# Protected Species Monitoring in the Virginia Capes OPAREA Cape Hatteras, North Carolina January 2013 – December 2013



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## Introduction

This report forms part of a multi-institutional monitoring project intended to provide information on the species composition, population identity, density and baseline behavior of marine mammals and sea turtles present in Navy range complexes along the Atlantic coast. This program began in 2007, with baseline aerial and vessel surveys and a passive acoustic monitoring program in Onslow Bay, North Carolina and has since expanded to include study areas off Jacksonville, Florida and Cape Hatteras, North Carolina. In Onslow Bay, six years of monitoring have yielded a comprehensive picture of the density, distribution and abundance of marine mammals and sea turtles and provided new insights into residency patterns among pelagic delphinid cetaceans in this region. More than four years of monitoring in Jacksonville have provided similar information on the density and distribution of marine mammals and sea turtles in this area. In Cape Hatteras, almost three years of surveys have provided preliminary information on the complex patterns of distribution and diversity of the marine mammals and sea turtles in this highly productive area. The current report builds on this past body of work and describes monitoring activities that occurred between January and December 2013.

#### Acknowledgements

For collaborative efforts we thank our colleagues at Duke University Marine Lab (Kim Urian, Andy Read, Heather Foley, Zach Swaim, Jennifer Dunn, and Lynne Hodge) and St. Andrews University (Charles Paxton). We thank Ed Coffman, owner and operator of Orion Aviation, and his highly skilled pilots: Dave Huddle, Stan Huddle, Cameron Radford, Ryan Macgregor, Greg Souther, Collin Mendenhall, Rocky Walker, John Esties, and Bob Stickle, for excellent flying and a high level of professionalism. We thank Joel Bell for his support of this work. Surveys are conducted under NOAA Scientific Permit No 16473, held by UNCW, and NOAA General Authorization Letter of Confirmation No. 16185 held by Duke University.

#### **Summary of Cape Hatteras Aerial Surveys**

This chapter describes the aerial surveys conducted in the Cape Hatteras, North Carolina study area between January 2013 and December 2013. The aim was to conduct two days of effort each month, flying a subset of the 26 tracklines that cover the area. Survey effort occurred in five of twelve months; unfavorable weather conditions and plane complications precluded any effort during January, February, April, June, September, November, and December. Two or more survey days were achieved for two of the five months, with a single day of effort occurring in the remaining three. A total of 68 tracklines (4935.9 km) were covered in the Cape Hatteras survey site during this reporting period. While survey conditions were dominated by Beaufort Sea State (BSS) 1-3, time was also spent in higher sea states. Other aerial surveys have demonstrated that the rate of cetacean sightings is negatively affected by an increase in the BSS (e.g. Gómez de Segura *et al.* 2006, DeMaster *et al.* 2001, McAlarney *et al.* 2012). This trend was also apparent in the present effort, as sightings dropped from 38.43 to 4.36 sightings per 1000 km as BSS increased from 1 to 4.

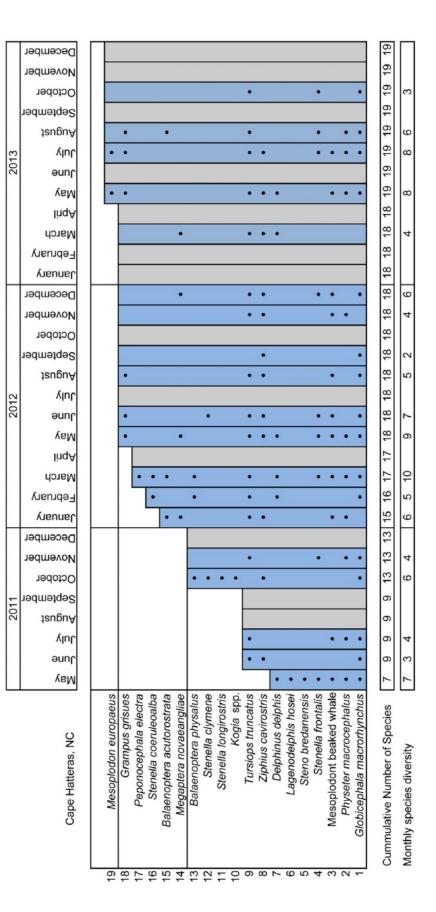
A total of 100 sightings of 1957 cetaceans were encountered while on effort during the nine days of aerial surveys in the study area (Table 1, Figure 1). Ten species of cetaceans were photo-documented, including bottlenose dolphins (*Tursiops truncatus*; 46 sightings of 794 individuals), short-finned pilot whales (*Globicephala macrorhynchus*; 18 sightings of 252 individuals), Atlantic spotted dolphins (*Stenella frontalis*; nine sightings of 563 individuals), Risso's dolphins (*Grampus griseus*; five sightings of 90 individuals), Cuvier's beaked whales (*Ziphius cavirostris*; 5 sightings of 14 individuals), sperm whales (*Physeter macrocephalus*; four sightings of seven individuals), mesoplodont beaked whales (*Mesoplodon spp*; four sightings of nine individuals), Gervais' beaked whale (*Mesoplodon europaeus* three sightings for 11 individuals), common dolphins (*Delphinus delphis*; three sighting of 206 individuals), and minke whales (*Balaenoptera acutorostrata*; one sighting of one individual). There was one sighting (six individuals) of dolphins where species identity could not be established with 100% certainty and is listed as "unidentified delphinid".

Fifty sea turtle sightings were recorded during this survey period. Forty two were identified as loggerhead sea turtles (*Caretta caretta*), and seven as a leatherback sea turtle (*Dermochelys coriacea*). Species identification could not be established with certainty for a single individual which is listed as "unidentified sea turtle" (Tables 15-16, Figures 17a-c & 18).

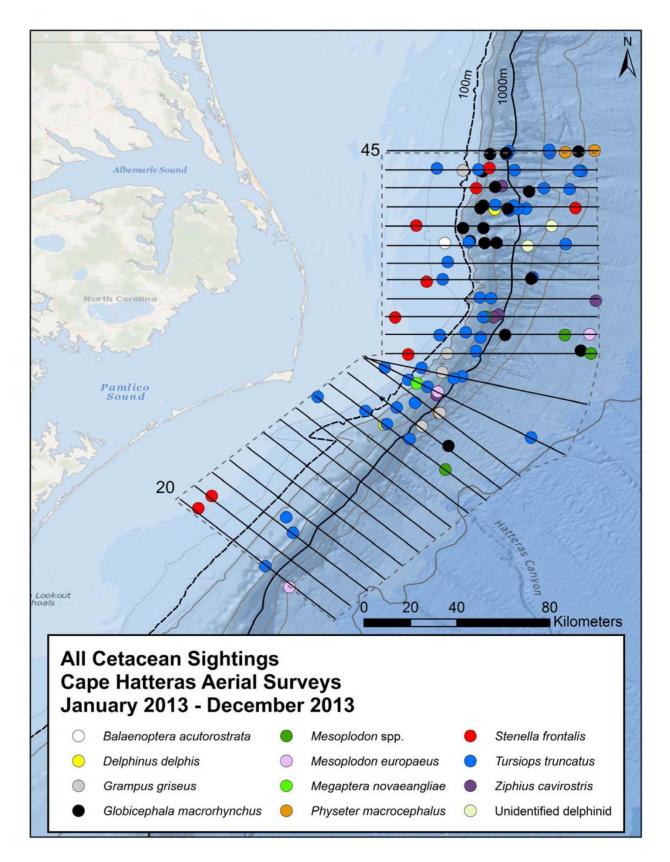
In addition to cetaceans and sea turtles, other pelagic marine vertebrates (*e.g.* manta rays, cownose rays, ocean sunfish, and unidentified sharks) were observed (Tables 17-20, Figure 19). Commercial, military and recreational vessels were also encountered in the survey area (Tables 21-23, Figures 20-22).

1a. Total numbe as, North Carolii
1a. Total number of si as, North Carolina sur

								2013					
		January	February	March	April N	May Ju	June July	August	September	October	November	December	Total
Turning trunch	Sightings			e		4	15	14		10			46
i aisiops trancatas	# of individuals			68		81	252	246		147			794
Glohicenhala macmuthunchus	Sightings					с С	4	2		4			18
and the state tractor is the state of the st	# of individuals					90	46	95		21			252
Standla frontalio	Sightings						-	2		-			6
	# of individuals						75	263		225			563
Cromoto aricoto	Sightings					2	2	٢					5
cialipus griseus	# of individuals					11	73	9					90
Tinhius conincetric	Sightings			-		-	e						5
zipinas cavinos	# of individuals			2		33	6						14
Meconocon en	Sightings					2	2						4
Mesohiocovi spb.	# of individuals					5	4						6
Dhucefer mechanic	Sightings					+	-	2					4
L'insorter machinerio	# of individuals					1	1	5					7
Delnhinus delnhis	Sightings			2		<del>.</del>							з
	# of individuals			26	•	180							206
streedurie autoritaosem	Sightings					+	2						з
	# of individuals					2	6						11
Balaenontera acritorostrata	Sightings							1					٦
	# of individuals							1					٦
Menshers paragraph	Sightings			-									٦
inegaptera rioracangliae	# of individuals			4									4
I Inidentified delahinid	Sightings						-						-
	# of individuals						9						9
	Total sightings	0	0	7	0		0 31		0	15	0	0	100
	Total individuals	0	0	100	-	373 (	0 475	616	0	393	0	0	1957



Dots denote months in which a species was observed. Grey bars denote months in which no survey effort was conducted. Table 1b. Cetacean discovery curve from May 2011 to December 2013 for the Cape Hatteras, North Carolina survey area.



*Figure 1*. All cetacean sightings during aerial surveys conducted in Cape Hatteras, North Carolina from January 2013 to December 2013.

#### Methodology

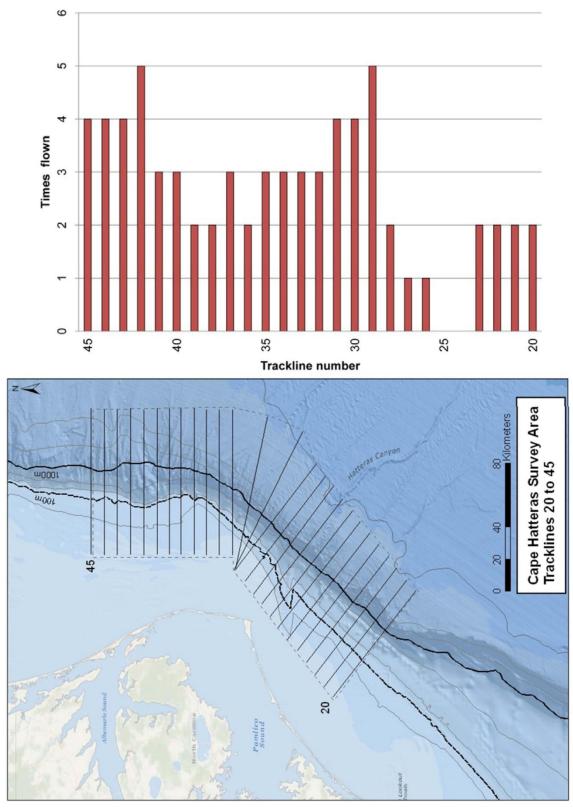
## Survey Design and Logistics

Aerial survey effort was initiated in the waters off Cape Hatteras, North Carolina in May of 2011 to assess the distribution and abundance of offshore cetacean species and sea turtles. These surveys are included in the Navy's Atlantic Fleet Active Sonar Training (AFAST) Monitoring Program, established to document marine species that could potentially be impacted by naval activities. The approximately 16000 km<sup>2</sup> survey area covers continental shelf waters as well as deeper waters beyond the shelf break. Placement of the survey area was designed to incorporate a large portion of the Cape Hatteras Special Research Area (CHSRA) in support of current research assessing fishery interactions between short-finned pilot whales and the local fisheries. The survey area excludes coastal waters to minimize survey effort in areas where the spatial distribution and relative abundance of coastal bottlenose dolphins has previously been established (Torres *et al.* 2003; Torres *et al.* 2005). Twenty six tracklines, ranging from 73.5 to 81.5 km long and orientated perpendicular to the coastline were evenly placed across the survey site.

Survey flights originated from the Fixed-base Operator (FBO) in Wilmington, NC with additional effort being conducted from the Dare County Regional Airport in Manteo, NC. Utilizing both airports maximized "on effort" survey time by decreasing transit time to and from the tracklines surveyed. A complete description of survey methods can be found in the Methodology section in the JAX Aerial Survey chapter of this report.

Transect Line	Eastern	Waypoint	Western	Waypoint
Line	Latitude	Longitude	Latitude	Longitude
20	34.770853	-75.954044	34.315878	-75.364928
21	34.819136	-75.891558	34.365250	-75.298656
22	34.870261	-75.824811	34.418267	-75.226703
23	34.919967	-75.760906	34.469392	-75.166111
24	34.972511	-75.691319	34.522408	-75.097944
25	35.023633	-75.625994	34.571642	-75.039247
26	35.073339	-75.562089	34.617083	-74.971081
27	35.118783	-75.502444	34.668208	-74.908594
28	35.169908	-75.435697	34.721228	-74.840431
29	35.219611	-75.371792	34.768564	-74.77605
30	35.270736	-75.303628	34.817794	-74.711672
31	35.319019	-75.242561	34.868919	-74.649186
32	35.319019	-75.242561	34.948447	-74.469303
33	35.319019	-75.242561	35.139689	-74.384097
34	35.340331	-75.161133	35.340331	-74.333672
35	35.410389	-75.161133	35.410389	-74.333672
36	35.48045	-75.161133	35.48045	-74.333672
37	35.550508	-75.161133	35.550508	-74.333672
38	35.620569	-75.161133	35.620569	-74.333672
39	35.690628	-75.161133	35.690628	-74.333672
40	35.762581	-75.161133	35.762581	-74.333672
41	35.832642	-75.161133	35.832642	-74.333672
42	35.906486	-75.161133	35.906486	-74.333672
43	35.978439	-75.161133	35.978439	-74.333672
44	36.048500	-75.161133	36.048500	-74.333672
45	36.122344	-75.161133	36.122344	-74.333672

*Table 2.* Coordinates for trackline end points for the Hatteras survey area.





#### Results

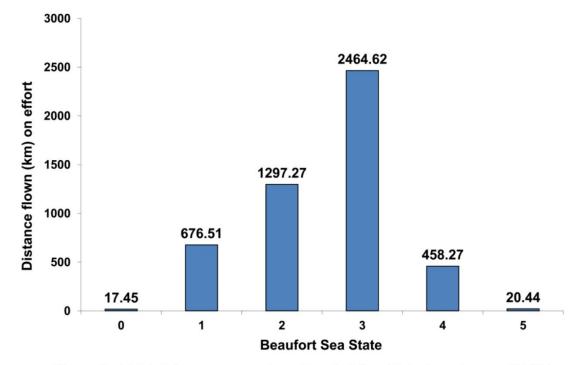
Sixty eight tracklines totaling 4935.9 km were surveyed from January 2013 to December 2013. Conditions during the 9 survey days ranged from a BSS 0 to 5 with 90% of effort in sea states less than or equal to a BSS 3.

An average Beaufort Sea State (BSS) value was calculated each month as a way to compare conditions across time. This average was calculated by taking the distance flown at each sea state multiplied by the BSS number (*i.e.* BSS 1 x distances would be multiplied by 1). These values were summed and then divided by the total distance flown that month. Survey conditions for this reporting period ranged from a BSS 0 to 5, with the majority of the surveys flown in a BSS 3 [BSS 0: 17.45 (<1%), BSS 1: 676.51 km (13.7%), BSS 2: 1297.27 km (26.3%), BSS 3: 2464.62 km (50%), BSS 4: 458.27 km (9.2%), BSS 5: 20.44 km (<1%)(Fig. 3a-c)]. Cetacean sighting rates dropped off as BSS increased, with 38.43 sightings/1000 km surveyed in BSS 1, 24.67 sightings/1000 km surveyed in BSS 2, 16.23 sightings/1000 km surveyed in BSS 3, 4.36 sightings/1000 km surveyed in BSS 4, and zero sightings/1000 km surveyed in BSS 5(Fig. 4a-c).

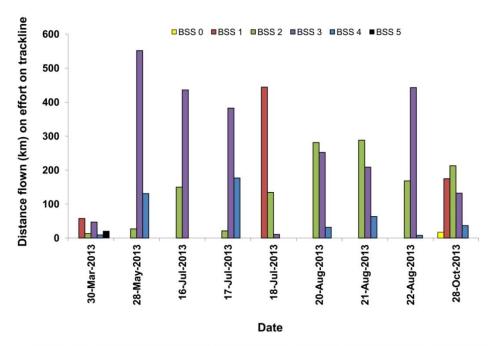
Mean sighting distance for all cetacean sightings was 0.91 km (SD=0.57). Sighting distances across sea states varied by less than 0.19 km (Fig.5a-b). Average sighting distances are normally calculated after removing outliers, defined as any value in excess of three standard deviations from the mean (Mean=0.91 km, SD=0.57\*3=1.71, Outlier >2.62km). Two of the sighting distances were identified as outliers during this reporting period, one in BSS 2 of 3.08km and the other in BSS 4 of 3.49km. The only other sighting in a BSS 4 was at a distance of 0.5km, this single sighting is not presented in Figure 5b. In addition, eleven sightings did not have associated sighting distances, and were excluded from these calculations.

	<b>Tracklines Flown</b>	<b>Tracklines Flown</b>	Total km	72
Date	AM	PM	Flown	<b>Hobbs Hours</b>
30-Mar-2013	32, 29	N/A	148.3	4.4
28-May-2013	29 to 31, 33 to 35	37, 40 to 42	709.8	7.8
16-Jul-2013	20 to 23	45 to 42	585.9	6.8
17-Jul-2013	41, 37 to 39	29 to 26	580.6	5.1
18-Jul-2013	30 to 33	40, 36 to 34	590.2	7.4
20-Aug-2013	36 to 39	40 to 43	565.5	6.1
21-Aug-2013	44, 45, 35, 34	20 to 23	561.1	6.3
22-Aug-2013	33, 32, 31, 30, 29	45 to 42	619.7	6.7
28-Oct-2013	45, 44, 43, 42	31, 30, 29, 28	574.8	5.9
9 days	68 trac	cklines	4935.9 km	56.5 hrs

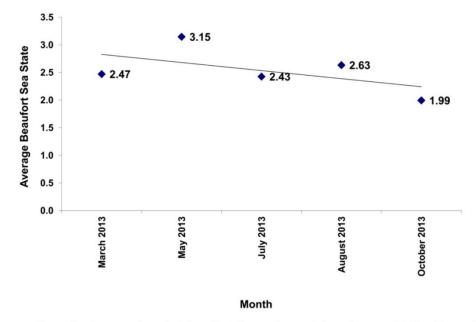
*Table 3.* Tracklines, km flown and Hobbs hours during aerial surveys of the Cape Hatteras, North Carolina survey area from January 2013 to December 2013. Trackline numbers are listed in the order in which they were flown.



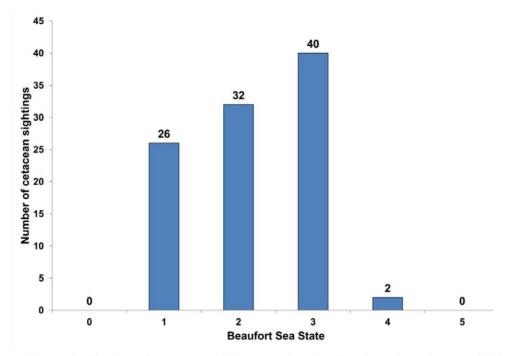
*Figure 3a*. Total distance surveyed per Beaufort Sea State from January 2013 to December 2013 during aerial surveys in the Cape Hatteras, North Carolina survey area.



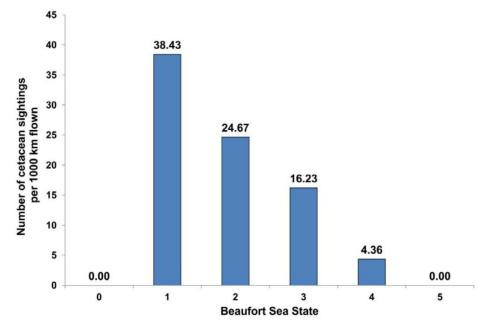
*Figure 3b.* Effort by Beaufort Sea State for each day from January 2013 to December 2013 during aerial surveys in the Cape Hatteras, North Carolina survey area.



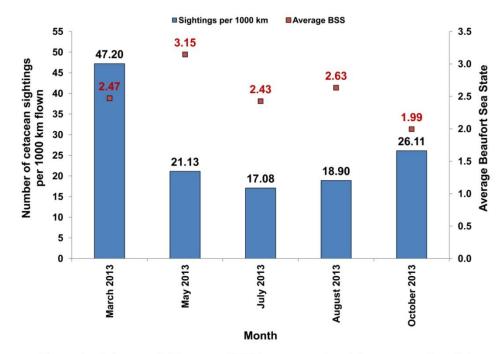
*Figure 3c.* Average Beaufort Sea State for each month from January 2013 to December 2013 during aerial surveys in the Cape Hatteras, North Carolina survey area. Values were calculated using the formula AvgBSS = [(Distance @ 1\*1)+.../Total distance flown that day]



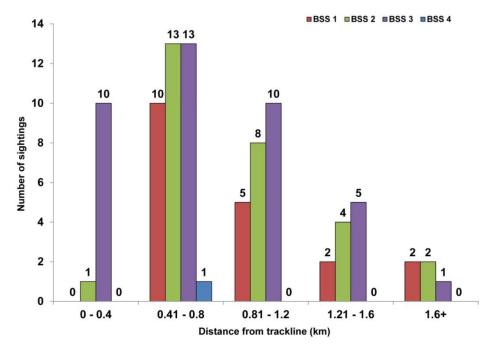
*Figure 4a*. Number of cetacean sightings per Beaufort Sea State from January 2013 to December 2013 during aerial surveys in the Cape Hatteras, North Carolina survey area.



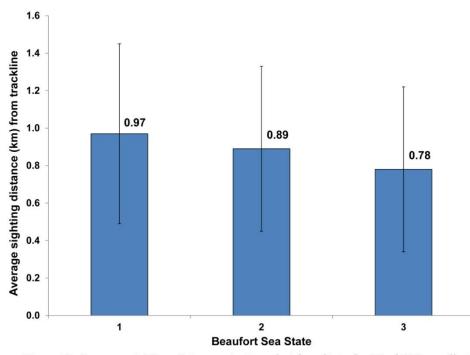
*Figure 4b*. Cetacean sightings per 1000 km flown by Beaufort Sea State from January 2013 to December 2013 during aerial surveys in the Cape Hatteras, North Carolina survey area.



*Figure 4c*. Cetacean sightings per 1000 km surveyed and the average Beaufort Sea State per month from January 2013 to December 2013 during aerial surveys in the Cape Hatteras, North Carolina survey area.



*Figure 5a.* Sighting distances by Beaufort Sea State for 87 of 100 on effort cetacean sightings from January 2013 to December 2013 during aerial surveys in the Cape Hatteras, North Carolina survey area.



*Figure 5b.* Average sighting distances by Beaufort Sea State for 87 of 100 on effort cetacean sightings from January 2013 to December 2013 during aerial surveys in the Cape Hatteras, North Carolina survey area. Error bars denote standard deviation for each category.

#### Marine Mammal Sightings

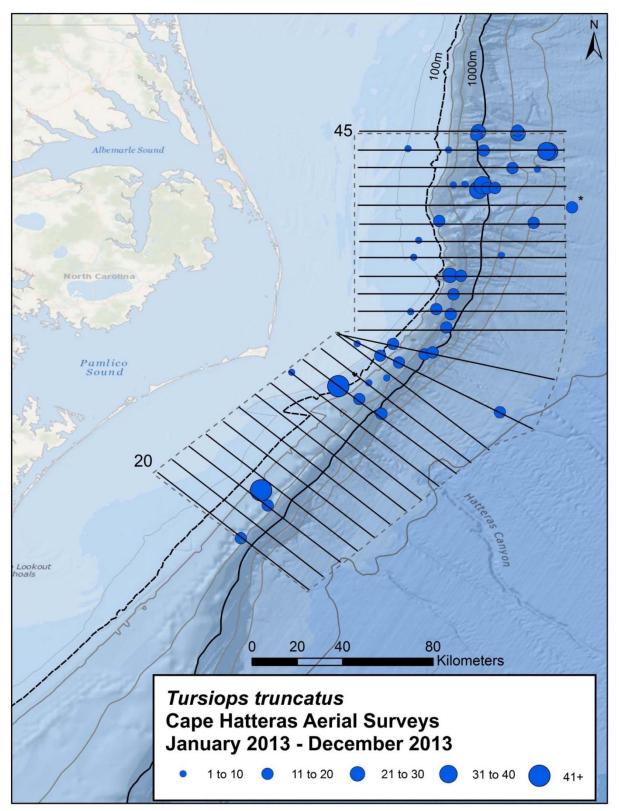
A total of 100 sightings of 1957 individual cetaceans representing ten species were observed while on effort during the reporting period. Two endangered species – humpback (*Megaptera novaeangliae*) and sperm (*Physeter macrocephalus*) whales – were encountered in the survey area. All identified species sighted are listed below in order of decreasing number of sightings (*i.e.* most commonly sighted species first). Four cetacean species had additional sightings that were recorded while off effort. These sightings are included in the below tables and maps for each species but are excluded from any calculations. A sighting was considered off effort if it occurred while transiting to or from the survey area or between tracklines. Any cetaceans the survey team encountered while investigating a separate sighting cue were also labeled off effort. If two species were seen associated with the same sighting cue both were considered on effort. Total number of individuals is based upon the best estimate of group size. Information on individual sighting summaries are in Appendix A. Daily sightings are summarized in Appendix B.

## Bottlenose dolphin (Tursiops truncatus) (Table 4, Figure 6)

This species was the most commonly observed cetacean species with 46 sightings for 943 individuals. This species was observed during every month of survey effort during this reporting period. Group size ranged between three and 60 individuals (mean=17). One off effort sighting of 14 individuals was recorded on the offshore end of our survey area. The majority of sightings occurred at distances greater than 37 km from shore and in waters beyond the 100 m isobaths. Based upon the distance from shore (*i.e.* greater than 34 km), these bottlenose dolphins were most likely the offshore ecotype (Torres *et al.* 2003). Genetic analysis of biopsy samples (n=30) collected inside the survey area confirm that all dolphins sampled belong to the offshore ecotype (Swaim *et al.* 2013) The current best estimate of offshore bottlenose dolphin in the western Atlantic, between central Florida and Canada, is 81588 (CV=0.17) (Waring *et al.* 2008). The status of the offshore bottlenose dolphins stock in the Northwest Atlantic is unknown.

	•	siops truncatus) sightings in
the Cape	Hatteras, North Carolina	a survey area from January
2013 to [	ecember 2013 Asterisk	denotes off effort sightings.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
30-Mar-13	11:33	4	35.283833	-75.162713	Е	32	3	90°	3
30-Mar-13	11:38	7	35.236617	-75.071242	Е	32	3	90°	12
30-Mar-13	12:58	21	35.115493		W	29	3	90°	53
28-May-13	14:27	50	35.556541	-74.794313	W	37	3	90°	26
28-May-13	14:34	54	35.554407	-74.750403	W	37	2	90°	18
8-May-13		66	35.764729	-74.461337	E	40	2	100°	19
8-May-13	16:02	83	35.903524	-74.614975	E	42	2	90°	18
16-Jul-13	10:53	5	34.511157	-75.625345	SE	20	2	100°	13
16-Jul-13	11:57	22	34.641013	-75.518358	SE	22	3	100°	18
16-Jul-13	14:46	38	36.126701	-74.680803	E	45	2	90°	25
16-Jul-13	15:08	44	36.048312	-74.399638	W	44	1	90°	35
16-Jul-13	16:39	74	35.902641	-74.645998	W	42	1	100°	15
17-Jul-13	9:31	12	35.826554	-74.308735	E	41	1	90°	14
18-Jul-13	9:22	90	35.128454	-75.116241	SE	30	1	100°	7
18-Jul-13	10:05	99	35.147892	-75.044946	NW	31	1	90°	9
18-Jul-13	11:15	117	35.249551	-74.862564	NW	33	3	90°	20
18-Jul-13	11:28	122	35.283093	-75.020068	NW	33	2	60°	20
18-Jul-13	13:25	138		-74.837177	E	40	2	90°	12
18-Jul-13	14:12	157	35.480616	-74.780087	W	36	2	90°	12
18-Jul-13	14:39	167	35.421648	-74.848720	E	35	2	90°	20
	14:39		35.421048		E	35	2	90°	15
18-Jul-13	15:31	171		-74.790934	W	35 34	3	90°	15
18-Jul-13	12:09	186 22		-74.808742 -74.938017	E	38	2	90°	6
0-Aug-13			35.627561			_	_	90°	
0-Aug-13		28	35.635088	-74.589241	E	38	2	90°	4
0-Aug-13		36	35.695223	-74.918406	W	39	1		
20-Aug-13		83	35.918025	-74.733924	E	42	3	90°	8
0-Aug-13		87	35.895733	-74.680760	E	42	3	60°	33
21-Aug-13	9:24	9	36.055076	-74.799332	E	44	2	90°	4
1-Aug-13		32	36.119509	-74.523369	W	45	1	90°	26
1-Aug-13		47	35.411016	-74.949978	E	35	1	90°	7
21-Aug-13		83	34.701233		SE	22	3	60°	60
22-Aug-13		106		-74.895108	E	33	1	60°	12
22-Aug-13		113			W	32	1	60°	17
				-74.996505		32		45°	11
				-74.659556		44	1	90°	18
				-74.662982	W	42	2	60°	35
28-Oct-13				-74.689719		45	1	100°	17
28-Oct-13				-74.525365		45	2	60°	20
28-Oct-13				-74.410421	_	44	1	90°	40
28-Oct-13				-74.960555		44	3	90°	6
28-Oct-13				-74.545324		43	2	90°	20
28-Oct-13				-74.446052		43	1	90°	3
28-Oct-13				-74.780864	_	42	2	90°	6
28-Oct-13		79		-75.154661			2	120°	
28-Oct-13				-75.066890			2	90°	20
28-Oct-13	16:08	91	35.170267	-75.423025	NW	28	3	110°	4



*Figure 6*. Bottlenose dolphin (*Tursiops truncatus*) sightings indicating group size. Asterisk denotes off effort sightings.

#### Short-finned pilot whale (Globicephala macrorhynchus) (Table 5, Figure 7)

This species was observed 18 times for a total of 252 individuals and was seen in four of the five months in which surveys were conducted. Group sizes ranged from one to 80 individuals (mean=14).

Sightings of pilot whales in the western North Atlantic occur primarily near the continental shelf break (Waring *et al.* 2010), and sightings in the Cape Hatteras survey area followed this pattern. Pilot whales were observed from the 100 m isobath to waters greater than 2000 m deep (Figure 7). As both species of *Globicephala* have been reported in the waters north of Cape Hatteras, careful examination of all photos was conducted to determine whether long-finned pilot whales (*Globicephala melas*) were encountered. All sightings were identified as *Globicephala macrorhynchus*. The difficulty of differentiating short-finned and long-finned pilot whales at sea results in NMFS reporting stock numbers and status for both species grouped as *Globicephala* spp. (Waring *et al.* 2011). The abundance estimate of *Globicephala* spp. (24674, CV=0.45) is based upon shipboard surveys along the outer continental shelf of the U.S. Atlantic between Florida and Maryland in 2004 (Waring *et al.* 2011). These estimates were combined with spatial distribution analysis, as well as genetic analyses, to generate the current value of 24674. The status of short-finned pilot whales in the U.S. Atlantic is currently unknown (Waring *et al.* 2011).

									_
Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
28-May-13	10:26	12	34.979820	-74.915520	NW	30	2	100°	6
28-May-13	12:15	32	35.350653	-74.402770	Е	34	2	90°	4
28-May-13	15:35	75	35.827554	-74.859116	W	41	2	90°	80
16-Jul-13	15:25	48	36.047800	-74.784396	W	44	2	90°	10
16-Jul-13	16:48	78	35.904796	-74.791456	W	42	1	90°	8
18-Jul-13	13:23	137	35.777435	-74.832254	E	40	2	90°	16
18-Jul-13	14:49	175	35.411805	-74.695952	Е	35	1	90°	12
20-Aug-13	12:33	29	35.630449	-74.595169	E	38	2	90°	2
20-Aug-13	15:10	51	35.769053	-74.776011	Е	40	3	90°	2
20-Aug-13	15:14	54	35.769931	-74.728976	E	40	2	90°	13
20-Aug-13	15:44	68	35.827280	-74.780002	W	41	3	100°	8
20-Aug-13	16:49	94	35.987213	-74.734562	W	43	1	90°	19
21-Aug-13	10:17	38	36.115082	-74.754407	W	45	2	90°	11
22-Aug-13	13:59	142	36.125361	-74.412052	Е	45	2	90°	40
28-Oct-13	10:41	6	36.118893	-74.692822	Е	45	1	100°	8
28-Oct-13	11:51	37	35.969512	-74.602950	Е	43	4	90°	1
28-Oct-13	12:33	58	35.903083	-74.685450	W	42	2	90°	6
28-Oct-13	12:39	64	35.914425	-74.781194	W	42	2	90°	6

*Table 5.* Short-finned pilot whale (*Globicephala macrorhynchus*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

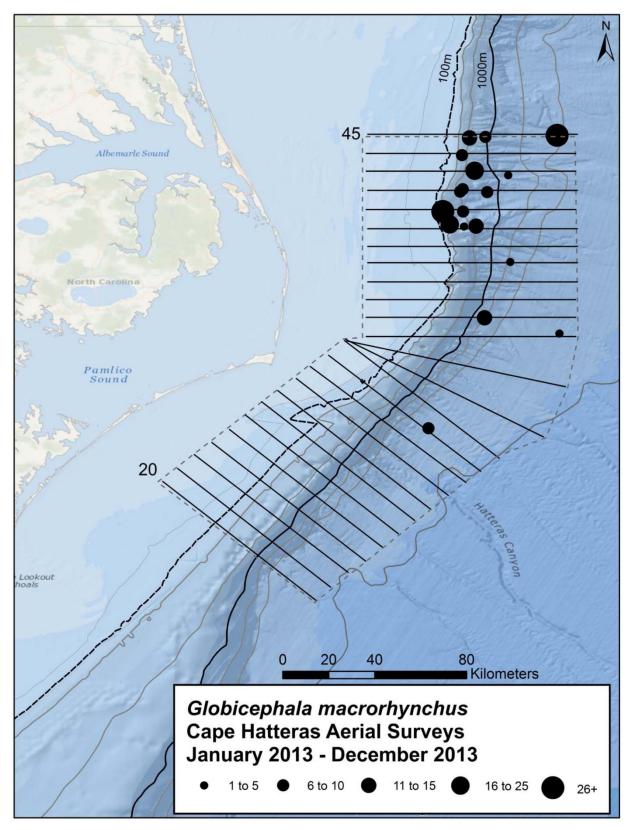


Figure 7. Short-finned pilot whale (Globicephala macrorhynchus) sightings indicating group size.

#### Atlantic spotted dolphin (Stenella frontalis) (Table 6, Figure 8)

Nine sightings of 563 individuals were observed while on effort in the Cape Hatteras survey area. Group size ranged between six and 225 (mean=62). There are two distinct forms, or ecotypes, of the Atlantic spotted dolphin in the western north Atlantic: a heavily spotted, larger form that typically occurs on the continental shelf and is most often encountered around the 200 m isobath or shallower water, and a less spotted and smaller form that occurs further offshore and around islands (Perrin *et al.* 1987, 1994). Examination of photos collected during each sighting and the animals' physical location in both shallow and deep waters suggests both ecotypes are present within the survey area. The abundance estimate for *S. frontalis* in the western north Atlantic is 26798 (CV=0.66); the status of the stock(s) is/are unknown (Waring *et al.* 2012).

*Table 6.* Atlantic spotted dolphin (*Stenella frontalis*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
16-Jul-13	16:00	62	35.982496	-74.808348	Е	43	2	90°	75
20-Aug-13	11:05	5	35.479552	-75.122299	Е	36	2	90°	10
20-Aug-13	12:01	18	35.618659	-75.000186	Ш	38	2	45°	48
20-Aug-13	15:56	73	35.837502	-75.040347	W	41	1	90°	35
21-Aug-13	9:28	13	36.060786	-74.756754	Е	44	3	90°	150
21-Aug-13	11:33	58	35.335280	-75.071666	W	34	2	90°	8
21-Aug-13	13:45	66	34.736882	-75.885247	SE	20	2	90°	6
21-Aug-13	14:30	76	34.784271	-75.833001	NW	21	2	60°	6
28-Oct-13	12:23	53	35.905673	-74.423186	W	42	3	100°	225

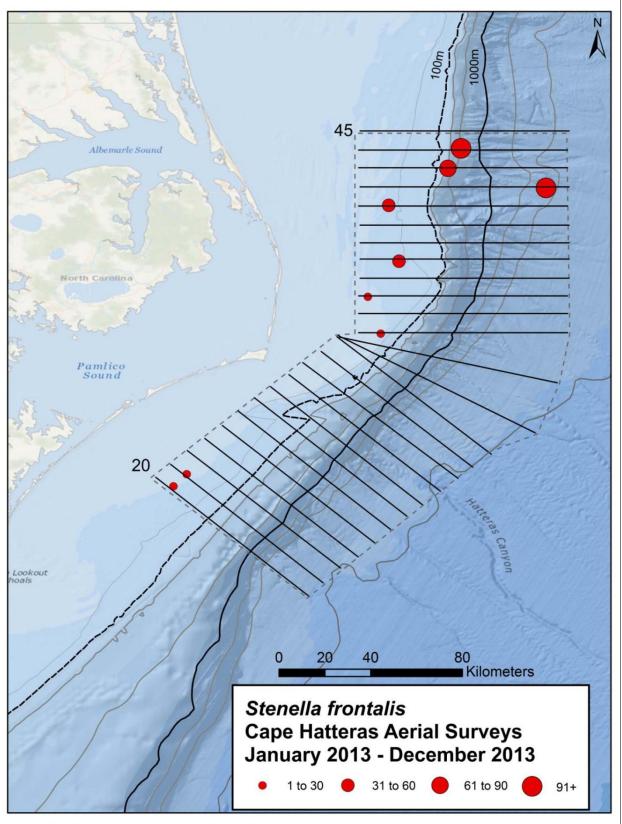


Figure 8. Atlantic spotted dolphin (Stenella frontalis) sightings indicating group size.

## <u>Sperm whale</u> (*Physeter macrocephalus*) (Table 7, Figure 9)

This species was observed four times, for a total of seven individuals while on effort, and was seen in three of the five months surveyed this reporting period. Group size ranged between one and four individuals. All sightings were recorded beyond the continental shelf, in depths greater than 1000m. Three additional off effort sightings of this species were recorded this year all located in the waters beyond our survey area. On May 28, a trio of adult animals was observed offshore of trackline 39. On August 22, off of trackline 44, we observed a large disturbance caused by a breach a single adult sperm whale. Shortly after breaking from this sighting a group of two adult sperm whales and a mom-calf pair were observed while transiting back to the survey site. The adult female and calf stayed in close proximity to each other and the calf was observed moving into a suckling positioning multiple times. All animals remained at the surface and close to one another throughout our observations. Sperm whales are listed as endangered under the Endangered Species Act, and the current best population estimate for the species, based upon survey effort from North Carolina to the southern Bay of Fundy, is 1593 (CV=0.36) (Waring *et al.* 2012).

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	1
28-May-13	10:58	20	35.108432	-74.952876	SE	31	1	90°	1	
28-May-13	14:54	63	35.710991	-74.297119	N		3	90°	3	*
18-Jul-13	11:15	117	35.249551	-74.862564	NW	33	3	90°	1	
21-Aug-13	9:57	24	36.129123	-74.349572	W	45	3	90°	1	
21-Aug-13	10:02	28	36.122438	-74.462890	W	45	2	60°	4	
22-Aug-13	14:21	147	36.050282	-74.255742	E		3	90°	1	*
22-Aug-13	14:23	149	36.050945	-74.282777	E		3	90°	4	*

*Table 7.* Sperm whale (*Physeter macrocephalus*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013. Asterisk denotes off effort sightings.

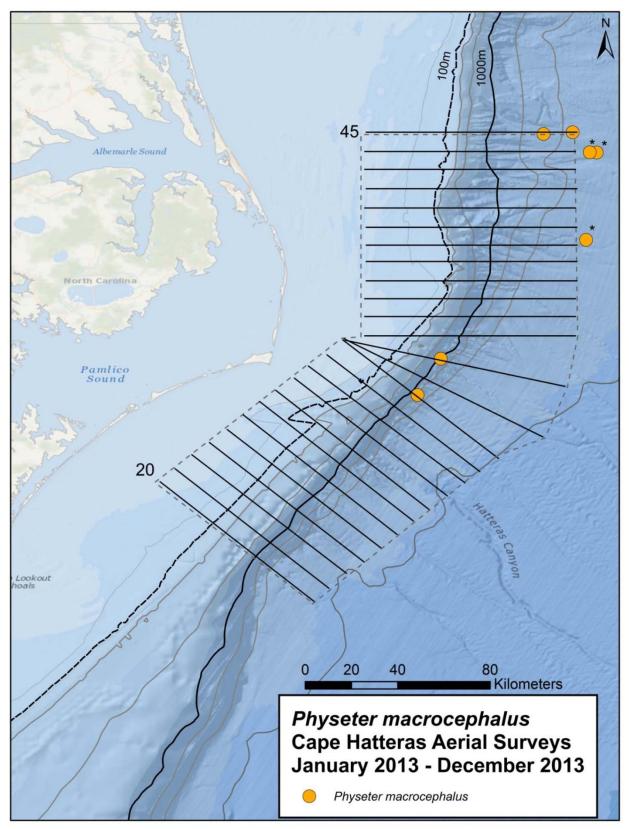


Figure 9. Sperm whale (Physeter macrocephalus) sightings. Asterisk denotes off effort sightings.

#### <u>Risso's dolphin</u> (*Grampus griseus*) (Table 8, Figure 10)

This species was encountered five times while on effort for a total of 90 individuals (Figure 10). Group size for this species ranged from 4 to 50 individuals (mean=20). One additional off effort sighting was made on the offshore end of trackline 44. Risso's dolphins were recorded in three of the five months surveyed, and were sighted from inside the 100m isobath to greater than 2000m. Risso's dolphins have been found along the mid-Atlantic continental shelf edge year round, with some movement north during spring, summer and fall, and into the mid-Atlantic Bight during winter (Waring *et al.* 2011). The best available estimate for Risso's dolphins, based on results from two US Atlantic surveys conducted in 2011, is 15197 (CV=0.55) (Waring *et al.* 2012). Data are currently insufficient to determine the population trend for this species in the western Atlantic (Waring *et al.* 2012).

*Table 8.* Risso's dolphin (*Grampus griseus*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013. Asterisk denotes off effort sightings.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	
28-May-13	10:35	15	35.055930	-75.018661	NW	30	2	100°	4	
28-May-13	11:40	26	35.266043	-74.939789	W	33	2	45°	7	
16-Jul-13	15:34	52	36.051731	-74.859693	W	44	2	90°	23	
18-Jul-13	15:40	190	35.339014	-74.920563	W	34	2	90°	50	
21-Aug-13	9:52	20	36.072366	-74.313114	E	44			30	*
22-Aug-13	11:01	124	35.107765	-74.948416	SE	31	1	90°	6	

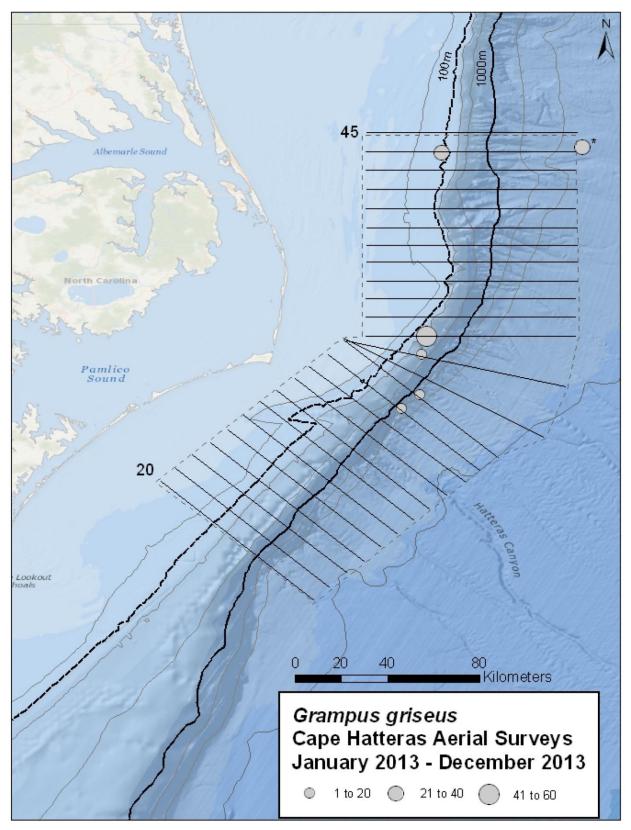


Figure 10. Risso's dolphin (Grampus griseus) sightings indicating group size.

## Cuvier's beaked whale (Ziphius cavirostris) (Table 9, Figure 11)

Five sightings of 14 individuals occurred while on effort in the Cape Hatteras survey area, and this species was observed in three of the five months in which surveys were conducted. Group sized ranged from pairs up to four individuals. Sighting occurred from just inshore the 1000m isobaths out to 2000m. The best estimate for population size for this species, based upon 2011 survey data, is 4962 (CV=0.37). Data are currently insufficient to determine the population trend for this species in the western Atlantic (Waring *et al.* 2012).

*Table 9*. Cuvier's beaked whale (*Ziphius cavirostris*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
30-Mar-13	12:03	9	35.176384	-74.961141	Е	32	3	90°	2
28-May-13	14:47	59	35.544498	-74.344333	W	37	2	90°	3
16-Jul-13	16:15	66	35.990592	-74.708755	Е	43	3	45°	4
18-Jul-13	14:01	147	35.491165	-74.721264	W	36	2	60°	2
18-Jul-13	14:05	151	35.480761	-74.740742	W	36	1	90°	3

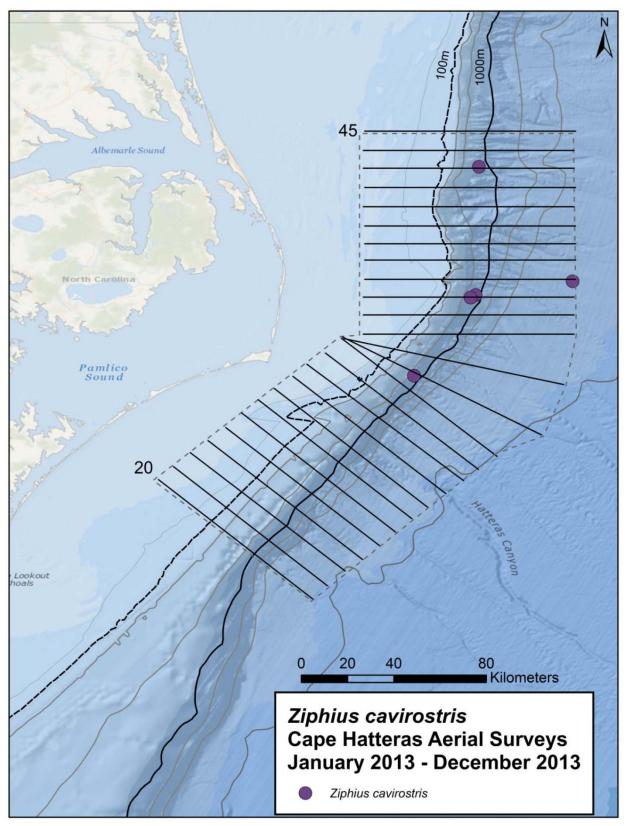


Figure 11. Cuvier's beaked whale (Ziphius cavirostris) sightings.

Beaked whale (Mesoplodon spp.) (Table 10, Figure 12)

On four occasions animals were identified as beaked whales but were determined not to be either Gervais' beaked whales (*Mesoplodon europaeus*) or *Z. cavirostris*. Since no species ID could be established they are listed here as *Mesoplodon* spp. Sightings occurred from just inside the 1000m isobaths to waters greater than 2000m. The difficulty in differentiating the various species of mesoplodont whales has led NMFS to create a single combined stock estimate for all species in the western Atlantic. Surveys conducted in 2004 from Maryland to Florida resulted in an estimate abundance at 674 animals (CV=0.36). The status of the various beaked whales stock in the Northwest Atlantic is unknown (Waring *et al.* 2012).

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
28-May-13	10:04	6	34.887077	-74.927528	SE	29	1	120°	3
28-May-13	12:36	42	35.411508	-74.464577	W	35	2	90°	2
18-Jul-13	14:07	154	35.481844	-74.772154	W	36	1	90°	2
18-Jul-13	15:12	181	35.339282	-74.363218	W	34	1	90°	2

*Table 10*. Unidentified *Mesoplodon* species sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

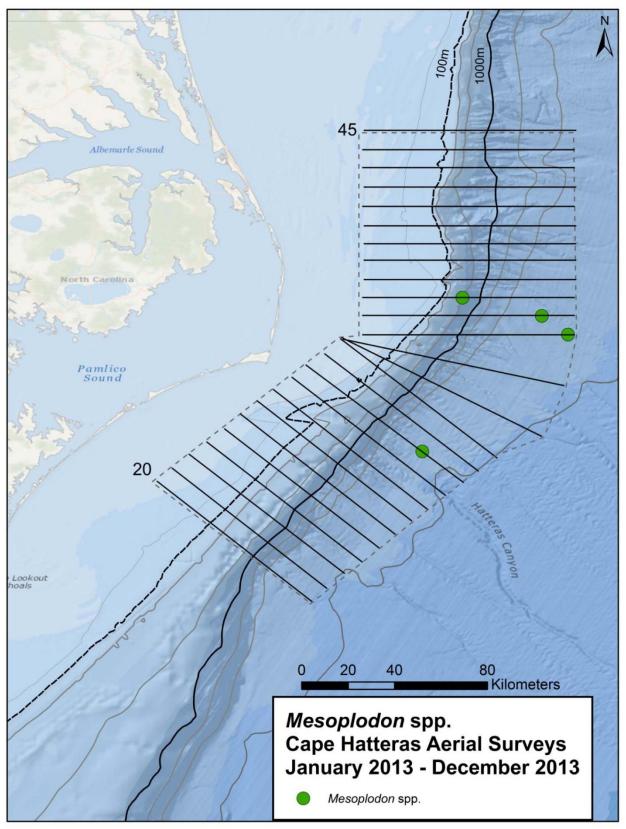


Figure 12. Unidentified Mesoplodon species sightings.

## Gervais beaked whale (Mesoplodon europaeus) (Table 11, Figure 13)

This year the examination of all of our beaked whale sightings allowed for three sightings to be classified to species as Gervais' beaked whales (*Mesoplodon europaeus*). The position of erupted teeth in one adult male animal sighted was used for species identification; these images were compared to those collected during other beaked whale encounters resulting in two more groups being labeled as Gervais beaked whales. As noted above NMFS gives a single combined stock estimate for all species in the western Atlantic. The status of the various beaked whales stock in the Northwest Atlantic is unknown (Waring *et al.* 2009).

*Table 11*. Gervais' beaked whale (*Mesoplodon europaeus*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
28-May-13	12:23	38	35.414108	-74.368509	W	35	2	45°	2
16-Jul-13	11:03	10	34.430081	-75.532243	SE	20	3	90°	4
18-Jul-13	10:29	109	35.190215	-74.956620	SE	32	2	90°	5

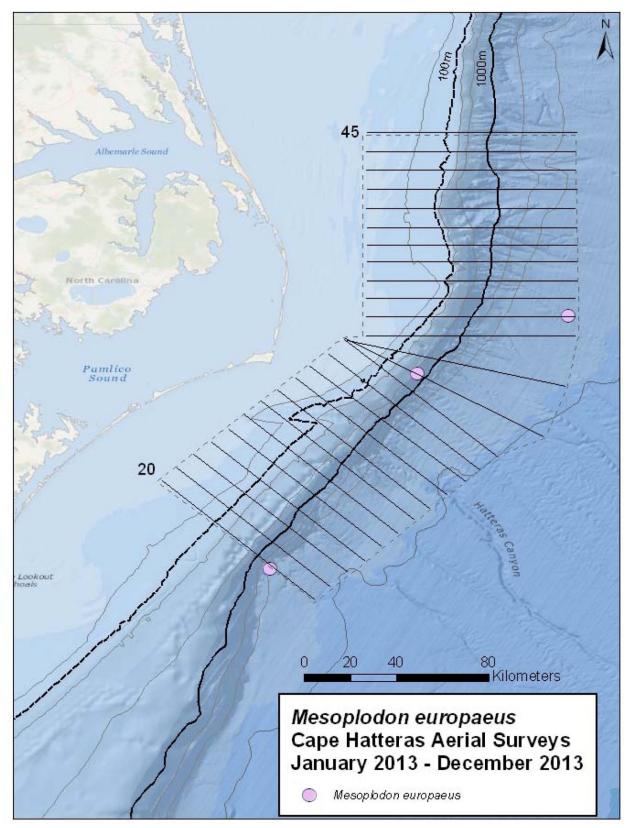


Figure 13. Gervais' beaked whale (Mesoplodon europaeus) sightings.

## Common dolphin (Delphinus delphis) (Table 12, Figure 14)

Three sightings of 206 individuals of common dolphins were observed between the 100m and 1000m isobath. Group sizes were highly variable; two groups had fewer than 20 animals while the third contained 180 individuals. The current best estimate of common dolphins in the western Atlantic Ocean is 67191 (0.29 CV) based upon 2011 survey efforts (Waring *et al.* 2012). NOAA has stated that there are no trend analyses completed for this speices. The status of the common dolphins stock in the Northwest Atlantic is unknown.

*Table 12.* Common dolphin (*Delphinus delphis*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
30-Mar-13	12:03	10	35.177930	-74.959396	Е	32	3	90°	16
30-Mar-13	12:49	19	35.061714	-75.163866	W	29	3	90°	10
28-May-13	16:13	87	35.900667	-74.736156	Е	42	2	90°	180

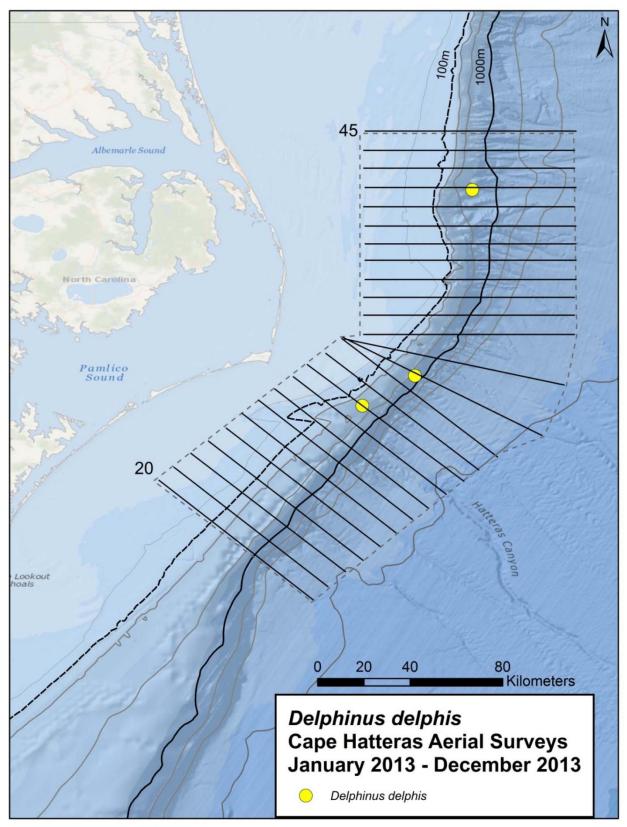


Figure 14. Common dolphin (Delphinus delphis) sightings.

## Humpback whale (Megaptera novaeangliae) (Table 13, Figure 15)

A single on effort sighting of two pairs of humpback whales was recorded over the continental shelf. One animal in each pair breached multiple times followed by periods out of sight below the surface. Two off effort sightings, both of single animals, were recorded between tracklines on the inshore portion of the survey area. Currently, humpback whales in the western North Atlantic are treated as a single stock despite genetic evidence identifying smaller substocks (Waring *et al.* 2012). Population estimates vary depending upon methods utilized, and range between 7698 (genetic tagging methods) and 11570 (photographic mark-recapture methods) (reviewed in Waring *et al.* 2012). This species is listed as endangered under the Endangered Species Act.

*Table 13.* Humpback whale (*Megaptera novaeangliae*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013. Asterisk denotes off effort sightings.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	
30-Mar-13	11:06	2	35.204615	-75.461175			2	90°	1	*
30-Mar-13	11:42	9	35.222878	-75.038577	Е	32	4	90°	4	
30-Mar-13	13:08	24	35.215145	-75.378190	W	29	3	90°	1	*

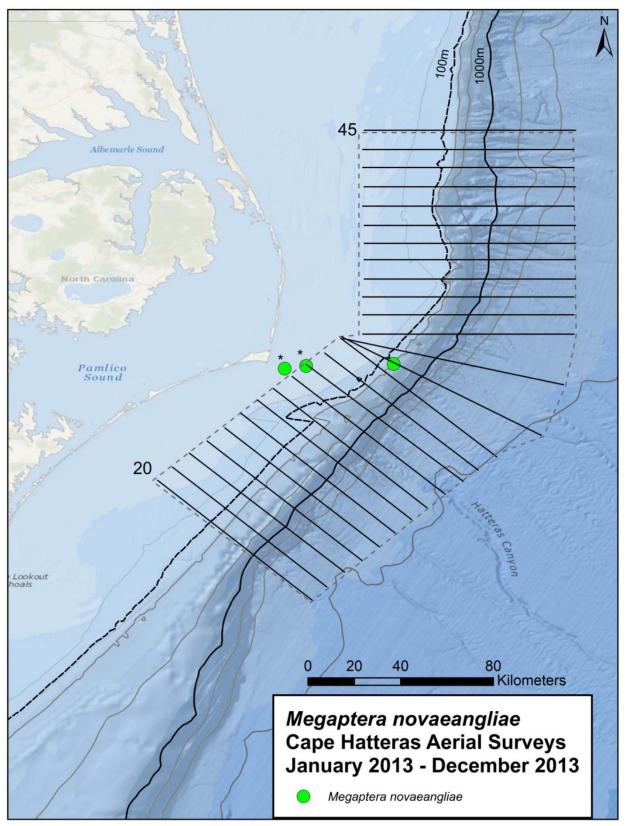


Figure 15. Humpback whale (Megaptera novaeangliae) sightings.

## Minke whale (Balaenoptera acutorostrata) (Table 14, Figure 16)

A single minke whale was observed in the 70m of water in August of this year. This sighting is unique as all previous minke sightings have occurred in colder months and have been seen in waters greater than 2000m. Minke whales inhabiting waters off the U.S. east coast are considered part of the Canadian East Coast stock, which occurs from to the western portion of the Davis Strait (45°W) south to the Gulf of Mexico. The best available abundance estimate for this stock is 20741 (CV=0.30) (Waring *et al.* 2012).

*Table 14*. Minke whale (*Balaenoptera acutorostrata*) sighting in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
20-Aug-13	14:46	47	35.768810	-74.929746	E	40	2	100°	1

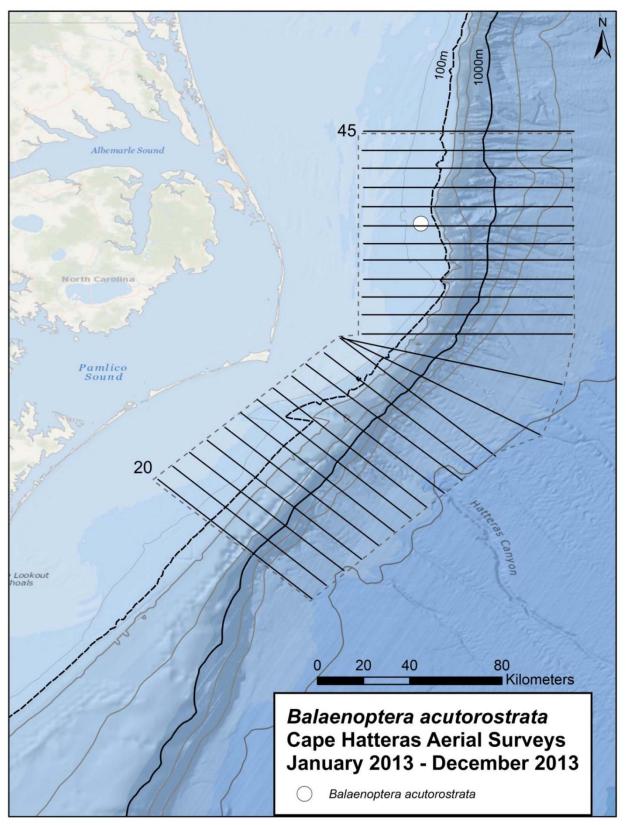
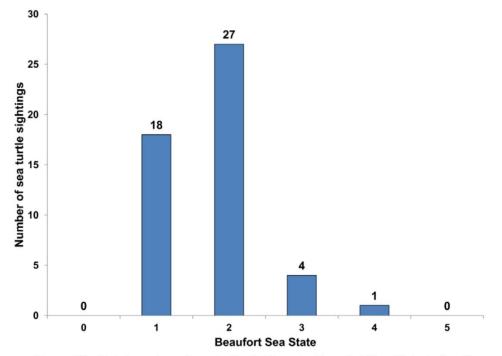


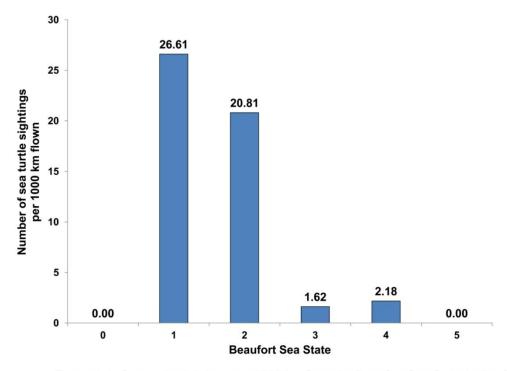
Figure 16. Minke whale (Balaenoptera acutorostrata) sighting.

Sea Turtles (Tables 15 & 16, Figures 17a-c and 18)

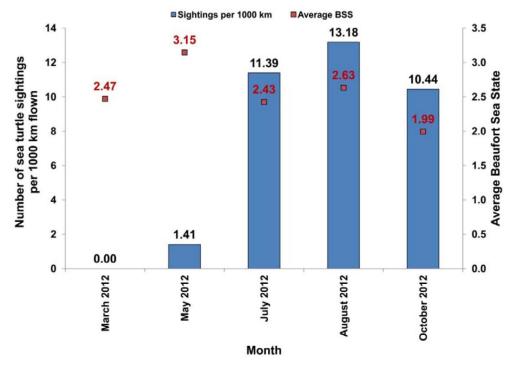
Fifty sea turtles were observed during the reporting period. Sighting rates were negatively correlated with Beaufort Sea State, with rates sharply declining at sea states greater than BSS 2 (Figures 17a-b). Sea turtles were recorded in every month surveyed except March; with July, August and October having roughly equivalent sighting rates (Figure 17c). Loggerhead sea turtles (*Caretta caretta*) represented the majority of sea turtle sightings (84%). The only other sea turtle species that was identified in the Cape Hatteras survey site was the leatherback sea turtle (*Dermochelys coriacea*) (14%). For the remaining 2% of sightings, species identification could not be made with 100% certainty and they are, therefore, listed as "unidentified sea turtles".



*Figure 17a.* Total number of sea turtle sightings by Beaufort Sea State in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.



*Figure 17b*. Sea turtle sightings per 1000 km flown by Beaufort Sea State in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.



*Figure 17c.* Sea turtle sightings per 1000 km surveyed and the average Beaufort Sea State per month in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

# Loggerhead sea turtle (Caretta caretta)(Table 15, Figure 18)

Sightings of loggerhead sea turtles occurred in three of the five months surveyed, for a total of 42 animals. The vast majority of sightings were over the continental shelf inside of the 100m isobath. For management purposes, loggerheads along the U.S. Atlantic east coast fall into the Northwest Atlantic Ocean distinct population segment (DPS), which is separated into five separate recovery units (NOAA 2011). The Northern Recovery Unit (defined as loggerheads originating from nests between southern VA through the FL/GA border) is currently listed as threatened under the Endangered Species Act (NMFS 2008).

*Table 15.* Loggerhead sea turtle (*Caretta caretta*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
16-Jul-13	14:39	34	36.123914	-74.906324	Е	45	1	90°	1
16-Jul-13	15:41	56	36.047762	-74.989266	W	44	1	90°	1
16-Jul-13	15:52	59	35.979910	-75.011103	E	43	3	90°	1
17-Jul-13	10:50	23	35.690908	-75.083553	W	39	1	90°	1
17-Jul-13	13:41	39	35.082486	-75.452289	SE	27	2	90°	1
18-Jul-13	10:16	104	35.275347	-75.186223	NW	31	1	90°	1
18-Jul-13	10:21	69	35.291765	-75.179218	SE	32	1	90°	1
18-Jul-13	13:13	130	35.763715	-75.114731	Е	40	1	90°	1
18-Jul-13	13:16	133	35.763570	-75.000971	E	40	1	90°	6
18-Jul-13	13:17	85	35.763537	-74.965164	E	40	3	90°	2
18-Jul-13	13:19	135	35.763533	-74.896326	Е	40	1	90°	1
18-Jul-13	14:15	102	35.480178	-74.885236	W	36	1	90°	1
18-Jul-13	14:28	106	35.411618	-75.095267	Е	35	2	90°	1
20-Aug-13	11:49	13	35.549259	-75.037858	NW	37	2	90°	1
20-Aug-13	13:15	30	35.694409	-75.115595	W	39	2	90°	1
20-Aug-13	14:36	35	35.764452	-75.142481	Е	40	1	90°	1
20-Aug-13	14:37	36	35.763721	-75.101938	Е	40	1	90°	1
20-Aug-13	14:40	44	35.761257	-74.994964	Е	40	2	90°	1
20-Aug-13	15:40	53	35.832251	-74.681485	W	41	2	90°	1
20-Aug-13	15:54	71	35.833541	-75.016404	W	41	2	90°	1
20-Aug-13	16:10	79	35.907825	-75.026202	Е	42	1	90°	1
20-Aug-13	_	81	35.906368	-74.810701	Е	42	1	90°	1
20-Aug-13	16:51	97	35.980109	-74.790664	W	43	1	90°	1
20-Aug-13	16:57	99	35.979384	-75.007576	W	43	1	90°	2
21-Aug-13	9:18	4	36.048549	-75.022778	Е	44	1	90°	3
21-Aug-13	9:19	5	36.048352	-74.968497	Е	44	2	100°	1
22-Aug-13		161	35.979289	-75.122980	Е	43	1	90°	1
22-Aug-13	15:12	162	35.981347	-75.013091	Е	43	1	90°	1
28-Oct-13		2		-75.045803	Е	45	2	90°	1
28-Oct-13	10:26	3	36.122860	-75.023162	Е	45	2	90°	1
28-Oct-13	11:37	34	35.978429	-75.076011	Е	43	1	90°	1
28-Oct-13	12:50	51	35.906238	-75.152820	W	42	1	90°	1
28-Oct-13	16:06	73	35.137776	-75.387738	W	28	2	90°	1

## Leatherback sea turtle (Dermochelys coriacea) (Table 16, Figure 18)

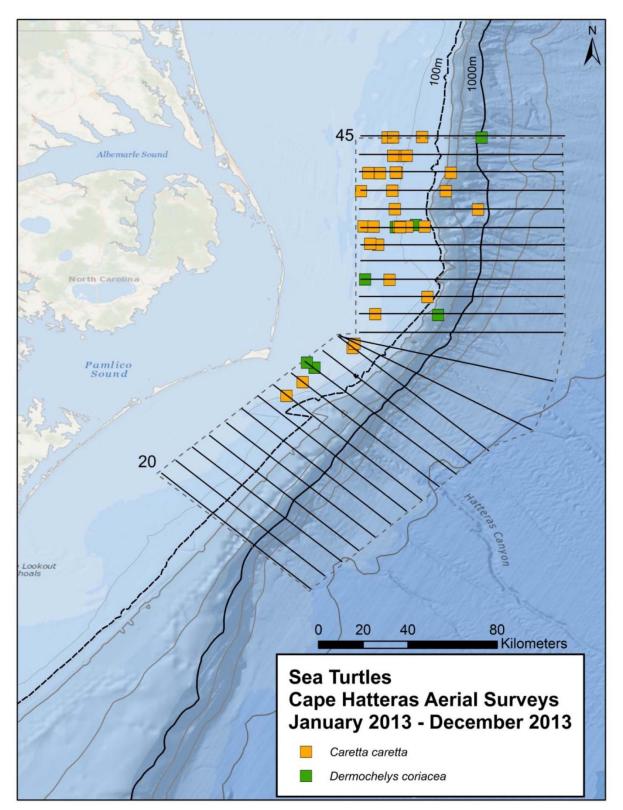
Seven leatherback sea turtle were observed from the inshore waters out to 1000m. The most recent population estimates for the North Atlantic ranges from 34000 to 94000 adult leatherbacks (Turtle Expert Working Group 2007). Leatherbacks throughout their range are listed as endangered under the Endangered Species Act (NMFS 1992).

*Table 16.* Leatherback sea turtle (*Dermochelys coriacea*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
28-May-13	9:45	3	35.195920	-75.339753	SE	29	1	90°	1
20-Aug-13	11:52	14	35.550855	-75.136088	NW	37	1	90°	1
20-Aug-13	14:39	37	35.761168	-75.012651	Е	40	1	90°	1
20-Aug-13	14:41	45	35.769749	-74.931561	Е	40	1	90°	1
21-Aug-13	10:12	36	36.122075	-74.666949	W	45	1	90°	1
21-Aug-13	10:58	51	35.407876	-74.842273	Е	35	2	90°	1
28-Oct-13	15:07	62	35.216455	-75.370175	Е	29	2	90°	1

# Unidentified sea turtles

Turtles labeled as unidentified were typically either of small size, submerged, or too far away for observers to make an accurate identification to species. This occurred on one occasion and the species is listed as unidentified.



*Figure 18.* Loggerhead (*Caretta caretta*) and leatherback sea turtle (*Dermochelys coriacea*) sightings.

# Other Marine Vertebrate Sightings (Tables 17-20, Figure 19)

## Chondrichthyan fishes

Twenty unidentified shark sightings were recorded during the reporting period. Most sharks were seen in the area inside the 100m isobath with the majority of sighting occurring in October. Seventeen manta rays (*Manta birostris*) were observed during the study period, and occurred in four of the five months surveyed. A single sighting of 225 individuals of cownose rays were observed in May inside the 100m isobaths.

# Other fishes

Eleven sightings of ocean sunfish (*Mola mola*) were recorded with the majority off of the 200m isobath. All sightings occurred in either March or May.

*Table 17*. Manta ray (*Manta birostris*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
28-May-13	14:25	48	35.555007	-74.842433	W	37	2	90°	3
28-May-13	14:25	39	35.554988	-74.846766	Е	37	2	90°	2
16-Jul-13	16:52	82	35.906200	-74.840620	W	42	2	90°	1
17-Jul-13	10:16	15	35.618951	-74.771526	Е	38	2	90°	1
20-Aug-13	11:42	11	35.551814	-74.763596	NW	37	1	90°	3
20-Aug-13	12:18	26	35.620762	-74.802606	Е	38	1	90°	1
20-Aug-13	15:40	65	35.832403	-74.688097	W	41	2	90°	2
21-Aug-13	10:11	35	36.123725	-74.622973	W	45	2	90°	2
22-Aug-13	13:44	104	36.126283	-74.761181	Е	45	1	90°	1
28-Oct-13	11:22	27	36.049894	-74.932001	W	44	2	90°	1

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
28-May-13	15:51	79	35.827462	-74.335548	W	41	2	90°	2
16-Jul-13	15:56	60	35.980199	-74.835194	ш	43	1	90°	1
18-Jul-13	14:20	160	35.480224	-75.034710	W	36	1	90°	1
20-Aug-13	14:37	43	35.763929	-75.113957	Е	40	1	90°	1
20-Aug-13	16:12	80	35.908643	-74.960514	Е	42	1	90°	1
21-Aug-13	9:15	3	36.044641	-75.134276	Е	44	1	90°	1
21-Aug-13	10:30	22	36.121343	-75.158077	W	45	2	90°	1
21-Aug-13	10:52	45	35.410818	-74.956622	Е	35	1	90°	1
22-Aug-13	15:03	115	36.049253	-75.078877	W	44	1	90°	1
28-Oct-13	10:45	7	36.122379	-74.574804	Е	45	1	120°	1

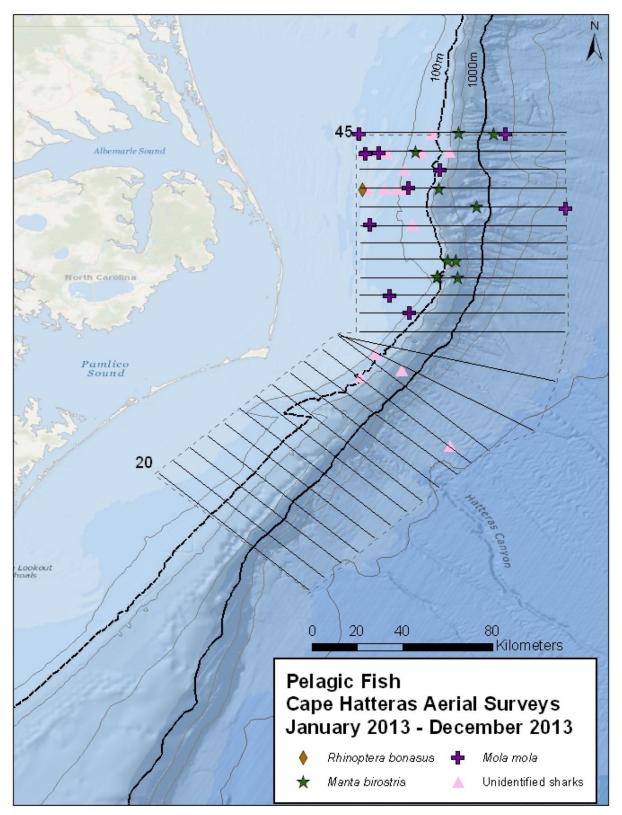
*Table 18*. Ocean sunfish (*Mola mola*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

*Table 19.* Cownose ray (*Rhinoptera bonasus*) sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
28-May-13	16:29	90	35.903389	-75.144966	Е	42	2	90°	225

2015.									
Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
28-May-13	10:16	11	34.882225	-74.795968	NW	30	1	90°	1
18-Jul-13	10:11	102	35.184473	-74.989762	NW	31	2	90°	2
18-Jul-13	10:24	107	35.248862	-75.094097	SE	32	1	90°	3
18-Jul-13	13:17	134	35.763534	-74.948187	Е	40	2	90°	1
28-Oct-13	10:30	3	36.124676	-74.868516	Е	45	1	100°	1
28-Oct-13	11:19	19	36.052243	-74.799090	W	44	1	90°	1
28-Oct-13	11:22	20	36.049231	-74.912655	W	44	1	110°	1
28-Oct-13	11:28	24	36.049028	-75.051282	W	44	3	100°	2
28-Oct-13	11:31	25	36.047368	-75.143988	W	44	3	100°	1
28-Oct-13	11:40	35	35.980850	-74.977838	E	43	2	90°	1
28-Oct-13	12:45	47	35.906951	-74.967875	W	42	1	100°	1
28-Oct-13	12:46	48	35.905641	-75.010223	W	42	1	90°	1
28-Oct-13	12:47	49	35.905170	-75.057867	W	42	1	90°	1
28-Oct-13	12:49	50	35.905859	-75.125066	W	42	1	90°	1
28-Oct-13	14:59	59	35.159487	-75.155402	W	30	2	100°	2

*Table 20.* Unidentified shark sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.



*Figure 19.* Manta ray (*Manta birostris*), ocean sunfish (*Mola mola*), cownose ray (*Rhinoptera bonasus*), and unidentified shark sightings.

<u>Vessel Sightings</u> Commercial (Table 21, Figure 20)

A total of 17 commercial vessels (*e.g.* tankers, car carriers, and container vessels) were observed in the survey site.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	Comments
28-May-13		4	35.105152	-75.218739	SE	29	3	60°	1	Cargo vessel
28-May-13	14:44	57	35.553293	-74.470275	W	37	1	90°	1	Tanker
16-Jul-13	11:01	8	34.476122	-75.579322	SE	20	2	60°	1	Tanker
16-Jul-13	11:29	11	34.605134	-75.611558	NW	21	3	60°	1	RORO car carrier
16-Jul-13	11:35	16	34.730817	-75.773575	NW	21	1	90°	2	Tug and Barge
16-Jul-13	16:37	72	35.906037	-74.589128	W	42	3	45°	1	Cargo vessel
18-Jul-13	10:15	66	35.255693	-75.159692	NW	31	3	60°	1	Cargo vessel
18-Jul-13	11:03	75	35.162943	-74.494962	NW	33	1	60°	1	Tanker
20-Aug-13	15:34	51	35.836386	-74.452984	W	41	1	60°	1	Cargo vessel
20-Aug-13	15:36	52	35.833859	-74.504902	W	41	3	60°	1	Cargo vessel
21-Aug-13	9:45	17	36.042971	-74.490553	Е	44	2	90°	1	Commercial fishing vessel
22-Aug-13	9:27	77	35.284369	-75.046607	SE	33	3	60°	1	Cargo vessel
22-Aug-13	10:06	82	34.950653	-74.482702	NW	32	2	45°	1	Commercial fishing vessel
22-Aug-13	10:09	111	34.988447	-74.550224	W	32	3	45°	1	Cargo vessel
22-Aug-13	15:01	113	36.047985	-75.020198	W	44	3	45°	1	Tanker
28-Oct-13	12:41	46	35.906859	-74.831259	W	42	4	90°	1	Research vessel

Table 21. Commercial vessel sightings in the Cape Hatteras, North
Carolina survey area from January 2013 to December 2013.

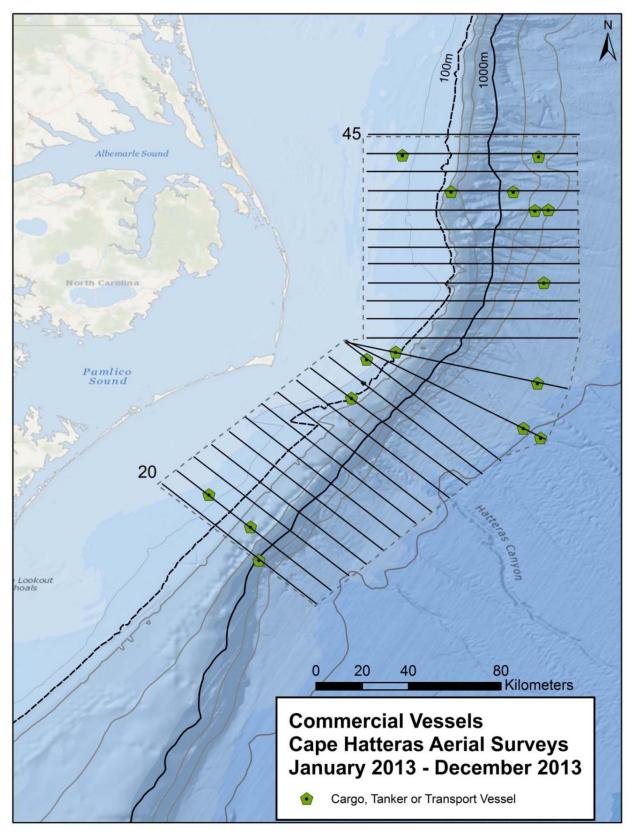


Figure 20. Large commercial shipping vessel sightings.

# Military / Coast Guard Vessels (Table 22, Figure 21)

A total of three military vessels were observed in the survey site.

Table 22. Military vessel sightings in the Cape Hatteras, North Carolina
survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	Comments
16-Jul-13	16:57	52	35.905797	-75.022512	W	42	2	90°	2	Millitary Carrier and Cargo
22-Aug-13	13:46	140	36.122483	-74.734485	Е	45	2	60°	1	Submarine

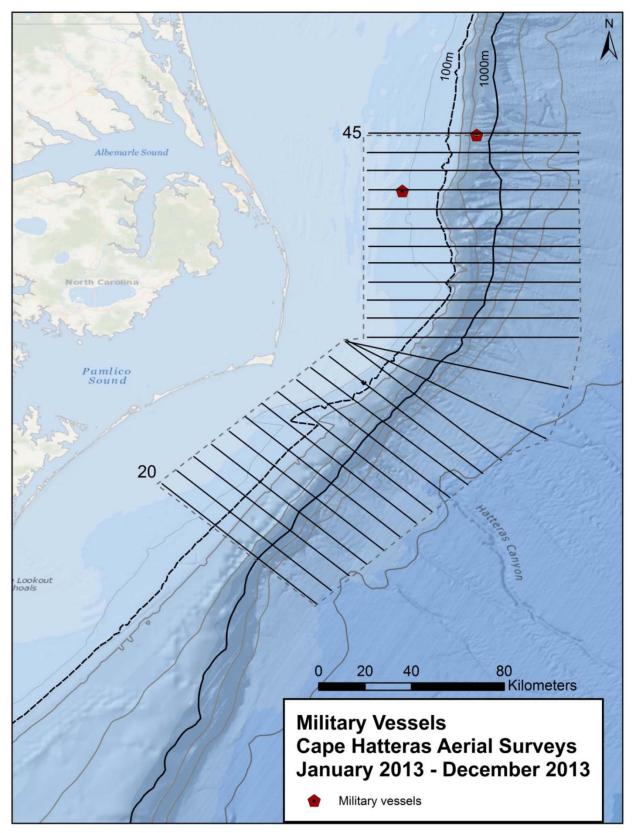


Figure 21. Military vessel sightings.

# Other Vessels (Table 23, Figure 22)

A total of 295 other vessels were recorded in the survey site. Other than a single sailboat sighting all other vessels were categorized as recreational sport fishing vessels.

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						er		Degree Forward		
		÷		7		Track Number		N		s
		oin	Ð	epr	Ð	Ę	out	Ш		ent
0	a	P	pn	gitt	din	×	le	Lee	t #	Ē
Date	Time	Way Point	atitude	-ongitude-1	Heading	rac	Angle out	beg	Best	Comments
30-Mar-13		<u>&gt;</u> 16		-75.091028	W	⊢ 29	A 3	90°	4	Recreational fishing vessel
28-May-13		3		-75.294855	SE	29	2	90°	4	Recreational fishing vessel
28-May-13		4		-75.277456	SE	29	2	60°	3	Recreational fishing vessel
28-May-13		6		-75.147699	SE	29	1	90°	1	Recreational fishing vessel
28-May-13		28		-75.016329	W	33	1	90°	1	Recreational fishing vessel
28-May-13		26		-74.918902	SE	34	2	60°	2	Recreational fishing vessel
28-May-13		40		-74.828202	E	37	3	90°	1	Recreational fishing vessel
28-May-13		69		-74.790254	E	40	2	90°	6	Recreational fishing vessal
28-May-13		52		-74.800053	Ŵ	40	2	90°	9	Recreational fishing vessel
28-May-13		72		-75.119029	W	41	1	45°	1	Recreational fishing vessel
28-May-13		73		-74.915834	W	41	2	90°	1	Recreational fishing vessel
	10:44	3		-75.755230	SE	20	1	90°	1	Recreational fishing vessel
	10:45	3		-75.730365	SE	20	3	90°	2	Recreational fishing vessel
16-Jul-13		10		-75.598374	NW	21	3	60°	5	Recreational fishing vessel
16-Jul-13	11:30	15		-75.635263	NW	21	2	45°	1	Recreational fishing vessel
16-Jul-13	11:39	12		-75.875282	NW	21	2	90°	1	Recreational fishing vessel
	11:50	19		-75.643742	SE	22	3	60°	5	Recreational fishing vessel
	11:51	20		-75.585457	SE	22	3	90°	15	Recreational fishing vessel
	12:30	27		-75.483538	NW	23	1	90°	7	Recreational fishing vessel
	14:39	35		-74.890811	E	45	2	90°	1	Recreational fishing vessel
	15:38	37		-74.892963	E	44	2	90°	1	Recreational fishing vessel
	16:53	51		-74.888622	w	42	3	90°	2	Recreational fishing vessel
16-Jul-13	16:56	83		-74.990557	W	42	1	45°	1	Recreational fishing vessel
17-Jul-13	9:07	3		-74.958882	E	41	3	45°	1	Recreational fishing vessel
17-Jul-13	9:16	5		-74.586211	E	41	2	60°	1	Recreational fishing vessel
17-Jul-13	10:16	14		-74.791357	E	38	1	90°	1	Recreational fishing vessel
17-Jul-13	10:42	22		-74.779671	w	39	2	60°	2	Recreational fishing vessel
17-Jul-13	12:54	28		-75.227134	SE	29	2	60°	1	Recreational fishing vessel
17-Jul-13	12:55	22		-75.199355	SE	29	3	90°	13	Recreational fishing vessel
17-Jul-13	13:30	34		-75.238516	NW	28	1	90°	1	Recreational fishing vessel
17-Jul-13	13:30	25		-75.248050	NW	28	2	90°	6	Recreational fishing vessel
17-Jul-13	13:31	35	35.037781		NW	28	1	60°	1	Recreational fishing vessel
17-Jul-13	14:22	45		-75.381443		26	3	90°	1	Recreational fishing vessel
	14:25	32		-75.471570		26	2	90°	1	Recreational fishing vessel
18-Jul-13	9:21	89		-75.149568		30	3	90°	1	Recreational fishing vessel
18-Jul-13				-75.151721		40		90°	1	Recreational fishing vessel
				-75.100737	E	40	2	60°	2	Recreational fishing vessel
				-75.056107	E	40	2	90°	1	Recreational fishing vessel
18-Jul-13				-74.951838	E	40	3	60°	1	Recreational fishing vessel
18-Jul-13				-74.456426		40	2	90°	1	Sailboat
				-74.816944	w	36	3	60°	1	Recreational fishing vessel
				-75.022017	W	36	3	60°	1	Recreational fishing vessel
18-Jul-13				-74.866582	E	35	3	90°	5	Recreational fishing vessel
20-Aug-13				-74.807071	E	36	2	90°	1	Recreational fishing vessel
20-Aug-13				-74.763192	SE	36	1	90°	1	Recreational fishing vessel
20-Aug-13		_		-75.061442	W	37	3	60°	1	Recreational fishing vessel
20-Aug-13				-74.840392	W	39	1	90°	1	Recreational fishing vessel
20-Aug-13		78		-75.135077	E	42	3	45°	2	Recreational fishing vessel
ug					_		-		_	in the second second

*Table 23.* Other vessel sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	Comments
20-Aug-13		98	35.978539	-74.857741	W	43	2	90°	1	Recreational fishing vessel
20-Aug-13		71	35.978659		W	43	2	90°	1	Recreational fishing vessel
21-Aug-13	9:22	4	36.048465	-74.834874	Е	44	3	60°	7	Recreational fishing vessel
21-Aug-13	9:23	7	36.048555	-74.828400	Е	44	2	45°	2	Recreational fishing vessel
21-Aug-13	10:21	41	36.124198	-74.804531	W	45	2	90°	2	Recreational fishing vessel
21-Aug-13	10:21	21	36.124204	-74.805000	W	45	3	90°	16	Recreational fishing vessel
21-Aug-13	14:43	50	34.816191	-75.747150	SE	22	3	60°	2	Recreational fishing vessel
22-Aug-13	13:41	139	36.125268	-74.866526	E	45	3	90°	20	Recreational fishing vessel
22-Aug-13	13:41	103	36.125580	-74.849372	E	45	2	45°	41	Recreational fishing vessel
22-Aug-13	14:54	112	36.053123	-74.785066	W	44	1	90°	65	Recreational fishing vessel
22-Aug-13	14:55	156	36.051236	-74.798365	W	44	2	90°	8	Recreational fishing vessel
22-Aug-13	15:13	163	35.982006	-74.961436	Е	43	2	60°	6	Recreational fishing vessel
28-Oct-13	14:23	70	35.232174	-75.123457	SE	31	1	90°	1	Recreational fishing vessel
28-Oct-13	15:00	75	35.187465	-75.190659	NW	30	3	45°	1	Recreational fishing vessel
28-Oct-13	15:10	63	35.156535	-75.286000	E	29	1	90°	1	Recreational fishing vessel

*Table 23 (Continued).* Other vessel sightings in the Cape Hatteras, North Carolina survey area from January 2013 to December 2013.

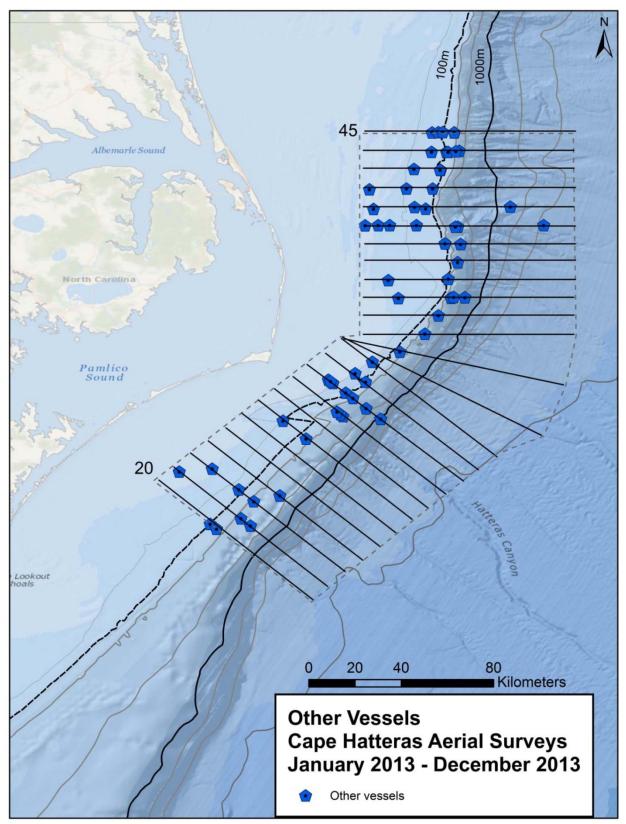


Figure 22. Other vessel sightings.

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# Protected Species Monitoring in the Jacksonville OPAREA Jacksonville, Florida January 2013 – December 2013



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## Introduction

This report forms part of a multi-institutional monitoring project intended to provide information on the species composition, population identity, density and baseline behavior of marine mammals and sea turtles present in Navy range complexes along the Atlantic coast. This program began in 2007, with baseline aerial and vessel surveys and a passive acoustic monitoring program in Onslow Bay, North Carolina and has since expanded to include study areas off Jacksonville, Florida and Cape Hatteras, North Carolina. In Onslow Bay, six years of monitoring have yielded a comprehensive picture of the density, distribution and abundance of marine mammals and sea turtles and provided new insights into residency patterns among pelagic delphinid cetaceans in this region. More than four years of monitoring in Jacksonville have provided similar information on the density and distribution of marine mammals and sea turtles in this area. In Cape Hatteras, almost three years of surveys have provided preliminary information on the complex patterns of distribution and diversity of the marine mammals and sea turtles in this highly productive area. The current report builds on this past body of work and describes monitoring activities that occurred between January and December 2013.

#### Acknowledgements

For collaborative efforts we thank our colleagues at Duke University Marine Lab (Kim Urian, Andy Read, Heather Foley, Zach Swaim, Jennifer Dunn, and Lynne Hodge) and St. Andrews University (Charles Paxton). We thank Ed Coffman, owner and operator of Orion Aviation, and his highly skilled pilots: Dave Huddle, Stan Huddle, Cameron Radford, Ryan Macgregor, Greg Souther, Collin Mendenhall, Rocky Walker, John Esties, and Bob Stickle, for excellent flying and a high level of professionalism. We thank Joel Bell for his support of this work. Surveys are conducted under NOAA Scientific Permit No 16473, held by UNCW, and NOAA General Authorization Letter of Confirmation No. 16185 held by Duke University.

# **Summary of JAX Aerial Surveys**

This document is an annual progress report to the U.S. Department of the Navy on aerial surveys conducted in the offshore waters of Jacksonville, Florida between January 2013 and December 2013. The goal was to survey the entire site (10 tracklines) twice per calendar month, which was achieved in May where 20 tracklines were flown and September where 23 tracklines were flown. In March, 10 tracklines were flown, followed by 12 in June and 8 in October. During the months of January February, April, July, August, November and December of 2013 no surveys were conducted due to unfavorable weather conditions or complications with aircraft. A total of 73 tracklines covering 5913km were surveyed across five months.

A total of 100 sightings of 915 cetaceans were recorded while on effort in the study area (Table 1a, Figure 1). Four species of cetaceans were observed while on effort including: bottlenose dolphins (*Tursiops truncatus*; 54 sightings of 309 individuals), Atlantic spotted dolphins (*Stenella frontalis*; 34 sightings of 503 individuals), Risso's dolphins (*Grampus griseus*; six sightings of 71 individuals), pantropical spotted dolphins (*Stenella attenuata*; one sighting of 25 individuals). During five sightings (totaling seven individuals) dolphin species identity could not be established with 100 percent certainty (*i.e.* "unidentified delphinids"). Two off effort sightings, one of short-finned pilot whales (*Globicephala macrorhynchus*) and one of bottlenose dolphins, were observed just offshore of the survey site while transiting between tracklines. These off effort sightings are included in the individual species sighting maps and tables but are excluded from all other calculations. Cetacean sighting rates varied across months with peaks in May and September.

A total of 301 sea turtles were recorded during the study period. Of these turtle sightings, 270 were identified as loggerheads (*Caretta caretta*), 16 as leatherbacks (*Dermochelys coriacea*), and 15 as "unidentified sea turtles" (Tables 9 and 10, Figure 12 and 13). Sea turtles were detected during each day of survey effort, with higher abundances observed in May and September (Figures 11a-c).

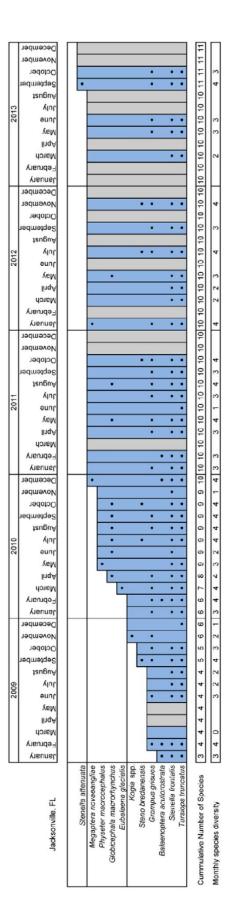
As has been demonstrated in our earlier reports and in other aerial survey studies, sightings drop off dramatically as the Beaufort Sea State increases (e.g. Gómez de Segura *et al.* 2006, DeMaster *et al.* 2001, McAlarney *et al.* 2011). Effort corrected cetacean and sea turtle sightings were higher in sea states of 1 or 2 than in sea states  $\geq$  3 (Figures 4b & 11b).

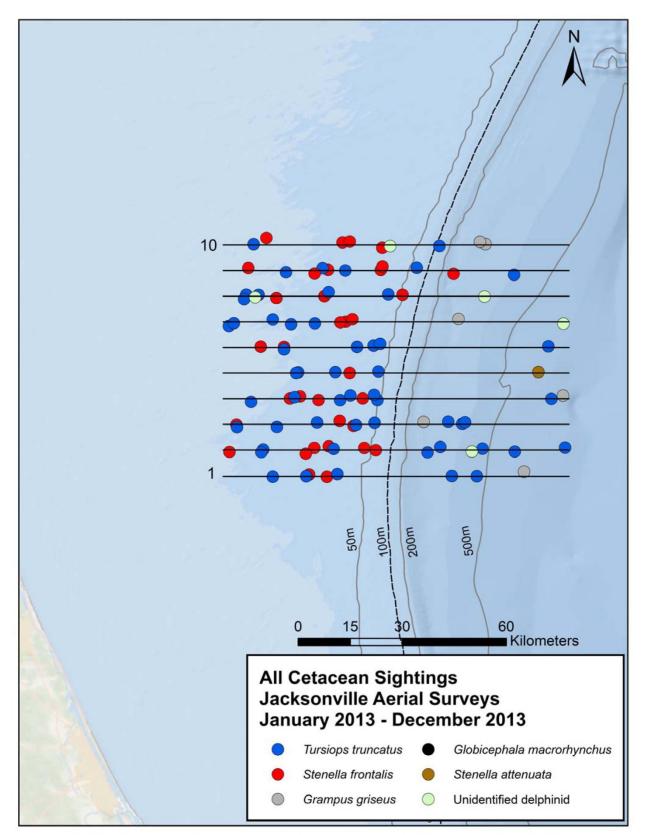
In addition to cetaceans and sea turtles, other pelagic marine vertebrates, including ocean sunfish and multiple species of sharks and rays, were observed (Tables 11-14, Figure 14). Military, commercial, and recreational vessel traffic was also recorded inside the survey area (Tables 15-17, Figures 15-17).

								2013						Total
		January Fe	February March April	March	April	May	June	July	August	September October	October	November	December	
Tursions truncatus	# of Sightings			2		21	7			20	4			54
	# of Individuals			9		126	36			126	15			309
Stanalla frontalis	# of Sightings			÷		13	٢			10	6			34
	# of Individuals			14		215	45			152	77			503
sitesiaa sitaateeg	# of Sightings					e	-			-	-			9
cuanting and	# of Individuals					43	10			11	7			71
Stenella attenuata	# of Sightings									۲				-
	# of Individuals									25				25
I Inidentified delphinid						-	4							5
	# of Individuals					2	5							7
	Total sightings	0	0	e	0	38	13	0	0	32	14	0	0	100
	Total individuals	0	0	20	0	386	96	0	0	314	66	0	0	915

Table 1a. Total number of sightings and individuals for each species by month from January 2013 to December 2013 for the Jacksonville, Florida survey area.

Dots denote months in which a species was observed. Grey bars denote months in which no survey effort was conducted. Table 1b. Cetacean discovery curve from January 2009 to December 2013 for the Jacksonville, Florida area.





*Figure 1*. All cetacean sightings during aerial surveys conducted in Jacksonville, Florida from January 2013 to December 2013.

## Methodology

### Survey design and logistics

The Jacksonville offshore survey area consists of ten 86 km long tracklines spaced 7.4km apart covering 5727km<sup>2</sup> (Table 2, Figure 2). The site is located offshore of the primary calving grounds for the highly endangered North Atlantic right whale (*Eubalaena glacialis*), which is located off the coast of the southeastern US (reviewed in Waring *et al.* 2010, but see Foley *et al.* 2011). Aerial Early Warning System (EWS) surveys have been conducted in northern Florida and southern Georgia for the past 16 years to warn mariners in real time about the presence of right whales in the region. These surveys are conducted on a daily basis, weather permitting, from December through March. Aerial survey effort in the Jacksonville offshore survey area provided additional coverage, both of the surrounding geographic region and during the months preceding and following the EWS surveys. In past years this has resulted in a number of ancillary right whale sightings that have helped augment inshore activity.

Safety and communication protocols for transiting through the EWS areas were established in January 2009 when offshore survey effort began. The offshore survey team talked with researchers from the Florida Wildlife Service prior to the start of EWS surveys. The protocols outlined included coordination between survey team leaders on the morning of a survey, plane to plane communication at the start of an aerial survey, and the maintenance of a 1000m altitude for the offshore survey plane while transiting through the EWS area between December and March. The protocols also established the 9.3km (5 nm) "buffer zone" between the western margin of the offshore survey area and the eastern margin of the EWS surveys (Figure 2). We have maintained these safety and communication protocols throughout the reporting period.

All aerial surveys were based out of the local Fixed-base Operator (FBO) in Fernandina Beach, Florida. Prior to an aerial survey, pilots with Orion aviation would contact SeaLord at FACFASJAX in Jacksonville, Florida, to get event codes for passage out of and into U.S. territorial waters.

Transect Line	Eastern	Waypoint	Western	Waypoint
Line	Latitude	Longitude	Latitude	Longitude
1	29.965011	-79.801416	29.965011	-80.700000
2	30.031263	-79.801416	30.031263	-80.700000
3	30.099694	-79.801416	30.099694	-80.700000
4	30.165763	-79.801416	30.165763	-80.700000
5	30.232227	-79.801416	30.232227	-80.700000
6	30.299477	-79.801416	30.299477	-80.700000
7	30.365152	-79.801416	30.365152	-80.700000
8	30.432797	-79.801416	30.432797	-80.700000
9	30.498866	-79.801416	30.498866	-80.700000
10	30.566233	-79.801416	30.566233	-80.700000

Table 2. Coordinates for trackline end points for the Jacksonville, Florida survey area.

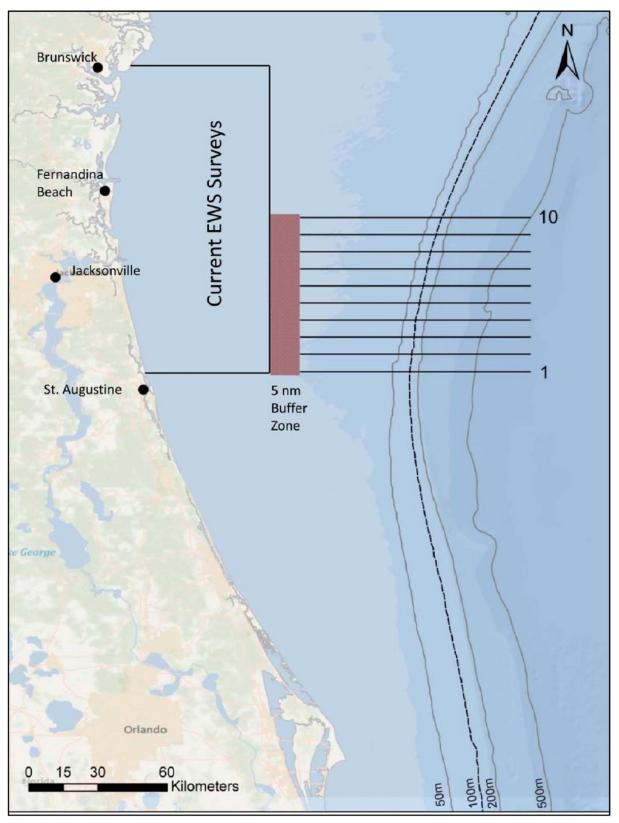


Figure 2. Tracklines 1-10 that compose the Jacksonville, Florida survey site.

## Results

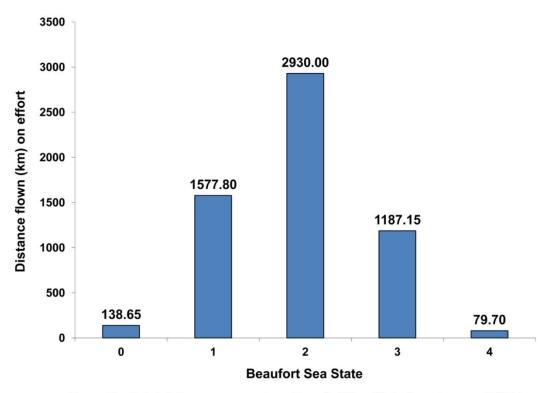
A total of 73 tracklines comprising 5913km were surveyed during the 12 month reporting period from January 2013 through December 2013. Minimum coverage of ten tracklines was achieved in four of 12 months, and in October eight tracklines were flown. Unfavorable survey conditions and complications with the planes precluded surveys from being conducted during the other seven months (Table 3).

An average Beaufort Sea State (BSS) value was calculated each survey month to compare conditions across time. The average was calculated by taking the distance flown at each sea state multiplied by the BSS number (*i.e.* BSS 1 distances would be multiplied by 1). These values were summed and divided by the total distance flown that month. Survey effort was terminated when BSS values persisted above a 4. Survey conditions ranged from a BSS 0 to 4, with the majority of the surveys flown in a BSS 2 (49.5%) (Figures 3a-c). Cetacean sighting rates dropped off dramatically at sea state greater than 2. Lower sighting rates in BSS 0 and 1 is likely a result of limited survey time spent in these conditions rather than decreased detection of cetaceans (Figures 4a-c).

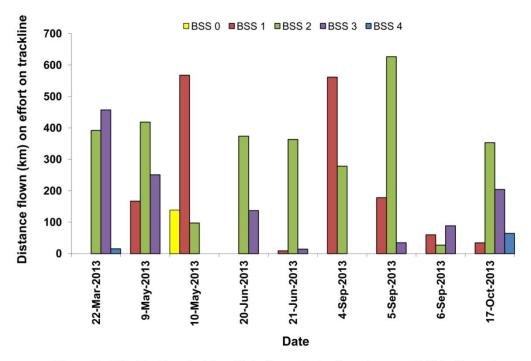
The mean sighting distance for all cetacean sightings was 0.72km with greater than 75% of sightings occurring within 1km of the trackline (Figure 5a). The mean sighting distance varied less than 0.15km across the BSS values recorded (Figure 5b). Average sighting distances were calculated after removing a single outlier (1.94km from trackline), which was defined as a value in excess of three standard deviations from the mean.

Date	Tracklines Flown AM	Tracklines Flown PM	Total km Flown	Hobbs Hours
22-Mar-2013	10 to 5	1 to 4	864.3	6.4
9-May-2013	10 to 7	6 to 1	836.4	8.0
10-May-2013	5 to 10	1 to 4	803.7	7.6
20-Jun-2013	10 to 5	N/A	510.7	4.2
21-Jun-2013	1 to 6	N/A	386.9	4.8
4-Sep-2013	10 to 7	1 to 6	839.7	7.4
5-Sep-2013	5 to 10	4 to 1	839.6	7.9
6-Sep-2013	10 to 8	N/A	175.9	2.4
17-Oct-2013	10 to 7	1 to 4	656.2	7.0
9 days	73 tra	cklines	5913.3 km	55.7 hrs

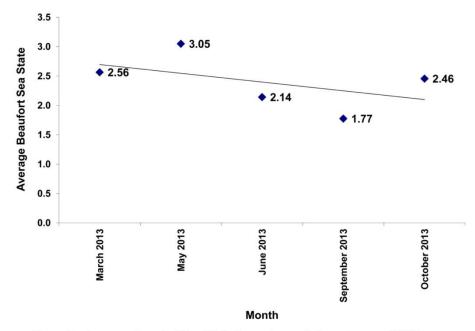
*Table 3.* Tracklines, km flown and Hobbs hours during aerial surveys of the Jacksonville, Florida survey area from January 2013 to December 2013. Trackline numbers are listed in the order in which they were flown.



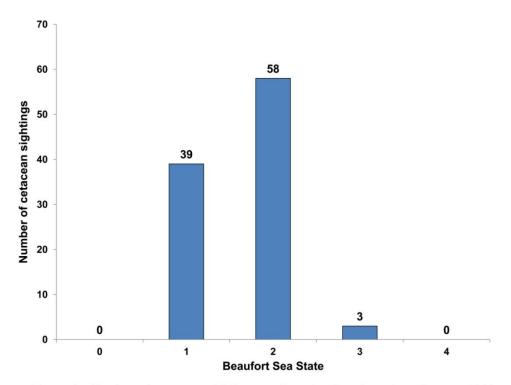
*Figure 3a*. Total distance surveyed per Beaufort Sea State from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area.



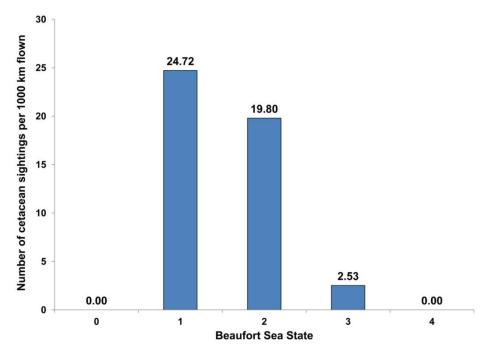
*Figure 3b*. Effort by Beaufort Sea State for each day from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area.



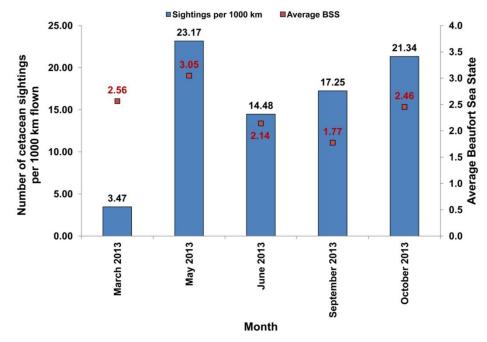
*Figure 3c.* Average Beaufort Sea State for each month from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area. Values were calculated using the formula AvgBSS = [(Distance @ 1\*1)+.../Total distance flown that day]



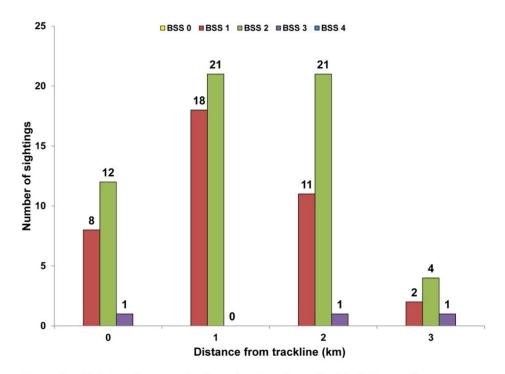
*Figure 4a*. Number of cetacean sightings per Beaufort Sea State from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area.



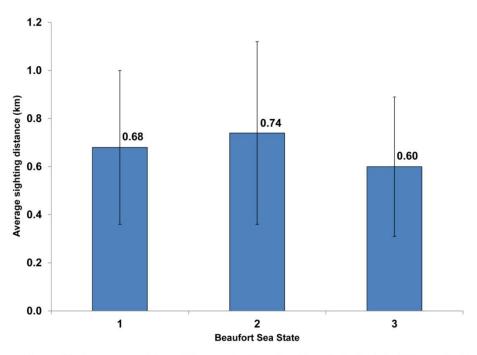
*Figure 4b*. Cetacean sightings per 1000 km flown by Beaufort Sea State from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area.



*Figure 4c.* Cetacean sightings per 1000 km surveyed and the average Beaufort Sea State per month from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area.



*Figure 5a*. Sighting distances by Beaufort Sea State for 99 of 99 on effort cetacean sightings from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area.



*Figure 5b.* Average sighting distances by Beaufort Sea State for 99 of 99 on effort cetacean sightings from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area. Error bars denote standard deviation for each category.

### Marine Mammal Sightings

A total of 100 sightings of 915 individual cetaceans, representing four species, were observed while on effort during the reporting period. There were no endangered species encountered inside the study area during this reporting period. All identified species encountered are listed below in order of decreasing number of sightings (*i.e.* most commonly sighted species first). While the only sighting of short-finned pilot whales this year occurred while off effort, this species is included here as it has been observed inside the range during previous year. Total number of individuals is based upon the best estimate of group size. Information on individual sighting summaries are in Appendix C. Daily sightings are summarized in Appendix D.

#### Bottlenose dolphin (Tursiops truncatus) (Table 4, Figure 6)

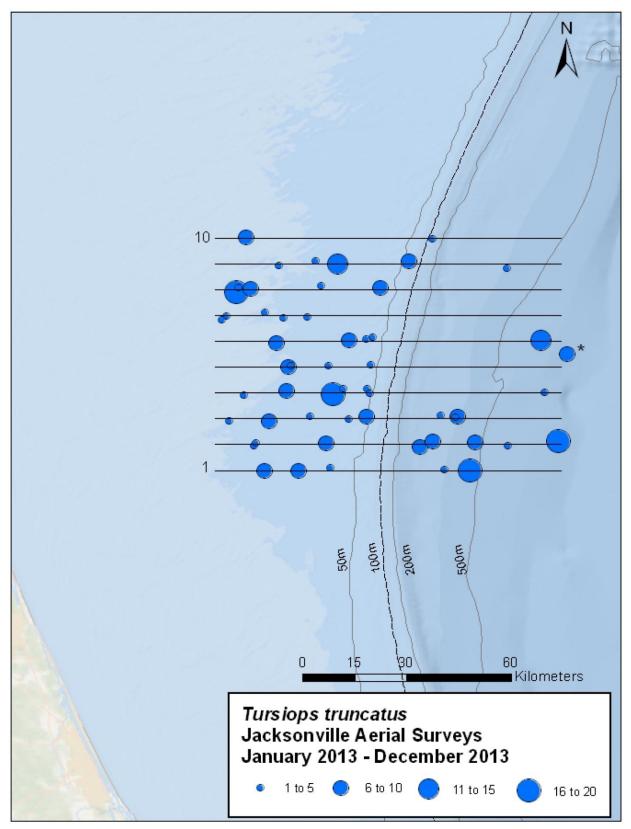
Bottlenose dolphins were the most frequently encountered cetacean (54 sightings for a total of 309 individuals). While group size ranged from 1 to 20 (mean=5.7), 89% of sightings contained 10 or fewer individuals. Based on the distance from shore (*e.g.* greater than 34 km), the bottlenose dolphins observed in this study are most likely of the offshore ecotype (Torres *et al.* 2003). Genetic analysis of biopsy samples (n=16) collected inside the survey area confirm that all dolphins sampled belong to the offshore ecotype (Swaim *et al.* 2013). Bottlenose dolphins were encountered throughout the study area and there was no obvious relationship between group size and bathymetry (Figure 6). This species was encountered during each month surveyed. The current best estimate of offshore bottlenose dolphins in the Western Atlantic Ocean, between central Florida and Canada, is 81588 (CV=0.17) (NOAA Stock Assessment Report; Waring *et al.* 2008). The status of the offshore bottlenose dolphins stock in the Northwest Atlantic is unknown (Waring *et al.* 2008).

							<u> </u>			
Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	ω Best #	
22-Mar-13	15:18	41	30.106511	-80.117174	E	3	1	90°	3	
22-Mar-13		47	30.165759		W	4	3	60°	3	
9-May-13	9:44	8	30.499629		W	9	2	60°	15	
9-May-13	10:14	16	30.437419		Е	8	3	90°	6	
9-May-13	11:04	30	30.359587		W	7	3	100°	3	
9-May-13	11:15	35	30.362490		W	7	2	90°	2	
9-May-13	13:03	46	30.308573		Е	6	2	90°	2	
9-May-13	13:39	58		-80.298098	W	5	2	90°	1	
9-May-13	13:56	66	30.233065		W	5	1	45°	6	
9-May-13	14:14	73	30.158026		E	4	2	90°	4	
9-May-13	14:26	80	30.162511		E	4	2	100°	3	
9-May-13	15:11	101	30.103609		W	3	1	90°	8	
9-May-13	15:44				E	2	2	90°	7	
9-May-13				-79.944436	E	2	1	90°	3	
10-May-13		5	30.235295		E	5	1	90°	4	
10-May-13		15	30.302153		W	6	1	45°	13	
10-May-13		21	30.304065		W	6	3	100°	2	
10-May-13		34	30.361910		E	7	2	90°	5	
10-May-13		62	30.424997		W	8	2	90°	20	
10-May-13		76	30.506527		E	9	2	60°	8	
10-May-13		92	30.563264		W	10	1	90°	3	
10-May-13		101	30.567770		W	10	2	60°	6	
10-May-13		152	30.174365		W	4	1	90°	5	
20-Jun-13	12:41	33	30.266891	-79.788749		-	3	90°	7	*
21-Jun-13	9:14	8	29.965022		Е	1	2	130°	3	
21-Jun-13		23	30.026501		W	2	1	90°	6	
21-Jun-13		32	30.092055		E	3	2	90°	4	
21-Jun-13	10:37	39	30.097726		E	3	2	130°	2	
21-Jun-13	10:50	45	30.104927		E	3	2	80°	7	
21-Jun-13	11:24	53	30.169890		W	4	2	100°	8	
21-Jun-13	12:08	70	30.294445		W	6	2	110°	6	
4-Sep-13	11:28	40		-80.571879	W	7	2	90°	4	
4-Sep-13	11:34	46	30.355202		W	7	2	100°	4	
4-Sep-13				-80.571982		1	1	90°	7	
4-Sep-13	13:27	61		-80.485104	E	1	2	90°	8	
4-Sep-13	13:37	65	29.970169		E	1	2	90°	1	
4-Sep-13	13:50	69	29.964516		E	1	2	90°	18	
4-Sep-13	14:12	75		-80.028405	W	2	1	120°	8	
4-Sep-13	14:34	80	30.027039		W	2	1	120°	2	
4-Sep-13	14:50	89	30.104249		E	3	1	90°	2	
4-Sep-13	15:49	99	30.234601		E	5	2	90°	1	
5-Sep-13	9:48	13	30.300761		W	6	1	90°	8	
5-Sep-13	11:00	29	30.443162		W	8	3	90°	3	
5-Sep-13	11:21	38		-80.442981	E	9	2	100°	1	
5-Sep-13	11:46	47	30.488333		E	9	2	90°	4	
5-Sep-13	14:24	76	30.162144		E	4	3	90°	16	
5-Sep-13	15:17	88		-80.561323	W	3	2	90°	6	
5-Sep-13	15:50	96	30.040520		E	2	2	45°	9	
0.000 10	.0.00	55	55.510020	00.101110	-	-	-		-	

*Table 4*. Bottlenose dolphin (*Tursiops truncatus*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013. Asterisk denotes off effort sightings.

	sightings i	n the .	Jack	sonville, Fl	dolphin ( <i>Te</i> orida surve sk denotes	y ar	ea f	from	Jani	uary	
- 1									σ		

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
5-Sep-13	16:00	100	30.039238	-79.814079	E	2	2	60°	19
6-Sep-13	10:00	128	30.495026	-80.537739	W	9	2	90°	1
6-Sep-13	10:12	135	30.436669	-80.640863	Е	8	2	60°	4
17-Oct-13	10:24	29	30.436226	-80.608824	Е	8	1	90°	6
17-Oct-13	14:15	70	30.034130	-80.596828	W	2	1	90°	2
17-Oct-13	15:04	94	30.100921	-80.080960	Е	3	1	60°	5
17-Oct-13	15:38	102	30.175892	-80.309161	W	4	2	90°	2



*Figure 6*. Bottlenose dolphin (*Tursiops truncatus*) sightings indicating group size. Asterisk denotes off effort sightings.

### Atlantic spotted dolphin (Stenella frontalis) (Table 5, Figure 7)

The Atlantic spotted dolphin was the second most frequently sighted, and numerically most abundant, species encountered in the survey area and were seen in every month surveyed (34 sightings for a total of 503 individuals). Group size ranged from 1 to 58 (mean=14.8). This species was encountered predominantly in shallow water over the continental shelf (Figure. 7). There are two distinct forms, or ecotypes, of the Atlantic spotted dolphin in the western North Atlantic: a heavily spotted form that typically occurs on the continental shelf and is most often encountered at or within the 200m isobath, and a less spotted, smaller form that occurs further offshore and around deep island archipelagoes (Perrin *et al.* 1987, 1994). It is likely, based upon the features observed, that the spotted dolphins seen during the present study belong to the continental shelf variety. The abundance estimate for *S. frontalis* (both the inshore and the offshore forms) in the western North Atlantic is 26798 (CV=0.66) and was determined by aerial and vessel observations; the status of the stock(s) is/are unknown (Waring *et al.* 2012).

*Table 5*. Atlantic spotted dolphin (*Stenella frontalis*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
22-Mar-13	15:00	36	30.108723	-80.398359	Е	3	1	90°	14
9-May-13	10:56	26	30.364507	-80.396673	W	7	1	90°	16
9-May-13	13:46	62	30.233078	-80.372391	W	5	2	90°	9
9-May-13	15:33	110	30.038290	-80.464253	Е	2	2	45°	14
9-May-13	15:50	118	30.038170	-80.334790	Е	2	2	90°	3
9-May-13	16:36	134	29.962992	-80.431610	W	1	3	90°	6
10-May-13	9:56	26	30.301435	-80.603184	W	6	1	90°	3
10-May-13	10:17	38	30.372800	-80.365265	Е	7	2	90°	8
10-May-13	10:56	51	30.436293	-80.235362	W	8	2	60°	58
10-May-13	11:04	56	30.432531	-80.438154	W	8	1	60°	6
10-May-13	11:39	72	30.509741	-80.287540	Е	9	2	90°	27
10-May-13	11:55	81	30.491044	-80.103064	Е	9	3	90°	30
10-May-13	14:40	114	29.968842	-80.477942	Е	1	1	90°	17
10-May-13	15:25	134	30.042331	-80.426692	W	2	2	100°	18
21-Jun-13	12:16	71	30.300538	-80.542854	W	6	2	100°	45
4-Sep-13	9:35	8	30.572533	-80.390993	Е	10	1	60°	35
4-Sep-13	10:24	20	30.505879	-80.635534	W	9	1	90°	20
4-Sep-13	11:17	34	30.366270	-80.382744	W	7	2	45°	10
5-Sep-13	11:29	42	30.500759	-80.291870	Е	9	2	100°	16
5-Sep-13	12:17	58	30.574702	-80.372299	W	10	2	60°	5
5-Sep-13	14:13	69	30.171990	-80.501133	Е	4	2	100°	1
5-Sep-13	14:19	72	30.162467	-80.453415	Е	4	2	90°	5
5-Sep-13	14:32	80	30.166837	-80.338649	Е	4	3	90°	5
6-Sep-13	9:51	119	30.501176	-80.428540	W	9	3	90°	35
6-Sep-13	9:55	123	30.491543	-80.463564	W	9	2	90°	20
17-Oct-13	9:14	6	30.584009	-80.588475	Е	10	3	120°	10
17-Oct-13	9:29	13	30.558824	-80.288020	Е	10	2	100°	12
17-Oct-13	10:29	33	30.427726	-80.562642	Е	8	2	90°	10
17-Oct-13	13:48	61	30.032212	-80.304650	W	2	1	90°	12
17-Oct-13	14:00	65	30.023095	-80.486503	W	2	3	110°	3
17-Oct-13	14:25	74	30.027669	-80.684144	W	2	1	90°	7
17-Oct-13	14:33	80	30.098440	-80.666253	Е	3	1	90°	5
17-Oct-13	14:48	86	30.095534	-80.362398	Е	3	2	90°	12
17-Oct-13	15:48	105	30.166598	-80.527591	W	4	2	90°	6

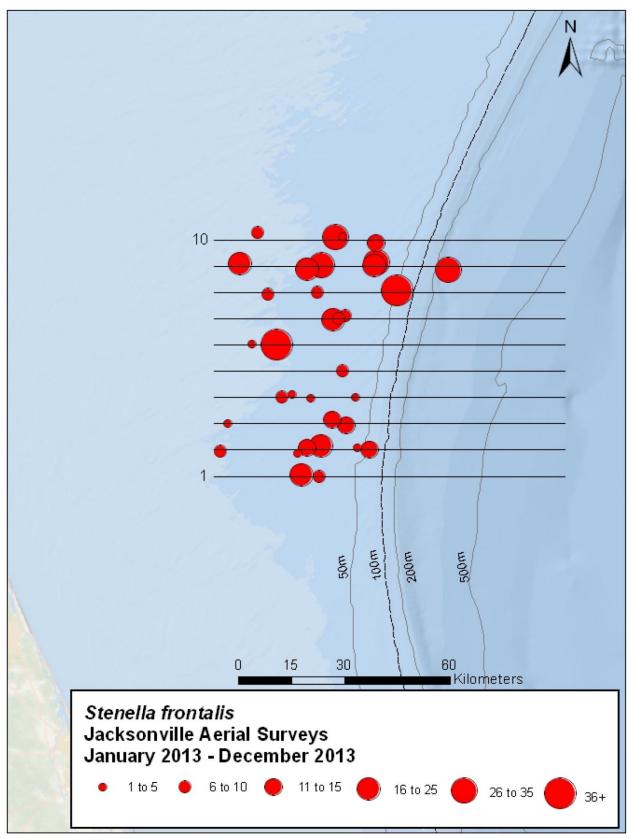


Figure 7. Atlantic spotted dolphin (Stenella frontalis) sightings indicating group size.

#### Risso's dolphin (Grampus griseus) (Table 6, Figure 8)

This species was encountered six times for a total of 71 individuals (Figure 8). Group size for this species ranged from 6 to 19 individuals (mean=11.8). Risso's dolphins were recorded in four of the five months surveyed, and were only observed in deeper, offshore waters. Risso's dolphin have been found along the mid-Atlantic continental shelf edge year round, with some movement north during spring, summer and fall, and into the mid-Atlantic bight during winter (Waring *et al.* 2011). The best available estimate for Risso's dolphins, based on results from US Atlantic surveys conducted in 2011, is 15197 (CV=0.55) (Waring *et al.* 2012). The status of this species in the western Atlantic is unknown (Waring *et al.* 2012).

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
9-May-13	14:42	86	30.174165	-79.819369	E	4	3	90°	18
10-May-13	10:30	44	30.373555	-80.090506	Е	7	3	100°	6
10-May-13	12:16	88	30.568157	-80.020547	W	10	3	110°	19
21-Jun-13	9:26	13	29.976420	-79.920542	Е	1	1	120°	10
5-Sep-13	12:02	54	30.573902	-80.035006	W	10	2	45°	11
17-Oct-13	14:57	90	30.105991	-80.180904	Е	3	1	90°	7

*Table 6*. Risso's dolphin (*Grampus griseus*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

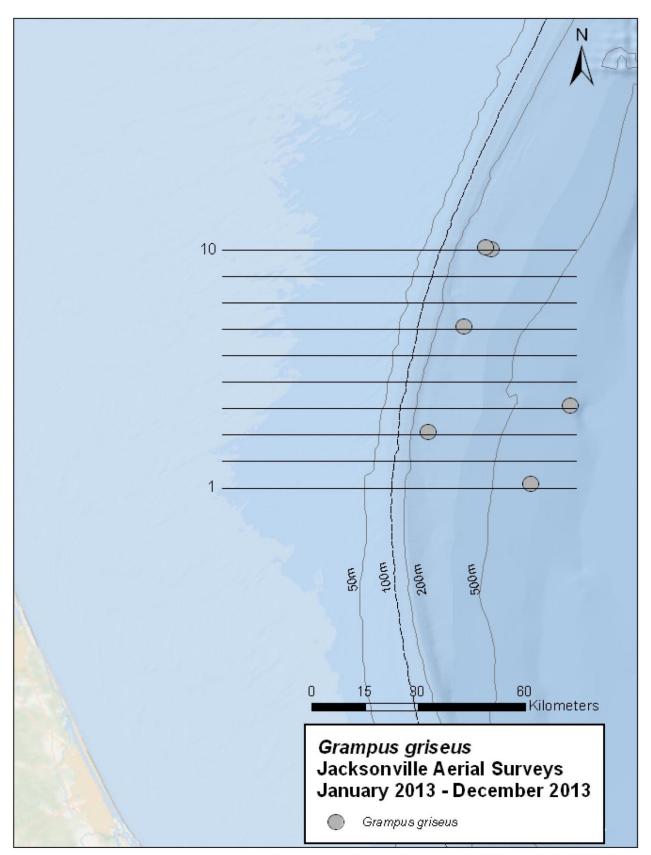


Figure 8. Risso's dolphin (Grampus griseus) sightings.

# Pantropical spotted dolphin (Stenella attenuata) (Table 7, Figure 9)

A single sighting of a group of 25 pantropical spotted dolphins occurred beyond the 500m isobath in the month of September, and represents the first sighting of this species since our surveys began in 2009. The best available abundance estimate for this species is 4439 (CV=0.49) based upon combined estimates of two vessel based surveys conducted in 2004. The status of pantropical spotted dolphins in the western U.S. Atlantic is currently unknown (Waring *et al.* 2007).

*Table 7*. Pantropical spotted dolphin (*Stenella attenuata*) sighting in the Jacksonville, Florida survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
5-Sep-13	9:13	6	30.235449	-79.883109	E	5	2	100°	25

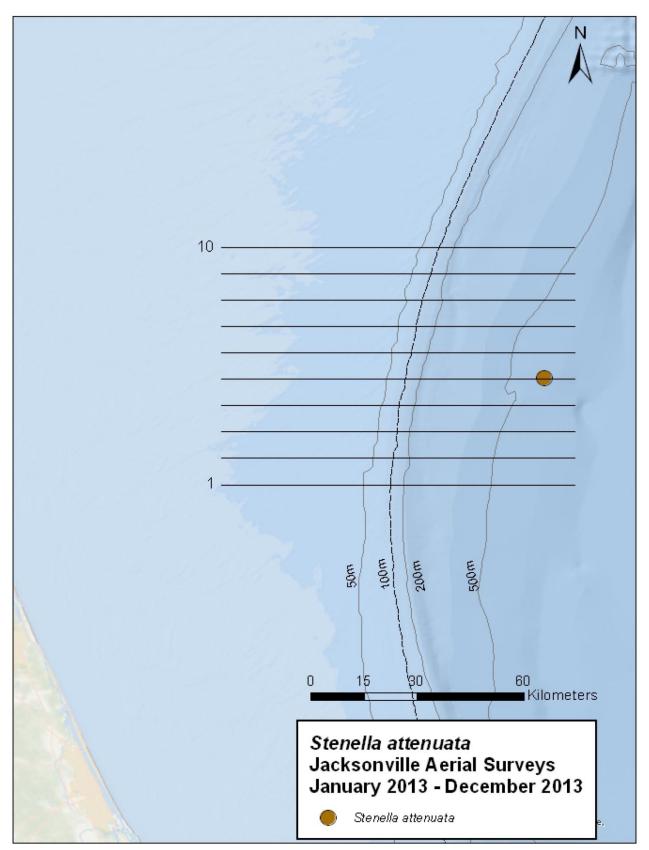


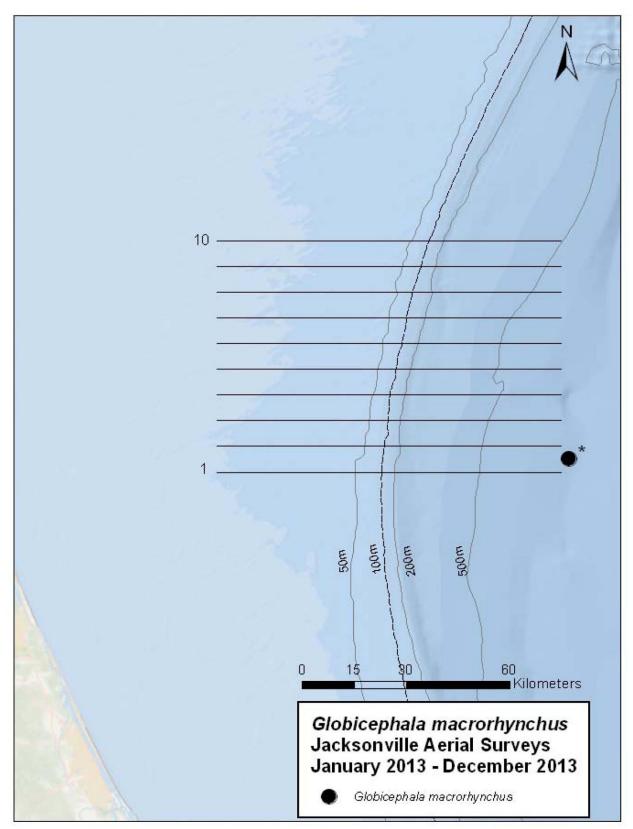
Figure 9. Pantropical spotted dolphin (Stenella attenuata) sighting.

# Short-finned pilot whale (Globicephala macrorhynchus) (Table 8, Figure 10)

A single, off effort sighting of a group of ten short-finned pilot whales were encountered while transiting between tracklines one and two. Sightings of pilot whales in the western North Atlantic occur primarily near the continental shelf break (Waring *et al.* 2010) as is the case with our sightings (Figure 9). The difficulty of differentiating short-finned and long-finned pilot whales (*Globicephala melas*) at sea, NMFS reports stock numbers and status as *Globicephala* spp. (Waring *et al.* 2011). The abundance estimate of *Globicephala* spp. (24674, CV=0.45) is based upon shipboard surveys along the outer continental shelf of the U.S. Atlantic between Florida and Maryland in 2004 (Waring *et al.* 2010). These estimates were combined with spatial distribution analysis as well as genetic analyses to generate the current value of 24674. The status of short-finned pilot whales in the U.S. Atlantic is currently unknown (Waring *et al.* 2011).

*Table 8.* Short-finned pilot whale (*Globicephala macrorhynchus*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013. Asterisk denotes off effort sightings.

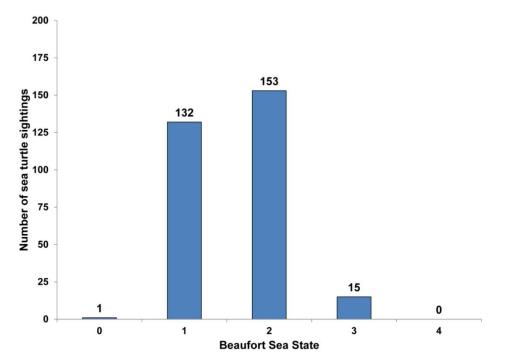
Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	
10-May-13	15:00	77	29.999860	-79.784083	E	1	1	90°	10	*



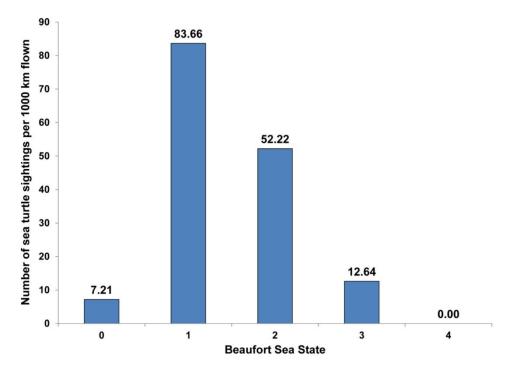
*Figure 10.* Short-finned pilot whale (*Globicephala macrorhynchus*) sighting. Asterisk denotes off effort sighting.

# <u>Sea Turtles</u> (Tables 9 and 10, Figures 11a - 13)

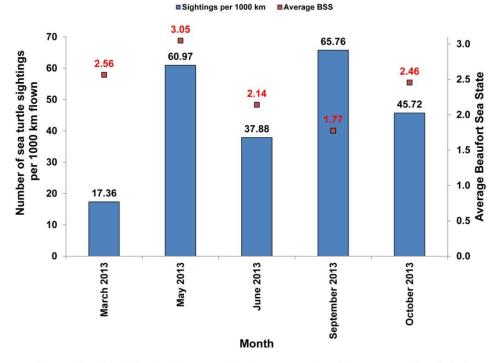
A total of 301 sea turtles were observed during the reporting period. Sighting rates were negatively correlated with Beaufort Sea State, with rates declining at higher sea states (Figure 12b). Sea turtles were observed every day of survey effort with the highest sighting rates occurring in May and September (Figure 12c). Observation rates ranged from a low of 17.36/1000km flown in March to 65.79/1000km in September (Figure 12c). Loggerhead sea turtles (*Caretta caretta*) constituted the majority of sea turtle sightings (89.7%), followed by leatherback sea turtles (*Dermochelys coriacea*) (5.3%). Turtles labeled as unidentified were typically either of small size, submerged, or too far away for the observers to make an accurate identification to species (accounted for 4.9% of sightings). Sea turtle species are listed below in order of decreasing number of sightings (*i.e.* most commonly sighted species first).



*Figure 11a*. Total number of sea turtle sightings by Beaufort Sea State from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area.



*Figure 11b*. Sea turtle sightings per 1000 km flown by Beaufort Sea State from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area.



*Figure 11c.* Sea turtle sightings per 1000 km surveyed and the average Beaufort Sea State per month from January 2013 to December 2013 during aerial surveys in the Jacksonville, Florida survey area.

# Loggerhead sea turtle (Caretta caretta) (Table 9, Figure 12)

A total of 270 loggerhead sea turtles were observed and this species was encountered on every day of survey effort. Loggerheads were predominantly recorded in the shallower waters over the continental shelf, although a small number of individuals occurred beyond the shelf break (Figure 12). For management purposes, loggerheads along the U.S. Atlantic east coast fall into the Northwest Atlantic Ocean distinct population segment (DPS), which is separated into five separate recovery units (NOAA 2011). The Northern Recovery Unit (defined as loggerheads originating from nests between southern VA through the FL/GA border) is currently listed as threatened under the Endangered Species Act (NMFS 2008).

 Table 9. Loggerhead sea turtle (Caretta caretta) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

 Image: State of the sea turtle (Caretta caretta) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

 Image: State of the sea turtle (Caretta caretta) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

 Image: State of the sea turtle (Caretta caretta) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

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 Image: State of turtle survey area from January 2013 to December

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Date	Time	ა Way Point	_atitude	-ongit	Heading	Track	Angle	Degree	Best #
22-Mar-13	9:31	2	30.567454	-80.538419	E	10	2	90°	1
22-Mar-13	10:05	11	30.500269	-80.260487	W	9	1	90°	1
22-Mar-13	10:14	12	30.498108	-80.608610	W	9	2	90°	2
22-Mar-13	11:55	29	30.232467	-80.308752	W	5	1	90°	1
22-Mar-13	11:58	30	30.233020	-80.431971	W	5	1	90°	1
22-Mar-13	12:02	31	30.232849	-80.563915	W	5	1	90°	1
22-Mar-13	13:50	37	29.964165	-80.459179	Е	1	2	90°	1
22-Mar-13	14:14	42	30.032469	-79.914083	W	2	3	90°	1
22-Mar-13	14:20	43	30.030858	-80.094269	W	2	1	90°	1
22-Mar-13	14:34	30	30.029445	-80.379803	W	2	1	90°	1
22-Mar-13	15:11	52	30.100602	-80.264373	Е	3	1	90°	1
22-Mar-13	15:50	59	30.158969	-80.143519	W	4	2	90°	1
22-Mar-13	15:58	52	30.166886	-80.430403	W	4	2	100°	1
22-Mar-13	15:58	60	30.167058	-80.419303	W	4	3	90°	1
9-May-13	9:37	6	30.499316		W	9	1	90°	1
9-May-13	10:05	13	30.433980		Е	8	2	90°	1
9-May-13	10:50			-80.323407	W	7	3	90°	1
9-May-13	11:10			-80.559879	W	7	2	90°	1
9-May-13	11:11			-80.615694	W	7	2	60°	1
9-May-13	11:12		30.363997		W	7	1	90°	1
9-May-13	11:19	38	30.363570		W	7	1	90°	1
9-May-13	12:51	36	30.301058		Е	6	1	90°	1
9-May-13	12:54			-80.440328	Е	6	2	90°	1
9-May-13	12:54		30.301288		Е	6	2	90°	2
9-May-13	12:57		30.301325		Е	6	2	90°	1
9-May-13	13:53		30.231486		W	5	3	90°	1
9-May-13	14:01		30.231464		W	5	2	90°	1
9-May-13	14:02			-80.580124	W	5	2	90°	2
9-May-13	14:16			-80.589532	Е	4	2	90°	1
9-May-13	14:16		30.167301		Е	4	2	90°	2
9-May-13	14:20		30.167542	-80.412402	Е	4	2	90°	1
9-May-13	15:14	76	30.099156		W	3	1	90°	1
9-May-13	15:19	_			W	3	2	90°	2
9-May-13	15:22		30.098242		W	3	2	90°	3
9-May-13	15:27			-80.598887	Е	2	2	90°	2
9-May-13				-80.600476	E	2	2	90°	5
9-May-13				-80.209099	Е	2	1	90°	1
9-May-13	15:58		30.033147	-80.061411	Е	2	1	60°	1
9-May-13	16:26			-80.143403	W	1	1	90°	2
9-May-13	16:31	132		-80.331006	W	1	1	90°	2
9-May-13	16:38				W	1	2	90°	2
9-May-13	16:40	138		-80.576005	W	1	1	90°	1
9-May-13	16:40	105			W	1	2	90°	3
9-May-13	16:41	139		-80.598729	W	1	2	90°	1
10-May-13	9:01	3	30.233078		E	5	2	90°	1
10-May-13	9:10	8	30.233653		E	5	2	90°	1
10-May-13	9:49	16	30.299761	-80.383482	W	6	1	90°	1
10-May-13	9:52	18	30.299682	-80.509877	W	6	2	60°	2
-		1000						1000 A (15)	

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
10-May-13	9:53	24	30.299582	-80.550551	W	6	1	90°	2
10-May-13	10:00	29	30.299422	-80.643360	W	6	2	60°	1
10-May-13	10:06	23	30.365818	-80.639418	E	7	2	60°	2
10-May-13	10:09	32	30.366178	-80.491192	E	7	1	90°	2
10-May-13	10:09	24	30.366161	-80.491160	E	7	1	90°	1
10-May-13	10:25	42	30.366576	-80.193386	E	7	1	90°	1
10-May-13	10:27	31	30.366647	-80.133751	E	7	2	60°	2
10-May-13	10:36	34	30.366668	-79.960308	E	7	1	90°	2
10-May-13	10:52	49	30.432455	-80.182935	W	8	1	90°	1
10-May-13	11:00	54	30.432233	-80.318962	W	8	1	90°	2
10-May-13	11:11	43	30.432322	-80.520553	W	8	1	90°	1
10-May-13	11:27	67	30.500274	-80.511121	E	9	1	90°	1
10-May-13	11:54	79	30.500560	-80.119501	E	9	2	90°	2
10-May-13	14:36	110	29.966092	-80.595947	E	1	2	90°	2
10-May-13	14:37	72	29.966101	-80.551402	E	1	2	90°	1
10-May-13	14:39	112	29.966343	-80.480475	E	1	2	90°	2
10-May-13	14:47	119	29.966243	-80.281508	E	1	2	90°	2
10-May-13	14:48	120	29.966307	-80.214382	E	1	2	90°	1
10-May-13	15:13	120	30.031229	-80.090700	W	2	1	90°	1
10-May-13	15:21	132	30.031229	-80.356457	W	2	1	90°	2
	15:21	81	30.031289	-80.330437	W	2	2	90°	2
10-May-13 10-May-13	15:32	84	30.031288	-80.562588	W	2	2	90°	1
10-May-13	15:41	141	30.101053	-80.630895	E	2	2	90°	4
10-May-13		141	30.101053	-80.485622	E	3	2	90°	2
10-May-13	15:40	90			E	3	2	90°	2
	15:47	90	30.101195 30.101410	-80.440974	E	3	2	90°	1
10-May-13	16:26	155		-80.354716 -80.472388	W	4	2	90°	1
10-May-13 10-May-13		101	30.165522		W	4	2	90 60°	1
20-Jun-13	16:26 11:13	101	30.165502 30.433610	-80.483680 -80.355157	E	4 8	2	100°	1
20-Jun-13	11:13	20	30.433621	-80.356341	W	8	2	90°	1
	12:20					0 6	2	90 100°	1
20-Jun-13 20-Jun-13	13:03	30 39	30.300399	-80.484550	E	5	2	60°	1
	13:03	39	30.232642	-80.294103	W	5	2	90°	1
20-Jun-13 20-Jun-13	13:04	40	30.232583 30.232747	-80.316607 -80.340113	E	5	2	90 60°	2
		40			E	_	-	45°	
20-Jun-13	13:10	37	30.232371		W	5 5	2	45 90°	1
20-Jun-13	13:11		30.232211						
21-Jun-13	8:49	2	29.966005 29.966167		E	1	1	100° 90°	1
21-Jun-13	8:51	3 11		-80.331749 -79.948386	E	1	2	90°	1
21-Jun-13	9:23 10:03	16	29.965789 30.031000	-79.948386	W	2	2	90°	1
21-Jun-13 21-Jun-13			30.031000		W	2	2	90°	1
	10:08	18 20	30.030790		W	2	1	90°	1
21-Jun-13	10:10					2			1
21-Jun-13 21-Jun-13	10:24	35 25	30.101224 30.101206		E	3	2	100° 60°	2
21-Jun-13 21-Jun-13	10:24 10:29	25 26		-80.609197	E	3	2	90°	2
		20 51	30.101379	-80.358652	W	3	2	90 120°	1
21-Jun-13 21-Jun-13	11:19 11:36	56	30.165378 30.164929	-80.613848	W	4	2	90°	1
21-Jun-13 21-Jun-13	11:38	50	30.164929	-80.686099	W	4	2	90°	1
21-Juli-13	11.30	57	50.104722	-00.000099	VV	4	2	90	

*Table 9 (continued)*. Loggerhead sea turtle (*Caretta caretta*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

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		Way Point	apr	ongitude-1	Heading	Track Number	Angle out	Degree Forward	#
Date	Time	Nay	-atitude	ong-	Head	Frac	Angl	Degr	Best
21-Jun-13	11:42	60	30.233359	-80.673792	E	5	2	100°	1
21-Jun-13	11:42	40		-80.658294	E	5	2	90°	1
21-Jun-13	11:45	61		-80.574087	E	5	2	120°	1
21-Jun-13	11:45	62	30.233604	-80.556715	Е	5	2	100°	1
21-Jun-13	11:52	64	30.233957	-80.348056	Е	5	2	100°	1
21-Jun-13	12:00	67	30.299337		W	6	2	100°	1
21-Jun-13	12:03	68	30.299073		W	6	2	110°	1
21-Jun-13	12:06	45	30.298961		W	6	1	90°	1
4-Sep-13	9:26	3		-80.661118	Е	10	1	90°	2
4-Sep-13	9:27	4	30.567263		Е	10	1	90°	2
4-Sep-13	9:30	3	30.567157	-80.494132	Е	10	2	90°	1
4-Sep-13	9:32	6	30.567375	-80.426064	Е	10	1	60°	1
4-Sep-13	9:41	11		-80.342143	Е	10	1	90°	1
4-Sep-13	9:44	7		-80.212994	Е	10	2	90°	1
4-Sep-13	10:17	12	30.499165		W	9	3	90°	3
4-Sep-13	10:18	15	30.499022		W	9	2	90°	1
4-Sep-13	10:18	13		-80.473238	W	9	2	90°	3
4-Sep-13	10:20	14		-80.567321	W	9	1	90°	1
4-Sep-13	10:21	17		-80.572597	W	9	1	90°	3
4-Sep-13	10:36	25	30.433581		Е	8	1	90°	1
4-Sep-13	10:36	20	30.433579	-80.547838	Е	8	2	90°	1
4-Sep-13	10:39	27	30.433859		Е	8	2	90°	2
4-Sep-13	10:41	28	30.433926		Е	8	1	90°	1
4-Sep-13	10:43	22		-80.300960	Е	8	2	90°	1
4-Sep-13	10:50	23		-80.044907	Е	8	2	90°	1
4-Sep-13	11:14	26	30.365464		W	7	2	90°	1
4-Sep-13	11:24	38	30.365151	-80.486572	W	7	2	90°	1
4-Sep-13	11:31	43	30.364538	-80.608420	W	7	2	90°	2
4-Sep-13	11:32	44	30.364742		W	7	2	90°	1
4-Sep-13	13:19	53	29.966151	-80.651806	Е	1	2	100°	1
4-Sep-13	13:20	54	29.966396	-80.622740	Е	1	2	90°	2
4-Sep-13	13:21	55	29.966466	-80.580178	Е	1	1	90°	1
4-Sep-13	14:24	49	30.031608	-80.366015	W	2	2	90°	1
4-Sep-13	14:29	51	30.031418		W	2	1	90°	1
4-Sep-13	14:30	78	30.031245	-80.555204	W	2	1	100°	1
4-Sep-13	14:30			-80.564627	W	2	1	90°	1
4-Sep-13	14:38	83	30.031036	-80.653808	W	2	2	90°	2
4-Sep-13	14:43	57	30.100397	-80.675628	Е	3	2	90°	1
	14:44	86		-80.640462	Е	3	3	90°	1
4-Sep-13	14:45	87		-80.605112	Е	3	2	90°	3
4-Sep-13	14:45	58	30.100406	-80.607357	Е	3	2	90°	2
4-Sep-13	14:46	59	30.100489	-80.572090	Е	3	2	90°	3
4-Sep-13	15:38	64	30.165643	-80.612157	W	4	2	90°	1
4-Sep-13	15:44	97		-80.651135	Е	5	1	90°	2
4-Sep-13	15:44	67		-80.645058	Е	5	2	90°	1
4-Sep-13	15:57	102	30.233434	-80.341656	Е	5	1	90°	1
4-Sep-13	15:57	71	30.233506	-80.324428	Е	5	2	90°	1
4-Sep-13	16:28	104	30 299773	-80.353026	W	6	1	90°	1

Date Time Way Point Latitude Longitude-1 Heading Track Number Angle out	best #
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17-Oct-13 10:09 16 30.498662 -80.472790 W 9 1 9	0° 3
17-Oct-13 10:09 25 30.498669 -80.481210 W 9 1 9	0° 1
	0° 1
	0° 3
	0° 1
17-Oct-13 13:19 54 29.966390 -80.264990 E 1 1 1 1	10° 1

*Table 9 (continued)*. Loggerhead sea turtle (*Caretta caretta*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

*Table 9 (continued).* Loggerhead sea turtle (*Caretta caretta*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
17-Oct-13	13:57	41	30.031311	-80.459521	W	2	1	90°	1
17-Oct-13	14:37	83	30.100419	-80.623915	Е	3	1	90°	2
17-Oct-13	14:39	54	30.100797	-80.537588	Е	3	1	90°	1
17-Oct-13	14:40	84	30.100758	-80.507192	Е	3	1	90°	1
17-Oct-13	15:45	71	30.165850	-80.467578	W	4	1	90°	3
17-Oct-13	15:52	74	30.166356	-80.570420	W	4	1	90°	1
17-Oct-13	15:53	75	30.165344	-80.604218	W	4	2	90°	1

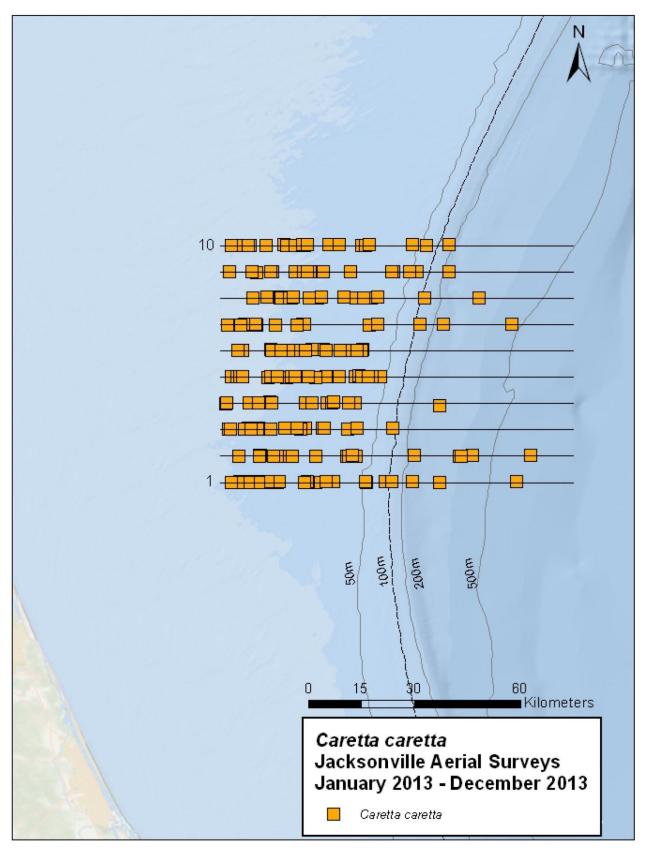


Figure 12. Loggerhead sea turtle (Caretta caretta) sightings.

### Leatherback sea turtle (Dermochelys coriacea) (Table 10, Figure 13)

A total of 16 leatherback sea turtles were recorded inshore of the 50m shelf break. This species was observed in four of the five months surveyed (absent in March). The most recent population estimates for the North Atlantic is a range of 34,000 to 94,000 adult leatherbacks (Turtle Expert Working Group 2007). Leatherback nesting beaches in the Atlantic, as well as worldwide, have experienced severe to moderate declines over the past several decades and this species is listed as endangered under the Endangered Species Act (NMFS 1992).

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
9-May-13	9:52	10	30.498700	-80.467029	W	9	2	90°	1
9-May-13	16:43	106	29.963869	-80.692764	W	1	1	60°	1
20-Jun-13	12:12	27	30.364728	-80.690127	W	7	2	90°	1
20-Jun-13	10:52	15	30.498625	-80.648203	Е	9	2	90°	1
4-Sep-13	15:34	94	30.166010	-80.466395	W	4	1	90°	2
4-Sep-13	15:48	98	30.233114	-80.527860	Е	5	2	90°	1
4-Sep-13	16:31	105	30.299707	-80.445775	W	6	1	90°	1
4-Sep-13	10:21	15	30.498837	-80.585909	W	9	2	90°	1
4-Sep-13	14:27	50	30.031527	-80.456816	W	2	1	90°	1
5-Sep-13	14:06	67	30.166647	-80.534017	Е	4	2	90°	1
5-Sep-13	16:32	108	29.964237	-80.603328	W	1	2	90°	2
17-Oct-13	13:08	51	29.965337	-80.668460	Е	1	1	90°	1
17-Oct-13	14:17	72	30.030698	-80.651910	W	2	1	90°	1
17-Oct-13	14:31	51	30.099887	-80.683980	Е	3	1	90°	1

*Table 10.* Leatherback sea turtle (*Dermochelys coriacea*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

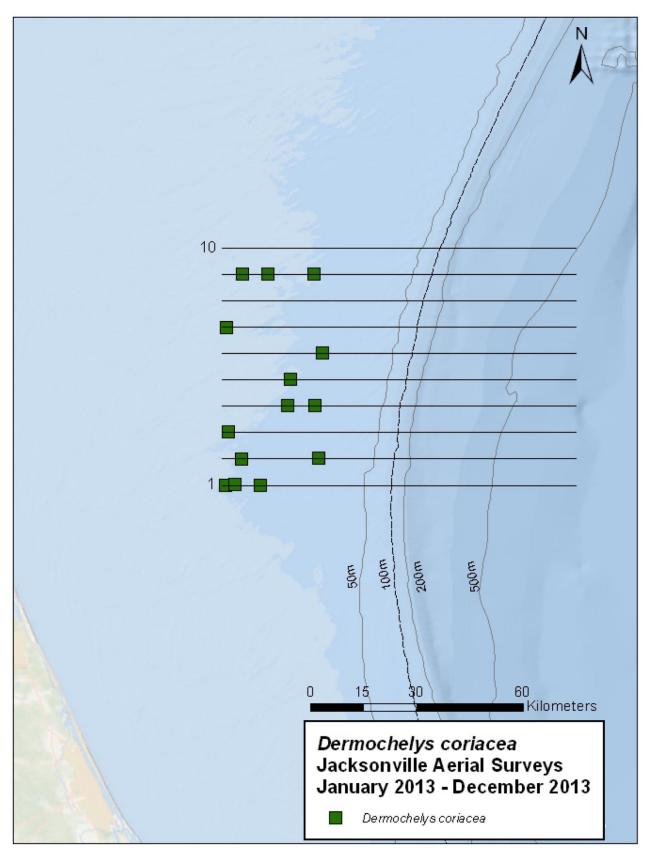


Figure 13. Leatherback sea turtle (Dermochelys coriacea) sightings.

Pelagic bony fishes Osteichthyes (Table 11, Figure 14).

Three ocean sunfish (Mola mola) were recorded over the continental shelf in May and June.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
9-May-13	13:12	50	30.301376	-80.125243	E	6	2	90°	1
21-Jun-13	10:11	28	30.030317	-80.659515	W	2	2	100°	1
21-Jun-13	10:25	36	30.101178	-80.571039	Е	3	2	90°	1

*Table 11*. Ocean sunfish (*Mola mola*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

Cartilaginous Fishes Chondrichthyes (Tables 12-14, Figure 14).

Nine manta rays (*Manta birostris*) occurred throughout the survey site with 55% of sightings occurring in May (Table 12). A single great white shark (*Carcharodon carcharias*) was recorded in March over the continental shelf break (Table 13). A total of 29 unidentified sharks were recorded during the reporting period (Table 14). Sharks were seen throughout the study period with no discernable spatial or temporal trends.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
9-May-13	16:39	137	29.964310	-80.537293	W	1	1	90°	1
9-May-13	15:30	82	30.032961	-80.508107	Е	2	2	90°	1
9-May-13	16:39	104	29.964343	-80.522563	W	1	1	90°	1
10-May-13	14:35	109	29.966227	-80.625693	Е	1	2	90°	1
10-May-13	15:32	138	30.030946	-80.547569	W	2	1	90°	1
20-Jun-13	10:06	6	30.567585	-80.120211	W	10	2	90°	1
21-Jun-13	8:47	3	29.965959	-80.499738	Е	1	1	90°	1
4-Sep-13	10:37	26	30.433809	-80.524473	Е	8	2	90°	1
5-Sep-13	15:24	69	30.098694	-80.666238	W	3	2	100°	1

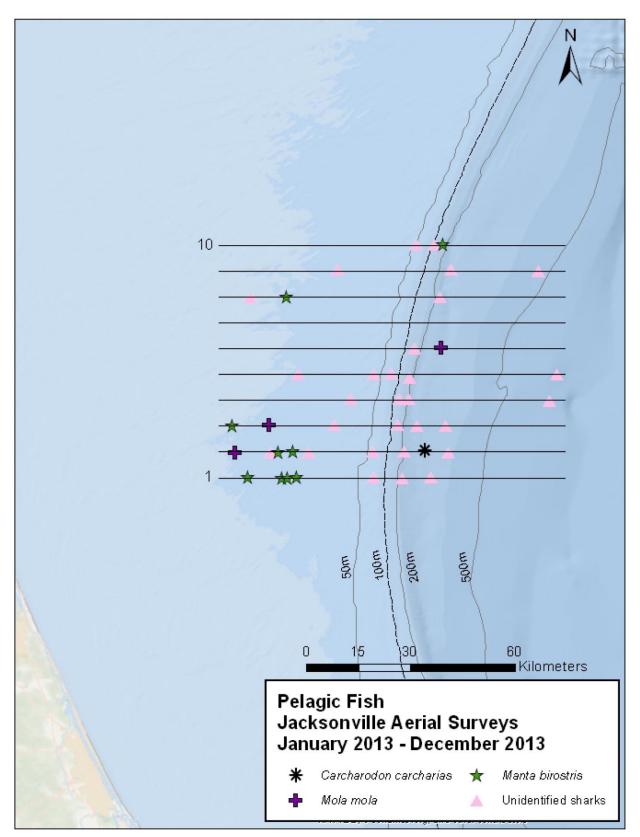
*Table 12.* Manta ray (*Manta birostris*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

*Table 13.* Great white shark (*Carcharodon carcharias*) sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
22-Mar-13	14:26	28	30.034610	-80.168774	W	2	1	90°	1

	15			ā		_			
Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #
22-Mar-13	14:31	46	30.031556	-80.302537	W	2	1	90°	1
9-May-13	14:22	78	30.167715	-80.357911	Е	4	3	90°	1
9-May-13	14:29	83	30.167886	-80.233013	Е	4	1	90°	1
9-May-13	14:59	94	30.099246	-80.185997	W	3	2	90°	3
9-May-13	15:53	121	30.033168	-80.220804	E	2	2	90°	2
9-May-13	13:34	46	30.223601	-80.205338	W	5	2	90°	1
9-May-13	14:30	63	30.167769	-80.207901	Е	4	1	90°	1
9-May-13	16:29	99	29.964567	-80.226181	W	1	2	90°	1
9-May-13	15:01	96	30.101863	-80.235979	W	3	1	90°	1
10-May-13	9:02	3	30.233186	-80.495063	Е	5	2	100°	1
10-May-13	9:12	9	30.233712	-80.298160	Е	5	1	90°	1
10-May-13	9:13	10	30.233885	-80.255024	Е	5	1	60°	1
10-May-13	9:42	19	30.299755	-80.193418	W	6	1	90°	1
10-May-13	11:13	60	30.432205	-80.617724	W	8	1	90°	2
10-May-13	11:33	69	30.505301	-80.391333	Е	9	2	90°	1
10-May-13	9:24	7	30.232909	-79.825222	Е	5	2	90°	1
10-May-13	10:51	37	30.432506	-80.128085	W	8	2	90°	1
10-May-13	15:13	79	30.031450	-80.106970	W	2	4	90°	1
10-May-13	16:07	97	30.164762	-79.844225	W	4	3	60°	1
20-Jun-13	10:30	8	30.504797	-80.100013	W	9	2	90°	18
21-Jun-13	8:52	4	29.966162	-80.298607	Е	1	2	110°	2
21-Jun-13	8:56	6	29.966060	-80.150693	Е	1	2	100°	1
21-Jun-13	10:06	26	30.030835	-80.467428	W	2	3	100°	1
21-Jun-13	10:30	37	30.101461	-80.402485	Е	3	2	100°	2
21-Jun-13	10:09	19	30.030712	-80.565987	W	2	2	90°	1
5-Sep-13	11:50	50	30.499519	-79.872744	Е	9	1	90°	1
5-Sep-13	15:01	64	30.099328	-80.113331	W	3	1	90°	1
17-Oct-13	9:33	16	30.568351	-80.189631	Е	10	1	90°	1
17-Oct-13	9:34	8	30.568050	-80.141055	Е	10	1	90°	1

*Table 14*. Unidentified shark sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.



*Figure 14*. Ocean sunfish (*Mola mola*), Manta ray (*Manta birostris*), great white shark (*Carcharodon carcharias*), and shark sightings.

Vessel Sightings

Commercial (Table 15, Figure 15)

A total of seven commercial vessels (*e.g.* tankers, car carriers, and container vessels) were observed in the study site.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	Comments
9-May-13	9:30	5	30.498822	-80.034096	W	9	3	45°	1	Cargo vessel
10-May-13	14:33	108	29.965752	-80.678741	Е	1	3	45°	1	Car carrier
20-Jun-13	9:55	3	30.567753	-80.519313	W	10	1	90°	1	Tanker
20-Jun-13	11:29	24	30.433534	-79.953940	W	8	2	60°	1	Cargo vessel
4-Sep-13	10:39	21	30.433828	-80.450476	Е	8	2	45°	1	Cargo vessel
5-Sep-13	8:56	4	30.233214	-80.451326	Е	5	2	60°	1	Flat decked boat
17-Oct-13	13:16	52	29.966238	-80.376275	Е	1	2	90°	1	Cargo vessel

*Table 15.* Commercial vessel sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

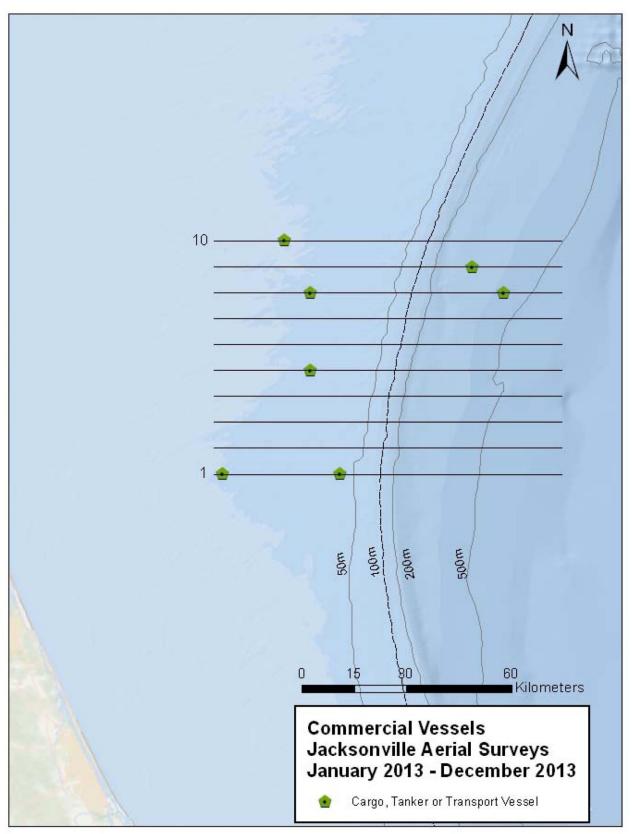


Figure 15. Large commercial shipping vessel sightings.

Military (Table 16, Figure 16)

A total of four U.S. military vessels were seen during the reporting period.

<i>Table 16.</i> Military vessel sightings in the Jacksonville, Florida survey
area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	Comments	
22-Mar-13	16:01	53	30.165624	-80.552963	W	4	4	90°	1	Submarine	
20-Jun-13	10:19	9	30.498138	-79.858890	Е	9	1	60°	1	Navy Frigate circling	
21-Jun-13	9:46	18	30.030854	-80.055606	W	2	2	130°	1	Submarine	
5-Sep-13	10:09	17	30.365606	-80.641892	Е	7	1	90°	1	USCG	

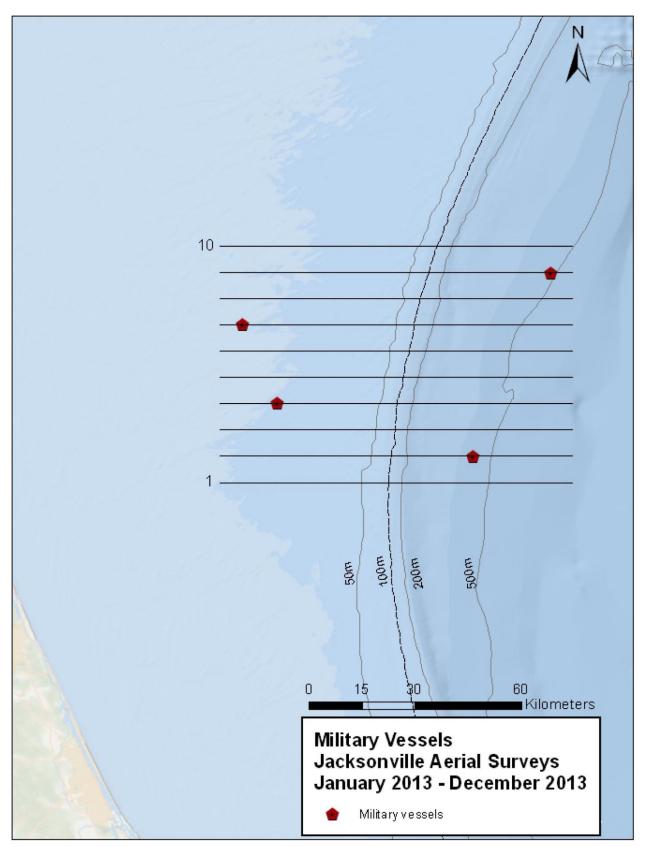


Figure 16. Military vessel sightings.

## Other Vessels (Table 17, Figure 17)

A total of 94 other vessels were recorded in the survey area with all classified as recreational fishing vessels.

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						er		Degree Forward		
		t		-		Track Number		20		S
		Way Point	e	.ongitude-1	g	In/	Angle out	Ш. П		Comments
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Date	Time	Vay	atitude	ů	Heading	rac	bu	eg	Best	Lio
5-Sep-13 22-Mar-13	15:36	72 5		-80.425800	E	2	2	45° 90°	1	Recreational fishing vessel
22-Mar-13		9		-80.201540 -80.292942	E	8	2	90°	1	Recreational fishing vessel Recreational fishing vessel
22-Mar-13		12	30.363471		W	7	2	90°	1	Recreational fishing vessel
22-Mar-13		12		-80.259618	W	5	4	90°	1	v
22-Mar-13		20		-80.259618	W	5	4	90°	2	Recreational fishing vessel Recreational fishing vessel
22-Mar-13		20			W	5	4	90°	_	
			30.233124		-	5	4	90°	1	Recreational fishing vessel
22-Mar-13		25		-80.306237	E	3		90°	8	Recreational fishing vessel
22-Mar-13		39		-80.279186	E		1	1.5.1.5.	1	Recreational fishing vessel
22-Mar-13		50		-80.355793	W	4	1	90°	1	Recreational fishing vessel
22-Mar-13		4		-80.166791	E	10	3	90°	2	Recreational fishing vessel
22-Mar-13		10		-80.169610	W	9	1	60°	1	Recreational fishing vessel
22-Mar-13		21		-80.260753	E	6	1	45°	2	Recreational fishing vessel
22-Mar-13		27		-80.247636	W	5	2	60°	2	Recreational fishing vessel
22-Mar-13		39		-80.311182	E	1	3	60°	1	Recreational fishing vessel
22-Mar-13		49		-80.510285	E	3	2	60°	1	Recreational fishing vessel
9-May-13		3		-80.247292	Е	10	1	90°	1	Recreational fishing vessel
9-May-13		24		-80.222657	W	7	1	90°	1	Recreational fishing vessel
9-May-13		49		-80.228949	E	6	2	60°	1	Recreational fishing vessel
9-May-13		56		-80.198677	W	5	3	90°	1	Recreational fishing vessel
9-May-13		93		-80.064953	W	3	3	45°	1	Recreational fishing vessel
9-May-13				-80.627502	W	3	2	45°	1	Recreational fishing vessel
9-May-13		16		-80.214979	E	8	2	60°	3	Recreational fishing vessel
9-May-13		41		-80.202231	Е	6	1	60°	1	Recreational fishing vessel
9-May-13		73		-80.284595	W	3	2	90°	2	Recreational fishing vessel
10-May-13		11		-80.080274	Е	5	2	90°	1	Recreational fishing vessel
10-May-13		18		-80.137711	W	6	3	45°	2	Recreational fishing vessel
10-May-13	10:24	41	30.366533	-80.239368	Е	7	2	45°	1	Recreational fishing vessel
10-May-13	11:11	59	30.432311	-80.521432	W	8	1	90°	1	Recreational fishing vessel
10-May-13	14:37	111	29.966285	-80.525746	Е	1	1	45°	1	Recreational fishing vessel
10-May-13	14:44	117	29.966440	-80.380396	Е	1	3	90°	3	Recreational fishing vessel
10-May-13				-80.300657	Е	1	3	90°	3	Recreational fishing vessel
10-May-13	15:19	131	30.031358	-80.273136	W	2	2	90°	2	Recreational fishing vessel
10-May-13	15:42	142	30.101057	-80.585977	Е	3	3	45°	3	Recreational fishing vessel
10-May-13	9:11	6	30.233706	-80.328902	Е	5	3	45°	5	Recreational fishing vessel
10-May-13	9:44	12	30.299847	-80.302820	W	6	2	90°	1	Recreational fishing vessel
10-May-13	9:48	15	30.299868	-80.362524	W	6	2	90°	1	Recreational fishing vessel
10-May-13		17		-80.421623	W	6	2	60°	1	Recreational fishing vessel
		29	30.366252	-80.290417	Е	7	2	60°	2	Recreational fishing vessel
10-May-13		40		-80.277617	W	8	3	60°	2	Recreational fishing vessel
10-May-13		54	30.500595		Е	9	1	90°	1	Recreational fishing vessel
10-May-13		89	30.101028		Е	3	1	90°	1	Recreational fishing vessel
10-May-13	15:50	92		-80.344038	E	3	3	90°	1	Recreational fishing vessel
10-May-13		93		-80.306002	E	3	3	90°	3	Recreational fishing vessel
10-May-13		98	30.165790		W	4	3	60°	1	Recreational fishing vessel
20-Jun-13		4	30.567573		W	10	1	90°	1	Recreational fishing vessel
20-Jun-13		12		-80.159371	E	9	2	60°	1	Recreational fishing vessel
20-Jun-13		21	30.433610		W	8	2	60°	1	Recreational fishing vessel
				10.010001		-	-		<u> </u>	in the second second second

*Table 17.* Other vessel sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

Date	Time	Way Point	Latitude	Longitude-1	Heading	Track Number	Angle out	Degree Forward	Best #	Comments
21-Jun-13	8:53	5	29.966245	-80.279808	Е	1	1	80°	1	Recreational fishing vessel
21-Jun-13	10:10	27	30.030544	-80.603713	W	2	4	90°	3	Recreational fishing vessel
4-Sep-13	10:20	16	30.498950	-80.543352	W	9	1	60°	1	Recreational fishing vessel
4-Sep-13	11:23	37	30.366552	-80.436867	W	7	3	100°	1	Recreational fishing vessel
4-Sep-13	9:33	4	30.567588	-80.401749	Е	10	3	60°	1	Recreational fishing vessel
5-Sep-13	10:53	27	30.433115	-80.372695	W	8	1	90°	1	Recreational fishing vessel
5-Sep-13	11:13	34	30.499523	-80.616123	Е	9	2	60°	1	Recreational fishing vessel
5-Sep-13	15:08	85	30.099378	-80.334723	W	3	3	60°	1	Recreational fishing vessel
5-Sep-13	15:06	65	30.099440	-80.268162	W	3	1	45°	1	Recreational fishing vessel
6-Sep-13	9:58	90	30.499476	-80.515094	W	9	2	69°	1	Recreational fishing vessel
17-Oct-13	9:33	17	30.568344	-80.174193	Е	10	2	90°	1	Recreational fishing vessel
17-Oct-13	9:57	12	30.498614	-80.206812	W	9	2	45°	1	Recreational fishing vessel
17-Oct-13	11:14	27	30.364838	-80.528840	W	7	2	45°	1	Recreational fishing vessel
17-Oct-13	13:15	32	29.966154	-80.385257	Е	1	3	45°	1	Recreational fishing vessel

*Table 17 (continued)*. Other vessel sightings in the Jacksonville, Florida survey area from January 2013 to December 2013.

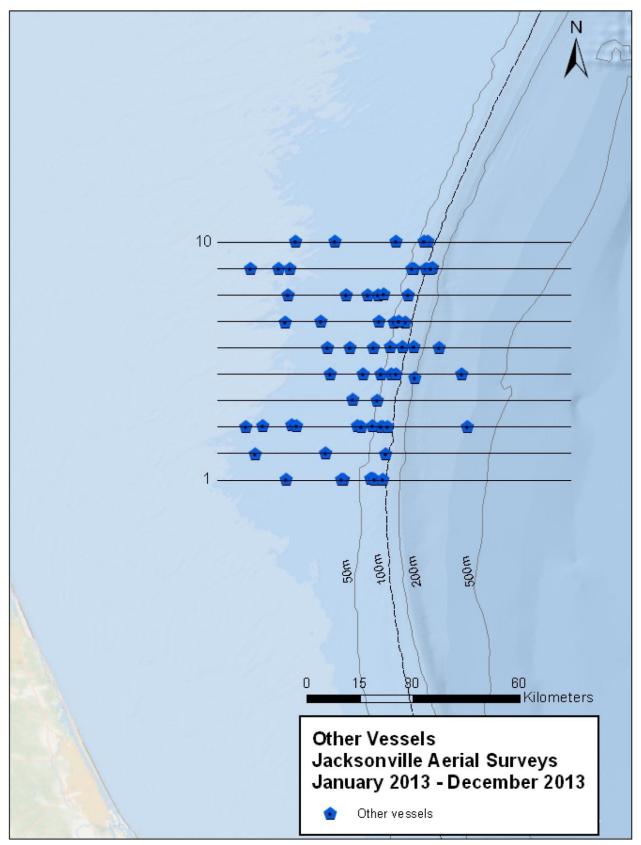


Figure 17. Other vessel sightings.

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Saturday, March 30, 2013 Sighting $\#$ 1
Initial sighting on Track
Time: NA WP#: NA Lat: NA Long: NA
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort:         Off         Trackline:         NA         Beaufort Sea State:         2
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time: 11:06 WP#: 2 Lat: 35.204615 Long: -75.461175
Species:Megaptera novaeangliae       Numbers (Low/High/Best): 1/1/1
Features used in Species ID: Large white pectoral fins, small dorsal fin, two blowholes.
Representative images used for Species ID: 24, 42, 75, 77, 78
Photographer:         Ryan         Frame numbers:         1 - 79         Spacer:         80
Calculated distance from Trackline: NA
Final Time and Position of Sighting
Time:         11:22         WP#:         3         Lat:         35.223523         Long:         -75.467792
Calculated Distance Traveled: 2.19 km
Behavior and Additional Comments
Animals pectoral fins difficult to see as animal always held them close to its body. Animal with unique
dorsal fin shape.
Saturday, March 30, 2013 Sighting # 2
Initial sighting on Track
Time:         11:30         WP#:         5         Lat:         35.281648         Long:         -75.160712
Vertical Angle:         3         Horizontal Bearing in Degrees:         90         Sighting Cue:         Body
On/Off Effort:         On         Trackline:         32         Beaufort Sea State:         1
Observer: Bill Observer side: Left
Actual Time and Position of Sighting
Time: 11:30 WP#: 5 Lat: 35.281648 Long: -75.160712
Species:Tursiops truncatus         Numbers (Low/High/Best):         3 / 3 / 3
Features used in Species ID: Robust body appearance and dorsal fin.
Representative images used for Species ID: 87,88
Photographer:RyanFrame numbers:81 - 121Spacer:122
Calculated distance from Trackline: NA
Final Time and Position of Sighting
Time: NA WP#: NA Lat: NA Long: NA
Calculated Distance Traveled: NA
Behavior and Additional Comments
Pale animals well dispersed from one another, one animal with zenobalanus visable on dorsal fin and
perhaps flukes. A few skin discolorations also observed on some of the animals.

Saturday, March 30, 2013 Sighting $\#$ 3
Initial sighting on Track
Time: 11:38 WP#: 7 Lat: 35.236617 Long: -75.071242
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 32 Beaufort Sea State: 1
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:         11:38         WP#:         7         Lat:         35.236617         Long:         -75.071242
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): <u>11/12/12</u>
Features used in Species ID: Robust body appearance, white peduncle present.
Representative images used for Species ID: 133, 139, 145, 157
Photographer:       Ryan       Frame numbers:       123 - 157       Spacer:       158         Calculated distance from Trackline:       NA
Final Time and Position of Sighting
Time:     NA     WP#:     NA     Lat:     NA     Long:     NA
Calculated Distance Traveled: NA
Behavior and Additional Comments
White peduncles present on most animals.
Saturday, March 30, 2013 Sighting # 4
Saturday, March 30, 2013 Sighting # 4
Initial sighting on Track
Initial sighting on Track           Time:         11:42         WP#:         9         Lat:         35.222878         Long:         -75.038577
Initial sighting on Track           Time:         11:42         WP#:         9         Lat:         35.222878         Long:         -75.038577
Initial sighting on TrackTime:11:42WP#:9Lat:35.222878Long:-75.038577Vertical Angle:4Horizontal Bearing in Degrees:90Sighting Cue:Breach
Initial sighting on TrackTime:11:42WP#:9Lat:35.222878Long:-75.038577Vertical Angle:4Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:32Beaufort Sea State:1Observer:RyanObserver side:Right
Initial sighting on Track         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Vertical Angle:       4       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       32       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right
Initial sighting on TrackTime:11:42WP#:9Lat:35.222878Long:-75.038577Vertical Angle:4Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:32Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:42WP#:9Lat:35.222878Long:-75.038577
Initial sighting on Track         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Vertical Angle:       4       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       32       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right
Initial sighting on TrackTime:11:42WP#:9Lat:35.222878Long:-75.038577Vertical Angle:4Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:32Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:42WP#:9Lat:35.222878Long:-75.038577Species:Megaptera novaeangliaeNumbers (Low/High/Best):4/4/4
Initial sighting on TrackTime:11:42WP#:9Lat:35.222878Long:-75.038577Vertical Angle:4Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:32Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:42WP#:9Lat:35.222878Long:-75.038577Species:Megaptera novaeangliaeNumbers (Low/High/Best):4/4/4
Initial sighting on Track         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Vertical Angle:       4       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       32       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Species:Megaptera novaeangliae       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Baleen whale with large white colored pectoral fins.
Initial sighting on Track         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Vertical Angle:       4       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       32       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Species:Megaptera novaeangliae       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Baleen whale with large white colored pectoral fins.         Representative images used for Species ID:
Initial sighting on TrackTime:11:42WP#:9Lat:35.222878Long:-75.038577Vertical Angle:4Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:32Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:42WP#:9Lat:35.222878Long:-75.038577Species:Megaptera novaeangliaeNumbers (Low/High/Best):4/4/4Features used in Species ID:Baleen whale with large white colored pectoral fins.Representative images used for Species ID:165, 190Photographer:RyanFrame numbers:159-196Spacer:197
Initial sighting on Track         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Vertical Angle:       4       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       32       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Species:Megaptera novaeangliae       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Baleen whale with large white colored pectoral fins.         Representative images used for Species ID:       165, 190         Photographer:       Ryan       Frame numbers:       159 - 196       Spacer:       197         Calculated distance from Trackline:       NA
Initial sighting on Track         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Vertical Angle:       4       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       32       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Species:Megaptera novaeangliae       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Baleen whale with large white colored pectoral fins.         Photographer:       Ryan       Frame numbers:       159 - 196       Spacer:       197         Calculated distance from Trackline:       NA       NA       NA       NA
Initial sighting on Track         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Vertical Angle:       4       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       32       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Species:       Megaptera novaeangliae       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Baleen whale with large white colored pectoral fins.         Representative images used for Species ID:       165, 190         Photographer:       Ryan       Frame numbers:       159 - 196       Spacer:       197         Calculated distance from Trackline:       NA       NA       Image:       NA
Initial sighting on Track         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Vertical Angle:       4       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       32       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Species:Megaptera novaeangliae       Numbers (Low/High/Best):       4 / 4 / 4         Features used in Species ID:       Baleen whale with large white colored pectoral fins.         Representative images used for Species ID:       165, 190         Photographer:       Ryan       Frame numbers:       159 - 196       Spacer:       197         Calculated distance from Trackline:       NA       NA       Long:       NA         Final Time and Position of Sighting       Time:       NA       Long:       NA         Galculated Distance Traveled:       NA       Long:       NA         Behavior and Additional Comments       NA       MA       MA    <
Initial sighting on Track         Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Vertical Angle:       4       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       32       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       11:42       WP#:       9       Lat:       35.222878       Long:       -75.038577         Species:Megaptera novaeangliae       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Baleen whale with large white colored pectoral fins.         Representative images used for Species ID:       165, 190         Photographer:       Ryan       Frame numbers:       159 - 196       Spacer:       197         Calculated distance from Trackline:       NA       NA       Image:       NA         Final Time and Position of Sighting       Time:       NA       Long:       NA         Calculated Distance Traveled:       NA       Long:       NA

<b>Initial sighting</b> Time: 11:56	WP#:		35.183692	Long:	-74.959872
Vertical Angle:		Horizontal Beari			Cue: Splas
On/Off Effort:		Trackline:		Beaufort Sea Sta	
Observer:		Observer s		Deduion Sed Su	
Actual Time an				_	
Time: 12:02	WP#:		35.183809	Long:	-74.965582
Species: Ziphius co		<u></u> Dut.		Low/High/Best):	
		ID: Tapered head i			
		d region. Small dor			
Representative i	mages u	sed for Species II	):	203, 204, 206, 207, 20	08
Photographer:		Frame numbers		5 Spacer:	216
Calculated dista	nce from	Trackline:	0.52 km		
Final Time and	Positio	n of Sighting			
Time: NA	WP#:		NA	Long:	NA
Calculated Dista			NA		
<b>Behavior and A</b>	ddition	al Comments			
		rs along right side a			
Si	aturday, I	March 30, 2013 <b>Si</b>			
Sa Initial sighting Time: <u>11:56</u>	aturday, l on Trac WP#:	March 30, 2013 Si <b>k</b> <u>11</u> Lat:	ghting # 6 35.183692		-74.959872
Sa Initial sighting Time: <u>11:56</u> Vertical Angle:	aturday, I on Trac WP#: 3	March 30, 2013 Si k <u>11</u> Lat: Horizontal Beari	ghting # 6 35.183692 ng in Degrees:	90 Sighting	Cue: Bod
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: _ On/Off Effort: _	aturday, I <b>on Trac</b> WP#: <u>3</u> On	March 30, 2013 Si k <u>11</u> Lat: Horizontal Beari Trackline:	ghting # 6 35.183692 ng in Degrees: 32	U	Cue: Bod
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u></u>	aturday, I on Trac WP#: <u>3</u> On Bill	March 30, 2013 Si k <u>11</u> Lat: Horizontal Beari Trackline: Observer s	ghting # 6 35.183692 ng in Degrees: 32	90 Sighting	Cue: Bod
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>F</u> Actual Time an	aturday, I on Trac WP#: <u>3</u> On Bill <b>d Positi</b>	March 30, 2013 Si k <u>11</u> Lat: Horizontal Beari Trackline: Observer s on of Sighting	ghting $\#$ 6 35.183692 ng in Degrees: 32 side: Left	90 Sighting Beaufort Sea Sta	Cue: <u>Bod</u> ate: <u>1</u>
Initial sightingTime:11:56Vertical Angle:_On/Off Effort:_Observer:_BActual Time anTime:12:02	aturday, I on Trac WP#: <u>3</u> On Bill d Positi WP#:	March 30, 2013 Si k <u>11</u> Lat: Horizontal Beari Trackline: Observer s	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809	90 Sighting Beaufort Sea Sta	Cue: <u>Bod</u> ate: <u>1</u>
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u>11:56</u> On/Off Effort: <u>12:02</u> Species: <i>Delphinus</i>	aturday, I on Trac WP#: <u>3</u> On Bill d Positi WP#: s delphis	March 30, 2013 Si k <u>11</u> Lat: Horizontal Beari Trackline: Observer s on of Sighting <u>12</u> Lat:	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809 Numbers (I	90 Sighting Beaufort Sea Sta Long:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 16 / 16 / 10
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an Time: <u>12:02</u> Species: <i>Delphinus</i> Features used in	aturday, I on Trac WP#: <u>3</u> On Bill <b>id Positi</b> WP#: Species	March 30, 2013 Si k <u>11</u> Lat: <u></u> Horizontal Beari Trackline: Observer s on of Sighting <u>12</u> Lat: <u></u> ID: <u>Pale melon and</u>	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809 Numbers (I	90 Sighting Beaufort Sea Sta Long:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 16 / 16 / 1
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>f</u> Actual Time an Time: <u>12:02</u> Species: <i>Delphinus</i> Features used in forms V shape at le	aturday, I on Trac WP#: <u>3</u> On Bill d Positi WP#: s delphis Species evel of dor	March 30, 2013 Si k <u>11</u> Lat: _ Horizontal Beari Trackline: Observer s on of Sighting <u>12</u> Lat: _ ID: Pale melon and sal fin with whit fror	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809 Numbers (I d peduncle region n peduncle.	90 Sighting Beaufort Sea Sta Long: Low/High/Best): , yellow coloration a	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 <u>16 / 16 / 10</u> long midline
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u>11:56</u> On/Off Effort: <u>12:02</u> Observer: <u>Factual Time an</u> Time: <u>12:02</u> Species: <i>Delphinus</i> Features used in forms V shape at le Representative in	aturday, I on Trac WP#: <u>3</u> On Bill <b>d Positi</b> WP#: s delphis Species vel of dor mages u	March 30, 2013 Si k <u>11</u> Lat: <u></u> Horizontal Beari Trackline: Observer s on of Sighting <u>12</u> Lat: <u></u> ID: <u>Pale melon and</u> sal fin with whit fror sed for Species II	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809 Numbers (I d peduncle region n peduncle. D:	90 Sighting Beaufort Sea Sta Long:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 <u>16 / 16 / 10</u> long midline
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>F</u> Actual Time an Time: <u>12:02</u> Species: <i>Delphinus</i> Features used in forms V shape at le Representative in Photographer: <u></u>	aturday, I on Trac WP#: <u>3</u> On Bill <b>d Positi</b> WP#: s delphis Species evel of dor mages u Ryan	March 30, 2013 Si k <u>11</u> Lat: <u></u> Horizontal Beari Trackline: Observer s on of Sighting <u>12</u> Lat: <u></u> ID: <u>Pale melon and</u> sal fin with whit fror sed for Species II Frame numbers	ghting # 6 <u>35.183692</u> ng in Degrees: <u>32</u> side: <u>Left</u> <u>35.183809</u> Numbers (I <u>d peduncle region</u> n peduncle. D: <u>217 - 248</u>	90 Sighting Beaufort Sea Sta Long:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 <u>16 / 16 / 1</u> long midline
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u>11:56</u> On/Off Effort: <u>12:02</u> Observer: <u>F</u> Actual Time an Time: <u>12:02</u> Species: <i>Delphinus</i> Features used in forms V shape at le Representative in Photographer: <u>Calculated distan</u>	aturday, I on Trac WP#: <u>3</u> On Bill <b>d Positi</b> Species vel of dor mages u Ryan nce from	March 30, 2013 Si k <u>11</u> Lat: <u></u> Horizontal Beari Trackline: Observer s on of Sighting <u>12</u> Lat: <u></u> ID: <u>Pale melon and</u> sal fin with whit from sed for Species II Frame numbers n Trackline: <u></u>	ghting # 6 <u>35.183692</u> ng in Degrees: <u>32</u> side: <u>Left</u> <u>35.183809</u> Numbers (I <u>d peduncle region</u> n peduncle. D: <u>217 - 248</u>	90 Sighting Beaufort Sea Sta Long:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 <u>16 / 16 / 1</u> long midline
Sa <b>Initial sighting</b> Time: <u>11:56</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>f</u> <b>Actual Time an</b> Time: <u>12:02</u> Species: <i>Delphinus</i> Features used in forms V shape at le Representative in Photographer: <u></u> Calculated distant <b>Final Time and</b>	aturday, I on Trac WP#: <u>3</u> On Bill d Positi WP#: Species vel of dor mages u Ryan nce from	March 30, 2013 Si k <u>11</u> Lat: _ Horizontal Beari Trackline: Observer s on of Sighting <u>12</u> Lat: _ ID: <u>Pale melon and</u> sal fin with whit from sed for Species II Frame numbers n Trackline: n of Sighting	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809 Numbers (I d peduncle region n peduncle. D:	90 Sighting Beaufort Sea Sta Long: Low/High/Best): , yellow coloration a 221, 222, 232, 243 3 Spacer:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 <u>16 / 16 / 1</u> long midline <u>248</u>
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u>11:56</u> On/Off Effort: <u>12:02</u> Observer: <u>F</u> Actual Time an Time: <u>12:02</u> Species: <i>Delphinus</i> Features used in forms V shape at le Representative in Photographer: <u>Calculated distan</u> Final Time and Time: <u>NA</u>	aturday, I on Trac WP#: <u>3</u> On Bill d Positi WP#: s delphis Species vel of dor mages u Ryan nce from <b>Positio</b> WP#:	March 30, 2013 Si k <u>11</u> Lat: _ Horizontal Beari Trackline: Observer s on of Sighting <u>12</u> Lat: _ ID: Pale melon and sal fin with whit fror sed for Species II Frame numbers n Trackline: n of Sighting NA Lat:	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809 Numbers (I d peduncle region n peduncle. D: : 217 - 248 0.52 km	90 Sighting Beaufort Sea Sta Long:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 <u>16 / 16 / 1</u> long midline
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u>11:56</u> On/Off Effort: <u>12:02</u> Species: <i>Delphinus</i> Features used in forms V shape at le Representative in Photographer: <u>Calculated distan</u> <b>Final Time and</b> Time: <u>NA</u>	aturday, I on Trac WP#: <u>3</u> On Bill d Positi WP#: s delphis Species vel of dor mages u Ryan nce from <b>Positio</b> WP#:	March 30, 2013 Si k <u>11</u> Lat: _ Horizontal Beari Trackline: Observer s on of Sighting <u>12</u> Lat: _ ID: Pale melon and sal fin with whit fror sed for Species II Frame numbers n Trackline: n of Sighting NA Lat:	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809 Numbers (I d peduncle region n peduncle. D:	90 Sighting Beaufort Sea Sta Long: Low/High/Best): , yellow coloration a 221, 222, 232, 243 3 Spacer:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 <u>16 / 16 / 1</u> long midline <u>248</u>
Sa <b>Initial sighting</b> Time: <u>11:56</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>F</u> <b>Actual Time an</b> Time: <u>12:02</u> Species: <i>Delphinus</i> Features used in forms V shape at le Representative in Photographer: <u>Calculated distan</u> <b>Final Time and</b> Time: <u>NA</u> Calculated Distan	aturday, I on Trac WP#: <u>3</u> On Bill d Positi WP#: Species vel of dor mages u Ryan nce from WP#: WP#: unce Trav	March 30, 2013 Si k 11 Lat: Horizontal Beari Trackline: Observer s on of Sighting 12 Lat: ID: Pale melon and sal fin with whit from sed for Species II Frame numbers n Trackline: n of Sighting NA Lat: veled:	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809 Numbers (I d peduncle region n peduncle. D: : 217 - 248 0.52 km	90 Sighting Beaufort Sea Sta Long: Low/High/Best): , yellow coloration a 221, 222, 232, 243 3 Spacer:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 <u>16 / 16 / 1</u> long midline <u>248</u>
Sa Initial sighting Time: <u>11:56</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an Time: <u>12:02</u> Species: <i>Delphinus</i> Features used in forms V shape at le Representative in Photographer: <u>Calculated distan</u> Final Time and Time: <u>NA</u> Calculated Distan Behavior and A	aturday, I on Trac WP#: <u>3</u> On Bill <b>d Positi</b> WP#: Species vel of dor mages u Ryan nce from WP#: unce from	March 30, 2013 Si k 11 Lat: Horizontal Beari Trackline: Observer s on of Sighting 12 Lat: ID: Pale melon and sal fin with whit from sed for Species II Frame numbers n Trackline: n of Sighting NA Lat: veled:	ghting # 6 35.183692 ng in Degrees: 32 side: Left 35.183809 Numbers (I d peduncle region n peduncle. D:	90 Sighting Beaufort Sea Sta Long: Low/High/Best): , yellow coloration a 221, 222, 232, 243 Spacer:  Long:	Cue: <u>Bod</u> ate: <u>1</u> -74.965582 <u>16 / 16 / 10</u> long midline <u>248</u>

Saturda	ay, March 30	0, 2013 S	ngnun	g# /				
Initial sighting on T	rack		-	-				
Time: <u>12:49</u> WI	<b>P#:</b> 19	Lat:	35	.061714		Long:	-75.	163866
Vertical Angle: <u>3</u>				Degrees:	90	Sigh	ting Cue	Body
On/Off Effort: <u>On</u>		Frackline		29	Beau	ifort Se	ea State:	2
Observer: Ryan	(	Observer	r side: _	Right				
Actual Time and Po	sition of Si	ighting						
Time: 12:49 WI	<b>P#:</b> 13	Lat:	35	.061714		Long:	-75.	163866
Species:Delphinus delpl				Numbers (1				8/12/10
Features used in Spec								ce at level
of dorsal fin, white from				tion formin	g V sha		ern.	
Representative image				240.07		268		274
Photographer: Ryan				249 - 27	3	_ Sp	acer:	274
Calculated distance f	rom Trackl	ine:		NA				
Final Time and Posi								
	P#: NA	Lat:		NA		Long:		NA
Calculated Distance	Fraveled:		NA					
Behavior and Addit	ional Com	ments						
Octored		0.0040.0	1.1.4.					
	ay, March 30	0, 2013 S	Sightin	g # 8				
Initial sighting on T	rack		U	C		Langu	75	227620
Initial sighting on T Time: <u>12:58</u> WI	<b>rack</b>	Lat:	35	5.115493		Long:		237638
Initial sighting on TTime:12:58WIVertical Angle:3	rack P#: <u>21</u> Horizo	Lat:	35 tring in	.115493 Degrees:	90	Sigh	ting Cue	e: Body
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:On	rack 2#: <u>21</u> Horizo	Lat: ] ntal Bea	35 17 10 10 10 10 10 10 10 10 10 10 10 10 10	5.115493 Degrees: 29	90	Sigh		e: Body
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:OnObserver:Ryan	rack 2#: 21 Horizo 7	Lat: ntal Bea Frackline Observer	35 17 10 10 10 10 10 10 10 10 10 10 10 10 10	5.115493 Degrees: 29	90	Sigh	ting Cue	e: Body
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:OnObserver:RyanActual Time and Po	rack P#: 21 Horizo	Lat: ] ntal Bea Frackling Observer <b>ighting</b>	35 uring in e: r side: _	5.115493 Degrees: 29 Right	90 Beau	Sigh Sigh	ting Cue ea State:	e: <u>Body</u> 1
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:OnObserver:RyanActual Time and PoTime:12:58WI	rack P#: 21 Horizo Sition of S P#: 21	Lat: ] ntal Bea Frackling Observer <b>ighting</b>	35 uring in e: r side: 35	.115493 Degrees: 29 Right .115493	90 Beau	Sighufort Se	ting Cue ea State: -75.	237638
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:OnObserver:RyanActual Time and PoTime:12:58WISpecies:Tursiops trunca	rack         P#:       21         Horizo         Sition of S         P#:       21         tus	Lat: ntal Bea Frackling Observer <b>ighting</b> Lat:	35 uring in e: r side: _ 35 N	.115493 Degrees: 29 Right .115493 Jumbers (J	90 Beau Low/H	Sigh Ifort Se Long:	ting Cue ea State: -75. est): 5	237638 60 / 55 / 53
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:OnObserver:RyanActual Time and PoTime:12:58WISpecies:Tursiops truncaFeatures used in Species	rack           P#:         21           Horizo         1           Sition of Si         1           P#:         21           tus         21           cies ID:         Uni	Lat: ntal Bea Frackling Observer <b>ighting</b> Lat:	35 uring in e: r side: _ 35 N	.115493 Degrees: 29 Right .115493 Jumbers (J	90 Beau Low/H	Sigh Ifort Se Long:	ting Cue ea State: -75. est): 5	237638 60 / 55 / 53
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:OnObserver:RyanActual Time and PoTime:12:58WISpecies:Tursiops truncaFeatures used in SpeciesIn Specieslighter blaze along anim	rack P#: 21 Horizo Sition of Si P#: 21 tus tus ties ID: Uni als side.	Lat: ntal Bea Frackling Observer <b>ighting</b> Lat:	35 uring in e: r side: 35 N t grey co	.115493 Degrees: 29 Right .115493 Jumbers (J	90 Beau Low/H	Sigh Ifort Se Long:	ting Cue ea State: -75. est): 5	237638 60 / 55 / 53
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:OnObserver:RyanActual Time and PoTime:12:58WISpecies:Tursiops truncaFeatures used in Specilighter blaze along animRepresentative image	rack P#: 21 Horizo sition of S P#: 21 tus bies ID: Uni als side. bies used for	Lat: ntal Bea frackling Observer ighting Lat: form light Species	35 uring in e: r side: 35 N t grey co ID:	5.115493 Degrees: 29 Right .115493 Jumbers (J lored anima	90 Beau Low/H	Sigh Ifort Se Long: Iigh/Be ust bod	-75. est): 5	237638 60 / 55 / 53 nce,
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:OnObserver:RyanActual Time and PoTime:12:58WISpecies:Tursiops truncaFeatures used in Species:Representative imagePhotographer:Ryan	rack         P#:       21         Horizo         Sition of Si         P#:       21         tus         cies ID:       Uni         als side.         es used for         Frame	Lat: ontal Bea Frackling Observer <b>ighting</b> Lat: form light Species e numbe	35 uring in e: r side: 35 N t grey co ID: urs:	.115493 Degrees: 29 Right .115493 Jumbers (J	90 Beau Low/H	Sigh Ifort Se Long: Iigh/Be ust bod	ting Cue ea State: -75. est): 5	237638 60 / 55 / 53
Initial sighting on TTime:12:58WIVertical Angle:3On/Off Effort:OnObserver:RyanActual Time and PoTime:12:58WISpecies:Tursiops truncaFeatures used in Speclighter blaze along animRepresentative imagePhotographer:RyanCalculated distance fit	rack P#: 21 Horizo Sition of S P#: 21 tus Dies ID: Uni als side. Ses used for Frame rom Trackl	Lat: ontal Bea Frackling Observer <b>ighting</b> Lat: form light Species e numbe ine:	35 uring in e: r side: 35 N t grey co ID: urs:	5.115493 Degrees: 29 Right .115493 Jumbers (J lored anima 275 - 31	90 Beau Low/H	Sigh Ifort Se Long: Iigh/Be ust bod	-75. est): 5	237638 60 / 55 / 53 nce,
Initial sighting on T         Time:       12:58       WI         Vertical Angle:       3         On/Off Effort:       On         Observer:       Ryan         Actual Time and Po         Time:       12:58         WI         Species:       Tursiops trunca         Features used in Spec         lighter blaze along anim         Representative image         Photographer:       Ryan         Calculated distance fi         Final Time and Position	rack P#: 21 Horizo sition of Si P#: 21 tus cies ID: Uni als side. s used for Frame from Trackl ition of Sig	Lat: ontal Bea Frackling Observer ighting Lat: form light Species e numbe ine:	35 uring in e: r side: 35 N t grey co ID: urs:	5.115493 Degrees: 29 Right .115493 Jumbers (J lored anima 275 - 31 NA	90 Beau Low/F als, rob	Sigh Ifort Se Long: High/Bo ust bod	-75. est): 5	237638 237638 30 / 55 / 53 nce, 312
Initial sighting on T         Time:       12:58       WI         Vertical Angle:       3         On/Off Effort:       On         Observer:       Ryan         Actual Time and Po         Time:       12:58         WI         Species:       Tursiops trunca         Features used in Species:         lighter blaze along anim         Representative image         Photographer:       Ryan         Calculated distance fi         Final Time and Posi         Time:       NA	rack P#: 21 Horizo Sition of Si P#: 21 tus bies ID: Uni als side. Side for Frame rom Trackl ition of Sig P#: NA	Lat: ontal Bea Frackling Observer <b>ighting</b> Lat: form light Species e numbe ine:	35 uring in e: r side: 35 N t grey co ID: ors:	5.115493 Degrees: 29 Right .115493 Jumbers (J lored anima 275 - 31	90 Beau Low/F als, rob	Sigh Ifort Se Long: Iigh/Be ust bod	-75. est): 5	237638 60 / 55 / 53 nce,
Initial sighting on T         Time:       12:58       WI         Vertical Angle:       3         On/Off Effort:       On         Observer:       Ryan         Actual Time and Po         Time:       12:58         WI         Species:       Tursiops trunca         Features used in Spec         lighter blaze along anim         Representative image         Photographer:       Ryan         Calculated distance fi         Final Time and Posi         Time:       NA         WI         Calculated Distance fi	rack P#: 21 Horizo sition of Si P#: 21 tus ties ID: Uni als side. s used for France tom Trackl tion of Sig P#: NA Fraveled: _	Lat: ontal Bea Frackling Observer ighting Lat: form light Species in numbe ine: 	35 uring in e: r side: 35 N t grey co ID: urs:	5.115493 Degrees: 29 Right .115493 Jumbers (J lored anima 275 - 31 NA	90 Beau Low/F als, rob	Sigh Ifort Se Long: High/Bo ust bod	-75. est): 5	237638 237638 30 / 55 / 53 nce, 312
Initial sighting on T         Time:       12:58       WI         Vertical Angle:       3         On/Off Effort:       On         Observer:       Ryan         Actual Time and Po         Time:       12:58         WI         Species:       Tursiops trunca         Features used in Species:         lighter blaze along anim         Representative image         Photographer:       Ryan         Calculated distance fi         Final Time and Posi         Time:       NA	rack P#: 21 Horizo sition of Si P#: 21 tus ties ID: Uni als side. s used for France tom Trackl tion of Sig P#: NA Fraveled: _	Lat: ontal Bea Frackling Observer ighting Lat: form light Species in numbe ine: 	35 uring in e: r side: 35 N t grey co ID: ors:	5.115493 Degrees: 29 Right .115493 Jumbers (J lored anima 275 - 31 NA	90 Beau Low/F als, rob	Sigh Ifort Se Long: High/Bo ust bod	-75. est): 5	237638 237638 30 / 55 / 53 nce, 312
Initial sighting on T         Time:       12:58       WI         Vertical Angle:       3         On/Off Effort:       On         Observer:       Ryan         Actual Time and Po         Time:       12:58         WI         Species:       Tursiops trunca         Features used in Spec         lighter blaze along anim         Representative image         Photographer:       Ryan         Calculated distance fi         Final Time and Posi         Time:       NA         WI         Calculated Distance fi	rack P#: 21 Horizo sition of Si P#: 21 tus ties ID: Uni als side. s used for France tom Trackl tion of Sig P#: NA Fraveled: _	Lat: ontal Bea Frackling Observer ighting Lat: form light Species in numbe ine: 	35 uring in e: r side: 35 N t grey co ID: ors:	5.115493 Degrees: 29 Right .115493 Jumbers (J lored anima 275 - 31 NA	90 Beau Low/F als, rob	Sigh Ifort Se Long: High/Bo ust bod	-75. est): 5	237638 237638 30 / 55 / 53 nce, 312
Initial sighting on T         Time:       12:58       WI         Vertical Angle:       3         On/Off Effort:       On         Observer:       Ryan         Actual Time and Po         Time:       12:58         WI         Species:       Tursiops trunca         Features used in Spec         lighter blaze along anim         Representative image         Photographer:       Ryan         Calculated distance fi         Final Time and Posi         Time:       NA         WI         Calculated Distance fi	rack P#: 21 Horizo sition of Si P#: 21 tus ties ID: Uni als side. s used for France tom Trackl tion of Sig P#: NA Fraveled: _	Lat: ontal Bea Frackling Observer ighting Lat: form light Species in numbe ine: 	35 uring in e: r side: 35 N t grey co ID: ors:	5.115493 Degrees: 29 Right .115493 Jumbers (J lored anima 275 - 31 NA	90 Beau Low/F als, rob	Sigh Ifort Se Long: High/Bo ust bod	-75. est): 5	237638 237638 30 / 55 / 53 nce, 312

Ś	Saturday,	March 30	D, 2013 S	Sightir	ng#9				
Initial sighting	g on Trac	k		-	-				
Time: NA	WP#:	NA	Lat:		NA	L	ong:	NA	١
Vertical Angle:	3	Horizo	ntal Bea	aring in	Degrees:	90	Sighting	Cue:	Body
On/Off Effort:	Off	]	Fracklin	e:	29	Beaufo	ort Sea Sta	te:	1
Observer:	Ryan	(	Observe	r side:	Right				
Actual Time a	nd Positi	on of S	ighting						
Time: 13:08	WP#:	24	Lat:	35	5.215145	L	ong:	-75.378	3190
Species:Megapte	era novaea	ngliae		1	Numbers (	Low/Hi	gh/Best):	1,	/1/1
Features used i	n Species	ID: Larg	ge white j	pectoral	fins, small c	dorsal fin	place slight	ly back	on
animals body.									
Representative	0		1						
Photographer:	Ryan	Fram	e numbe	ers:	313 - 33	4	Spacer:		NA
Calculated dist	ance from	n Trackl	ine:		NA				
Final Time an	d Positio	n of Sig	hting						
Time: NA	WP#:	NA	Lat:		NA	L	ong:	NA	1
Calculated Dist	tance Tra	veled:		NA					
Behavior and	Addition	al Com	ments						
Animal encounte	red at the e	end of tra	ckline 29	swimmi	ng near cur	rent line.			

Tuesday, May 28, 2013 Sighting # 1
Initial sighting on Track
Time: 9:59 WP#: 5 Lat: 34.887437 Long: -74.931443
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>120</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 29 Beaufort Sea State: 3
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time: 10:04 WP#: 6 Lat: 34.887077 Long: -74.927528
Species:Unidentified Mesoplodon Numbers (Low/High/Best): 2/3/3
Features used in Species ID: Long fusiform body, small pectoral fins, small dorsal fin placed
far back on the animals dorsal surface.
Representative images used for Species ID:
Photographer: NA Frame numbers: NA Spacer: NA
Calculated distance from Trackline: 0.36 km
Final Time and Position of Sighting
Time: 10:05 WP#: 7 Lat: 34.900298 Long: -74.936459
Calculated Distance Traveled: 1.7 km
Behavior and Additional Comments
Trio of animals sighted behind the wing, unable to relocate.
Actual and final position of animal both assumed locations.
Tuesday, May 28, 2013 Sighting # 2
Tuesday, May 28, 2013 Sighting # 2
Initial sighting on Track
Initial sighting on Track           Time:         10:21         WP#:         11         Lat:         34.981000         Long:         -74.927528
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:Body
Initial sighting on Track         Time:       10:21       WP#:       11       Lat:       34.981000       Long:       -74.927528         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       30       Beaufort Sea State:       3
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:Left
Initial sighting on Track         Time:       10:21       WP#:       11       Lat:       34.981000       Long:       -74.927528         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       30       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftImage: 10:26WP#:12Lat:34.979820Long:-74.915520
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingImage: State:12Lat:34.979820Long:-74.915520Species:Globicephala macrorhynchusNumbers (Low/High/Best):4/6/6
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:26WP#:12Lat:34.979820Long:-74.915520Species:Globicephala macrorhynchusNumbers (Low/High/Best):4/6/6Features used in Species ID:Large square head, black body coloration, dorsal fin placed 1/3 way
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:26WP#:12Lat:34.979820Long:-74.915520Species:Globicephala macrorhynchusNumbers (Low/High/Best):4/6/6Features used in Species ID:Large square head, black body coloration, dorsal fin placed 1/3 waydown animals back, pectoral fins do not extend beyond dorsal fin.Horizonal fin.Horizonal fin.
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingImage:12Lat:34.979820Long:-74.915520Species:Globicephala macrorhynchusNumbers (Low/High/Best):4/6/64/6/6Features used in Species ID:Large square head, black body coloration, dorsal fin placed 1/3 waydown animals back, pectoral fins do not extend beyond dorsal fin.Representative images used for Species ID:3, 8, 11 and 14
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:26WP#:12Lat:34.979820Long:-74.915520Species:Globicephala macrorhynchusNumbers (Low/High/Best):4/6/6Features used in Species ID:Large square head, black body coloration, dorsal fin placed 1/3 waydown animals back, pectoral fins do not extend beyond dorsal fin.Representative images used for Species ID:3, 8, 11 and 14Photographer:ErinFrame numbers:1-18Spacer:19
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingImage:12Lat:34.979820Long:-74.915520Species:Globicephala macrorhynchusNumbers (Low/High/Best):4/6/64/6/6Features used in Species ID:Large square head, black body coloration, dorsal fin placed 1/3 waydown animals back, pectoral fins do not extend beyond dorsal fin.Representative images used for Species ID:3, 8, 11 and 14
Initial sighting on Track         Time:       10:21       WP#:       11       Lat:       34.981000       Long:       -74.927528         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       30       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       4       4         Actual Time and Position of Sighting       Time:       10:26       WP#:       12       Lat:       34.979820       Long:       -74.915520         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       4/6/6         Features used in Species ID:       Large square head, black body coloration, dorsal fin placed 1/3 way         down animals back, pectoral fins do not extend beyond dorsal fin.         Representative images used for Species ID:       3, 8, 11 and 14         Photographer:       Erin       Frame numbers:       1 - 18       Spacer:       19         Calculated distance from Trackline:       1.1 km       1.1 km       1.1 km       1.1 km
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:26WP#:12Lat:34.979820Long:-74.915520Species:Globicephala macrorhynchusNumbers (Low/High/Best):4 / 6 / 6Features used in Species ID:Large square head, black body coloration, dorsal fin placed 1/3 waydown animals back, pectoral fins do not extend beyond dorsal fin.Representative images used for Species ID:3, 8, 11 and 14Photographer:ErinFrame numbers:1 - 18Spacer:19Calculated distance from Trackline:1.1 km
Initial sighting on Track         Time:       10:21       WP#:       11       Lat:       34.981000       Long:       -74.927528         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       30       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       10:26       WP#:       12       Lat:       34.979820       Long:       -74.915520         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       4/6/6       4/6/6         Features used in Species ID:       Large square head, black body coloration, dorsal fin placed 1/3 way       down animals back, pectoral fins do not extend beyond dorsal fin.         Representative images used for Species ID:       3, 8, 11 and 14         Photographer:       Erin       Frame numbers:       1 - 18       Spacer:       19         Calculated distance from Trackline:       1.1 km       11 km       11 km       11 km
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:26WP#:12Lat:34.979820Long:-74.915520Species:Globicephala macrorhynchusNumbers (Low/High/Best):4/6/6Features used in Species ID:Large square head, black body coloration, dorsal fin placed 1/3 waydown animals back, pectoral fins do not extend beyond dorsal fin.Representative images used for Species ID:3, 8, 11 and 14Photographer:ErinFrame numbers:1 - 18Spacer:19Calculated distance from Trackline:1.1 kmFinal Time and Position of SightingTime:10:26WP#:13Lat:34.990907Long:-74.935970
Initial sighting on Track         Time:       10:21       WP#:       11       Lat:       34.981000       Long:       -74.927528         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       30       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left         Actual Time and Position of Sighting         Time:       10:26       WP#:       12       Lat:       34.979820       Long:       -74.915520         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       4 / 6 / 6         Features used in Species ID:       Large square head, black body coloration, dorsal fin placed 1/3 way         down animals back, pectoral fins do not extend beyond dorsal fin.         Representative images used for Species ID:       3,8,11 and 14         Photographer:       Erin       Frame numbers:       1 - 18       Spacer:       19         Calculated distance from Trackline:       1.1 km       1       1       1       1       1         Final Time and Position of Sighting       Time:       10:26       WP#:       13       Lat:       34.990907       Long:       -74.935
Initial sighting on TrackTime:10:21WP#:11Lat:34.981000Long:-74.927528Vertical Angle:2Horizontal Bearing in Degrees:100Sighting Cue:BodyOn/Off Effort:OnTrackline:30Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:26WP#:12Lat:34.979820Long:-74.915520Species:Globicephala macrorhynchusNumbers (Low/High/Best):4 / 6 / 6Features used in Species ID:Large square head, black body coloration, dorsal fin placed 1/3 waydown animals back, pectoral fins do not extend beyond dorsal fin.Representative images used for Species ID:3, 8, 11 and 14Photographer:ErinFrame numbers:1 - 18Spacer:19Calculated distance from Trackline:1.1 kmFinal Time and Position of SightingTime:10:26WP#:13Lat:34.990907Long:-74.935970Calculated Distance Traveled:2.2 km

Tu	iesday, May 28	, 2013 Sigł	nting # 3		
Initial sighting on	Track	-	-		
Time: 10:29	WP#: <u>14</u>	Lat:	35.052511	Long:	-75.017986
Vertical Angle:	2 Horizon	ntal Bearing	g in Degrees:	100 Sighting	Cue: Body
		rackline:	30	Beaufort Sea S	tate: <u>3</u>
Observer: Erin	C	bserver sic	le: Right	_	
Actual Time and I	Position of Sig	ghting			
Time: 10:35	WP#: 15	Lat:	35.055930	Long:	-75.018661
Species:Grampus gris	seus		Numbers (L	ow/High/Best):	4/4/4
Features used in Sp			body give it a gre	ey appearance, tal	l falcate dorsal
fin, head with pointed					
Representative ima		-		21 & 25	
		numbers:	20 - 26	Space	27
Calculated distance	e from Trackli	ne:	0.4 km		
Final Time and P	osition of Sigl	nting			
Time: NA	WP#: <u>NA</u>	Lat:	NA	Long:	NA
Calculated Distance	e Traveled:	1	IA		
Behavior and Add	litional Com	nents			
Single animal first obs	erved stay just s	ubsurface, re	maining individu	ual deeper in tight	group.
Group was difficult to	photograph as t	his behavior	persisted throug	hout our first 4 cir	cling attempts.
Group finally surfaced	at 10:33 to be d	ocumented.			
Initial sighting onTime:10:58VVertical Angle:On/Off Effort:OnObserver:Ryar	WP#: <u>19</u> <u>1</u> Horizor Dn T	Lat:		Long: 90 Sighting Beaufort Sea S	
Actual Time and				-	
Time: 10:58		5 0	35.108432	Long	-74.952876
Species:Physeter mat		Lat		Long: ow/High/Best):	
Features used in Sp		e head asym	,	- /	
wrinkled body.	ceres ID. <u>curg</u>	e neud, usyn	incencency placed		nage, gray
Representative ima	ges used for S	species ID:		37, 41 & 42	
Photographer: Er	-	numbers:	28 - 44	Spacer	: 45
Calculated distance			1.0 km	~P****	·
Final Time and Po					
	0	0	25 101554	Lange	74.050.417
	WP#: <u>21</u>	Lat:	35.101554	Long:	-74.950417
Calculated Distanc			i km		
Behavior and Ado					
Single large individua	l straight line tra	vel animal t	ook multiple resr	pirations taken du	ring our oncounts
before diving from su		aver, annuar e	ookmunpiciesp	shallons taken aa	nng our encounte
					ning our encounte

	on Track				
Initial sighting					
Time: <u>11:36</u>		25 Lat:	35.254182	Long:	-74.9314
Vertical Angle:	<u>2</u> Ho		aring in Degrees:		ng Cue:
On/Off Effort: _	On	Trackline		Beaufort Sea	State:
Observer: E	rin	Observer	r side: Right		
Actual Time an	d Position	of Sighting			
Time: 11:40		26 Lat:		Long:	-74.9397
Species:Grampus		-		Low/High/Bes	
			nal body giving it a	grey appearance	, tall falcate o
fin, head rounded t	•		ID	47 40 9 50	
Representative in		-		47, 49 & 50	
Photographer:		rame numbe	ers: <u>40-51</u> 1.5 km	Spac	cer: 52
Calculated distan			1.3 KIII		
Final Time and		0 0			
Time: NA		NA Lat:	NA	Long:	NA
Calculated Dista	ince Travele	ed:	NA	_	
<b>Behavior and A</b>	dditional (	Comments			
			lose to the surface w	hile others rema	nined well be
• ·			ing a unified direction		
surface. Four anim		st group show	ing a unineu unectio	Shito tiavel. A se	cond group
was approximators div	vhilo roturnin	a to the trackli	20		
was encountered v	Tuesday, M	-	ne. Sighting # 6		
Initial sighting Time: 12:12	Tuesday, M on Track WP#:	ay 28, 2013 § 31 Lat:	Sighting # 6 35.341332	Long:	-74.3957
Initial sighting Time: <u>12:12</u> Vertical Angle:	Tuesday, M on Track WP#: 2 Ho	ay 28, 2013 S 31 Lat: prizontal Bea	Sighting # 6 35.341332 aring in Degrees:	90 Sighti	ng Cue:
Initial sighting Time: <u>12:12</u> Vertical Angle: ] On/Off Effort: _	Tuesday, M on Track WP#: Ho On	ay 28, 2013 S 31 Lat: prizontal Bea Trackline	Sighting #         6           35.341332         35.341332           aring in Degrees:         34		ng Cue:
Initial sighting Time: <u>12:12</u> Vertical Angle: <u>]</u> On/Off Effort: <u>_</u> Observer: <u></u>	Tuesday, M on Track WP#: 2 Ho On yan	ay 28, 2013 S 31 Lat: prizontal Bea Trackling Observer	Sighting #         6           35.341332         35.341332           aring in Degrees:         34	90 Sighti	ng Cue:
Initial sighting Time: <u>12:12</u> Vertical Angle: <u>_</u> On/Off Effort: <u>_</u> Observer: <u></u> Actual Time an	Tuesday, M on Track WP#: Ho  yan d Position	ay 28, 2013 S 31 Lat: Drizontal Bea Trackline Observer of Sighting	Sighting # 6 35.341332 aring in Degrees: e: 34 r side: Left	90 Sighti Beaufort Sea	ng Cue: State:
Initial sighting Time: <u>12:12</u> Vertical Angle: <u>12:12</u> On/Off Effort: <u>0</u> Observer: <u>R</u> Actual Time an Time: <u>12:15</u>	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#:	ay 28, 2013 S <u>31</u> Lat: <u>1</u> prizontal Bea Trackling <b>of Sighting</b> <u>32</u> Lat:	35.341332         aring in Degrees:         e:       34         r side:       Left         35.350653	90 Sighti Beaufort Sea	ng Cue: State: -74.4027
Initial sighting Time: 12:12 Vertical Angle: 0n/Off Effort: 0 Observer: R Actual Time an Time: 12:15 Species: Globiceph	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: nala macrorhy	ay 28, 2013 S <u>31</u> Lat: prizontal Bea Trackling Observer of Sighting <u>32</u> Lat:	Sighting # 6         35.341332         aring in Degrees:         e: 34         r side: Left         35.350653         Numbers (1	90 Sighti Beaufort Sea Long: Long: Low/High/Bes	ng Cue: State: -74.4027 st):4 / 5
Initial sighting Time: <u>12:12</u> Vertical Angle: ] On/Off Effort: <u></u> Observer: <u>R</u> Actual Time an Time: <u>12:15</u> Species: <i>Globiceph</i> Features used in	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: Species ID	ay 28, 2013 S <u>31</u> Lat: prizontal Bea Trackling Observer of Sighting <u>32</u> Lat:	35.341332         aring in Degrees:         e:       34         r side:       Left         35.350653	90 Sighti Beaufort Sea Long: Long: Low/High/Bes	ng Cue: State: -74.4027 at):4/5
Initial sighting Time: 12:12 Vertical Angle: ] On/Off Effort: _ Observer:R Actual Time an Time: 12:15 Species:Globiceph Features used in black body colorati	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: nala macrorhy Species ID ion.	ay 28, 2013 <u>S</u> <u>31</u> Lat: <u>1</u> prizontal Bea Trackling Observer <b>of Sighting</b> <u>32</u> Lat: <u>1</u> <u>mchus</u> : Large dorsal	Sighting # 6 35.341332 aring in Degrees: e: 34 r side: Left 35.350653 Numbers ( fin placed 1/3 back	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lau	ng Cue: State: -74.4027 at):4/5
Initial sighting Time: 12:12 Vertical Angle: ] On/Off Effort: _ Observer:R Actual Time an Time: 12:15 Species: <i>Globiceph</i> Features used in black body colorati Representative in	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: ala macrorhy Species ID ion. mages used	ay 28, 2013 S <u>31</u> Lat: prizontal Bea Trackling Observer of Sighting <u>32</u> Lat: <i>inchus</i> : Large dorsal for Species	Sighting # 6 35.341332 aring in Degrees: e: 34 r side: Left 35.350653 Numbers ( fin placed 1/3 back ID:	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lan 54 & 55	ng Cue: State: -74.4027 st):4 / 5 rge square he
Initial sighting Time: 12:12 Vertical Angle: ] On/Off Effort: _ Observer: R Actual Time an Time: 12:15 Species:Globiceph Features used in black body colorati Representative i Photographer:	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: species ID ion. mages used Erin F	ay 28, 2013 S <u>31</u> Lat: Drizontal Bea Trackline Observer <b>of Sighting</b> <u>32</u> Lat: <u>inchus</u> : Large dorsal for Species rame numbe	35.341332         aring in Degrees:         e:       34         r side:       Left         35.350653         Numbers (         fin placed 1/3 back         ID:         ers:       53 - 58	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lan 54 & 55	ng Cue: State: -74.4027 st):4 / <u>5</u> rge square he
Initial sighting Time: 12:12 Vertical Angle: ] On/Off Effort: _ Observer:R Actual Time an Time: 12:15 Species: <i>Globiceph</i> Features used in black body colorati Representative i Photographer: Calculated distan	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: ala macrorhy Species ID ion. mages used Erin F nce from Tr	ay 28, 2013 S <u>31</u> Lat: prizontal Bea Trackling Observer of Sighting <u>32</u> Lat: <u>inchus</u> : Large dorsal for Species rame number ackline:	Sighting # 6 35.341332 aring in Degrees: e: 34 r side: Left 35.350653 Numbers ( fin placed 1/3 back ID:	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lan 54 & 55	ng Cue: State: -74.4027 st):4 / <u>5</u> rge square he
Initial sighting Time: 12:12 Vertical Angle: ] On/Off Effort: _ Observer:R Actual Time an Time: 12:15 Species: <i>Globiceph</i> Features used in black body colorati Representative i Photographer: Calculated distan	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: ala macrorhy Species ID ion. mages used Erin F nce from Tr	ay 28, 2013 S <u>31</u> Lat: prizontal Bea Trackling Observer of Sighting <u>32</u> Lat: <u>inchus</u> : Large dorsal for Species rame number ackline:	35.341332         aring in Degrees:         e:       34         r side:       Left         35.350653         Numbers (         fin placed 1/3 back         ID:         ers:       53 - 58	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lan 54 & 55	ng Cue: State: -74.4027 st):4 / <u>5</u> rge square ho
Initial sighting Time: 12:12 Vertical Angle: On/Off Effort: Observer: R Actual Time an Time: 12:15 Species: <i>Globiceph</i> Features used in black body colorati Representative i Photographer: Calculated distant Final Time and	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: ala macrorhy Species ID ion. mages used Erin F nce from Tr	ay 28, 2013 S <u>31</u> Lat: <u>1</u> prizontal Bea Trackling Observer of Sighting <u>32</u> Lat: <u>1</u> <i>nchus</i> : Large dorsal for Species rame number ackline: <u>f</u> Sighting	35.341332         aring in Degrees:         e:       34         r side:       Left         35.350653         Numbers (         fin placed 1/3 back         ID:         ers:       53 - 58	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lan 54 & 55 Spac	ng Cue:
Initial sighting Time: 12:12 Vertical Angle: On/Off Effort: Observer: <b>R</b> Actual Time an Time: 12:15 Species: <i>Globiceph</i> Features used in black body colorati Representative i Photographer: Calculated distan <b>Final Time and</b> Time: 12:16	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: ada macrorhy Species ID ion. mages used Erin F nce from Tr Position of WP#:	ay 28, 2013 S <u>31</u> Lat: Drizontal Bea Trackling Observer of Sighting <u>32</u> Lat: <i>inchus</i> : Large dorsal for Species rame number ackline: <u>53</u> Lat:	Sighting # 6         35.341332         aring in Degrees:         e: 34         r side: Left         35.350653         Numbers (         fin placed 1/3 back         ID:	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lan 54 & 55 Spac	ng Cue:
Initial sighting Time: 12:12 Vertical Angle: On/Off Effort: Observer: <b>R</b> Actual Time an Time: 12:15 Species: <i>Globiceph</i> Features used in black body colorati Representative i Photographer: Calculated distant <b>Final Time and</b> Time: 12:16 Calculated Distant	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: aala macrorhy Species ID ion. mages used Erin F nce from Tr Position of WP#: unce Travele	ay 28, 2013 S <u>31</u> Lat: prizontal Bea Trackling Observer of Sighting <u>32</u> Lat: <i>inchus</i> : Large dorsal for Species rame number ackline: <u>533</u> Lat: ed:	Sighting # 6         35.341332         aring in Degrees:         e: 34         r side: Left         35.350653         Numbers (1/3 back         ID:	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lan 54 & 55 Spac	ng Cue:
Initial sighting Time: 12:12 Vertical Angle: On/Off Effort: Observer: <b>R</b> Actual Time an Time: 12:15 Species: <i>Globiceph</i> Features used in black body colorati Representative i Photographer: Calculated distan <b>Final Time and</b> Time: 12:16 Calculated Dista <b>Behavior and A</b>	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: mala macrorhy Species ID ion. mages used Erin F nce from Tr Position of WP#: unce Travelo	ay 28, 2013 S <u>31</u> Lat: prizontal Bea Trackling Observer of Sighting <u>32</u> Lat: <i>inchus</i> : Large dorsal for Species rame number ackline: <u>53</u> Lat: ed: Comments	Sighting # 6         35.341332         aring in Degrees:         e: 34         r side: Left         35.350653         Numbers (         fin placed 1/3 back         ID:         25.353653         1.1 km         35.343671         0.84 km	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lan 54 & 55 Spac	ng Cue: State: -74.4027 st):4 / 5 rge square he cer:5
Initial sighting Time: 12:12 Vertical Angle: 0n/Off Effort: 0 Observer: R Actual Time an Time: 12:15 Species: Globiceph Features used in black body colorati Representative i Photographer: 0 Calculated distant Final Time and Time: 12:16	Tuesday, M on Track WP#: 2 Ho On yan d Position WP#: mala macrorhy Species ID ion. mages used Erin F nce from Tr Position of WP#: unce Travelo	ay 28, 2013 S <u>31</u> Lat: prizontal Bea Trackling Observer of Sighting <u>32</u> Lat: <i>inchus</i> : Large dorsal for Species rame number ackline: <u>53</u> Lat: ed: Comments	Sighting # 6         35.341332         aring in Degrees:         e: 34         r side: Left         35.350653         Numbers (         fin placed 1/3 back         ID:         25.353653         1.1 km         35.343671         0.84 km	90 Sighti Beaufort Sea Long: Low/High/Bes animals body, lan 54 & 55 Spac	ng Cue: State: -74.4027 st):4 / <u>5</u> rge square he

	Tuesday		-				
Initial sighting	on Trac	k					
Time: 12:22	WP#:	37	Lat:	35.409614	Lor	ıg:	-74.364485
Vertical Angle:	2				45 S	ighting	Cue: Body
On/Off Effort: _	On	Tı	rackline:	35	Beaufor	t Sea St	tate: <u>3</u>
Observer: E	rin	0	bserver si	ide: Right	_		
Actual Time an	d Positi	on of Sig	ghting				
Time: 12:23	WP#:	38	Lat:	35.414108	Lor	ıg:	-74.368509
Species:Mesoplod				Numbers (L	Low/High	Best):	2/2/2
Features used in					ll and plac	e far bac	k on animals
body, pointed head							
Representative i							
Photographer:			numbers:			Spacer	: 77
Calculated distant				0.6 km			
Final Time and			nting				
Time: 12:29		39		35.415443	Lor	ıg:	-74.364945
Calculated Dista	nce Tra	veled:	0	0.4 km			
Initial sighting	on Trac	k		ghting # 8			
Initial sighting Time: 12:32	on Trac WP#:	2 <b>k</b> 41	Lat:	35.410440		ng:	
Initial sighting Time: <u>12:32</u> Vertical Angle:	on Trac WP#: 2	k 41 Horizon	Lat: ntal Bearir	35.410440 ng in Degrees:	90 S	ighting	Cue: Body
Initial sighting Time: <u>12:32</u> Vertical Angle: On/Off Effort:	on Trac WP#: 2 On	e <b>k</b> <u>41</u> Horizon Ti	Lat: tal Bearin rackline:	35.410440 ng in Degrees:		ighting	Cue: Body
Initial sighting Time: <u>12:32</u> Vertical Angle: _ On/Off Effort: _ Observer:	on Trac WP#: 2 On yan	e <b>k</b> 41 Horizon Ti O	Lat: tal Bearin rackline: bserver si	35.410440 ng in Degrees:	90 S	ighting	Cue: Body
Initial sighting Time: <u>12:32</u> Vertical Angle: ] On/Off Effort: <u></u> Observer: <u>R</u> Actual Time an	on Trac WP#: 2 On yan d Positi	k 41 Horizon Ti O on of Sig	Lat:	35.410440 ng in Degrees:	90 S Beaufor	ighting t Sea St	Cue: <u>Body</u> tate: <u>3</u>
Initial sighting Time: <u>12:32</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>R</u> Actual Time an Time: <u>12:36</u>	on Trac WP#: 2 On yan d Positi WP#:	k 41 Horizon Ti O on of Sig 42	Lat:	35.410440 ng in Degrees: 35 ide:Left 35.411508	90 S Beaufor	ighting t Sea St	Cue: <u>Body</u> tate: <u>3</u>
Initial sighting Time: <u>12:32</u> Vertical Angle: ] On/Off Effort: <u></u> Observer: <u>R</u> Actual Time an Time: <u>12:36</u> Species: <i>Unidentifi</i>	on Trac WP#: <u>2</u> On yan d Positi WP#:	k 41 Horizon Ti O on of Sig 42 Iodon	Lat: ntal Bearin rackline: bbserver si <b>ghting</b> Lat:	<u>35.410440</u> ng in Degrees: <u>35</u> ide: <u>Left</u> <u>35.411508</u> Numbers (L	90 S Beaufor Lor	ighting t Sea St ng: n/Best):	Cue: <u>Body</u> tate: <u>3</u> -74.464577 2/2/2
Initial sighting Time: <u>12:32</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>R</u> Actual Time an Time: <u>12:36</u> Species: <i>Unidentifi</i> Features used in	on Trac WP#: <u>2</u> On yan d Positi WP#:	k 41 Horizon Ti O on of Sig 42 Iodon	Lat: ntal Bearin rackline: bbserver si <b>ghting</b> Lat:	<u>35.410440</u> ng in Degrees: <u>35</u> ide: <u>Left</u> <u>35.411508</u> Numbers (L	90 S Beaufor Lor	ighting t Sea St ng: n/Best):	Cue: <u>Body</u> tate: <u>3</u> -74.464577 2/2/2
Initial sighting Time: <u>12:32</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>R</u> Actual Time an Time: <u>12:36</u> Species: <i>Unidentifi</i> Features used in body.	on Trac WP#: 2 On yan d Positi WP#: fed Mesop Species	k 41 Horizon Ti O on of Sig 42 lodon ID: Smal	Lat: ntal Bearin rackline: bbserver si ghting Lat: ll pectoral f	35.410440 ng in Degrees: 35 ide: Left 35.411508 Numbers (L ins, small dorsal fi	90 S Beaufor Lor	ighting t Sea St ng: n/Best):	Cue: <u>Body</u> tate: <u>3</u> -74.464577 2/2/2
Initial sighting Time: 12:32 Vertical Angle: ] On/Off Effort: _ Observer: R Actual Time an Time: 12:36 Species: Unidentific Features used in body. Representative in	on Trac WP#: <u>2</u> On yan d Positi WP#: Species mages u	k 41 Horizon Tr O on of Sig 42 lodon ID: Smal sed for S	Lat:	35.410440 ng in Degrees:	90 S Beaufor Lor	ighting t Sea St ng: h/Best): back on	Cue: <u>Body</u> tate: <u>3</u> -74.464577 <u>2/2/2</u> the animals
Initial sighting Time: <u>12:32</u> Vertical Angle: <u>12:32</u> On/Off Effort: <u>12:36</u> Observer: <u>R</u> Actual Time an Time: <u>12:36</u> Species: <i>Unidentifi</i> Features used in body. Representative i Photographer: <u></u>	on Trac WP#: 2 On yan d Positi WP#: fed Mesop Species mages u Erin	k 41 Horizon Ti O on of Sig 42 lodon ID: <u>Smal</u> sed for S Frame	Lat:	35.410440 ng in Degrees:	90 S Beaufor Lor	ighting t Sea St ng: n/Best):	Cue: <u>Body</u> tate: <u>3</u> -74.464577 <u>2/2/2</u> the animals
Initial sighting Time: <u>12:32</u> Vertical Angle: ] On/Off Effort: <u></u> Observer: <u>R</u> Actual Time an Time: <u>12:36</u> Species: <i>Unidentifi</i> Features used in body. Representative i Photographer: <u>Calculated distan</u>	on Trac WP#: <u>2</u> On yan d Positi WP#: <i>d</i> Positi Species mages u Erin nce from	k 41 Horizon Ti O on of Sig 42 lodon ID: Smal sed for S Frame Tracklin	Lat:	35.410440 ng in Degrees:	90 S Beaufor Lor	ighting t Sea St ng: h/Best): back on	Cue: <u>Body</u> tate: <u>3</u> -74.464577 <u>2/2/2</u> the animals
Vertical Angle: On/Off Effort: _ Observer:R Actual Time an Time:12:36 Species: Unidentifi Features used in body. Representative i Photographer: Calculated distan Final Time and	on Trac WP#: 2 On yan d Positi WP#: <i>Species</i> mages u Erin nce from Positio	k 41 Horizon Tr O on of Sig 42 lodon ID: Smal sed for S Frame Tracklin n of Sigh	Lat:	35.410440 ng in Degrees:	90 S Beaufor Lor Low/High n place far	ighting t Sea St ng: /Best): back on Spacer	Cue: <u>Body</u> tate: <u>3</u> -74.464577 <u>2/2/2</u> the animals : <u>NA</u>
Initial sighting Time: 12:32 Vertical Angle: On/Off Effort: Observer: R Actual Time an Time: 12:36 Species: Unidentific Features used in body. Representative in Photographer: Calculated distant Final Time and Time: NA	on Trac WP#: <u>2</u> On yan d Positi WP#: Species mages u Erin nce from Positio WP#:	k 41 Horizon Tr O on of Sig 42 lodon ID: Smal sed for S Frame Tracklin n of Sigh NA	Lat:	35.410440 ng in Degrees:	90 S Beaufor Lor	ighting t Sea St ng: /Best): back on Spacer	Cue: <u>Body</u> tate: <u>3</u> -74.464577 <u>2/2/2</u> the animals
Initial sighting Time: 12:32 Vertical Angle: On/Off Effort: Observer: R Actual Time an Time: 12:36 Species: Unidentific Features used in body. Representative i Photographer: Calculated distant Final Time and Time: NA Calculated Distant	on Trac WP#: 2 On yan d Positi WP#: fed Mesop Species mages u Erin nce from Position WP#: nce Trav	k 41 Horizon Tr O on of Sig 42 lodon ID: Smal sed for S Frame Tracklin n of Sigh NA veled:	Lat:	35.410440 ng in Degrees:	90 S Beaufor Lor Low/High n place far	ighting t Sea St ng: /Best): back on Spacer	Cue: <u>Body</u> tate: <u>3</u> -74.464577 <u>2/2/2</u> the animals : <u>NA</u>
Initial sighting Time: 12:32 Vertical Angle: On/Off Effort: Observer: R Actual Time an Time: 12:36 Species: Unidentific Features used in body. Representative in Photographer: Calculated distant Final Time and Time: NA	on Trac WP#: 2 On yan d Positi WP#: fed Mesop Species mages u Erin nce from Positio WP#: nce Trav	k 41 Horizon Tr O on of Sig 42 Hodon ID: Smal sed for S Frame Tracklin n of Sigh NA veled: al Comm	Lat:	35.410440 ng in Degrees:	90 S Beaufor Lor Low/High n place far	ighting t Sea St ng: /Best): back on Spacer	Cue: <u>Body</u> tate: <u>3</u> -74.464577 <u>2/2/2</u> the animals : <u>NA</u>

Tuesday, May 28, 2013 Sighting $\#$ 9	
Initial sighting on Track	
Time: 14:27 WP#: 49 Lat: 35.555038 Long: -74.80268	57
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Standard</u>	plash
On/Off Effort: On Trackline: 37 Beaufort Sea State:	3
Observer: Ryan Observer side: Left	
Actual Time and Position of Sighting	
Time: 14:27 WP#: 50 Lat: 35.556541 Long: -74.79431	3
Species: Tursiops truncatus Numbers (Low/High/Best): 25 / 27	/ 26
Features used in Species ID: Uniform grey body coloration, white peduncles	
Representative images used for Species ID: 82, 92, 94, 95, 97 & 98	
Photographer: Erin Frame numbers: 78 - 98 Spacer: 99	
Calculated distance from Trackline: 0.78 km	
Final Time and Position of Sighting	
Time:         14:32         WP#:         51         Lat:         35.566950         Long:         -74.79194	4
Calculated Distance Traveled: 1.2 km	
Behavior and Additional Comments	
One group of ~ 5-7 animals and a second, more densely packed group of 20. All animals appeared	ed to
have white peduncles. Glare made it difficult to track and photograph animals.	
Tuesday, May 28, 2013 Sighting # 10	
Initial sighting on Track	
Initial sighting on Track           Time:         14:33         WP#:         53         Lat:         35.554615         Long:         -74.75330	
Initial sighting on TrackTime:14:33WP#:53Lat:35.554615Long:-74.75330Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Sighting Cue:	palsh
Initial sighting on TrackTime:14:33WP#:53Lat:35.554615Long:-74.75330Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Sighting Cue:Sighting Cue:Sighting Cue:On/Off Effort:OnTrackline:37Beaufort Sea State:Image: Contract State:	
Initial sighting on Track         Time:       14:33       WP#:       53       Lat:       35.554615       Long:       -74.75330         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Sighting Cue: <td>palsh</td>	palsh
Initial sighting on Track         Time:       14:33       WP#:       53       Lat:       35.554615       Long:       -74.75330         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:	palsh 3
Initial sighting on TrackTime:14:33WP#:53Lat:35.554615Long:-74.75330Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Sighting Cue:Sightin	palsh 3 3
Initial sighting on TrackTime:14:33WP#:53Lat:35.554615Long:-74.75330Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Sighting Cue:Sightin	palsh 3 3
Initial sighting on TrackTime:14:33WP#:53Lat:35.554615Long:-74.75330Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Sighting Cue:Sightin	palsh 3 3
Initial sighting on Track         Time:       14:33       WP#:       53       Lat:       35.554615       Long:       -74.75330         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:	palsh 3 3
Initial sighting on Track         Time:       14:33       WP#:       53       Lat:       35.554615       Long:       -74.75330         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:	palsh 3 3 / 18
Initial sighting on Track         Time:       14:33       WP#:       53       Lat:       35.554615       Long:       -74.75330         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Sp         On/Off Effort:       On       Trackline:       37       Beaufort Sea State:       Observer:       Sp         Observer:       Erin       Observer side:       Right       Right       Actual Time and Position of Sighting         Time:       14:34       WP#:       54       Lat:       35.554407       Long:       -74.75040         Species:       Tursiops truncatus       Numbers (Low/High/Best):       15 / 20         Features used in Species ID:       Uniform grey body coloration, white peduncles         Representative images used for Species ID:       104, 110, 113, 114 & 117         Photographer:       Erin       Frame numbers:       100 - 119       Spacer:       120	palsh 3 3 / 18
Initial sighting on TrackTime:14:33WP#:53Lat:35.554615Long:-74.75330Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SiOn/Off Effort:OnTrackline:37Beaufort Sea State:Observer:SiObserver:ErinObserver side:RightActual Time and Position of SightingTime:14:34WP#:54Lat:35.554407Long:-74.75040Species:Tursiops truncatusNumbers (Low/High/Best):15 / 20Features used in Species ID:Uniform grey body coloration, white pedunclesRepresentative images used for Species ID:104, 110, 113, 114 & 117Photographer:ErinFrame numbers:100 - 119Spacer:120Calculated distance from Trackline:0.26 km	palsh 3 3 / 18
Initial sighting on Track         Time:       14:33       WP#:       53       Lat:       35.554615       Long:       -74.75330         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Sighting Cue: <td>palsh 3 3 / 18 )</td>	palsh 3 3 / 18 )
Initial sighting on TrackTime:14:33WP#:53Lat:35.554615Long:-74.75330Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Sighting Cue:Sightin	palsh 3 3 / 18 )
Initial sighting on Track         Time:       14:33       WP#:       53       Lat:       35.554615       Long:       -74.75330         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Sighting Cue: <td>palsh 3 3 / 18 )</td>	palsh 3 3 / 18 )
Initial sighting on TrackTime:14:33WP#:53Lat:35.554615Long:-74.75330Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Sighting Cue:Sightin	palsh 3 3 / 18 )
Initial sighting on Track         Time:       14:33       WP#:       53       Lat:       35.554615       Long:       -74.75330         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Sighting Cue: <td>palsh 3 3 / 18 0</td>	palsh 3 3 / 18 0
Initial sighting on TrackTime:14:33WP#:53Lat:35.554615Long:-74.75330Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SpOn/Off Effort:OnTrackline:37Beaufort Sea State:Observer:SpObserver:ErinObserver side:RightActual Time and Position of SightingTime:14:34WP#:54Lat:35.554407Long:-74.75040Species:Tursiops truncatusNumbers (Low/High/Best):15 / 20Features used in Species ID:Uniform grey body coloration, white pedunclesRepresentative images used for Species ID:104, 110, 113, 114 & 117Photographer:ErinFrame numbers:100 - 119Spacer:120Calculated distance from Trackline:0.26 kmFinal Time and Position of SightingTime:14:37WP#:55Lat:35.555132Long:-74.74782Calculated Distance Traveled:0.25 kmBehavior and Additional Comments	palsh 3 3 / 18 0
Initial sighting on Track         Time:       14:33       WP#:       53       Lat:       35.554615       Long:       -74.75330         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Sighting Cue: <td>palsh 3 3 / 18 0</td>	palsh 3 3 / 18 0

Tuesday, May 28, 2013 Sighting $\#$ 11
Initial sighting on Track
Time:         14:47         WP#:         58         Lat:         35.551463         Long:         -74.351276
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body
On/Off Effort:         On         Trackline:         37         Beaufort Sea State:         3
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time:         14:47         WP#:         59         Lat:         35.544498         Long:         -74.344333
Species: Ziphius cavirostris       Numbers (Low/High/Best): 3/3/3
Features used in Species ID: White anterior area of body with grey or yellow brown coloration
posteriorly, small dorsal fin placed far back on the body.
Representative images used for Species ID:123, 124, 129, 130, 136 & 140Photographer:ErinFrame numbers:121 - 143Spacer:144
Photographer:       Erin       Frame numbers:       121 - 143       Spacer:       144         Calculated distance from Trackline:       1.0 km       1.0 km       1.0 km       1.0 km
Final Time and Position of Sighting
Time:14:49WP#:60Lat:35.555934Long:-74.347482Calculated Distance Traveled:1.3 km
Behavior and Additional Comments
Hanging at the surface for a few breaths before diving.
Tuesday, May 28, 2013 Sighting # 12
Initial sighting on Track
Time: NA WP#: NA Lat: NA Long: NA
Vertical Angle: 3 Horizontal Bearing in Degrees: 90 Sighting Cue: Wake
On/Off Effort: Off Trackline: 37 & 40 Beaufort Sea State: 3
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time:         14:54         WP#:         63         Lat:         35.710991         Long:         -74.297119
Species:Physeter macrocephalus     Numbers (Low/High/Best):     3 / 3 / 3
Features used in Species ID: Large head with asymmetrical placement of blowhole
grey wrinkled body, dorsal ridge instead of fin.
Representative images used for Species ID: 160, 161, 162, 164 & 167
Photographer: Erin Frame numbers: 145 - 174 Spacer: 175
Calculated distance from Trackline: NA
Final Time and Position of Sighting
Time: NA WP#: NA Lat: NA Long: NA
Calculated Distance Traveled: NA
Behavior and Additional Comments
Behavior and Additional Comments Animals observed while transiting between trackline 37 and 40. All three individuals were seen

within seconds of one another. One animal slightly smaller than the other two.

Tuesday, May 28, 2013 Sighting $\#$ 13
Initial sighting on Track
Time:         15:03         WP#:         65         Lat:         35.757416         Long:         -74.461130
Vertical Angle: 2 Horizontal Bearing in Degrees: 100 Sighting Cue: Body
On/Off Effort:         On         Trackline:         40         Beaufort Sea State:         3
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time:         15:04         WP#:         66         Lat:         35.764729         Long:         -74.461337
Species:Tursiops truncatus         Numbers (Low/High/Best):         19/20/19
Features used in Species ID: Robust body size, robust rostrum, white peduncles present.
Representative images used for Species ID: 179, 185 & 195
Representative images used for Species ID:179, 185 & 195Photographer:ErinFrame numbers:176 - 196Spacer:197
Calculated distance from Trackline: 0.8 km
Final Time and Position of Sighting
Time:         15:07         WP#:         67         Lat:         35.769731         Long:         -74.461358
Calculated Distance Traveled: 0.6 km
Behavior and Additional Comments
One tight group not traveling very fast.
Tuesday, May 28, 2013 Sighting # 14
Tuesday, May 28, 2013 Sighting # 14 Initial sighting on Track
e e
Initial sighting on Track
Initial sighting on Track           Time: 15:34         WP#: 74         Lat: 35.829832         Long: -74.856094
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:Left
Initial sighting on Track         Time:       15:34       WP#:       74       Lat:       35.829832       Long:       -74.856094         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       41       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftLeftTime:15:35WP#:75Lat:35.827554Long:-74.859116
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:35WP#:75Lat:35.827554Long:-74.859116Species:Globicephala macrorhynchusNumbers (Low/High/Best):75 / 85 / 80Features used in Species ID:Square head, dark body coloration, large dorsal fin placed1/3 back the animals body.
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:35WP#:75Lat:35.827554Long:-74.859116Species:Globicephala macrorhynchusNumbers (Low/High/Best):75 / 85 / 80Features used in Species ID:Square head, dark body coloration, large dorsal fin placed1/3 back the animals body.Images used for Species ID:199, 201, 204, 207 & 214
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:35WP#:75Lat:35.827554Long:-74.859116Species:Globicephala macrorhynchusNumbers (Low/High/Best):75 / 85 / 80Features used in Species ID:Square head, dark body coloration, large dorsal fin placed1/3 back the animals body.Representative images used for Species ID:199, 201, 204, 207 & 214Photographer:ErinFrame numbers:198 - 216Spacer:217
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:35WP#:75Lat:35.827554Long:-74.859116Species:Globicephala macrorhynchusNumbers (Low/High/Best):75 / 85 / 80Features used in Species ID:Square head, dark body coloration, large dorsal fin placed1/3 back the animals body.Representative images used for Species ID:199, 201, 204, 207 & 214Photographer:ErinFrame numbers:198 - 216Spacer:217Calculated distance from Trackline:0.4 km
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:35WP#:75Lat:35.827554Long:-74.859116Species:Globicephala macrorhynchusNumbers (Low/High/Best):75 / 85 / 80Features used in Species ID:Square head, dark body coloration, large dorsal fin placed1/3 back the animals body.Representative images used for Species ID:199, 201, 204, 207 & 214Photographer:ErinFrame numbers:198 - 216Spacer:217Calculated distance from Trackline:0.4 kmFinal Time and Position of Sighting
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:35WP#:75Lat:35.827554Long:-74.859116Species:Globicephala macrorhynchusNumbers (Low/High/Best):75 / 85 / 80Features used in Species ID:Square head, dark body coloration, large dorsal fin placed1/3 back the animals body.Images used for Species ID:199, 201, 204, 207 & 214Photographer:ErinFrame numbers:198 - 216Spacer:217Calculated distance from Trackline:0.4 kmImages0.4 kmImages74.859607Time:15:38WP#:76Lat:35.836363Long:-74.859607
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:35WP#:75Lat:35.827554Long:-74.859116Species:Globicephala macrorhynchusNumbers (Low/High/Best):75 / 85 / 80Features used in Species ID:Square head, dark body coloration, large dorsal fin placed1/3 back the animals body.Representative images used for Species ID:199, 201, 204, 207 & 214Photographer:ErinFrame numbers:198 - 216Spacer:217Calculated distance from Trackline:0.4 kmFinal Time and Position of Sighting
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:35WP#:75Lat:35.827554Long:-74.859116Species:Globicephala macrorhynchusNumbers (Low/High/Best):75 / 85 / 80Features used in Species ID:Square head, dark body coloration, large dorsal fin placed1/3 back the animals body.Images used for Species ID:199, 201, 204, 207 & 214Photographer:ErinFrame numbers:198 - 216Spacer:217Calculated distance from Trackline:0.4 kmImages0.4 kmImages74.859607Time:15:38WP#:76Lat:35.836363Long:-74.859607
Initial sighting on TrackTime:15:34WP#:74Lat:35.829832Long:-74.856094Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:41Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:35WP#:75Lat:35.827554Long:-74.859116Species:Globicephala macrorhynchusNumbers (Low/High/Best):75 / 85 / 80Features used in Species ID:Square head, dark body coloration, large dorsal fin placed1/3 back the animals body.Representative images used for Species ID:199, 201, 204, 207 & 214Photographer:ErinFrame numbers:198 - 216Spacer:217Calculated distance from Trackline:0.4 kmFinal Time and Position of SightingTime:15:38WP#:76Lat:35.836363Long:-74.859607Calculated Distance Traveled:1.0 km

Tuesday,	, May 28, 2013 Sigh	ting # 15		
Initial sighting on Tracl	ĸ	C		
Time: 16:01 WP#:	82 Lat:	35.903498	Long:	-74.620195
Vertical Angle: 2				
On/Off Effort: On	Trackline:	42	Beaufort Sea St	ate:4
Observer: Ryan	Observer sid	e: Left		
Actual Time and Position	on of Sighting			
Time: 16:02 WP#:	83 Lat:	35.903524	Long:	-74.614975
Species:Tursiops truncatus			Low/High/Best):	15 / 20 / 18
Features used in Species	ID: Grey body colorat	tion, robust bod	y appearance.	
			210	
Representative images us Photographer: <u>Erin</u>	Eromo numboro	218 - 221	218	222
Calculated distance from			Spacer	•
Final Time and Position		25.000025		74 (10022
Time: <u>16:08</u> WP#: _		35.906925 km	Long:	-74.019933
Calculated Distance Trav		KIII	1	
Behavior and Additiona				
Fast swimming group, difficu	It to photograph			
Tuesday,	, May 28, 2013 Sigh	ting # 16		
	, May 28, 2013 Sigh	ting # 16		
Initial sighting on Tracl	k	C	Long:	-74.737929
	<b>k</b> <u>86</u> Lat:	35.903364		
Initial sighting on Tracl Time: <u>16:12</u> WP#:	k <u>86</u> Lat: <u></u> Horizontal Bearing	35.903364	90 Sighting	Cue: Splash
Initial sighting on Tracl Time: <u>16:12</u> WP#: Vertical Angle: <u>2</u>	k <u>86</u> Lat: <u></u> Horizontal Bearing	35.903364 g in Degrees: 42	90 Sighting	Cue: Splash
Initial sighting on TraclTime:16:12WP#:Vertical Angle:2On/Off Effort:OnObserver:Ryan	k <u>86</u> Lat: <u></u> Horizontal Bearing Trackline: <u></u> Observer sid	35.903364 g in Degrees: 42	90 Sighting	Cue: Splash
Initial sighting on Tracl         Time:       16:12       WP#:         Vertical Angle:       2         On/Off Effort:       On         Observer:       Ryan	k <u>86</u> Lat: Horizontal Bearing Trackline: Observer sid on of Sighting	35.903364 g in Degrees: 42 e: Left	90 Sighting Beaufort Sea St	Cue: Splash ate: 3
Initial sighting on TraclTime:16:12WP#:Vertical Angle:2On/Off Effort:OnObserver:Ryan	k <u>86</u> Lat: <u></u> Horizontal Bearing Trackline: <u></u> Observer sid	35.903364 5 in Degrees: 42 e: Left 35.900667	90 Sighting	Cue: <u>Splash</u> ate: <u>3</u>
Initial sighting on TraclTime:16:12WP#:Vertical Angle:2On/Off Effort:OnObserver:RyanActual Time and PositionTime:16:13WP#:	k          86       Lat:         Horizontal Bearing         Trackline:         Observer sid         on of Sighting         87	35.903364 g in Degrees: 42 e: Left 35.900667 Numbers (I	90 Sighting Beaufort Sea St Long: Low/High/Best):	Cue: Splash ate: 3 -74.736156 150 / 200 / 180
Initial sighting on Track         Time:       16:12       WP#:         Vertical Angle:       2         On/Off Effort:       On         Observer:       Ryan         Actual Time and Position         Time:       16:13         WP#:       Species: Delphinus delphis	k <u>86</u> Lat: Horizontal Bearing Trackline: Observer sid <b>on of Sighting</b> <u>87</u> Lat: ID: Dark grey dorsal of the second	35.903364 35.903364 35.900667 Numbers (I coloration, anter	90 Sighting Beaufort Sea St Long: Low/High/Best): rior to dorsal fin ver	Cue: Splash ate: 3 -74.736156 150 / 200 / 180
Initial sighting on TraclTime:16:12WP#:Vertical Angle:2On/Off Effort:OnObserver:RyanActual Time and PositionTime:16:13WP#:Species:Delphinus delphisFeatures used in Speciesposterior to dorsal fin ventralRepresentative images used	k          86       Lat:         Horizontal Bearing         Trackline:         Observer sid         On of Sighting         87       Lat:         ID:       Dark grey dorsal of white body coloration	35.903364 g in Degrees: 42 e: Left 35.900667 Numbers (I coloration, anter n. Triangular do	90 Sighting Beaufort Sea St Long: Low/High/Best): rior to dorsal fin ver	Cue: Splash ate: 3 -74.736156 150 / 200 / 180 ntral yellow blaze
Initial sighting on TraclTime:16:12WP#:Vertical Angle:2On/Off Effort:OnObserver:RyanActual Time and PositionTime:16:13WP#:Species:Delphinus delphisFeatures used in Speciesposterior to dorsal fin ventralRepresentative images usPhotographer:Erin	k           86         Lat:           Horizontal Bearing           Trackline:           Observer sid           on of Sighting           87           Lat:           ID:           Dark grey dorsal or white body coloration           Sed for Species ID:           Frame numbers:	35.903364 g in Degrees: 42 e: Left 35.900667 Numbers (I coloration, anter h. Triangular do 223 - 263	90 Sighting Beaufort Sea St Long: Low/High/Best): rior to dorsal fin ver rsal fin 25, 231, 238, 255 &	Cue: Splash ate: 3 -74.736156 150 / 200 / 180 htral yellow blaze
Initial sighting on TraclTime:16:12WP#:Vertical Angle:2On/Off Effort:OnObserver:RyanActual Time and PositionTime:16:13WP#:Species:Delphinus delphisFeatures used in Speciesposterior to dorsal fin ventralRepresentative images used	k           86         Lat:           Horizontal Bearing           Trackline:           Observer sid           on of Sighting           87           Lat:           ID:           Dark grey dorsal or white body coloration           Sed for Species ID:           Frame numbers:	35.903364 g in Degrees: 42 e: Left 35.900667 Numbers (I coloration, anter h. Triangular do 2:	90 Sighting Beaufort Sea St Long: Low/High/Best): rior to dorsal fin ver rsal fin 25, 231, 238, 255 &	Cue: Splash ate: 3 -74.736156 150 / 200 / 180 htral yellow blaze
Initial sighting on TraclTime:16:12WP#:Vertical Angle:2On/Off Effort:OnObserver:RyanActual Time and PositionTime:16:13WP#:Species:Delphinus delphisFeatures used in Speciesposterior to dorsal fin ventralRepresentative images usPhotographer:Erin	k           86         Lat:           Horizontal Bearing           Trackline:           Observer sid           on of Sighting           87         Lat:           ID:         Dark grey dorsal of the body coloration of	35.903364 g in Degrees: 42 e: Left 35.900667 Numbers (I coloration, anter h. Triangular do 223 - 263	90 Sighting Beaufort Sea St Long: Low/High/Best): rior to dorsal fin ver rsal fin 25, 231, 238, 255 &	Cue: Splash ate: 3 -74.736156 150 / 200 / 180 htral yellow blaze
Initial sighting on Track         Time:       16:12       WP#:         Vertical Angle:       2         On/Off Effort:       On         Observer:       Ryan         Actual Time and Position         Time:       16:13         WP#:       Species:Delphinus delphis         Features used in Species         posterior to dorsal fin ventral         Representative images us         Photographer:       Erin         Calculated distance from         Final Time and Position         Time:       16:19	k          86       Lat:         Horizontal Bearing         Trackline:         Observer sid         on of Sighting         87       Lat:         ID:       Dark grey dorsal of white body coloration         white body coloration         ied for Species ID:         Frame numbers:         Trackline:         of Sighting         88       Lat:	35.903364 g in Degrees: 42 e: Left 35.900667 Numbers (I coloration, anter h. Triangular do 223 - 263	90 Sighting Beaufort Sea St Long: Low/High/Best): rior to dorsal fin ver rsal fin 25, 231, 238, 255 &	Cue: Splash ate: 3 -74.736156 150 / 200 / 180 htral yellow blaze
Initial sighting on Track         Time:       16:12       WP#:         Vertical Angle:       2         On/Off Effort:       On         Observer:       Ryan         Actual Time and Position         Time:       16:13         VP#:       Species: Delphinus delphis         Features used in Species         posterior to dorsal fin ventral         Representative images us         Photographer:       Erin         Calculated distance from         Final Time and Position	k          86       Lat:         Horizontal Bearing         Trackline:         Observer sid         on of Sighting         87       Lat:         ID:       Dark grey dorsal of white body coloration         white body coloration         ied for Species ID:         Frame numbers:         Trackline:         of Sighting         88       Lat:	35.903364 g in Degrees: 42 e: Left 35.900667 Numbers (I coloration, anter h. Triangular do 22 223 - 263 0.3 km	90 Sighting Beaufort Sea St Long: Low/High/Best): rior to dorsal fin ver rsal fin 25, 231, 238, 255 & Spacer	Cue: Splash ate: 3 -74.736156 150 / 200 / 180 htral yellow blaze 261 : 264
Initial sighting on Track         Time:       16:12       WP#:         Vertical Angle:       2         On/Off Effort:       On         Observer:       Ryan         Actual Time and Position         Time:       16:13         WP#:       Species:Delphinus delphis         Features used in Species         posterior to dorsal fin ventral         Representative images us         Photographer:       Erin         Calculated distance from         Final Time and Position         Time:       16:19	k           86         Lat:           Horizontal Bearing           Trackline:           Observer sid           on of Sighting           87         Lat:           ID:         Dark grey dorsal control           white body coloration         Sector Species ID:           Frame numbers:         Trackline:           Trackline:	35.903364 g in Degrees: 42 e: Left 35.900667 Numbers (I coloration, anter h. Triangular do 223 - 263 0.3 km 35.891998	90 Sighting Beaufort Sea St Long: Low/High/Best): rior to dorsal fin ver rsal fin 25, 231, 238, 255 & Spacer	Cue: Splash ate: 3 -74.736156 150 / 200 / 180 htral yellow blaze 261 : 264

Very active individuals.

Initial sighting on Track
Time:         10:49         WP#:         4         Lat:         34.503088         Long:         -75.626831
Vertical Angle: 2 Horizontal Bearing in Degrees: 100 Sighting Cue: Body
On/Off Effort:         On         Trackline:         20         Beaufort Sea State:         3
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time: 10:53 WP#: 5 Lat: 34.511157 Long: -75.625345
Species: Tursiops truncatus       Numbers (Low/High/Best): 12/15/13
Features used in Species ID: Robust body appearance and dorsal fin, white peduncles present
Representative images used for Species ID: 16
Photographer:       Ryan       Frame numbers:       1 - 19       Spacer:       20         Calculated distance from Trackline:       0.91 km
Final Time and Position of Sighting
Time:         11:00         WP#:         6         Lat:         34.510588         Long:         -75.614455
Calculated Distance Traveled: 1.0 km
Behavior and Additional Comments
Two groups but close together, not traveling, staying just below the surface, white peduncles present.
Tuesday July 16, 2013 Stochting $\#$
Tuesday, July 16, 2013 Sighting # 2
Initial sighting on Track
Initial sighting on Track           Time: 11:03         WP#: 9         Lat: 34.437846         Long: -75.530700
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:Right
Initial sighting on Track         Time:       11:03       WP#:       9       Lat:       34.437846       Long:       -75.530700         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       20       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightTime: 11:03WP#:10Lat:34.430081Long:-75.532243
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:03WP#:10Lat:34.430081Long:-75.532243Species:Mesoplodon europeausNumbers (Low/High/Best):4/4/4
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightTime: 11:03WP#:10Lat:34.430081Long:-75.532243
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:03WP#:10Lat:34.430081Long:-75.532243Species:Mesoplodon europeausNumbers (Low/High/Best):4/4/4Features used in Species ID:Small pectoral fins, small dorsal fin placed well back on animals body
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:03WP#:10Lat:34.430081Long:-75.532243Species:Mesoplodon europeausNumbers (Low/High/Best):4/4/4Features used in Species ID:Small pectoral fins, small dorsal fin placed well back on animals bodylight "tiger striping" pattern on dorsal surface.
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:03WP#:10Lat:34.430081Long:-75.532243Species:Mesoplodon europeausNumbers (Low/High/Best):4/4/4Features used in Species ID:Small pectoral fins, small dorsal fin placed well back on animals bodylight "tiger striping" pattern on dorsal surface.Representative images used for Species ID:21, 41, 43, 44, 58, 66
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:03WP#:10Lat:34.430081Long:-75.532243Species:Mesoplodon europeausNumbers (Low/High/Best):4/4/4Features used in Species ID:Small pectoral fins, small dorsal fin placed well back on animals bodylight "tiger striping" pattern on dorsal surface.Representative images used for Species ID:21, 41, 43, 44, 58, 66Photographer:RyanFrame numbers:21 - 83Spacer:84
Initial sighting on Track         Time:       11:03       WP#:       9       Lat:       34.437846       Long:       -75.530700         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       20       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       11:03       WP#:       10       Lat:       34.430081       Long:       -75.532243         Species:Mesoplodon europeaus       Numbers (Low/High/Best):       4/4/4       4/4/4         Features used in Species ID:       Small pectoral fins, small dorsal fin placed well back on animals body       1         light "tiger striping" pattern on dorsal surface.       21, 41, 43, 44, 58, 66       4         Photographer:       Ryan       Frame numbers:       21-83       Spacer:       84         Calculated distance from Trackline:       0.87 km       5       5       5       5
Initial sighting on Track         Time:       11:03       WP#:       9       Lat:       34.437846       Long:       -75.530700         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       20       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       11:03       WP#:       10       Lat:       34.430081       Long:       -75.532243         Species:Mesoplodon europeaus       Numbers (Low/High/Best):       4/4/4       4/4/4         Features used in Species ID:       Small pectoral fins, small dorsal fin placed well back on animals body       light "tiger striping" pattern on dorsal surface.         Representative images used for Species ID:       21, 41, 43, 44, 58, 66       Photographer:       Ryan       Frame numbers:       21 - 83       Spacer:       84         Calculated distance from Trackline:       0.87 km       Image:       11.41, 43, 44, 58, 66       Image:       Image:       11.41
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:03WP#:10Lat:34.430081Long:-75.532243Species:Mesoplodon europeausNumbers (Low/High/Best):4/4/4Features used in Species ID:Small pectoral fins, small dorsal fin placed well back on animals bodylight "tiger striping" pattern on dorsal surface.Representative images used for Species ID:21, 41, 43, 44, 58, 66Photographer:RyanFrame numbers:21 - 83Spacer:84Calculated distance from Trackline:0.87 km0.87 kmImage:-75.537130Image:-75.537130
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:03WP#:10Lat:34.430081Long:-75.532243Species:Msoplodon europeausNumbers (Low/High/Best):4 / 4 / 4Features used in Species ID:Small pectoral fins, small dorsal fin placed well back on animals bodylight "tiger striping" pattern on dorsal surface.Representative images used for Species ID:21, 41, 43, 44, 58, 66Photographer:RyanFrame numbers:21 - 83Spacer:84Calculated distance from Trackline:0.87 kmFinal Time and Position of SightingTime:11:08WP#:11Lat:34.428582Long:-75.537130Calculated Distance Traveled:0.47 kmBehavior and Additional Comments
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:03WP#:10Lat:34.430081Long:-75.532243Species:Mesoplodon europeausNumbers (Low/High/Best):4/4/4Features used in Species ID:Small pectoral fins, small dorsal fin placed well back on animals bodylight "tiger striping" pattern on dorsal surface.Representative images used for Species ID:21, 41, 43, 44, 58, 66Photographer:RyanFrame numbers:21-83Spacer:84Calculated distance from Trackline:0.87 kmFinal Time and Position of SightingTime:11:08WP#:11Lat:34.428582Long:-75.537130Calculated Distance Traveled:0.47 km
Initial sighting on TrackTime:11:03WP#:9Lat:34.437846Long:-75.530700Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:20Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:03WP#:10Lat:34.430081Long:-75.532243Species:Mesoplodon europeausNumbers (Low/High/Best):4 / 4 / 4Features used in Species ID:Small pectoral fins, small dorsal fin placed well back on animals bodylight "tiger striping" pattern on dorsal surface.Representative images used for Species ID:21, 41, 43, 44, 58, 66Photographer:RyanFrame numbers:21 - 83Spacer:84Calculated distance from Trackline:0.87 kmFinal Time and Position of SightingTime:11:08WP#:11Lat:34.428582Long:-75.537130Calculated Distance Traveled:0.47 kmBehavior and Additional CommentsTraveling fast and below the surface then began staying at the surface for long periods with multiple

Tuesday,	July 16, 2013 Sigh	ting # 3		
Initial sighting on Track		C		
Time: 11:54 WP#:	21 Lat:	34.636026	Long:	.514550
Vertical Angle: <u>3</u> I	Horizontal Bearing	in Degrees: 100	Sighting Cue	e: Body
On/Off Effort: On	Trackline:		ufort Sea State:	3
Observer: Erin	Observer side	e: Left		
Actual Time and Positio	n of Sighting			
Time: 11:57 WP#:	22 Lat:	34.641013	Long:	518358
Species:Tursiops truncatus		Numbers (Low/		
Features used in Species I	D: Robust body and	dorsal fin, grey body	coloration with lat	teral blaze.
Representative images use	-	05.04	85	0.5
	Frame numbers: _	85 - 94	Spacer:	95
Calculated distance from '	Frackline:	0.65 km		
<b>Final Time and Position</b>	of Sighting			
Time: <u>12:04</u> WP#: _		34.639639	Long:75	.515417
Calculated Distance Trave	eled: 0.31	km		
<b>Behavior and Additional</b>	l Comments			
Traveling just below the surface	ce in between doing c	leeper dives.		
		•		
Initial sighting on TrackTime:14:44WP#:Vertical Angle:3HOn/Off Effort:On	37 Lat: Horizontal Bearing Trackline:	36.124061 in Degrees: 90 45 Bea	Long: <u>-74</u> Sighting Cuo ufort Sea State:	e: Body
Observer: Erin	Observer side	e: Left		
Actual Time and Position	n of Sighting			
Time: 14:46 WP#:	38 Lat:	36.126701	Long:74.	680803
Species: Tursiops truncatus		Numbers (Low/	- /	
Features used in Species I	D: Robust body and	dorsal fin, grey body	coloration with lat	teral blaze.
White peduncles				
Representative images use			13, 132, 133, 143	
Photographer: Ryan		96 - 146	Spacer:	146
Calculated distance from '	Trackline:			
<b>Final Time and Position</b>	of Sighting			
Time: 14:51 WP#:	39 Lat:	36.130591	Long: -74	.687902
Calculated Distance Trave	eled:			
<b>Behavior and Additional</b>	l Comments			
Traveling fast, jumping out of				
naveling last, jumping out of	the watch			

	Tuesda	y, July 16,	2013 Sigl	nting # 5		
Initial sighting of			U	e		
Time: 15:05		43	Lat:	36.047608	Long:	-74.405293
Vertical Angle:	1	Horizon	tal Bearing	g in Degrees:	0	g Cue: Body
On/Off Effort:				44	Beaufort Sea S	
Observer: Ry	van	0	bserver sid	le: Right		
Actual Time and	d Positi	on of Sig	hting			
Time: 15:08		44	, 0	36.048312	Long:	-74.399638
Species:Tursiops tr				Numbers (I	Low/High/Best)	: 30 / 40 / 35
Features used in		ID: Robu	st body app	earance and do	rsal fin, uniform gr	ey coloration with
slightly lighter later						
Representative in						
Photographer:			numbers: _	148 - 170	Space	r: <u>171</u>
Calculated distan	ice fron	n Tracklii	ne:	0.51 km		
Final Time and	Positio	n of Sigh	ting			
Time: 15:13		45	Lat:	36.051644	Long:	-74.391174
Calculated Distan	nce Tra	veled:	0.8	4 km		
Behavior and A	ddition	al Comn	nents			
Calf present, a coup	le aroup	S.				
	ie group	5.				
Initial sighting of Time: <u>15:23</u> Vertical Angle: _ On/Off Effort: Observer: Ry	0n Trac WP#: 2 On	e <b>k</b> <u>47</u> Horizon Tı	Lat: tal Bearing rackline:			
Actual Time and					_	
Time: 15:25			, 0	26.047900	Long	74 794206
Species:Globiceph			Lat:		Long: Low/High/Best)	
Features used in			s cauaro hoa	`	<b>U</b> /	
Dark body coloratio	-					sbody
Representative in					180	
Photographer:	-		numbers:	172 - 183		r: 184
Calculated distar					spuce	
Final Time and						
Time: 15:30	WP#:	0	Lat:	26 05 4292	Long	-74.772390
			Lai	36.054282	Long:	-74.772390
Calculated Distan						
Behavior and A						
Hanging just below						
Hanging just below						
Hanging just below						

Initial sighting on Track
Time: 15:33 WP#: 51 Lat: 36.047987 Long: -74.868414
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: 44 Beaufort Sea State: 3
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time: 15:34 WP#: 52 Lat: 36.051731 Long: -74.859693
Species:Grampus griseus         Numbers (Low/High/Best):         20 / 25 / 23
Features used in Species ID: Robust bodies, tall, falcate dorsal fin, lots of scarring across body
causing lighter white coloration.
Representative images used for Species ID: 193, 197, 22
Photographer: Ryan Frame numbers: 185-223 Spacer: 224
Calculated distance from Trackline: 0.88 km
Final Time and Position of Sighting
Time:         15:36         WP#:         53         Lat:         36.054536         Long:         -74.862407
Calculated Distance Traveled: 0.39 km
Behavior and Additional Comments
Hanging just below the surface, slowly surfacing and then descending back below the surface.
Tuesday July 16 2013 Sighting # 8
Tuesday, July 16, 2013 Sighting # 8 Initial sighting on Track
Time: 15:57 WP#: 61 Lat: 35.980447 Long: -74.803345
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Splash
On/Off Effort:         On         Trackline:         43         Beaufort Sea State:         2
On/Off Effort:OnTrackline:43Beaufort Sea State:2Observer:ErinObserver side:Left
On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting
On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       16:00       WP#:       62       Lat:       35.982496       Long:       -74.808348
On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       16:00       WP#:       62       Lat:       35.982496       Long:       -74.808348         Species:       Stenella frontalis       Numbers (Low/High/Best):       50 / 100 / 75
On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       16:00       WP#:       62       Lat:       35.982496       Long:       -74.808348         Species:       Stenella frontalis       Numbers (Low/High/Best):       50 / 100 / 75         Features used in Species ID:       White tip to rostrums, lighter grey blaze to dorsal fin with darker
On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       16:00       WP#:       62       Lat:       35.982496       Long:       -74.808348         Species:       Stenella frontalis       Numbers (Low/High/Best):       50 / 100 / 75         Features used in Species ID:       White tip to rostrums, lighter grey blaze to dorsal fin with darker         blaze at level or dorsal fin, some animals with spotting present in light grey areas of body.
On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left           Actual Time and Position of Sighting       Time:       16:00       WP#:       62       Lat:       35.982496       Long:       -74.808348         Species:Stenella frontalis       Numbers (Low/High/Best):       50 / 100 / 75         Features used in Species ID:       White tip to rostrums, lighter grey blaze to dorsal fin with darker         blaze at level or dorsal fin, some animals with spotting present in light grey areas of body.         Representative images used for Species ID:       231, 247, 250, 279, 286
On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       16:00       WP#:       62       Lat:       35.982496       Long:       -74.808348         Species:       Stenella frontalis       Numbers (Low/High/Best):       50 / 100 / 75         Features used in Species ID:       White tip to rostrums, lighter grey blaze to dorsal fin with darker         blaze at level or dorsal fin, some animals with spotting present in light grey areas of body.
On/Off Effort:OnTrackline:43Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:16:00WP#:62Lat:35.982496Long:-74.808348Species:Stenella frontalisNumbers (Low/High/Best):50 / 100 / 75Features used in Species ID:White tip to rostrums, lighter grey blaze to dorsal fin with darkerblaze at level or dorsal fin, some animals with spotting present in light grey areas of body.Representative images used for Species ID:231, 247, 250, 279, 286Photographer:RyanFrame numbers:225 - 298Spacer:298Calculated distance from Trackline:0.51 km
On/Off Effort:OnTrackline:43Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:16:00WP#:62Lat:35.982496Long:-74.808348Species:Stenella frontalisNumbers (Low/High/Best):50 / 100 / 75Features used in Species ID:White tip to rostrums, lighter grey blaze to dorsal fin with darkerblaze at level or dorsal fin, some animals with spotting present in light grey areas of body.Representative images used for Species ID:231, 247, 250, 279, 286Photographer:RyanFrame numbers:225 - 298Calculated distance from Trackline:0.51 kmFinal Time and Position of Sighting
On/Off Effort:OnTrackline:43Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:16:00WP#:62Lat:35.982496Long:-74.808348Species:Stenella frontalisNumbers (Low/High/Best):50 / 100 / 75Features used in Species ID:White tip to rostrums, lighter grey blaze to dorsal fin with darkerblaze at level or dorsal fin, some animals with spotting present in light grey areas of body.Representative images used for Species ID:231, 247, 250, 279, 286Photographer:RyanFrame numbers:225 - 298Spacer:298Calculated distance from Trackline:0.51 kmFinal Time and Position of SightingTime:16:12WP#:63Lat:35.998376Long:-74.799263
On/Off Effort:OnTrackline:43Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:16:00WP#:62Lat:35.982496Long:-74.808348Species:Stenella frontalisNumbers (Low/High/Best):50 / 100 / 75Features used in Species ID:White tip to rostrums, lighter grey blaze to dorsal fin with darkerblaze at level or dorsal fin, some animals with spotting present in light grey areas of body.Representative images used for Species ID:231, 247, 250, 279, 286Photographer:RyanFrame numbers:225 - 298Calculated distance from Trackline:0.51 kmFinal Time and Position of SightingTime:16:12WP#:63Lat:35.998376Long:-74.799263Calculated Distance Traveled:1.9 km
On/Off Effort:OnTrackline:43Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:16:00WP#:62Lat:35.982496Long:-74.808348Species:Stenella frontalisNumbers (Low/High/Best):50 / 100 / 75Features used in Species ID:White tip to rostrums, lighter grey blaze to dorsal fin with darkerblaze at level or dorsal fin, some animals with spotting present in light grey areas of body.Representative images used for Species ID:231, 247, 250, 279, 286Photographer:RyanFrame numbers:225 - 298Calculated distance from Trackline:0.51 kmFinal Time and Position of SightingTime:16:12WP#:63Lat:35.998376Long:-74.799263Calculated Distance Traveled:1.9 kmBehavior and Additional Comments
On/Off Effort:OnTrackline:43Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:16:00WP#:62Lat:35.982496Long:-74.808348Species:Stenella frontalisNumbers (Low/High/Best):50 / 100 / 75Features used in Species ID:White tip to rostrums, lighter grey blaze to dorsal fin with darkerblaze at level or dorsal fin, some animals with spotting present in light grey areas of body.Representative images used for Species ID:231, 247, 250, 279, 286Photographer:RyanFrame numbers:225 - 298Calculated distance from Trackline:0.51 kmFinal Time and Position of SightingTime:16:12WP#:63Lat:35.998376Long:-74.799263Calculated Distance Traveled:1.9 km
On/Off Effort:OnTrackline:43Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:16:00WP#:62Lat:35.982496Long:-74.808348Species:Stenella frontalisNumbers (Low/High/Best):50 / 100 / 75Features used in Species ID:White tip to rostrums, lighter grey blaze to dorsal fin with darkerblaze at level or dorsal fin, some animals with spotting present in light grey areas of body.Representative images used for Species ID:231, 247, 250, 279, 286Photographer:RyanFrame numbers:225 - 298Calculated distance from Trackline:0.51 kmFinal Time and Position of SightingTime:16:12WP#:63Lat:35.998376Long:-74.799263Calculated Distance Traveled:1.9 kmBehavior and Additional Comments
On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       16:00       WP#:       62       Lat:       35.982496       Long:       -74.808348         Species:       Stenella frontalis       Numbers (Low/High/Best):       50 / 100 / 75         Features used in Species ID:       White tip to rostrums, lighter grey blaze to dorsal fin with darker         blaze at level or dorsal fin, some animals with spotting present in light grey areas of body.         Representative images used for Species ID:       231, 247, 250, 279, 286         Photographer:       Ryan       Frame numbers:       225 - 298       Spacer:       298         Calculated distance from Trackline:       0.51 km       50       -74.799263         Time:       16:12       WP#:       63       Lat:       35.998376       Long:       -74.799263         Calculated Distance Traveled:       1.9 km       43       Behavior and Additional Comments       43       50

Tuesday, July 16, 2013 Sighting # 9	
Initial sighting on Track	
Time: 16:15 WP#: 65 Lat: 35.980755 Long: -74.715348	
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>45</u> Sighting Cue: <u>Body</u>	
On/Off Effort: On Trackline: 43 Beaufort Sea State: 2	
Observer: Erin Observer side: Left	
Actual Time and Position of Sighting	
Time:         16:15         WP#:         66         Lat:         35.990592         Long:         -74.708755	
Species: <i>Ziphius cavirostris</i> Numbers (Low/High/Best): 4/4/4	
Features used in Species ID: Small pectoral fins, dorsal fin small and well back on animals body	
White and copper coloration to body, scarring present, broad head quickly tapering to small rostrum.	_
Representative images used for Species ID: 305, 306	
Photographer:         Ryan         Frame numbers:         300 - 312         Spacer:         313	
Calculated distance from Trackline: 1.24 km	
Final Time and Position of Sighting	
Time:         16:17         WP#:         67         Lat:         35.99047         Long:         -74.707753	
Calculated Distance Traveled: 0.1 km	
Behavior and Additional Comments	
Logging at the surface.	
Tuesday, July 16, 2013 Sighting # 10	
Initial sighting on Track	
Time:         16:38         WP#:         73         Lat:         35.906164         Long:         -74.647446	
Vertical Angle:         1         Horizontal Bearing in Degrees:         100         Sighting Cue:         Body	
On/Off Effort:         On         Trackline:         42         Beaufort Sea State:         3	
Observer: Erin Observer side: Left	
Actual Time and Position of Sighting	
Time:         16:39         WP#:         74         Lat:         35.902641         Long:         -74.645998	
Species:Tursiops truncatusNumbers (Low/High/Best):10 / 20 / 15	
Features used in Species ID: Unifrom grey coloration and robust body and dorsal fin.	
	_
Representative images used for Species ID: 320	_
Photographer: Ryan Frame numbers: 314-324 Spacer: 325	
Calculated distance from Trackline: 0.41 km	
Final Time and Position of Sighting	
Time:         16:42         WP#:         75         Lat:         35.907706         Long:         -74.636459	
Calculated Distance Traveled: 1.01 km	
Behavior and Additional Comments	
Two groups, looks like they were feeding, darting in different directions.	

	Tuesday	y, July 16	, 2013 <b>S</b> i	ighti	ng # 11					
Initial sighting	on Trac	k		U	C					
Time: 16:47	WP#:	77	Lat:		35.906052		Long:	-	74.792	2097
Vertical Angle:	1	Horizon	ntal Bear	ing i	n Degrees:	90	Sigh	ting C	Cue:	Body
On/Off Effort:	On	Т	rackline	:	3	Beau	fort Se	a Stat	:e:	42
Observer: Ry	yan	C	Observer	side	Right					
Actual Time an	d Positi	ion of Si	ghting							
Time: 16:48	WP#:	78	Lat:	3	35.904796		Long:	-7	74.791	456
Species:Globiceph	ala macr	orhynchus	; —		Numbers (I	Low/H	ligh/Be	est):	8/	/8/8
Features used in	Species	ID: Larg	je square ł	nead,	dark body co	loratio	n, broad	based	dorsa	l fin
placed 1/3 back the	e animals	body.								
Representative in	mages u	sed for S	Species I	D:			330			
Photographer:	Ryan	Frame	number	s:	326 - 334	4	Spa	acer:		335
Calculated distar	nce from	n Trackli	ne:	(	0.15 km		_			
Final Time and	Positio	n of Sig	hting							
Time: 16:50	WP#:	79	Lat:		35.914384		Long:	-	74.786	5600
Calculated Dista	nce Tra	veled:		1.15	m					
Behavior and A	ddition	al Com	ments							
Lots of splashing / I	hard surfa	acings, gro	oup well s	pread	out.					

Wednesday, July 17, 2013 Sighting $\#$ 1
Initial sighting on Track
Time:         9:17         WP#:         6         Lat:         35.835850         Long:         -74.555034
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>100</u> Sighting Cue: <u>3</u>
On/Off Effort: On Trackline: 41 Beaufort Sea State: 4
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time: N/A WP#: N/A Lat: N/A Long: N/A
Species:Unidentified Delphinid       Numbers (Low/High/Best):       4/7/6         Features used in Species ID:       4/7/6
Features used in Species ID:
Representative images used for Species ID:
Photographer: Erin Frame numbers: N/A Spacer: N/A
Calculated distance from Trackline: n/A
Final Time and Position of Sighting
Time: 9:22 WP#: 8 Lat: 35.834962 Long: -74.509402
Calculated Distance Traveled: N/A
Behavior and Additional Comments
Not able to relocate animals
Wednesday, July 17, 2013 Sighting # 2
Wednesday, July 17, 2013 Sighting # 2
Initial sighting on Track
Initial sighting on Track           Time:         9:28         WP#:         11         Lat:         35.819865         Long:         -74.310438
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3
Initial sighting on Track         Time:       9:28       WP#:       11       Lat:       35.819865       Long:       -74.310438         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       3
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3On/Off Effort:OffTrackline:41-40Beaufort Sea State:4Observer:ErinObserver side:Right
Initial sighting on Track         Time:       9:28       WP#:       11       Lat:       35.819865       Long:       -74.310438         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       3         On/Off Effort:       Off       Trackline:       41-40       Beaufort Sea State:       4         Observer:       Erin       Observer side:       Right
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3On/Off Effort:OffTrackline:41-40Beaufort Sea State:4Observer:ErinObserver side:Right
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3On/Off Effort:OffTrackline:41-40Beaufort Sea State:4Observer:ErinObserver side:RightActual Time and Position of SightingTime:9:31WP#:12Lat:35.826554Long:-74.308735
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3On/Off Effort:OffTrackline:41-40Beaufort Sea State:4Observer:ErinObserver side:RightActual Time and Position of SightingTime:9:31WP#:12Lat:35.826554Long:-74.308735Species:Tursiops truncatusNumbers (Low/High/Best):12/15/14Features used in Species ID:Uniform gray, robust
Initial sighting on Track         Time:       9:28       WP#:       11       Lat:       35.819865       Long:       -74.310438         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       3         On/Off Effort:       Off       Trackline:       41-40       Beaufort Sea State:       4         Observer:       Erin       Observer side:       Right       Actual Time and Position of Sighting         Time:       9:31       WP#:       12       Lat:       35.826554       Long:       -74.308735         Species:       Tursiops truncatus       Numbers (Low/High/Best):       12/15/14         Features used in Species ID:       Uniform gray, robust       1
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3On/Off Effort:OffTrackline:41-40Beaufort Sea State:4Observer:ErinObserver side:RightActual Time and Position of SightingImage:Time:9:31WP#:12Lat:35.826554Long:-74.308735Species:Tursiops truncatusNumbers (Low/High/Best):12/15/14Features used in Species ID:Uniform gray, robustImages1Photographer:ErinFrame numbers:1Spacer:2
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3On/Off Effort:OffTrackline:41-40Beaufort Sea State:4Observer:ErinObserver side:RightActual Time and Position of SightingTime:9:31WP#:12Lat:35.826554Long:-74.308735Species:Tursiops truncatusNumbers (Low/High/Best):12/15/14Features used in Species ID:Uniform gray, robustPhotographer:ErinFrame numbers:1Spacer:2Calculated distance from Trackline:0.7595 km
Initial sighting on Track         Time:       9:28       WP#:       11       Lat:       35.819865       Long:       -74.310438         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       3         On/Off Effort:       Off       Trackline:       41-40       Beaufort Sea State:       4         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       9:31       WP#:       12       Lat:       35.826554       Long:       -74.308735         Species:       7ursiops truncatus       Numbers (Low/High/Best):       12/15/14         Features used in Species ID:       Uniform gray, robust
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3On/Off Effort:OffTrackline:41-40Beaufort Sea State:4Observer:ErinObserver side:RightActual Time and Position of SightingTime:9:31WP#:12Lat:35.826554Long:-74.308735Species:FuncturesNumbers (Low/High/Best):12/15/14Features used in Species ID:Uniform gray, robustRepresentative images used for Species ID:1Photographer:ErinFrame numbers:1Spacer:2Calculated distance from Trackline:0.7595 kmFinal Time and Position of SightingTime:9:33WP#:13Lat:35.822823Long:-74.314329
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3On/Off Effort:OffTrackline:41-40Beaufort Sea State:4Observer:ErinObserver side:RightActual Time and Position of SightingTime:9:31WP#:12Lat:35.826554Long:-74.308735Species:Tursiops truncatusNumbers (Low/High/Best):12/15/14Features used in Species ID:Uniform gray, robust
Initial sighting on Track         Time:       9:28       WP#:       11       Lat:       35.819865       Long:       -74.310438         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       3         On/Off Effort:       Off       Trackline:       41-40       Beaufort Sea State:       4         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       9:31       WP#:       12       Lat:       35.826554       Long:       -74.308735         Species:       Tursiops truncatus       Numbers (Low/High/Best):       12/15/14         Features used in Species ID:       Uniform gray, robust       12/15/14         Representative images used for Species ID:       1       Photographer:       Erin         Photographer:       Erin       Frame numbers:       1       Spacer:       2         Calculated distance from Trackline:       0.7595 km       1       1       Photographer:       13       Lat:       35.822823       Long:       -74.314329         Calculated Distance Traveled:       0.6531 km       1       1       1       1       1         Behavior and Additional Comme
Initial sighting on TrackTime:9:28WP#:11Lat:35.819865Long:-74.310438Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:3On/Off Effort:OffTrackline:41-40Beaufort Sea State:4Observer:ErinObserver side:RightActual Time and Position of SightingTime:9:31WP#:12Lat:35.826554Long:-74.308735Species:Tursiops truncatusNumbers (Low/High/Best):12/15/14Features used in Species ID:Uniform gray, robust
Initial sighting on Track         Time:       9:28       WP#:       11       Lat:       35.819865       Long:       -74.310438         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       3         On/Off Effort:       Off       Trackline:       41-40       Beaufort Sea State:       4         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       9:31       WP#:       12       Lat:       35.826554       Long:       -74.308735         Species:       Tursiops truncatus       Numbers (Low/High/Best):       12/15/14         Features used in Species ID:       Uniform gray, robust       12/15/14         Features used for Species ID:       1       Photographer:       Erin       Frame numbers:       1       Spacer:       2         Calculated distance from Trackline:       0.7595 km       0.7595 km       1       1       Photographer:       13       Lat:       35.822823       Long:       -74.314329       2         Calculated Distance Traveled:       0.6531 km       0.6531 km       1       1       1       1

Initial sighting on Track
Time:         9:22         WP#:         90         Lat:         35.128454         Long:         -75.116241
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>100</u> Sighting Cue: <u>Body</u>
On/Off Effort:         On         Trackline:         30         Beaufort Sea State:         2
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:   N/A   WP#:   N/A   Lat:   N/A   Long:   N/A
Species: Tursiops truncatus    Numbers (Low/High/Best): 5/8/7
Features used in Species ID: Robust, uniform grey
Representative images used for Species ID: N/A
Photographer:         Ryan         Frame numbers:         N/A         Spacer:         N/A
Calculated distance from Trackline:
Final Time and Position of Sighting
Time:         9:33         WP#:         91         Lat:         35.120395         Long:         -75.115261
Calculated Distance Traveled:
Behavior and Additional Comments
No resight, no images
Thursday, July 18, 2013 Sighting $\# 2$
Initial sighting on Track
Time: 10:04 WP#: 98 Lat: 35.165386 Long: -75.040476
Vertical Angle: 1 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: 31 Beaufort Sea State: 2
On/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:ErinObserver side:Left
Observer: Erin Observer side: Left
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       End       End       End         Time:       10:05       WP#:       99       Lat:       35.147892       Long:       -75.044946
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       End       End         Time:       10:05       WP#:       99       Lat:       35.147892       Long:       -75.044946         Species:       Tursiops truncatus       Numbers (Low/High/Best):       9/9/9
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       End of Sighting         Time:       10:05       WP#:       99       Lat:       35.147892       Long:       -75.044946         Species:       Tursiops truncatus       Numbers (Low/High/Best):       9/9/9         Features used in Species ID:       Uniform grey, robust         Representative images used for Species ID:
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       10:05       WP#:       99       Lat:       35.147892       Long:       -75.044946         Species:       Tursiops truncatus       Numbers (Low/High/Best):       9/9/9         Features used in Species ID:       Uniform grey, robust         Representative images used for Species ID:       9, 16         Photographer:       Ryan       Frame numbers:       3 - 25       Spacer:       26
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       End of Sighting         Time:       10:05       WP#:       99       Lat:       35.147892       Long:       -75.044946         Species:       Tursiops truncatus       Numbers (Low/High/Best):       9/9/9         Features used in Species ID:       Uniform grey, robust         Representative images used for Species ID:
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       10:05       WP#:       99       Lat:       35.147892       Long:       -75.044946         Species:       Tursiops truncatus       Numbers (Low/High/Best):       9/9/9         Features used in Species ID:       Uniform grey, robust         Representative images used for Species ID:       9, 16         Photographer:       Ryan       Frame numbers:       3 - 25       Spacer:       26
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       End of Sighting         Time:       10:05       WP#:       99       Lat:       35.147892       Long:       -75.044946         Species:       Tursiops truncatus       Numbers (Low/High/Best):       9/9/9         Features used in Species ID:       Uniform grey, robust
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Image: State of the state of
Observer:ErinObserver side:LeftActual Time and Position of SightingTime:10:05WP#:99Lat:35.147892Long:-75.044946Species:Features used in Species ID:Numbers (Low/High/Best):9/9/9Features used in Species ID:Uniform grey, robustRepresentative images used for Species ID:9, 16Photographer:RyanFrame numbers:3 - 25Spacer:26Calculated distance from Trackline:1.987 kmFinal Time and Position of SightingTime:10:10WP#:100Lat:35.157274Long:-75.035833
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Image: Structure of the struct
Observer:ErinObserver side:LeftActual Time and Position of SightingTime:10:05WP#:99Lat:35.147892Long:-75.044946Species:For struncatusNumbers (Low/High/Best):9/9/9Features used in Species ID:Uniform grey, robustRepresentative images used for Species ID:9916Photographer:RyanFrame numbers:3 - 25Spacer:26Calculated distance from Trackline:1.987 kmFinal Time and Position of SightingTime:10:10WP#:100Lat:35.157274Long:-75.035833Calculated Distance Traveled:1.332 km1.332 kmBehavior and Additional Comments
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       10:05       WP#:       99       Lat:       35.147892       Long:       -75.044946         Species:       Tursiops truncatus       Numbers (Low/High/Best):       9/9/9         Features used in Species ID:       Uniform grey, robust       9/16         Representative images used for Species ID:       9, 16         Photographer:       Ryan       Frame numbers:       3 - 25       Spacer:       26         Calculated distance from Trackline:       1.987 km       100       Lat:       35.157274       Long:       -75.035833         Calculated Distance Traveled:       1.332 km       Behavior and Additional Comments       1.332 km

Thursday, July 18, 2013 Sighting $\#$ 3
Initial sighting on Track
Time: 10:28 WP#: 108 Lat: 35.185557 Long: -74.961439
Vertical Angle: <u>2</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 32 Beaufort Sea State: 1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         10:29         WP#:         Lat:         35.190215         Long:         -74.956620
Species:Mesoplodon europaeus         Numbers (Low/High/Best):         5/5/5
Features used in Species ID: Tiger strips down back, small pectorals, dorsal fin set way back on
body
Representative images used for Species ID: 53 - 57
Photographer: Ryan Frame numbers: 27 - 74 Spacer: 75
Calculated distance from Trackline: 0.6783 km
Final Time and Position of Sighting
Time:         10:37         WP#:         110         Lat:         35.187660         Long:         -74.962611
Calculated Distance Traveled: 0.6141 km
Behavior and Additional Comments
Traveling just below the surface, breathing slow occasional breaths
Thursday, $h/h$ 40, 2012 $G_{12}^{1}$ 1.4 $h$
Thursday, July 18, 2013 Sighting # 4
Initial sighting on Track
Initial sighting on Track           Time:         11:14         WP#:         116         Lat:         35.242009         Long:         -74.871201
Initial sighting on TrackTime:11:14WP#:116Lat:35.242009Long:-74.871201Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:Splash
Initial sighting on TrackTime:11:14WP#:116Lat:35.242009Long:-74.871201Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:1
Initial sighting on TrackTime:11:14WP#:116Lat:35.242009Long:-74.871201Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:1Observer:RyanObserver side:Right
Initial sighting on Track         Time:       11:14       WP#:       116       Lat:       35.242009       Long:       -74.871201         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right
Initial sighting on TrackTime:11:14WP#:116Lat:35.242009Long:-74.871201Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:15WP#:117Lat:35.249551Long:-74.862564
Initial sighting on TrackTime:11:14WP#:116Lat:35.242009Long:-74.871201Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTat:35.249551Long:-74.862564Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1
Initial sighting on TrackTime:11:14WP#:116Lat:35.242009Long:-74.871201Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:15WP#:117Lat:35.249551Long:-74.862564
Initial sighting on Track         Time:       11:14       WP#:       116       Lat:       35.242009       Long:       -74.871201         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       117       Lat:       35.249551       Long:       -74.862564         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, blunt head, forward blow       1
Initial sighting on TrackTime:11:14WP#:116Lat:35.242009Long:-74.871201Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:15WP#:117Lat:35.249551Long:-74.862564Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large, blunt head, forward blow
Initial sighting on TrackTime:11:14WP#:116Lat:35.242009Long:-74.871201Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:15WP#:117Lat:35.249551Long:-74.862564Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large, blunt head, forward blowPhotographer:RyanFrame numbers:76-154Spacer:155
Initial sighting on Track         Time:       11:14       WP#:       116       Lat:       35.242009       Long:       -74.871201         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       11:15       WP#:       117       Lat:       35.249551       Long:       -74.862564         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, blunt head, forward blow
Initial sighting on Track         Time:       11:14       WP#:       116       Lat:       35.242009       Long:       -74.871201         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       11:15       WP#:       117       Lat:       35.249551       Long:       -74.862564         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, blunt head, forward blow       11/1         Features used in Species ID:       11/1       93, 95, 96, 115, 150         Photographer:       Ryan       Frame numbers:       76-154       Spacer:       155         Calculated distance from Trackline:       1.148 km       1148 km       1148 km       1148 km
Initial sighting on Track         Time:       11:14       WP#:       116       Lat:       35.242009       Long:       -74.871201         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       11:15       WP#:       117       Lat:       35.249551       Long:       -74.862564         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, blunt head, forward blow       1         Representative images used for Species ID:       93, 95, 96, 115, 150       93         Photographer:       Ryan       Frame numbers:       76-154       Spacer:       155         Calculated distance from Trackline:       1.148 km       1148 km       1122       WP#:       118       Lat:       35.256816       Long:       -74.863312
Initial sighting on TrackTime:11:14WP#:116Lat:35.242009Long:-74.871201Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:15WP#:117Lat:35.249551Long:-74.862564Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:11.14Large, blunt head, forward blowMetrographer:RyanFrame numbers:76-154Spacer:155Calculated distance from Trackline:1.148 kmFinal Time and Position of SightingTime:11:22WP#:118Lat:35.256816Long:-74.863312Calculated Distance Traveled:0.8107 km
Initial sighting on Track         Time:       11:14       WP#:       116       Lat:       35.242009       Long:       -74.871201         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       11:15       WP#:       117       Lat:       35.249551       Long:       -74.862564         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, blunt head, forward blow         Representative images used for Species ID:       93, 95, 96, 115, 150         Photographer:       Ryan       Frame numbers:       76 - 154       Spacer:       155         Calculated distance from Trackline:       1.148 km         Final Time and Position of Sighting         Time:       11:22       WP#:       118       Lat:       35.256816       Long:       -74.863312         Calculated Distance Traveled:       0.8107 km       Behavior and Additional Comments       Sighting </td
Initial sighting on Track         Time:       11:14       WP#:       116       Lat:       35.242009       Long:       -74.871201         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       11:15       WP#:       117       Lat:       35.249551       Long:       -74.862564         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, blunt head, forward blow       11/1         Representative images used for Species ID:       93, 95, 96, 115, 150       93         Photographer:       Ryan       Frame numbers:       76-154       Spacer:       155         Calculated distance from Trackline:       1.148 km       1122       WP#:       118       Lat:       35.256816       Long:       -74.863312         Calculated Distance Traveled:       0.8107 km       Behavior and Additional Comments       Sperm whale vertical in water column, mouth open, tursiops swimming around. Whale finally went
Initial sighting on Track         Time:       11:14       WP#:       116       Lat:       35.242009       Long:       -74.871201         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       11:15       WP#:       117       Lat:       35.249551       Long:       -74.862564         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, blunt head, forward blow         Representative images used for Species ID:       93, 95, 96, 115, 150         Photographer:       Ryan       Frame numbers:       76 - 154       Spacer:       155         Calculated distance from Trackline:       1.148 km         Final Time and Position of Sighting         Time:       11:22       WP#:       118       Lat:       35.256816       Long:       -74.863312         Calculated Distance Traveled:       0.8107 km       Behavior and Additional Comments       Sighting </td

Thursday, July 18, 2013 Sighting $\#$ 5
Initial sighting on Track
Time: 11:14 WP#: 116 Lat: 35.242009 Long: -74.871201
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Splash</u>
On/Off Effort: On Trackline: 33 Beaufort Sea State: 1
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:         11:15         WP#:         117         Lat:         35.249551         Long:         -74.862564
Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20
Features used in Species ID: Uniform grey, robust, white peduncles
Representative images used for Species ID: 93, 95, 96, 115, 150
Photographer: Ryan Frame numbers: 76-154 Spacer: 155
Calculated distance from Trackline: 1.148 km
Final Time and Position of Sighting
Time:         11:22         WP#:         118         Lat:         35.256816         Long:         -74.863312
Calculated Distance Traveled: 0.8107 km
Behavior and Additional Comments
Swimming around sperm whale, darting in different directions
Thursday, July 18, 2013 Sighting # 6
Initial sighting on Track
Initial sighting on Track           Time:         11:26         WP#:         121         Lat:         35.272996         Long:         -75.020394
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:Splash
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:Right
Initial sighting on Track         Time:       11:26       WP#:       121       Lat:       35.272996       Long:       -75.020394         Vertical Angle:       2       Horizontal Bearing in Degrees:       60       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting       Image: State state       State state
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068
Initial sighting on Track         Time:       11:26       WP#:       121       Lat:       35.272996       Long:       -75.020394         Vertical Angle:       2       Horizontal Bearing in Degrees:       60       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Right       2         Actual Time and Position of Sighting       Time:       11:28       WP#:       122       Lat:       35.283093       Long:       -75.020068         Species:       Tursiops truncatus       Numbers (Low/High/Best):       15/25/20         Features used in Species ID:       Uniform grey, robust, white peduncles
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20Features used in Species ID:Uniform grey, robust, white pedunclesPresentative images used for Species ID:
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20Features used in Species ID:Uniform grey, robust, white pedunclesRepresentative images used for Species ID:156, 157, 164, 170Photographer:RyanFrame numbers:156 - 176Spacer:177
Initial sighting on Track         Time:       11:26       WP#:       121       Lat:       35.272996       Long:       -75.020394         Vertical Angle:       2       Horizontal Bearing in Degrees:       60       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       11:28       WP#:       122       Lat:       35.283093       Long:       -75.020068         Species:       Tursiops truncatus       Numbers (Low/High/Best):       15/25/20         Features used in Species ID:       Uniform grey, robust, white peduncles         Representative images used for Species ID:       156, 157, 164, 170         Photographer:       Ryan       Frame numbers:       156 - 176       Spacer:       177         Calculated distance from Trackline:       1.123 km       1.123 km       1123 km
Initial sighting on Track         Time:       11:26       WP#:       121       Lat:       35.272996       Long:       -75.020394         Vertical Angle:       2       Horizontal Bearing in Degrees:       60       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       33       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Right       2         Actual Time and Position of Sighting       Time:       11:28       WP#:       122       Lat:       35.283093       Long:       -75.020068         Species:       Tursiops truncatus       Numbers (Low/High/Best):       15/25/20         Features used in Species ID:       Uniform grey, robust, white peduncles         Representative images used for Species ID:         156, 157, 164, 170         Photographer:       Ryan       Frame numbers:       156 - 176       Spacer:       177         Calculated distance from Trackline:         1.123 km
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20Features used in Species ID:Uniform grey, robust, white pedunclesRepresentative images used for Species ID:156, 157, 164, 170Photographer:RyanFrame numbers:156, 157, 164, 170Photographer:RyanFrame numbers:156 - 176Spacer:ITTTCalculated distance from Trackline:1.123 kmFinal Time and Position of SightingTime:11:36WP#:123Lat:35.273170Long:-75.026124
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20Features used in Species ID:Uniform grey, robust, white peduncles
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20Features used in Species ID:Uniform grey, robust, white pedunclesRepresentative images used for Species ID:156, 157, 164, 170Photographer:RyanFrame numbers:156, 157, 164, 170Photographer:RyanFrame numbers:156 - 176Spacer:ITTTCalculated distance from Trackline:1.123 kmFinal Time and Position of SightingTime:11:36WP#:123Lat:35.273170Long:-75.026124
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20Features used in Species ID:Uniform grey, robust, white peduncles
Initial sighting on TrackTime:11:26WP#:121Lat:35.272996Long:-75.020394Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:SplashOn/Off Effort:OnTrackline:33Beaufort Sea State:2Observer:RyanObserver side:RightActual Time and Position of SightingTime:11:28WP#:122Lat:35.283093Long:-75.020068Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20Features used in Species ID:Uniform grey, robust, white pedunclesRepresentative images used for Species ID:156, 157, 164, 170Photographer:RyanFrame numbers:156-176Spacer:177Calculated distance from Trackline:1.123 kmFinal Time and Position of SightingTime:11:36WP#:123Lat:35.273170Long:-75.026124Calculated Distance Traveled:1.233 kmBehavior and Additional Comments

Thursday, July 18, 2013 Sighting # 7
Initial sighting on Track
Time:         13:20         WP#:         136         Lat:         35.763809         Long:         -74.852849
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort:         On         Trackline:         40         Beaufort Sea State:         1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         13:23         WP#:         137         Lat:         35.777435         Long:         -74.832254
Species:Globicephala macrorhynchus         Numbers (Low/High/Best):         12/18/16
Features used in Species ID: Black animals, blunt head
Representative images used for Species ID:178, 186, 189Photographer:RyanFrame numbers:178 - 192Spacer:193
Photographer:RyanFrame numbers:178 - 192Spacer:193Calculated distance from Trackline:2.398 km
Final Time and Position of Sighting
Time:         13:25         WP#:         139         Lat:         35.766668         Long:         -74.848123
Calculated Distance Traveled: 1.866 km
Behavior and Additional Comments
Logging at the surface
Thursday, July 18, 2013 Sighting $\#$ 8
Initial sighting on Track
Time: 13:20 WP#: 136 Lat: 35.763809 Long: -74.852849
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: 40 Beaufort Sea State: 1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         13:25         WP#:         138         Lat:         35.772371         Long:         -74.837177
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 8/15/12
Features used in Species ID: Uniform grey, robust, white peduncles
Representative images used for Species ID: N/A
Photographer:         Ryan         Frame numbers:         N/A         Spacer:         N/A
Calculated distance from Trackline: 1.705 km
Final Time and Position of Sighting
Final Time and Position of Sighting           Time:         13:25         WP#:         138         Lat:         35.766668         Long:         -74.848123
Time:         13:25         WP#:         138         Lat:         35.766668         Long:         -74.848123
Time:         13:25         WP#:         138         Lat:         35.766668         Long:         -74.848123           Calculated Distance Traveled:         1.174 km         1.174 km         1.174 km         1.174 km
Time:       13:25       WP#:       138       Lat:       35.766668       Long:       -74.848123         Calculated Distance Traveled:       1.174 km       Behavior and Additional Comments       -74.848123
Time:       13:25       WP#:       138       Lat:       35.766668       Long:       -74.848123         Calculated Distance Traveled:       1.174 km       Behavior and Additional Comments       -74.848123

Thurs	day, July 18, 2013 ${ m S}$	ighting # 9		
Initial sighting on Ti	ack	0 0		
		35.480611	Long:	-74.716993
Vertical Angle: 2	Horizontal Bear	ring in Degrees:	60 Sighting	g Cue: Body
On/Off Effort: On	Trackline	36	Beaufort Sea S	tate: <u>1</u>
Observer: Ryan	Observer	side: Right		
Actual Time and Pos	sition of Sighting			
Time: 14:01 WP	#: <u>147</u> Lat:	35.491165	Long:	-74.721264
Species:Ziphius cavirosti	ris	Numbers (L	.ow/High/Best)	: 2/2/2
Features used in Spec	ies ID: Long bodied,	white head, brown	body, short pecto	rals
Representative image	-			
Photographer: Ryan			Space	r: 227
Calculated distance fr		1.230 KIII		
Final Time and Posi	0 0			
		35.491543	Long:	-74.721640
Calculated Distance T	Traveled: 0	.05409 km	_	
<b>Behavior and Additi</b>	onal Comments			
Hanging at the surface				
Thurs	day, July 18, 2013 ${ m S}$	ighting # 10		
Initial sighting on Ti		igning # 10		
Time: 14:09 WP		35 / 80005	Long	-74.745816
Vertical Angle: 1			_	
On/Off Effort: On		0 0 -	Beaufort Sea S	
Observer: Erin		side: Left		
Actual Time and Pos				
Time: 14:05 WP	0 0	35.480761	Long:	-74.740742
Species:Ziphius cavirosti			ow/High/Best)	
Features used in Spec			- /	
1		,		
Representative image	s used for Species I	ID: 2	38,239, 241 - 247,	250
Photographer: Ryan	Frame number	rs: 228 - 251	Space	r: 252
Calculated distance fr	om Trackline:	0.4602 km		
Final Time and Posi	tion of Sighting			
Time: 14:06 WP	#: 152 Lat:	35.478077	Long:	-74.748698
Calculated Distance T	raveled: 0	).7798 km		
Behavior and Additi	anal Commonts		-	
Hanging at the surface, g	onal Comments			
, , , , , , , , , , , , , , , , , , ,		rface then coming u	p for breaths	
		rface then coming u	p for breaths	
		rface then coming u	p for breaths	

Thursday, July 18, 2013 Sighting $\#$ 11
Initial sighting on Track
Time: 14:07 WP#: 154 Lat: 35.481844 Long: -74.772154
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: <u>36</u> Beaufort Sea State: <u>1</u>
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:     N/A     WP#:     N/A     Lat:     N/A     Long:     N/A
Species:Unidentified Mesoplodon         Numbers (Low/High/Best):         2/2/2
Features used in Species ID: N/A
Representative images used for Species ID: N/A
Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Calculated distance from Trackline:       N/A       N/A       N/A       N/A
Final Time and Position of Sighting
Time:14:10WP#:155Lat:35.492771Long:-74.772450Calculated Distance Traveled:N/A
Behavior and Additional Comments
One smaller than the other, not resight
Thursday, July 18, 2013 Sighting # 12
Thursday, July 18, 2013 Sighting # 12 Initial sighting on Track
6 6
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1Observer:ErinObserver side:Left
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:12WP#:157Lat:35.480616Long:-74.780087Species:Tursiops truncatusNumbers (Low/High/Best):10/15/12
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1Observer:ErinObserver side:LeftImit:14:12WP#:157Lat:35.480616Long:-74.780087
Initial sighting on Track         Time:       14:11       WP#:       156       Lat:       35.483349       Long:       -74.787616         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       36       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       14:12       WP#:       157       Lat:       35.480616       Long:       -74.780087         Species:       Tursiops truncatus       Numbers (Low/High/Best):       10/15/12         Features used in Species ID:       Robust, uniform grey
Initial sighting on Track         Time:       14:11       WP#:       156       Lat:       35.483349       Long:       -74.787616         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       36       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Tat:       35.480616       Long:       -74.780087         Species: Tursiops truncatus       Numbers (Low/High/Best):       10/15/12         Features used in Species ID:       Robust, uniform grey       2         Representative images used for Species ID:       253, 259,
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1Observer:ErinObserver side:LeftLong:-74.780087Numbers (Low/High/Best):10/15/12Features used in Species ID:Robust, uniform greyRepresentative images used for Species ID:253, 259,Photographer:RyanFrame numbers:253 - 261Spacer:262
Initial sighting on Track         Time:       14:11       WP#:       156       Lat:       35.483349       Long:       -74.787616         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       36       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:12       WP#:       157       Lat:       35.480616       Long:       -74.780087         Species:       Tursiops truncatus       Numbers (Low/High/Best):       10/15/12         Features used in Species ID:       Robust, uniform grey       253, 259,         Photographer:       Ryan       Frame numbers:       253 - 261       Spacer:       262         Calculated distance from Trackline:       0.7464 km       0.7464 km       0.7464 km
Initial sighting on Track         Time:       14:11       WP#:       156       Lat:       35.483349       Long:       -74.787616         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       36       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:12       WP#:       157       Lat:       35.480616       Long:       -74.780087         Species:       Tursiops truncatus       Numbers (Low/High/Best):       10/15/12         Features used in Species ID:       Robust, uniform grey       10/15/12         Representative images used for Species ID:       253, 259,         Photographer:       Ryan       Frame numbers:       253 - 261       Spacer:       262         Calculated distance from Trackline:       0.7464 km       10.7464 km
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:12WP#:157Lat:35.480616Long:-74.780087Species:Tursiops truncatusNumbers (Low/High/Best):10/15/12Features used in Species ID:Robust, uniform greyRepresentative images used for Species ID:253, 259,Photographer:RyanFrame numbers:253 - 261Spacer:262Calculated distance from Trackline:0.7464 km0.7464 kmFinal Time and Position of SightingTime:14:13WP#:158Lat:35.481413Long:-74.785307
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:12WP#:157Lat:35.480616Long:-74.780087Species:Tursiops truncatusNumbers (Low/High/Best):10/15/12Features used in Species ID:Representative images used for Species ID:253, 259,Photographer:RyanFrame numbers:253 - 261Spacer:262Calculated distance from Trackline:0.7464 kmFinal Time and Position of SightingTime:14:13WP#:158Lat:35.481413Long:-74.785307Calculated Distance Traveled:0.4809 km0.4809 km
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:12WP#:157Lat:35.480616Long:-74.780087Species:Tursiops truncatusNumbers (Low/High/Best):10/15/12Features used in Species ID:Robust, uniform greyRepresentative images used for Species ID:253, 259,Photographer:RyanFrame numbers:253 - 261Spacer:262Calculated distance from Trackline:0.7464 km0.7464 kmFinal Time and Position of SightingTime:14:13WP#:158Lat:35.481413Long:-74.785307
Initial sighting on TrackTime:14:11WP#:156Lat:35.483349Long:-74.787616Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:36Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:12WP#:157Lat:35.480616Long:-74.780087Species:Tursiops truncatusNumbers (Low/High/Best):10/15/12Features used in Species ID:Representative images used for Species ID:253, 259,Photographer:RyanFrame numbers:253 - 261Spacer:262Calculated distance from Trackline:0.7464 kmFinal Time and Position of SightingTime:14:13WP#:158Lat:35.481413Long:-74.785307Calculated Distance Traveled:0.4809 km0.4809 km

Thursday, July 18, 2013 ${ m Sighting}~\#~13$
Initial sighting on Track
Time: 14:37 WP#: 166 Lat: 35.412234 Long: -74.847135
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: 35 Beaufort Sea State: 1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time: 14:39 WP#: 167 Lat: 35.421648 Long: -74.848720
Species:Tursiops truncatus         Numbers (Low/High/Best):         19/25/20
Features used in Species ID: Uniform grey, robust, white peduncles
Representative images used for Species ID:         263, 265, 268, 270, 271, 287, 289,
Photographer:       Ryan       Frame numbers:       263 - 294       Spacer:       295         Calculated distance from Trackline:       1.057 km
Final Time and Position of Sighting
Time:         14:41         WP#:         168         Lat:         35.422461         Long:         -74.844838
Calculated Distance Traveled: 0.3632 km
Behavior and Additional Comments
2 groups, 6 in one 5 in another, white peduncles, traveling, regular surfacing, 8 more in another group
Thursday, July 18, 2013 ${ m Sighting}~\#~$ 14
Initial sighting on Track
Time: 14:43 WP#: 170 Lat: 35.412152 Long: -74.787456
Vertical Angle: 1 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort:         On         Trackline:         35         Beaufort Sea State:         1
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:         14:44         WP#:         171         Lat:         35.402009         Long:         -74.790934
Species:Tursiops truncatus         Numbers (Low/High/Best):         10/20/15
Features used in Species ID: Uniform grey, robust
Representative images used for Species ID: 312, 315
Photographer: Ryan Frame numbers: 296-317 Spacer: 318
· · ·
Photographer: Ryan Frame numbers: 296-317 Spacer: 318
Photographer:       Ryan       Frame numbers:       296 - 317       Spacer:       318         Calculated distance from Trackline:       1.171 km         Final Time and Position of Sighting         Time:       14:47       WP#:       172       Lat:       35.409806       Long:       -74.788371
Photographer:       Ryan       Frame numbers:       296 - 317       Spacer:       318         Calculated distance from Trackline:       1.171 km       Image: Space in the second secon
Photographer:       Ryan       Frame numbers:       296 - 317       Spacer:       318         Calculated distance from Trackline:       1.171 km         Final Time and Position of Sighting         Time:       14:47       WP#:       172       Lat:       35.409806       Long:       -74.788371
Photographer:       Ryan       Frame numbers:       296 - 317       Spacer:       318         Calculated distance from Trackline:       1.171 km         Final Time and Position of Sighting         Time:       14:47       WP#:       172       Lat:       35.409806       Long:       -74.788371         Calculated Distance Traveled:       0.8976 km       0.8976 km       1000       1000       1000
Photographer:RyanFrame numbers:296 - 317Spacer:318Calculated distance from Trackline:1.171 kmFinal Time and Position of SightingTime:14:47WP#:172Lat:35.409806Long:-74.788371Calculated Distance Traveled:0.8976 kmBehavior and Additional Comments
Photographer:RyanFrame numbers:296 - 317Spacer:318Calculated distance from Trackline:1.171 kmFinal Time and Position of SightingTime:14:47WP#:172Lat:35.409806Long:-74.788371Calculated Distance Traveled:0.8976 kmBehavior and Additional Comments

Thursday, July 18, 2013 $Sighting \# 15$
Initial sighting on Track
Time: 14:49 WP#: 175 Lat: 35.411805 Long: -74.695952
Vertical Angle:         1         Horizontal Bearing in Degrees:         90         Sighting Cue:         Body
On/Off Effort: On Trackline: 35 Beaufort Sea State: 2
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:   N/A   WP#:   N/A   Lat:   N/A   Long:   N/A
Species:Globicephala macrorhynchus         Numbers (Low/High/Best):         8/15/12
Features used in Species ID: Long, black, blunt head
Representative images used for Species ID: <u>N/A</u>
Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Calculated distance from Trackline:       N/A       N/A       N/A       N/A
Final Time and Position of Sighting
Time:         14:57         WP#:         176         Lat:         35.410451         Long:         -74.701333
Calculated Distance Traveled: N/A
Behavior and Additional Comments
No resight, no photos
Thursday, July 18, 2013 Sighting # 16
Thursday, July 18, 2013 Sighting # 16 Initial sighting on Track
Initial sighting on Track
Initial sighting on Track           Time: 15:12         WP#: 181         Lat: 35.339282         Long: -74.363218
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body
Initial sighting on TrackTime:15:12WP#:181Lat:35.339282Long:-74.363218Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:34Beaufort Sea State:1
Initial sighting on TrackTime:15:12WP#:181Lat:35.339282Long:-74.363218Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:34Beaufort Sea State:1Observer:ErinObserver side:Left
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Left         Actual Time and Position of Sighting         Time:       N/A       Long:       N/A
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Image: N/A       Long:       N/A         Actual Time and Position of Sighting       Time:       N/A       Lat:       N/A       Long:       N/A         Species: Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Left         Actual Time and Position of Sighting         Time:       N/A       Long:       N/A
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Image: N/A       Long:       N/A         Actual Time and Position of Sighting       Time:       N/A       Lat:       N/A       Long:       N/A         Species: Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       N/A       Long:       N/A         Species: Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       N/A       WP#:       N/A       Lat:       N/A         Species:       Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body         Representative images used for Species ID:       N/A
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       N/A       Long:       N/A         Species:       Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body         Representative images used for Species ID:       N/A       Spacer:       N/A
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Image:       N/A         Actual Time and Position of Sighting       Time:       N/A       Long:       N/A         Species:       Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body         Representative images used for Species ID:       N/A       Spacer:       N/A         Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Calculated distance from Trackline:       N/A       Spacer:       N/A         Final Time and Position of Sighting       N/A       Spacer:       N/A
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       N/A       WP#:       N/A       Lat:       N/A       Long:       N/A         Species:Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body         Main       Representative images used for Species ID:       N/A       Spacer:       N/A         Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Calculated distance from Trackline:       N/A       Spacer:       N/A         Final Time and Position of Sighting       M/A       Spacer:       N/A
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       N/A       Long:       N/A         Species:Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body         Representative images used for Species ID:       N/A       Spacer:       N/A         Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Calculated distance from Trackline:       N/A       Spacer:       N/A         Final Time and Position of Sighting       Time:       15:17       WP#:       182       Lat:       35.335345       Long:       -74.373141         Calculated Distance Traveled:       N/A       N/A       Spacer:       -74.373141
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       N/A       WP#:       N/A       Lat:       N/A       Long:       N/A         Species:       Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body         Photographer:       N/A       Frame numbers:       N/A         Photographer:       N/A       Frame numbers:       N/A         Final Time and Position of Sighting       Time:       15:17       WP#:       182       Lat:       35.335345       Long:       -74.373141         Calculated Distance Traveled:       N/A       MA       Behavior and Additional Comments       M/A
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       N/A       Long:       N/A         Species:Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body         Representative images used for Species ID:       N/A       Spacer:       N/A         Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Calculated distance from Trackline:       N/A       Spacer:       N/A         Final Time and Position of Sighting       Time:       15:17       WP#:       182       Lat:       35.335345       Long:       -74.373141         Calculated Distance Traveled:       N/A       N/A       Spacer:       -74.373141
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Actual Time and Position of Sighting         Time:       N/A       WP#:       N/A       Lat:       N/A       Long:       N/A         Species:       Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body         Presentative images used for Species ID:       N/A       Spacer:       N/A         Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Calculated distance from Trackline:       N/A       N/A       Spacer:       N/A         Final Time and Position of Sighting       Time:       15:17       WP#:       182       Lat:       35.335345       Long:       -74.373141         Calculated Distance Traveled:       N/A       M/A       Behavior and Additional Co
Initial sighting on Track         Time:       15:12       WP#:       181       Lat:       35.339282       Long:       -74.363218         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       34       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       N/A       WP#:       N/A       Lat:       N/A         Species:       Unidentified Mesoplodon       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Long body, short pectorals, dorsal fin set way back on body         Photographer:       N/A       Frame numbers:       N/A         Photographer:       N/A       Frame numbers:       N/A         Final Time and Position of Sighting       Time:       15:17       WP#:       182       Lat:       35.335345       Long:       -74.373141         Calculated Distance Traveled:       N/A       M/A       Behavior and Additional Comments       M/A

Thursday, July 18, 2013 Sighting $\#$ 17
Initial sighting on Track
Time:         15:29         WP#:         185         Lat:         35.339713         Long:         -74.807205
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Splash</u>
On/Off Effort: On Trackline: 34 Beaufort Sea State: 2
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:         15:31         WP#:         186         Lat:         35.348792         Long:         -74.808742
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 12/20/17
Features used in Species ID: Uniform grey, robust
Representative images used for Species ID: 323, 326, 40, 347, 352, 353
Photographer:         Ryan         Frame numbers:         319-355         Spacer:         356
Calculated distance from Trackline: 1.019 km
Final Time and Position of Sighting
Time:         15:35         WP#:         187         Lat:         35.352322         Long:         -74.802421
Calculated Distance Traveled: 0.6948 km
Behavior and Additional Comments
Hanging just below the surface, calves present
Thursday, July 18, 2013 Sighting # 18
Initial sighting on Track
Time:         15:39         WP#:         189         Lat:         35.339805         Long:         -74.926688
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: 34 Beaufort Sea State: 2
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         15:40         WP#:         190         Lat:         35.339014         Long:         -74.920563
Species:Grampus griseus         Numbers (Low/High/Best):         40/60/50
Features used in Species ID: grey body, white scaring, blunt head with cleft in the middle
Demonstrations increases at few Granding ID:
Representative images used for Species ID: <u>360, 369, 372</u>
Photographer:RyanFrame numbers:357 - 394Spacer:395Calculated distance from Trackline:0.5625 km
Final Time and Position of Sighting
Time:         15:44         WP#:         191         Lat:         35.338311         Long:         -74.918938
Calculated Distance Traveled: 0.1668 km
Behavior and Additional Comments
Traveling just below the surface, regular surfacing, staying ~ 1-2 body lengths apart

Tuesday, August 20, 2013 ${ m Sighting}~\#$ 1	
Initial sighting on Track	
Time: <u>11:03</u> WP#: <u>4</u> Lat: <u>35.48067</u> Long: <u>-75.108512</u>	
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Boo	dy
On/Off Effort: On Trackline: <u>36</u> Beaufort Sea State: <u>3</u>	
Observer: Ryan Observer side: Left	
Actual Time and Position of Sighting	
Time:         11:05         WP#:         5         Lat:         35.47955         Long:         -75.122299	
Species:Stenella frontalis       Numbers (Low/High/Best): 9/12/1	0
Features used in Species ID: White tip to rostrum, alternating light and dark coloration along	
lenght of body. Spotting pattern more extensive.	
Representative images used for Species ID: 23, 27	
Photographer: Erin Frame numbers: <u>1-34</u> Spacer: <u>35</u>	
Calculated distance from Trackline: 1.26 km	
Final Time and Position of Sighting	
Time:         11:09         WP#:         6         Lat:         35.47719         Long:         -75.11484	
Calculated Distance Traveled: 0.72 km	
Behavior and Additional Comments	
Groups of animals with between 4 & 5 body lengths between them. Groups surfacing regularly wit	:h
consistent direction to travel.	
Inshore spotting variety.	
Tuesday, August 20, 2013 Sighting # 2	
Initial sighting on Track	
Time: 12:00 WP#: 17 Lat: 35.62209 Long: -75.007026	
Vertical Angle: 2 Horizontal Bearing in Degrees: 45 Sighting Cue: Spla	
On/Off Effort:OnTrackline:38Beaufort Sea State:2Observer:ErinObserver side:Right	
Actual Time and Position of Sighting	
Time:         12:01         WP#:         18         Lat:         35.61866         Long:         -75.00186	
Species: Stenella frontalis Numbers (Low/High/Best): 45/50/4	48
Features used in Species ID: White tip to rostrum, alternating light and dark coloration along	
lenght of body. Spotting pattern more extensive.	
Representative images used for Species ID: 44, 55, 68	
Photographer: Erin Frame numbers: <u>36-68</u> Spacer: <u>69</u>	
Calculated distance from Trackline: 0.60 km	
Final Time and Position of Sighting	
Time:         12:05         WP#:         19         Lat:         35.61068         Long:         -75.010913	
Calculated Distance Traveled: 1.21 km	
Behavior and Additional Comments	
Disperse groups with ~5 body lenghts between groups. Animals surfaced regularly and showed a	
consistent direction to travel.	
Inshore spotting variety	

Tuesday, August 20, 2013 Sighting $\#$ 3
Initial sighting on Track
Time:         12:07         WP#:         21         Lat:         35.62057         Long:         -74.934937
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Splash
On/Off Effort: On Trackline: <u>38</u> Beaufort Sea State: <u>2</u>
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time:         12:09         WP#:         22         Lat:         35.62756         Long:         -74.938017
Species: Tursiops truncatus Numbers (Low/High/Best): 6/7/6
Features used in Species ID: Robust body appearance, more uniform grey coloration with slight blaze along side. Robust dorsal fin.
Representative images used for Species ID:75, 76, 79
Photographer: Erin Frame numbers: 70 - 81 Spacer: 82
Calculated distance from Trackline: 0.83 km
Final Time and Position of Sighting
Time: 12:15 WP#: 23 Lat: 35.6248 Long: -74.931502
Calculated Distance Traveled: 0.66 km
Behavior and Additional Comments
Two groups of three, animals made frequent dives from the surface when first approached, after circled
a few times group began hanging just below the surface stationary.
Tuesday, August 20, 2013 Sighting # 4
Initial sighting on Track
Initial sighting on Track           Time:         12:23         WP#:         27         Lat:         35.62139         Long:         -74.592714
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:38Beaufort Sea State:3
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:38Beaufort Sea State:3Observer:RyanObserver side:Left
Initial sighting on Track         Time:       12:23       WP#:       27       Lat:       35.62139       Long:       -74.592714         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       38       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:38Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingLong:-74.589241Time:12:32WP#:28Lat:35.63509Long:-74.589241
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:38Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:12:32WP#:28Lat:35.63509Long:-74.589241Species:Tursiops truncatusNumbers (Low/High/Best):4/4/4
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:38Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingLong:-74.589241Time:12:32WP#:28Lat:35.63509Long:-74.589241
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:38Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:12:32WP#:28Lat:35.63509Long:-74.589241Species:Tursiops truncatusNumbers (Low/High/Best):4/4/4
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:38Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:12:32WP#:28Lat:35.63509Long:-74.589241Species:Features used in Species ID:White peduncles4/4/4Representative images used for Species ID:83, 84Photographer:ErinFrame numbers:83Spacer:84
Initial sighting on Track         Time:       12:23       WP#:       27       Lat:       35.62139       Long:       -74.592714         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       38       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       12:32       WP#:       28       Lat:       35.63509       Long:       -74.589241         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       White peduncles       83,84
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:38Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:12:32WP#:28Lat:35.63509Long:-74.589241Species:Features used in Species ID:White peduncles4/4/4Representative images used for Species ID:83, 84Photographer:ErinFrame numbers:83Spacer:84
Initial sighting on Track         Time:       12:23       WP#:       27       Lat:       35.62139       Long:       -74.592714         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       38       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       12:32       WP#:       28       Lat:       35.63509       Long:       -74.589241         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       White peduncles       4/4/4         Photographer:       Erin       Frame numbers:       83       Spacer:       84         Calculated distance from Trackline:       1.56 km       1.56 km       1.56 km
Initial sighting on Track         Time:       12:23       WP#:       27       Lat:       35.62139       Long:       -74.592714         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       38       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left         Actual Time and Position of Sighting         Time:       12:32       WP#:       28       Lat:       35.63509       Long:       -74.589241         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       White peduncles         Representative images used for Species ID:         Representative images used for Species ID:       83, 84         Photographer:       Erin       Frame numbers:       83       Spacer:       84         Calculated distance from Trackline:         1.56 km       Image:       1.56 km
Initial sighting on TrackTime:12:23WP#:27Lat:35.62139Long:-74.592714Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:38Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:12:32WP#:28Lat:35.63509Long:-74.589241Species:Tursiops truncatusNumbers (Low/High/Best):4/4/4Features used in Species ID:White pedunclesRepresentative images used for Species ID:83Spacer:84Calculated distance from Trackline:1.56 kmFinal Time and Position of SightingTime:12:34WP#:30Lat:35.62872Long:-74.595637
Initial sighting on Track         Time:       12:23       WP#:       27       Lat:       35.62139       Long:       -74.592714         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       38       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       12:32       WP#:       28       Lat:       35.63509       Long:       -74.589241         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       White peduncles       4/4/4         Representative images used for Species ID:       83, 84         Photographer:       Erin       Frame numbers:       83       Spacer:       84         Calculated distance from Trackline:       1.56 km       1.56 km       1.56 km       1.56 km         Final Time and Position of Sighting       Time:       12:34       WP#:       30       Lat:       35.62872       Long:       -74.595637         Calculated Distance Traveled:       0.91 km       0.91 km       1.50 km       1.50 km<
Initial sighting on Track         Time:       12:23       WP#:       27       Lat:       35.62139       Long:       -74.592714         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       38       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       Actual Time and Position of Sighting         Time:       12:32       WP#:       28       Lat:       35.63509       Long:       -74.589241         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4 / 4 / 4         Features used in Species ID:       White peduncles

Tuesday, August 20, 2013 Sighting # 5
Initial sighting on Track
Time: 12:23 WP#: 27 Lat: 35.62139 Long: -74.592714
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: Off Trackline: 38 Beaufort Sea State: 3
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time: 12:33 WP#: 29 Lat: 35.63045 Long: -74.595169
Species: Globicephala macrorhynchus Numbers (Low/High/Best): 2/2/2
Features used in Species ID: Large black bodied animals, squared off head, dorsal fin ~1/3 back
on the animals body.
Representative images used for Species ID: NA
Photographer:         Erin         Frame numbers:         NA         Spacer:         NA
Calculated distance from Trackline: 1.03 km
Final Time and Position of Sighting
Time: <u>12:34</u> WP#: <u>30</u> Lat: <u>35.62872</u> Long: <u>-74.595637</u>
Calculated Distance Traveled: 0.20 km
Behavior and Additional Comments
Observed while circling Ttrs on sighting 4. Pilot whales would surface very quickly before diving out
of view.
Tuesday, August 20, 2013 Sighting # 6
Initial sighting on Track
Initial sighting on Track           Time:         12:59         WP#:         35         Lat:         35.69057         Long:         -74.921754
Initial sighting on TrackTime:12:59WP#:35Lat:35.69057Long:-74.921754Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5/6/5         Features used in Species ID:       Robust body appearance.
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5/6/5       5         Features used in Species ID:       Robust body appearance.       88
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right       3       3         Actual Time and Position of Sighting       Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 6 / 5         Features used in Species ID:       Robust body appearance.       88         Photographer:       Erin       Frame numbers:       85 - 89       Spacer:       90
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5/6/5       5         Features used in Species ID:       Robust body appearance.       88
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right       3       3         Actual Time and Position of Sighting       Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species: Tursiops truncatus       Numbers (Low/High/Best):       5 / 6 / 5       5         Features used in Species ID:       Robust body appearance.       88         Photographer:       Erin       Frame numbers:       85 - 89       Spacer:       90
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species: Tursiops truncatus       Numbers (Low/High/Best):       5 / 6 / 5       5         Features used in Species ID:       Robust body appearance.       88         Photographer:       Erin       Frame numbers:       85 - 89       Spacer:       90         Calculated distance from Trackline:       0.60 km       90       Calculated distance from Trackline:       0.60 km         Final Time and Position of Sighting       Time:       13:09       WP#:       37       Lat:       35.69033       Long:       -74.913360
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 6 / 5       5         Features used in Species ID:       Representative images used for Species ID:       88         Photographer:       Erin       Frame numbers:       85 - 89       Spacer:       90         Calculated distance from Trackline:       0.60 km       0.60 km       5
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species: Tursiops truncatus       Numbers (Low/High/Best):       5 / 6 / 5       5         Features used in Species ID:       Robust body appearance.       88         Photographer:       Erin       Frame numbers:       85 - 89       Spacer:       90         Calculated distance from Trackline:       0.60 km       90       Calculated distance from Trackline:       0.60 km         Final Time and Position of Sighting       Time:       13:09       WP#:       37       Lat:       35.69033       Long:       -74.913360
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right       3       Actual Time and Position of Sighting         Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 6 / 5       5         Features used in Species ID:       Robust body appearance.       88         Photographer:       Erin       Frame numbers:       85 - 89       Spacer:       90         Calculated distance from Trackline:       0.60 km       88       90       Calculated Distance Traveled:       0.71 km         Behavior and Additional Comments       0.71 km       13:09       WP#:       37       Lat:       35.69033       Long:       -74.913360
Initial sighting on Track         Time:       12:59       WP#:       35       Lat:       35.69057       Long:       -74.921754         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       39       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       13:01       WP#:       36       Lat:       35.69522       Long:       -74.918406         Species: Tursiops truncatus       Numbers (Low/High/Best):       5 / 6 / 5       5         Features used in Species ID:       Robust body appearance.       88         Photographer:       Erin       Frame numbers:       85 - 89       Spacer:       90         Calculated distance from Trackline:       0.60 km       90       Calculated Distance Traveled:       0.71 km

Tuesday, August 20, 2013 Sighting $\#$ 7
Initial sighting on Track
Time:         14:42         WP#:         46         Lat:         35.76914         Long:         -74.922954
Vertical Angle: 2 Horizontal Bearing in Degrees: 100 Sighting Cue: Body
On/Off Effort: On Trackline: 40 Beaufort Sea State: 2
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time:         14:46         WP#:         47         Lat:         35.76881         Long:         -74.929746
Species:Balaenoptera acutorostrata Numbers (Low/High/Best): 1/1/1
Features used in Species ID: Small baleen whale, white blazes present on pectoral fins.
Representative images used for Species ID:96 & 97
Photographer: Erin Frame numbers: 91 - 103 Spacer: 104
Calculated distance from Trackline: 0.61 km
Final Time and Position of Sighting
Time: 14:57 WP#: 48 Lat: 35.76462 Long: -74.934525
Calculated Distance Traveled: 0.63 km
Behavior and Additional Comments
Fast moving subsurface travel, could see animals white pectoral fin stripes. Animal surfaced three
times in a row before again traveling subsurface, did so again with only a single surfacing.
Tuesday, August 20, 2013 Sighting $\#$ 8
Initial sighting on Track
Time:         15:02         WP#:         50         Lat:         35.76398         Long:         -74.771581
Vertical Angle:         3         Horizontal Bearing in Degrees:         90         Sighting Cue:         Splash
On/Off Effort:         On         Trackline:         40         Beaufort Sea State:         2
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time: 15:10 WP#: 51 Lat: 35.76905 Long: -74.776011
Species: Globicephala macrorhynchus Numbers (Low/High/Best): 2/2/2
Features used in Species ID: Black bodied with squared off head, dorsal fin placed ~1/3 back
animals body.
Representative images used for Species ID: NA
Photographer: Erin Frame numbers: NA Spacer: NA
Calculated distance from Trackline: 0.70 km
Final Time and Position of Sighting
Time: NA WP#: NA Lat: NA Long: NA
Calculated Distance Traveled: NA
Behavior and Additional Comments
A pair of animals traveling close together, unable to relocate - assumed location is recorded above.
repair of animals fraveling close togethely anable to relocate "assumed location is recorded abovel

Tu			U	e				
Initial sighting		k						
Time: 15:12			Lat:	35.76527		Long:	-74.729	9443
Vertical Angle:						•		
On/Off Effort:				40		fort Sea St		
Observer: Ry		Oł	oserver sid	e: Left				
Actual Time an	d Positi	on of Sig	hting					
Time: 15:14		0	0	35.76993		Long:	-74.728	8976
Species:Globiceph								
Features used in	Species	ID: Black	bodied anin	nals, large dors	al fin pla	aced 1/3 bac	k anima	ls body,
large squared off he								
Representative in	nages u	sed for Sp	pecies ID:		10	7, 114, 120		
Photographer:	Erin	Frame	numbers: _	105 - 124	4	_ Spacer	:	125
Calculated distar	ice from	rracklin	e:	0.52 km				
Final Time and	Positio	n of Sight	ting					
Time: 15:14	WP#:	55	Lat:	35.76861	]	Long:	-74.729	9354
Calculated Dista	nce Trav	veled:	0.15	5 km		-		
Behavior and A	ddition	al Comm	ents					
		ugust 20	2013 Sigh	ting # 10				
Initial sighting	on Trac	k		ting # 10				
Initial sighting of Time: 15:17	on Trac WP#:	<b>k</b> 57	Lat:	35.76181		Long:		
Initial sighting Time: <u>15:17</u> Vertical Angle:	on Trac WP#: 2	<b>k</b> 57 Horizont	Lat: tal Bearing	35.76181 in Degrees:	90	Sighting	Cue:	Body
Initial sighting of Time: <u>15:17</u> Vertical Angle: _ On/Off Effort: _	0 <b>n Trac</b> WP#: 	<b>k</b> <u>57</u> Horizont Tr	Lat: tal Bearing ackline:	35.76181 in Degrees: 37	90	U	Cue:	Body
Initial sighting         Time:       15:17         Vertical Angle:          On/Off Effort:          Observer:	on Trac WP#: 2 On rin	k <u>57</u> Horizont Tr Ot	Lat: tal Bearing ackline: oserver sid	35.76181 in Degrees:	90	Sighting	Cue:	Body
Initial sighting of Time: <u>15:17</u> Vertical Angle: <u>0</u> On/Off Effort: <u>0</u> Observer: <u>E</u> Actual Time an	on Trac WP#: 2 On rin d Positi	k 57 Horizont Tr Ot on of Sig	Lat: tal Bearing ackline: oserver sid hting	35.76181 in Degrees: 37 e: Right	90 Beau	Sighting fort Sea St	Cue: _	Body 2
Initial sighting ofTime:15:17Vertical Angle:_On/Off Effort:_Observer:EActual Time anTime:15:20	WP#: 2 On rin d Positie WP#:	k 57 Horizont Tr Ot on of Sig 58	Lat: tal Bearing ackline: oserver sid hting	35.76181 (in Degrees: 37 e: Right 35.75749	90 Beau	Sighting fort Sea St	Cue:	Body 2 826
Initial sighting of         Time:       15:17         Vertical Angle:          On/Off Effort:          Observer:       E         Actual Time an       Time:         Time:       15:20         Species:       Unidentifi	on Trac WP#: 2 On rin d Positi WP#:	k 57 Horizont Tr Ot on of Sig 58 nid	Lat: tal Bearing ackline: oserver sid hting	35.76181 in Degrees: 37 e: Right	90 Beau	Sighting fort Sea St	Cue:	Body 2
Initial sighting ofTime:15:17Vertical Angle:_On/Off Effort:_Observer:EActual Time anTime:15:20Species:Unidentifi	on Trac WP#: 2 On rin d Positi WP#:	k 57 Horizont Tr Ot on of Sig 58 nid	Lat: tal Bearing ackline: oserver sid hting	35.76181 (in Degrees: 37 e: Right 35.75749	90 Beau	Sighting fort Sea St	Cue:	Body 2 826
Initial sighting of Time: <u>15:17</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an Time: <u>15:20</u> Species: <i>Unidentifi</i> Features used in	on Trac WP#: 2 On rin d Positie WP#: Species	k 57 Horizont Tr. Ot on of Sig 58 nid ID:	Lat: tal Bearing ackline: oserver sid hting Lat:	35.76181 (in Degrees: 37 e: Right 35.75749	90 Beau	Sighting fort Sea St Long: ligh/Best):	Cue:	Body 2 826
Initial sighting of Time: <u>15:17</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an Time: <u>15:20</u> Species: <i>Unidentifi</i> Features used in Representative in	on Trac WP#: <u>2</u> On rin d Positi WP#: Species mages us	k 57 Horizont Tr. Ot on of Sig 58 nid ID: sed for Sp	Lat: tal Bearing ackline: oserver sid hting Lat: peccies ID:	35.76181 in Degrees: 37 e: Right 35.75749 Numbers (1	90 Beau	Sighting fort Sea St Long: ligh/Best):  NA	Cue:	Body 2 826 / 1 / 1
Initial sighting of Time: <u>15:17</u> Vertical Angle: <u>0</u> On/Off Effort: <u>0</u> Observer: <u>E</u> Actual Time an Time: <u>15:20</u> Species: <i>Unidentifi</i> Features used in Representative in Photographer: <u></u>	on Trac WP#: <u>2</u> On rin d Positi WP#: species mages us Erin	k 57 Horizont Tr. Ot on of Sig 58 nid ID: sed for Sp Frame for	Lat: tal Bearing ackline: oserver sid hting Lat: pecies ID: numbers: _	35.76181 (in Degrees: 37 e: Right 35.75749	90 Beau	Sighting fort Sea St Long: ligh/Best):	Cue:	Body 2 826
Initial sighting of Time: <u>15:17</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an Time: <u>15:20</u> Species: <i>Unidentifi</i> Features used in Representative in Photographer: <u>Calculated distan</u>	on Trac WP#: <u>2</u> On rin d Positi WP#: ged Delphi Species mages us <u>Erin</u> nce from	k 57 Horizont Tr. Ot on of Sig 58 nid ID: sed for Sp Frame a Tracklin	Lat: tal Bearing ackline: oserver sid hting Lat: pecies ID: numbers:	35.76181 (in Degrees: 37 e: Right 35.75749 Numbers (1	90 Beau	Sighting fort Sea St Long: ligh/Best):  NA	Cue:	Body 2 826 / 1 / 1
Initial sighting of Time: <u>15:17</u> Vertical Angle: <u>0</u> On/Off Effort: <u>0</u> Observer: <u>E</u> Actual Time an Time: <u>15:20</u> Species: <i>Unidentifi</i> Features used in Representative in Photographer: <u>0</u> Calculated distant Final Time and	on Trac WP#: <u>2</u> On rin d Positie d Positie Species mages us Erin nce from Position	k 57 Horizont Tr Ot on of Sig 58 nid ID: sed for Sp Frame n Tracklin	Lat:	35.76181 in Degrees: 37 e: Right 35.75749 Numbers (1 NA 2.03 km	90 Beau Low/H	Sighting fort Sea St Long: ligh/Best):  NA Spacer	Cue:	Body 2 826 / 1 / 1
Initial sighting of Time: <u>15:17</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an Time: <u>15:20</u> Species: <i>Unidentifi</i> Features used in Representative in Photographer: <u>Calculated distan</u> Final Time and Time: <u>NA</u>	on Trac WP#: <u>2</u> On rin d Positie WP#: ded Delphin Species mages us <u>Erin</u> nce from <b>Position</b> WP#:	k 57 Horizont Tr. Ot on of Sig 58 nid ID: sed for Sp Frame n Tracklin n of Sight NA	Lat: tal Bearing ackline: oserver sid hting Lat: pecies ID: numbers: ting Lat:	35.76181 in Degrees: 37 e: Right 35.75749 Numbers (1 Numbers (1 NA 2.03 km	90 Beau Low/H	Sighting fort Sea St Long: ligh/Best):  NA	Cue:	Body 2 826 / 1 / 1
Initial sighting of Time: <u>15:17</u> Vertical Angle: <u>0</u> On/Off Effort: <u>0</u> Observer: <u>E</u> Actual Time an Time: <u>15:20</u> Species: <i>Unidentifi</i> Features used in Representative in Photographer: <u>0</u> Calculated distant Final Time and Time: <u>NA</u> Calculated Distant	on Trac WP#: <u>2</u> On rin d Positie d Positie Species mages us Erin nce from Position WP#: nce Trav	k 57 Horizont Tr Ot on of Sig 58 nid ID: sed for Sp Frame n Tracklin n of Sight NA veled:	Lat:	35.76181 in Degrees: 37 e: Right 35.75749 Numbers (1 NA 2.03 km	90 Beau Low/H	Sighting fort Sea St Long: ligh/Best):  NA Spacer	Cue:	Body 2 826 / 1 / 1
Initial sighting of Time: <u>15:17</u> Vertical Angle: <u>0</u> On/Off Effort: <u>0</u> Observer: <u>E</u> Actual Time an Time: <u>15:20</u> Species: <i>Unidentifi</i> Features used in Representative in Photographer: <u>0</u> Calculated distant Final Time and	on Trac WP#: <u>2</u> On rin d Position WP#: bed Delphil Species mages us <u>Erin</u> nce from WP#: nce Trav	k 57 Horizont Tr Ot on of Sig 58 nid ID: sed for Sp Frame p Tracklin n of Sigh NA veled: al Comm	Lat: tal Bearing ackline: oserver sid hting Lat: pecies ID: numbers: ting Lat: tat: Lat: hents	35.76181 in Degrees: 37 e: Right 35.75749 Numbers (1 NA 2.03 km NA	90 Beau Low/H	Sighting fort Sea St Long: ligh/Best):  NA Spacer	Cue:	Body 2 826 / 1 / 1

Tuesday, A	ugust 20, 2013 ${ m Sigh}$	ting # 11			
Initial sighting on Trac	k	C			
		35.83287	Long:		
Vertical Angle: <u>3</u>			-	ng Cue: _	
On/Off Effort: <u>On</u>	Trackline:		Beaufort Sea	State:	2
Observer: Ryan	Observer side	e: <u>Left</u>			
Actual Time and Position	on of Sighting				
Time: 15:44 WP#:		35.82728	Long:		
Species: Globicephala macro	orhynchus	Numbers (L	.ow/High/Best	t): <u>5 /</u>	10/8
Features used in Species	ID: Dark bodied anim	als with squared	d off head, robus	t dorsal fir	າ
			121 122 120	<u>,</u>	
Representative images us		176 120	131, 132, 138		139
Photographer: <u>Erin</u> Calculated distance from		0.66 km	Spac	er:	139
		0.00 Km			
Final Time and Position	0 0				
Time: <u>15:48</u> WP#: ]		35.82592	Long:	-74.772	2858
Calculated Distance Trav		km	_		
Behavior and Additiona					
Big surfacings followed by tir	me spent traveling just	below the surfa	ce.		
Tuesday_A	ugust 20, 2013 Sigh	ting # 12			
	ugust 20, 2013 Sigh	ting # 12			
Initial sighting on Trac	k	e	Long.	-75.039	9848
Initial sighting on TracTime:15:55WP#:	<b>k</b> <u>72</u> Lat:	35.83374	Long: 90 Sightir		
Initial sighting on TractTime:15:55WP#:Vertical Angle:1	<b>k</b> 72 Lat: Horizontal Bearing	35.83374 in Degrees:	90 Sightir	ng Cue:	Body
Initial sighting on TracTime:15:55WP#:	<b>k</b> <u>72</u> Lat:	35.83374 in Degrees:	_ v_	ng Cue:	Body
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:Erin	k 72 Lat: Horizontal Bearing Trackline: Observer side	35.83374 in Degrees:	90 Sightir	ng Cue:	Body
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and Position	k 72 Lat: Horizontal Bearing Trackline: Observer side on of Sighting	35.83374 in Degrees: _ 	90 Sightir Beaufort Sea	ng Cue: _ State:	Body 2
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:	k 72 Lat: Horizontal Bearing Trackline: Observer side	35.83374 in Degrees:	90 Sightir Beaufort Sea	ng Cue: _ State:	Body 2
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalis	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:	35.83374 in Degrees:	90 Sightir Beaufort Sea Long:	ng Cue:	Body 2 0347 40 / 35
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73         Lat:         ID:         White tip to rostrue	35.83374 in Degrees:	90 Sightir Beaufort Sea Long:	ng Cue:	Body 2 0347 40 / 35
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Species	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.	35.83374 in Degrees:	90 Sightir Beaufort Sea Long:	ng Cue:	Body 2 0347 40 / 35
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Speciesbody, spotting pattern prese	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.	35.83374 in Degrees:	90 Sightir Beaufort Sea Long:	ng Cue:	Body 2 0347 40 / 35
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Speciesbody, spotting pattern preseRepresentative images use	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.         sed for Species ID:       Frame numbers:	35.83374 in Degrees:	90 Sightir Beaufort Sea Long: .ow/High/Best ight and dark co 	ng Cue:	Body 2 0347 40 / 35 ong
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Speciesbody, spotting pattern preseRepresentative images usePhotographer:ErinCalculated distance from	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.         sed for Species ID:       Frame numbers:         Trackline:	35.83374 in Degrees:	90 Sightir Beaufort Sea Long: .ow/High/Best ight and dark co 	ng Cue:	Body 2 0347 40 / 35 ong
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Speciesbody, spotting pattern preseRepresentative images usePhotographer:Erin	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.         sed for Species ID:       Frame numbers:         Trackline:       Trackline:	35.83374 in Degrees:	90 Sightir Beaufort Sea Long: .ow/High/Best ight and dark co Spac	ng Cue:	Body 2 0347 40 / 35 ong 155
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Speciesbody, spotting pattern preseRepresentative images usePhotographer:ErinCalculated distance fromFinal Time and Position	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.         sed for Species ID:       Frame numbers:         Trackline:	35.83374 in Degrees:	90 Sightir Beaufort Sea Long: .ow/High/Best ight and dark co 	ng Cue: _ State:	Body 2 0347 40 / 35 ong 155
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Speciesbody, spotting pattern preseRepresentative images usPhotographer:ErinCalculated distance fromTime:16:00WP#:Calculated Distance Trav	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.         sed for Species ID:       Frame numbers:         Trackline:	35.83374 in Degrees:	90 Sightir Beaufort Sea Long: .ow/High/Best ight and dark co Spac	ng Cue: _ State:	Body 2 0347 40 / 35 ong 155
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Speciesbody, spotting pattern preseRepresentative images usePhotographer:ErinCalculated distance fromTime:16:00WP#:Calculated Distance TravBehavior and Additional	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.         sed for Species ID:       Frame numbers:         Trackline:	35.83374 in Degrees:	90 Sightir Beaufort Sea  	ng Cue:	Body 2 347 40 / 35 ong 155 3413
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Species:body, spotting pattern preseRepresentative images usePhotographer:ErinCalculated distance fromTime:16:00WP#:Calculated Distance TravBehavior and AdditionalA large number of animals species	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.         sed for Species ID:       Frame numbers:         Trackline:	35.83374 in Degrees:	90 Sightir Beaufort Sea  	ng Cue:	Body 2 347 40 / 35 ong 155 3413
Initial sighting on TractTime:15:55WP#:Vertical Angle:1On/Off Effort:OnObserver:ErinActual Time and PositionTime:15:56WP#:Species:Stenella frontalisFeatures used in Speciesbody, spotting pattern preseRepresentative images usePhotographer:ErinCalculated distance fromTime:16:00WP#:Calculated Distance TravBehavior and Additional	k          72       Lat:         Horizontal Bearing         Trackline:         Observer side         on of Sighting         73       Lat:         ID:       White tip to rostrunt.         sed for Species ID:       Frame numbers:         Trackline:	35.83374 in Degrees:	90 Sightir Beaufort Sea  	ng Cue:	Body 2 347 40 / 35 ong 155 3413

Tu	esday, A	ugust 20, 1	· · Digi			
Initial sighting (	on Trac	k	U	C		
Time: 16:18	WP#:	82	Lat:	35.90724	Long:	-74.723097
Vertical Angle:	3	Horizont	al Bearing	g in Degrees: 90	Sighting	; Cue: Splash
On/Off Effort:	On	Tra	ackline:	39 Be	aufort Sea St	tate: 2
Observer: Ry	/an	Ob	oserver sid	e: Left		
Actual Time an	d Positi	on of Sigl	hting			
Time: 16:19	WP#:	83	Lat:	35.91803	Long:	-74.733927
Species:Tursiops to				Numbers (Low		
			st body appe	earance, uniform gre	ey coloration w	vith slight blaze
along side of anima						
Representative in		-			156, 158	162
Photographer:			numbers: _	156 - 162	Spacer	: 163
Calculated distar				1.55 km		
Final Time and					_	
Time: <u>16:19</u>		83		35.91803	Long:	-74.733924
Calculated Dista	nce Trav	veled:	01	km		
			2013 Sigh	ting # 14		
Initial sighting	on Trac	k	0	C	Long:	-74.688230
Initial sighting of Time: 16:22	on Trac WP#:	<b>k</b> 86	Lat:	35.90542	U	-74.688230 2 Cue: Splash
Initial sighting of Time: <u>16:22</u> Vertical Angle:	on Trac WP#: 3	<b>k</b> <u>86</u> Horizont	Lat:	35.90542 g in Degrees: 60		g Cue: Splash
Initial sighting of Time: <u>16:22</u> Vertical Angle: _ On/Off Effort: _	0n Trac WP#: 3 On	<b>k</b> <u>86</u> Horizont Tra	Lat: al Bearing	35.90542 g in Degrees: 60 39 Bes	Sighting	g Cue: Splash
Initial sighting Time: <u>16:22</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>E</u>	on Trac WP#: <u>3</u> On rin	<b>k</b> <u>86</u> Horizont Tra Ot	Lat: al Bearing ackline: oserver sid	35.90542 g in Degrees: 60 39 Bes	Sighting	g Cue: Splash
Initial sighting Time: <u>16:22</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an	on Trac WP#: <u>3</u> On rin d Positi	k <u>86</u> Horizont Tra Ob on of Sigl	Lat: al Bearing ackline: oserver sid hting	35.90542 g in Degrees: 60 39 Bea e: Right	Sighting aufort Sea St	g Cue: Splash tate: 2
Initial sighting ofTime:16:22Vertical Angle:_On/Off Effort:_Observer:EActual Time anTime:16:23	WP#: 3 On rin d Positi WP#:	k <u>86</u> Horizont Tra Ob on of Sigl	Lat: al Bearing ackline: oserver sid hting	35.90542 g in Degrees: 60 39 Bea e: Right	Sighting aufort Sea St Long:	g Cue: Splash tate: 2 -74.68076
Initial sighting         Time:       16:22         Vertical Angle:          On/Off Effort:          Observer:       E         Actual Time an          Time:       16:23         Species:       Tursiops to	wP#: <u>3</u> On rin d Positi WP#: runcatus	k Borizont Tra Ob on of Sigl 87	Lat: al Bearing ackline: oserver sid hting Lat:	35.90542 g in Degrees: 60 39 Bea e: Right 35.89573	Sighting aufort Sea St Long: /High/Best):	cue: Splash tate: 2 -74.68076 30 / 35 / 33
Initial sighting of Time: 16:22 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 16:23 Species: <i>Tursiops ti</i> Features used in	wP#: 3 On rin d Positi WP#: Species	k <u>86</u> Horizont Tra Ob on of Sigl <u>87</u> ID: <u>Robus</u>	Lat: al Bearing ackline: oserver sid hting Lat:	35.90542         g in Degrees:       60         39       Be:         e:       Right         35.89573       Numbers (Low	Sighting aufort Sea St Long: /High/Best):	cue: Splash tate: 2 -74.68076 30 / 35 / 33
Initial sighting of Time: 16:22 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 16:23 Species: <i>Tursiops to</i> Features used in along side of anima Representative in	on Trac WP#: <u>3</u> On rin d Positi WP#: Species al. Large on mages un	k <u>86</u> Horizont Tra Ob on of Sigl <u>87</u> ID: <u>Robus</u> dorsal fin. sed for Sp	Lat: al Bearing ackline: oserver sid hting Lat: tody appo- becies ID:	35.90542 g in Degrees: 60 39 Bea e: Right 35.89573 Numbers (Low earance, uniform gree	Sighting aufort Sea St Long: /High/Best):	cue: Splash tate: 2 -74.68076 30 / 35 / 33 vith slight blaze
Initial sighting of Time: 16:22 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 16:23 Species: <i>Tursiops to</i> Features used in along side of anima Representative in Photographer: 0	on Trac WP#: <u>3</u> On rin d Positi WP#: Species al. Large of mages un Erin	k <u>86</u> Horizont Tra Ob on of Sigl <u>87</u> ID: <u>Robus</u> dorsal fin. sed for Sp Frame r	Lat: al Bearing ackline: oserver sid hting Lat: st body appo becies ID: numbers: _	35.90542 g in Degrees: 60 39 Bet e: <u>Right</u> 35.89573 Numbers (Low earance, uniform gree 164 - 178	Sighting aufort Sea St Long: /High/Best): ey coloration w	cue: Splash tate: 2 -74.68076 30 / 35 / 33 vith slight blaze
Initial sighting of Time: 16:22 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 16:23 Species: <i>Tursiops ta</i> Features used in along side of anima Representative in Photographer: 0	on Trac WP#: <u>3</u> On rin d Positi WP#: Species al. Large of mages un Erin	k <u>86</u> Horizont Tra Ob on of Sigl <u>87</u> ID: <u>Robus</u> dorsal fin. sed for Sp Frame r	Lat: al Bearing ackline: oserver sid hting Lat: st body appo becies ID: numbers: _	35.90542 g in Degrees: 60 39 Bea e: Right 35.89573 Numbers (Low earance, uniform gree	Long: /High/Best): ey coloration w	cue: Splash tate: 2 -74.68076 30 / 35 / 33 vith slight blaze
Initial sighting of Time: 16:22 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 16:23 Species: <i>Tursiops to</i> Features used in along side of anima Representative in Photographer: 0 Calculated distant Final Time and	on Trac WP#: <u>3</u> On rin d Positi WP#: Vuncatus Species al. Large of mages un Erin nce from Position	k <u>86</u> Horizont Tra Ob on of Sigl 87 ID: Robus dorsal fin. sed for Sp Frame r Tracklin n of Sight	Lat: al Bearing ackline: oserver sid hting Lat: tody appo- pecies ID: numbers: e:	35.90542 g in Degrees: 60 39 Bet e: <u>Right</u> 35.89573 Numbers (Low earance, uniform gree 164 - 178	Long: /High/Best): ey coloration w	cue: Splash tate: 2 -74.68076 30 / 35 / 33 vith slight blaze
Initial sighting of Time: 16:22 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 16:23 Species: <i>Tursiops to</i> Features used in along side of anima Representative in Photographer: 0 Calculated distant Final Time and Time: 16:25	on Trac WP#: <u>3</u> On rin d Positi WP#: Species al. Large of mages us Erin nce from Position WP#:	k <u>86</u> Horizont Tra Ob on of Sigl <u>87</u> ID: Robus dorsal fin. sed for Sp Frame r Tracklim n of Sight <u>88</u>	Lat: al Bearing ackline: oserver sid hting Lat: becies ID: numbers: _ e: ting Lat:	<u>35.90542</u> g in Degrees: <u>60</u> <u>39</u> Be: e: <u>Right</u> <u>35.89573</u> Numbers (Low earance, uniform green <u>164 - 178</u> <u>1.27 km</u> <u>35.89139</u>	Long: Long: /High/Best): ey coloration w	cue: Splash tate: 2 -74.68076 30 / 35 / 33 vith slight blaze
Initial sighting of Time: 16:22 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 16:23 Species: <i>Tursiops to</i> Features used in along side of anima Representative in Photographer: 0 Calculated distant Final Time and	on Trac WP#: <u>3</u> On rin d Positi WP#: Species al. Large of mages us Erin nce from Position WP#:	k <u>86</u> Horizont Tra Ob on of Sigl <u>87</u> ID: Robus dorsal fin. sed for Sp Frame r Tracklim n of Sight <u>88</u>	Lat: al Bearing ackline: oserver sid hting Lat: becies ID: numbers: _ e: ting Lat:	35.90542         g in Degrees:       60         39       Be:         e:       Right         35.89573       Numbers (Low earance, uniform green structure)         164 - 178         1.27 km	Long: Long: /High/Best): ey coloration w	cue: Splash tate: 2 -74.68076 30 / 35 / 33 vith slight blaze :: 179
Initial sighting of Time: 16:22 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 16:23 Species: <i>Tursiops to</i> Features used in along side of anima Representative in Photographer: 0 Calculated distant Final Time and Time: 16:25	on Trac WP#: <u>3</u> On rin d Positi WP#: Species al. Large of mages us Erin nee from Position WP#: nce Trav	k 86 Horizont Tra Ob on of Sigl 87 ID: Robus dorsal fin. sed for Sp Frame r Tracklin n of Sight 88 veled:	Lat: al Bearing ackline: oserver sid hting Lat: becies ID: numbers: e: ting Lat: 0.48	<u>35.90542</u> g in Degrees: <u>60</u> <u>39</u> Be: e: <u>Right</u> <u>35.89573</u> Numbers (Low earance, uniform green <u>164 - 178</u> <u>1.27 km</u> <u>35.89139</u>	Long: Long: /High/Best): ey coloration w	cue: Splash tate: 2 -74.68076 30 / 35 / 33 vith slight blaze :: 179
Initial sighting         Time:       16:22         Vertical Angle:	on Trac WP#: <u>3</u> On rin d Positi WP#: Species al. Large of mages us Erin nee from Position WP#: nce Trav	k 86 Horizont Tra Ob on of Sigl 87 ID: Robus dorsal fin. sed for Sp Frame r Tracklin n of Sight 88 veled:	Lat: al Bearing ackline: oserver sid hting Lat: becies ID: numbers: e: ting Lat: 0.48	<u>35.90542</u> g in Degrees: <u>60</u> <u>39</u> Be: e: <u>Right</u> <u>35.89573</u> Numbers (Low earance, uniform green <u>164 - 178</u> <u>1.27 km</u> <u>35.89139</u>	Long: Long: /High/Best): ey coloration w	cue: Splash tate: 2 -74.68076 30 / 35 / 33 vith slight blaze :: 179

Tu	esday, A	August 2	0, 2013 <mark>S</mark>	igh	ting # 15					
Initial sighting o	on Trac	:k		C	e					
Time: 16:48	WP#:	93	Lat:		35.9813	L	ong:	-7	4.734	980
Vertical Angle:	1	Horizo	ontal Bear	ring	in Degrees:	90	Sight	ting C	ue:	Body
On/Off Effort:	On	r	Trackline	:	43	Beaufo	ort Se	a State	e:	2
Observer: Er	rin	(	Observer	side	e: Right					
Actual Time and	d Positi	ion of S	ighting							
Time: 16:49	WP#:	94	Lat:		35.98721	L	ong:	-7-	4.734	562
Species:Globiceph							gh/Be	est):	18/2	20/19
Features used in	Species	ID: Bla	ck bodied	anim	als, large squa	re heads,	, robus	st dorsa	l fin p	laced
1/3 back animals bo	ody.									
Representative in	20000	and for	Spacing I	D.		10	34, 186			
Representative n	nages u	seu 101	species I	<i>ν</i> .		10	, 100			
Photographer:	U		-					acer:	1	90
-	Erin	Fram	e number	rs:	180 - 189				1	90
Photographer:	Erin Ice fron	Fram n Trackl	e number line:	rs:	180 - 189				1	90
Photographer: Calculated distan	Erin Ice from Positio	Fram n Trackl <b>n of Sig</b>	e number line: ghting	rs: _	180 - 189 0.66 km	)	Spa			
Photographer: Calculated distan Final Time and	Erin ice fron <b>Positio</b> WP#:	Fram n Trackl <b>n of Sig</b> 95	e number line: ghting Lat: _	rs: _	180 - 189 0.66 km 35.98004	)	Spa	acer:		
Photographer: Calculated distan <b>Final Time and</b> Time:	Erin Ice from Positio WP#: nce Tra	Fram n Trackl <b>n of Sig</b> 95 veled:	e number line: ghting Lat:	rs: _	180 - 189 0.66 km 35.98004	)	Spa	acer:		
Photographer: Calculated distan Final Time and Time: <u>16:50</u> Calculated Distan	Erin Ice fron Positio WP#: nce Tra ddition	Fram n Trackl n of Sig 95 veled: _ al Com	e number line: ghting Lat: uments	rs:	180 - 189 0.66 km 35.98004 km	)	Spa	acer:		
Photographer: Calculated distan Final Time and Time: <u>16:50</u> Calculated Distan Behavior and A	Erin Ice fron Positio WP#: nce Tra ddition	Fram n Trackl n of Sig 95 veled: _ al Com	e number line: ghting Lat: uments	rs:	180 - 189 0.66 km 35.98004 km	)	Spa	acer:		
Photographer: Calculated distan Final Time and Time: <u>16:50</u> Calculated Distan Behavior and A	Erin Ice fron Positio WP#: nce Tra ddition	Fram n Trackl n of Sig 95 veled: _ al Com	e number line: ghting Lat: uments	rs:	180 - 189 0.66 km 35.98004 km	)	Spa	acer:		

Time: <u>9:23</u>	WP#:	8 Lat:	36.048966	Long:	-74.797415
Vertical Angle:	<u>2</u> Ho	rizontal Bearin	g in Degrees:	44 Sightin	ng Cue: Body
On/Off Effort:	On	Trackline:	44	Beaufort Sea	State: 3
Observer: E	rin	Observer si	de: Left		
Actual Time an	d Position (	of Sighting			
Time: 9:24		E Lat:	36.055076	Long:	-74.799332
Species:Tursiops ti	runcatus		Numbers (1	Low/High/Bes	t): 4/4/4
Features used in		Uniform grey, ro	· · · · · · · · · · · · · · · · · · ·		
Representative in				4, 5	
Photographer:		rame numbers:		Spac	er: 15
Calculated distar	nce from Tra	ackline:	0.7009 km		
Final Time and	Position of	f Sighting			
Time: 9:26	WP#:1	0 Lat:	36.049373	Long:	-74.801560
Calculated Dista	nce Travele	ed:0.66	650 km	_	
Behavior and A	dditional C	Comments			
Splashing, darting o	different direc	tions, breaching			
		ıst 21, 2013 Sig	hting # 2		
Initial sighting of Time: 9:28 Vertical Angle: 0n/Off Effort:	on Track WP#: <u>1</u> <u>3</u> Ho On	2 Lat: prizontal Bearin Trackline:	36.054342 ag in Degrees: 44	Long:	-74.758434 ng Cue: <u>Splas</u> State: <u>3</u>
Initial sighting of Time:9:28 Vertical Angle: _ On/Off Effort: Observer:E	on Track WP#: <u>1</u> <u>3</u> Ho On rin	2 Lat: prizontal Bearin Trackline: Observer si	36.054342 ag in Degrees: 44	90 Sightin	ng Cue: Splas
Initial sighting of Time: 9:28 Vertical Angle: 0n/Off Effort: 0 Observer: E Actual Time an	on Track WP#: <u>1</u> <u>3</u> Ho <u>On</u> rin d Position of	2 Lat: prizontal Bearin Trackline: Observer si of Sighting	$\frac{36.054342}{\text{ag in Degrees:}}$ $\frac{44}{\text{de:}}$	90 Sightin Beaufort Sea	ng Cue: <u>Splas</u> State: <u>3</u>
Initial sighting of         Time:       9:28         Vertical Angle:       _         On/Off Effort:       _         Observer:       E         Actual Time an       Time:         9:28	on Track WP#: <u>1</u> <u>3</u> Ho <u>On</u> rin d Position of WP#: <u>1</u>	2 Lat: prizontal Bearin Trackline: Observer si of Sighting	36.054342 1g in Degrees: 44 de: Left 36.060786	90 Sightin Beaufort Sea	ng Cue: <u>Splas</u> State: <u>3</u> -74.756754
Initial sighting ofTime:9:28Vertical Angle:_On/Off Effort:_Observer:EActual Time anTime:9:28Species:Stenella fr	on Track WP#: <u>1</u> <u>3</u> Ho <u>On</u> rin d Position of WP#: <u>1</u> contalis	2 Lat:	36.054342 ag in Degrees: 44 de: Left 36.060786 Numbers (I	90 Sightin Beaufort Sea Long: Low/High/Bes	ng Cue: Splas State: 3 -74.756754 t): 100/175/15
Initial sighting of         Time:       9:28         Vertical Angle:       _         On/Off Effort:       _         Observer:       E         Actual Time an       Time:         9:28	on Track WP#: <u>1</u> <u>3</u> Ho <u>On</u> rin d Position of WP#: <u>1</u> contalis	2 Lat:	36.054342 ag in Degrees: 44 de: Left 36.060786 Numbers (I	90 Sightin Beaufort Sea Long: Low/High/Bes	ng Cue: Splas State: 3 -74.756754 t): 100/175/15
Initial sighting of Time: 9:28 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 9:28 Species: <i>Stenella fr</i> Features used in	on Track WP#: 1 3 Ho On rin d Position of WP#: 1 contalis Species ID:	2 Lat:	36.054342 ag in Degrees: 44 de: Left 36.060786 Numbers (l	90 Sightin Beaufort Sea Long: Low/High/Besin n down body, spa	ng Cue: Splas State: 3 -74.756754 t): 100/175/15
Initial sighting ofTime:9:28Vertical Angle:_On/Off Effort:_Observer:EActual Time anTime:9:28Species:Stenella frFeatures used inRepresentative in	on Track WP#: 1 3 Ho On rin d Position of WP#: 1 ontalis Species ID: mages used	<ul> <li>2 Lat:</li></ul>	36.054342 ag in Degrees: 44 de: Left 36.060786 Numbers (I t and dark patter	90 Sightin Beaufort Sea Long: Low/High/Bes n down body, sp 76, 79, 85	ng Cue: <u>Splas</u> State: <u>3</u> -74.756754 t): <u>100/175/15</u> otting
Initial sighting of Time: 9:28 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 9:28 Species: Stenella fr Features used in Representative in Photographer: 0	WP#:       1         3       Ho         0n       1         rin       4         d Position (         WP#:       1         rontalis       5         Species ID:       1         mages used       Ryan         Ryan       Fr	<ul> <li>2 Lat:</li></ul>	<u>36.054342</u> ag in Degrees: <u>44</u> de: <u>Left</u> <u>36.060786</u> Numbers (I t and dark patter : <u>16 - 107</u>	90 Sightin Beaufort Sea Long: Low/High/Best n down body, spo 76, 79, 85	ng Cue: <u>Splas</u> State: <u>3</u> -74.756754 t): <u>100/175/15</u> otting
Initial sighting of Time: 9:28 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 9:28 Species: Stenella fr Features used in Representative in Photographer: 0 Calculated distar	on Track WP#: 1 3 Ho On rin d Position of WP#: 1 contalis Species ID: mages used Ryan France from Track	<ul> <li>2 Lat:</li></ul>	<u>36.054342</u> ag in Degrees: <u>44</u> de: <u>Left</u> <u>36.060786</u> Numbers (I t and dark patter : <u>16 - 107</u>	90 Sightin Beaufort Sea Long: Low/High/Bes n down body, sp 76, 79, 85	ng Cue: <u>Splas</u> State: <u>3</u> -74.756754 t): <u>100/175/15</u> otting
Initial sighting of Time: 9:28 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 9:28 Species: Stenella fr Features used in Representative in Photographer: 0 Calculated distar Final Time and	on Track WP#: 1 3 Ho On rin d Position of WP#: 1 ontalis Species ID: mages used Ryan Fince from Trac Position of	<ul> <li>2 Lat:</li></ul>	36.054342 ag in Degrees: 44 de: Left 36.060786 Numbers (I t and dark patter : 16 - 107 0.7323 km	90 Sightin Beaufort Sea Long: Low/High/Best n down body, spo 76, 79, 85	ng Cue: Splas State: 3 -74.756754 t): 100/175/15 otting eer: 108
Initial sighting of         Time:       9:28         Vertical Angle:          On/Off Effort:          Observer:          Actual Time an       Time:       9:28         Species:       Stenella fr         Features used in       Representative in         Photographer:          Calculated distar         Final Time and         Time:       9:38	on Track WP#: 1 3 Ho On rin d Position of WP#: 1 ontalis Species ID: mages used Ryan Fince from Trac Position of WP#: 1	<ul> <li>2 Lat:</li></ul>	36.054342 ag in Degrees: 44 de: Left 36.060786 Numbers (I t and dark patter : 16 - 107 0.7323 km 36.059290	90 Sightin Beaufort Sea Long: Low/High/Best n down body, spo 76, 79, 85	ng Cue: <u>Splas</u> State: <u>3</u> -74.756754 t): <u>100/175/15</u> otting
Initial sighting of         Time:       9:28         Vertical Angle:       _         On/Off Effort:       _         Observer:       _         Actual Time an       _         Time:       9:28         Species:       Stenella fr         Features used in       _         Representative in       _         Photographer:       _         Calculated distar       _         Time:       9:38         Calculated Distar	on Track WP#: 1 3 Ho On rin d Position of WP#: 1 ontalis Species ID: mages used Ryan France from Trace Position of WP#: 1 nce Travele	<ul> <li>2 Lat:</li></ul>	36.054342 ag in Degrees: 44 de: Left 36.060786 Numbers (I t and dark patter : 16 - 107 0.7323 km	90 Sightin Beaufort Sea Long: Low/High/Best n down body, spo 76, 79, 85	ng Cue: Splas State: 3 -74.756754 t): 100/175/15 otting eer: 108
Initial sighting of         Time:       9:28         Vertical Angle:       _         On/Off Effort:       _         Observer:       _         Actual Time an       _         Time:       9:28         Species:       Stenella fr         Features used in       _         Representative in       _         Photographer:       _         Calculated distar       _         Time:       9:38         Calculated Distar	on Track WP#: 1 3 Ho On rin d Position of WP#: 1 ontalis Species ID: mages used Ryan France from Trace Position of WP#: 1 nce Travele	<ul> <li>2 Lat:</li></ul>	36.054342 ag in Degrees: 44 de: Left 36.060786 Numbers (I t and dark patter : 16 - 107 0.7323 km 36.059290	90 Sightin Beaufort Sea Long: Low/High/Best n down body, spo 76, 79, 85	ng Cue: Splas State: 3 -74.756754 t): 100/175/15 otting eer: 108
Initial sighting of Time: 9:28 Vertical Angle: 0 On/Off Effort: 0 Observer: E Actual Time an Time: 9:28 Species: Stenella fr Features used in Representative in Photographer: 0 Calculated distar Final Time and	on Track WP#: 1 3 Ho On rin d Position of WP#: 1 contalis Species ID: mages used Ryan Fr nce from Tra Position of WP#: 1 nce Travele	2       Lat:         prizontal Bearin         Trackline:         Observer si         of Sighting         3       Lat:         3       Lat:         6       Species ID:         rame numbers:       ackline:         ackline:	<u>36.054342</u> ag in Degrees: <u>44</u> de: <u>Left</u> <u>36.060786</u> Numbers (I t and dark patter <u>16 - 107</u> 0.7323 km <u>36.059290</u> <u>337 km</u>	90 Sightin Beaufort Sea Long: Low/High/Best n down body, spo 76, 79, 85	ng Cue: Splas State: 3 -74.756754 t): 100/175/15 otting eer: 108

Wednesday, August 21, 2013 Sighting $\#$ 3
Initial sighting on Track
Time: 9:50 WP#: 19 Lat: 36.081520 Long: -74.304286
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: Off Trackline: Beaufort Sea State: 2
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time: 9:52 WP#: 20 Lat: 36.072366 Long: -74.313114
Species: Grampus griseus Numbers (Low/High/Best): 20/35/30
Features used in Species ID: Grey, blunt head with cleft in the middle, white scaring down body
Representative images used for Species ID:
Photographer: Ryan Frame numbers: 109-124 Spacer: 125
Calculated distance from Trackline: 1.291 km
Final Time and Position of Sighting
Time:         9:54         WP#:         21         Lat:         36.077824         Long:         -74.315555
Calculated Distance Traveled: 0.6453 km
Behavior and Additional Comments
Some individuals spaced out, subsurface
Wednesday, August 21, 2012 Sighting # 1
Wednesday, August 21, 2013 Sighting # 4
Initial sighting on Track
Initial sighting on Track           Time:         9:56         WP#:         23         Lat:         36.120886         Long:         -74.350012
Initial sighting on TrackTime:9:56WP#:23Lat:36.120886Long:-74.350012Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:9:56WP#:23Lat:36.120886Long:-74.350012Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3
Initial sighting on TrackTime:9:56WP#:23Lat:36.120886Long:-74.350012Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:RyanObserver side:Right
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right
Initial sighting on TrackTime:9:56WP#:23Lat:36.120886Long:-74.350012Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:57WP#:24Lat:36.129123Long:-74.349572
Initial sighting on TrackTime:9:56WP#:23Lat:36.120886Long:-74.350012Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingImage: Sight State:1/1/1Time:9:57WP#:24Lat:36.129123Long:-74.349572Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1
Initial sighting on TrackTime:9:56WP#:23Lat:36.120886Long:-74.350012Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:57WP#:24Lat:36.129123Long:-74.349572
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       9:57       WP#:       24       Lat:       36.129123       Long:       -74.349572         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, wrinkles, forward blow, blunt head       1/1/1
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right       3       Actual Time and Position of Sighting         Time:       9:57       WP#:       24       Lat:       36.129123       Long:       -74.349572         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, wrinkles, forward blow, blunt head       133
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right       3       Actual Time and Position of Sighting         Time:       9:57       WP#:       24       Lat:       36.129123       Long:       -74.349572         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, wrinkles, forward blow, blunt head       133
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       9:57       WP#:       24       Lat:       36.129123       Long:       -74.349572         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, wrinkles, forward blow, blunt head         Photographer:       Ryan       Frame numbers:       126 - 136       Spacer:       137         Calculated distance from Trackline:       0.9168 km       0.9168 km       137
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right       3         Actual Time and Position of Sighting       Time:       9:57       WP#:       24       Lat:       36.129123       Long:       -74.349572         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, wrinkles, forward blow, blunt head         Image:         Mage:       133         Photographer:       Ryan       Frame numbers:       126-136       Spacer:       137         Calculated distance from Trackline:       0.9168 km         Final Time and Position of Sighting
Initial sighting on TrackTime:9:56WP#:23Lat:36.120886Long:-74.350012Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:57WP#:24Lat:36.129123Long:-74.349572Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large, wrinkles, forward blow, blunt headRepresentative images used for Species ID:133Photographer:RyanFrame numbers:126-136Spacer:137Calculated distance from Trackline:0.9168 kmFinal Time and Position of SightingTime:9:58WP#:25Lat:36.126649Long:-74.355892
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right       3       Actual Time and Position of Sighting         Time:       9:57       WP#:       24       Lat:       36.129123       Long:       -74.349572         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, wrinkles, forward blow, blunt head
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       9:57       WP#:       24       Lat:       36.129123       Long:       -74.349572         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, wrinkles, forward blow, blunt head         Representative images used for Species ID:       133         Photographer:       Ryan       Frame numbers:       126 - 136       Spacer:       137         Calculated distance from Trackline:       0.9168 km       133         Final Time and Position of Sighting       Time:       9:58       WP#:       25       Lat:       36.126649       Long:       -74.355892         Calculated Distance Traveled:       0.6308 km       Mem       Mem       Mem       Mem
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right       3       Actual Time and Position of Sighting         Time:       9:57       WP#:       24       Lat:       36.129123       Long:       -74.349572         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, wrinkles, forward blow, blunt head
Initial sighting on Track         Time:       9:56       WP#:       23       Lat:       36.120886       Long:       -74.350012         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       9:57       WP#:       24       Lat:       36.129123       Long:       -74.349572         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large, wrinkles, forward blow, blunt head         Representative images used for Species ID:       133         Photographer:       Ryan       Frame numbers:       126 - 136       Spacer:       137         Calculated distance from Trackline:       0.9168 km       137       Calculated Distance Traveled:       0.6308 km         Time:       9:58       WP#:       25       Lat:       36.126649       Long:       -74.355892         Calculated Distance Traveled:       0.6308 km       Memory       Memory       Memory       Memory

Wednesday, August 21, 2013 Sighting $\#$ 5
Initial sighting on Track
Time: 10:01 WP#: 27 Lat: 36.124146 Long: -74.455991
Vertical Angle: 2 Horizontal Bearing in Degrees: 60 Sighting Cue: Body
On/Off Effort: On Trackline: 45 Beaufort Sea State: 3
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:         10:02         WP#:         28         Lat:         36.122438         Long:         -74.462890
Species:Physeter macrocephalus         Numbers (Low/High/Best):         4/4/4
Features used in Species ID: Large, blunt head, forward blow, wrinkles
Representative images used for Species ID: 159
Photographer:     Ryan     Frame numbers:     138 - 159     Spacer:     160
Calculated distance from Trackline: 0.6481 km
Final Time and Position of Sighting
Time:         10.03         WP#:         29         Lat:         36.122330         Long:         -74.463313
Calculated Distance Traveled: 0.03985 km
Behavior and Additional Comments
Logging at the surface, 3 close together
Wednesday, August 21, 2013 Sighting # 6
Initial sighting on Track
Initial sighting on Track           Time:         10:05         WP#:         31         Lat:         36.125110         Long:         -74.526549
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3
Initial sighting on Track         Time:       10:05       WP#:       31       Lat:       36.125110       Long:       -74.526549         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left
Initial sighting on Track         Time:       10:05       WP#:       31       Lat:       36.125110       Long:       -74.526549         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left       Left
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:ErinObserver side:LeftImage: 10:06WP#:32Lat:36.119509Long:-74.523369
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:ErinObserver side:LeftActual Time and Position of SightingImage: State:36.119509Long:-74.523369Species:TruncatusNumbers (Low/High/Best):20/35/26
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:ErinObserver side:LeftImage: 10:06WP#:32Lat:36.119509Long:-74.523369
Initial sighting on Track         Time:       10:05       WP#:       31       Lat:       36.125110       Long:       -74.526549         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       10:06       WP#:       32       Lat:       36.119509       Long:       -74.523369         Species:       Tursiops truncatus       Numbers (Low/High/Best):       20/35/26         Features used in Species ID:       Robust, uniform grey
Initial sighting on Track         Time:       10:05       WP#:       31       Lat:       36.125110       Long:       -74.526549         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:ErinObserver side:LeftActual Time and Position of SightingTime:10:06WP#:32Lat:36.119509Long:-74.523369Species:FuncatusNumbers (Low/High/Best):20/35/26Features used in Species ID:Robust, uniform greyPhotographer:RyanFrame numbers:161-171Spacer:172
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:ErinObserver side:LeftActual Time and Position of SightingTime:10:06WP#:32Lat:36.119509Long:-74.523369Species:Features used in Species ID:Robust, uniform greyPhotographer:RyanFrame numbers:161.171Spacer:172Calculated distance from Trackline:0.6852 km
Initial sighting on Track         Time:       10:05       WP#:       31       Lat:       36.125110       Long:       -74.526549         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       10:06       WP#:       32       Lat:       36.119509       Long:       -74.523369         Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best):       20/35/26         Features used in Species ID:       Robust, uniform grey
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:ErinObserver side:LeftActual Time and Position of SightingTime:10:06WP#:32Lat:36.119509Long:-74.523369Species:Fursiops truncatusNumbers (Low/High/Best):20/35/26Features used in Species ID:Representative images used for Species ID:161, 166, 170Photographer:RyanFrame numbers:161 - 171Spacer:172Calculated distance from Trackline:0.6852 km172172Final Time and Position of SightingTime:10:09WP#:33Lat:36.134091Long:-74.525855
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:ErinObserver side:LeftActual Time and Position of SightingTime:10:06WP#:32Lat:36.119509Long:-74.523369Species:Tursiops truncatusNumbers (Low/High/Best):20/35/26Features used in Species ID:Representative images used for Species ID:161, 166, 170Photographer:RyanFrame numbers:161 - 171Spacer:172Calculated distance from Trackline:0.6852 km162 km172Final Time and Position of SightingTime:10:09WP#:33Lat:36.134091Long:-74.525855Calculated Distance Traveled:1.637 km1.637 km1.637 km1.637 km1.637 km
Initial sighting on Track         Time:       10:05       WP#:       31       Lat:       36.125110       Long:       -74.526549         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       10:06       WP#:       32       Lat:       36.119509       Long:       -74.523369         Species:       Tursiops truncatus       Numbers (Low/High/Best):       20/35/26         Features used in Species ID:       Robust, uniform grey         Representative images used for Species ID:       161, 166, 170         Photographer:       Ryan       Frame numbers:       161 - 171       Spacer:       172         Calculated distance from Trackline:       0.6852 km       161       172       172         Calculated Distance Traveled:       1.637 km       1637 km       163       1637 km         Behavior and Additional Comments       1.637 km       1.637 km       1.637 km       1.637 km
Initial sighting on TrackTime:10:05WP#:31Lat:36.125110Long:-74.526549Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:3Observer:ErinObserver side:LeftActual Time and Position of SightingTime:10:06WP#:32Lat:36.119509Long:-74.523369Species:Tursiops truncatusNumbers (Low/High/Best):20/35/26Features used in Species ID:Representative images used for Species ID:161, 166, 170Photographer:RyanFrame numbers:161 - 171Spacer:172Calculated distance from Trackline:0.6852 km162 km172Final Time and Position of SightingTime:10:09WP#:33Lat:36.134091Long:-74.525855Calculated Distance Traveled:1.637 km1.637 km1.637 km1.637 km1.637 km
Initial sighting on Track         Time:       10:05       WP#:       31       Lat:       36.125110       Long:       -74.526549         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       10:06       WP#:       32       Lat:       36.119509       Long:       -74.523369         Species:       Tursiops truncatus       Numbers (Low/High/Best):       20/35/26         Features used in Species ID:       Robust, uniform grey         Representative images used for Species ID:       161, 166, 170         Photographer:       Ryan       Frame numbers:       161 - 171       Spacer:       172         Calculated distance from Trackline:       0.6852 km       161       172       172         Calculated Distance Traveled:       1.637 km       1637 km       163       1637 km         Behavior and Additional Comments       1.637 km       1.637 km       1.637 km       1.637 km

Wednesday, August 21, 2013 ${ m Sighting}$ #	ŧ <b>7</b>
Initial sighting on Track	
Time: 10:15 WP#: 37 Lat: 36.124	Long
Vertical Angle: Horizontal Bearing in De	
On/Off Effort: Trackline:45	
Observer: Erin Observer side:	Left
Actual Time and Position of Sighting	
Time: 10:17 WP#: 38 Lat: 36.115	5082 Long: -74.754407
	nbers (Low/High/Best): 7/15/11
Features used in Species ID: slender black bodies, blu	nt melon, large dorsal fin
	170,100
Representative images used for Species ID:	178, 182 172 184 Sussee 185
Photographer:         Ryan         Frame numbers:         Transform           Calculated distance from Trackline:         1.3101	
Final Time and Position of Sighting	
Time: <u>10:20</u> WP#: <u>39</u> Lat: <u>36.114</u>	4832 Long:74.759754
Calculated Distance Traveled: 0.4811 km	
<b>Behavior and Additional Comments</b>	
Logging at one of the longline buoys	
Wednesday, August 21, 2012 Sighting	4 0
Wednesday, August 21, 2013 Sighting # Initial sighting on Track	+ 0
Time: 10:52 WP#: 46 Lat: 35.410	0841 Long: -74.942895
Vertical Angle: 1 Horizontal Bearing in De	0
On/Off Effort: On Trackline: 35	
Observer: Ryan Observer side:	
Actual Time and Position of Sighting	
	1016 Long: -74.949978
	bers (Low/High/Best): 7/7/7
Features used in Species ID: Uniform grey	
i outares asea in species in i <u>ormenni grey</u>	
Representative images used for Species ID:	189
· · · · ·	186 - 198 Spacer: 199
Calculated distance from Trackline: 0.6422	
Final Time and Position of Sighting	
Time: 10:55 WP#: 48 Lat: 35.40	6477 Long: -74.950671
Calculated Distance Traveled: 0.5086 km	
Behavior and Additional Comments	
Behavior and Additional Comments	

Wednesday, August 21, 2013 ${ m Sighting}~\#~11$
Initial sighting on Track
Time: 14:29 WP#: 75 Lat: 34.781486 Long: -75.840143
Vertical Angle: 2 Horizontal Bearing in Degrees: 60 Sighting Cue: Splash
On/Off Effort: On Trackline: 21 Beaufort Sea State: 2
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time: 14:30 WP#: 76 Lat: 34.784271 Long: -75.833001
Species: Stenella frontalis Numbers (Low/High/Best): 6/6/6
Features used in Species ID: Alternating light and dark pattern down body, spotting
Representative images used for Species ID:262, 266, 267
Photographer:         Ryan         Frame numbers:         248 - 269         Spacer:         270
Calculated distance from Trackline: 0.7220 km
Final Time and Position of Sighting
Time: 14:35 WP#: 77 Lat: 34.789827 Long: -75.835316
Calculated Distance Traveled: 0.6530 km
Behavior and Additional Comments
Tight group swimming in different directions
Wednesday, August 21, 2013 Sighting # 12         Initial sighting on Track         Time:       14:48       WP#:       82       Lat:       34.690250       Long:       -75.575789         Vertical Angle:       3       Horizontal Bearing in Degrees:       60       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       22       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       14:50       WP#:       83       Lat:       34.701233       Long:       -75.544753         Species:       Tursiops truncatus       Numbers (Low/High/Best):       50/75/60
Representative images used for Species ID: 272, 288, 289, 297
Photographer: Ryan Frame numbers: 271 - 297 Spacer: 298
Calculated distance from Trackline: 3.089
Final Time and Position of Sighting
Time: 15:00 WP#: 84 Lat: 34.708854 Long: -75.546101
Calculated Distance Traveled: 0.8563 km
Behavior and Additional Comments
Multiple groups traveling then circling, breaching, some milling

Thu	ursday, A	August 22	, 2013 S	ighting # 1		
Initial sighting	on Trac	:k		0 0		
Time: 9:31	WP#:	105	Lat:	35.250532	Long:	-74.903434
Vertical Angle:	1	Horizon	ntal Bear	ring in Degrees:	60 Sightin	g Cue: Body
On/Off Effort:	On	Т	rackline	33	Beaufort Sea	State: 3
Observer: Ry	yan	C	Observer	side: Left		
Actual Time an	d Positi	ion of Sig	ghting			
Time: 9:33		106	0 0	35.24216	Long:	-74.895108
Species:Tursiops t			_	Numbers (	Low/High/Best	
Features used in	Species	ID: Rob	ust body a	appearance, unifor	m grey coloration	except slight
lighter blaze along	side. Rob	oust dorsa	l fin			
Representative in	-		-		4, 8, 16	
Photographer:			number		Space	er: 22
Calculated distant	nce from	n Trackli	ne:	1.20 km		
Final Time and	Positio	n of Sigl	hting			
Time: 9:45	WP#:	107	Lat:	35.238987	Long:	-74.907061
Calculated Dista	nce Tra	veled:		1.14 km		
Behavior and A	ddition	al Com	nents			
Initial sighting of a	oprovima	toly 5 apir	male tight	ly packed After w	a bagan ta circla a	nimals moved int
Initial sighting			, 2013 <b>S</b>	ighting # 2		
Time: 10:10	WP#:	112	Lat:	35.012159	Long:	-74.594142
Vertical Angle:	1	Horizon	ntal Bear	ring in Degrees:	60 Sightin	g Cue: Body
On/Off Effort:	On	Т	rackline	32	Beaufort Sea	State: 3
Observer: E	rin	C	Observer	side: Right		
Actual Time an	d Positi	ion of Si	ghting			
Time: 10:11	WP#:	113	Lat:	35.011683	Long:	-74.595534
Species:Tursiops t	runcatus			Numbers (	Low/High/Best	): 15 / 18 / 17
Features used in	Species	ID: Rob	ust body a	appearance, unifor	m grey coloration	except slight
lighter blaze along	side. Rok	oust dorsa	l fin			
Representative in	-		-		25, 30	
Photographer:					Space	er: 37
Calculated distant	nce from	n Trackli	ne:	0.14 km		
Final Time and	Positio	n of Sigl	hting			
Time: 10:16	WP#:	114	Lat:	35.016362	Long	
Calculated Dista				33.010302	Long	-74.598305
Dehavior and A	nce Tra	veled:			Long	-74.598305
Denavior and A					Long	-74.598305
Behavior and A Group composed c	ddition	al Com	nents	0.58 km		
	ddition	al Com	nents	0.58 km		
Group composed c	ddition	al Com	nents	0.58 km		

Thursday, August 22, 2013 Sighting $\#$ 3
Initial sighting on Track
Time: 10:30 WP#: 118 Lat: 35.201128 Long: -74.996234
Vertical Angle: 2 Horizontal Bearing in Degrees: 45 Sighting Cue: Splash
On/Off Effort: On Trackline: <u>32</u> Beaufort Sea State: <u>2</u>
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time:         10:35         WP#:         119         Lat:         35.209608         Long:         -74.996505
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 10/12/11
Features used in Species ID: Robust body appearance, uniform grey coloration, robust dorsal fin.
Representative images used for Species ID: 41,53
Photographer: Erin Frame numbers: 38 - 58 Spacer: 59
Calculated distance from Trackline: 0.94 km
Final Time and Position of Sighting
Time:         10:35         WP#:         120         Lat:         35.214878         Long:         -75.003651
Calculated Distance Traveled: 0.87 km
Behavior and Additional Comments
Disperse group of animals with some smaller (sub adult) animals present. The group became less
disperse forming into a single group after plane began to circle them.
Thursday, August 22, 2013 Sighting # 4
Initial sighting on Track
Initial sighting on Track           Time:         10:53         WP#:         123         Lat:         35.099083         Long:         -74.947934
Initial sighting on Track         Time:       10:53       WP#:       123       Lat:       35.099083       Long:       -74.947934         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2
Initial sighting on Track         Time:       10:53       WP#:       123       Lat:       35.099083       Long:       -74.947934         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       31       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left
Initial sighting on Track         Time:       10:53       WP#:       123       Lat:       35.099083       Long:       -74.947934         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       31       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416Species:Grampus griseusNumbers (Low/High/Best):4/8/6
Initial sighting on Track         Time:       10:53       WP#:       123       Lat:       35.099083       Long:       -74.947934         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       31       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left         Actual Time and Position of Sighting         Time:       11:01       WP#:       124       Lat:       35.107765       Long:       -74.948416         Species:       Grampus griseus       Numbers (Low/High/Best):       4/8/6         Features used in Species ID:       Animals with lighter scarring on grey bodies, head coming to a point
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416Species:Grampus griseusNumbers (Low/High/Best):4/8/6Features used in Species ID:Animals with lighter scarring on grey bodies, head coming to a pointwith cleft in melon, no rostrum, tall falcate dorsal fin.
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416Species:Grampus griseusNumbers (Low/High/Best):4/8/6Features used in Species ID:Animals with lighter scarring on grey bodies, head coming to a pointwith cleft in melon, no rostrum, tall falcate dorsal fin.66, 74, 75
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416Species:Grampus griseusNumbers (Low/High/Best):4/8/6Features used in Species ID:Animals with lighter scarring on grey bodies, head coming to a pointwith cleft in melon, no rostrum, tall falcate dorsal fin.66, 74, 75Photographer:ErinFrame numbers:60 - 69Spacer:70
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416Species:Grampus griseusNumbers (Low/High/Best):4 / 8 / 6Features used in Species ID:Animals with lighter scarring on grey bodies, head coming to a pointwith cleft in melon, no rostrum, tall falcate dorsal fin.66, 74, 75Photographer:ErinFrame numbers:60 - 69Spacer:70Calculated distance from Trackline:0.97 km
Initial sighting on Track         Time:       10:53       WP#:       123       Lat:       35.099083       Long:       -74.947934         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       31       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       11:01       WP#:       124       Lat:       35.107765       Long:       -74.948416         Species:       Grampus griseus       Numbers (Low/High/Best):       4/8/6         Features used in Species ID:       Animals with lighter scarring on grey bodies, head coming to a point         with cleft in melon, no rostrum, tall falcate dorsal fin.       Representative images used for Species ID:       66, 74, 75         Photographer:       Erin       Frame numbers:       60 - 69       Spacer:       70         Calculated distance from Trackline:       0.97 km       M       10.97 km
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416Species:Grampus griseusNumbers (Low/High/Best):4 / 8 / 6Features used in Species ID:Animals with lighter scarring on grey bodies, head coming to a pointwith cleft in melon, no rostrum, tall falcate dorsal fin.Representative images used for Species ID:66, 74, 75Photographer:ErinFrame numbers:60 - 69Spacer:70Calculated distance from Trackline:0.97 kmFinal Time and Position of SightingTime:11:04WP#:125Lat:35.110743Long:-74.951201
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416Species:Grampus griseusNumbers (Low/High/Best):4/8/6Features used in Species ID:Animals with lighter scarring on grey bodies, head coming to a pointwith cleft in melon, no rostrum, tall falcate dorsal fin.Representative images used for Species ID:66, 74, 75Photographer:ErinFrame numbers:60 - 69Spacer:70Calculated distance from Trackline:0.97 kmFinal Time and Position of SightingTime:11:04WP#:125Lat:35.110743Long:-74.951201Calculated Distance Traveled:0.42 km
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416Species:Grampus griseusNumbers (Low/High/Best):4 / 8 / 6Features used in Species ID:Animals with lighter scarring on grey bodies, head coming to a pointwith cleft in melon, no rostrum, tall falcate dorsal fin.Representative images used for Species ID:66, 74, 75Photographer:ErinFrame numbers:60 - 69Spacer:70Calculated distance from Trackline:0.97 kmFinal Time and Position of SightingTime:11:04WP#:125Lat:35.110743Long:-74.951201
Initial sighting on Track         Time:       10:53       WP#:       123       Lat:       35.099083       Long:       -74.947934         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       31       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left         Actual Time and Position of Sighting         Time:       11:01       WP#:       124       Lat:       35.107765       Long:       -74.948416         Species:       Grampus griseus       Numbers (Low/High/Best):       4 / 8 / 6         Features used in Species ID:       Animals with lighter scarring on grey bodies, head coming to a point         with cleft in melon, no rostrum, tall falcate dorsal fin.         Representative images used for Species ID:       66, 74, 75         Photographer:       Erin       Frame numbers:       60 - 69       Spacer:       70         Calculated distance from Trackline:       0.97 km
Initial sighting on TrackTime:10:53WP#:123Lat:35.099083Long:-74.947934Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:31Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:11:01WP#:124Lat:35.107765Long:-74.948416Species:Grampus griseusNumbers (Low/High/Best):4 / 8 / 6Features used in Species ID:Animals with lighter scarring on grey bodies, head coming to a pointwith cleft in melon, no rostrum, tall falcate dorsal fin.Representative images used for Species ID:66, 74, 75Photographer:ErinFrame numbers:60 - 69Spacer:70Calculated distance from Trackline:0.97 kmTime:11:04WP#:125Lat:35.110743Long:-74.951201Calculated Distance Traveled:0.42 kmBehavior and Additional Comments

Thursday, August 22, 2013 $\mathbf{Sighting}~\#~5$
Initial sighting on Track
Time: 13:54 WP#: 141 Lat: 36.125049 Long: -74.426722
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: 45 Beaufort Sea State: 3
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time: 13:59 WP#: 142 Lat: 36.125361 Long: -74.412052
Species: Globicephala macrorhynchus Numbers (Low/High/Best): 35/45/40
Features used in Species ID: Dark bodied animals with square head, wide based dorsal fin placed
1/3 back animals body.
Representative images used for Species ID: 82,83
Photographer: Erin Frame numbers: 71 - 83 Spacer: 84
Calculated distance from Trackline: 1.32 km
Final Time and Position of Sighting
Time: 14:08 WP#: 143 Lat: 36.130822 Long: -74.417581
Calculated Distance Traveled: 0.78 km
Behavior and Additional Comments
Two groups logging at the surface, coloration behind dorsal fin very white.
Thursday, August 22, 2013 Sighting # 6
Thursday, August 22, 2013 Sighting # 6 Initial sighting on Track
e e
Initial sighting on Track
Initial sighting on Track           Time:         14:15         WP#:         146         Lat:         36.058962         Long:         -74.25864
Initial sighting on Track         Time:       14:15       WP#:       146       Lat:       36.058962       Long:       -74.25864         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3
Initial sighting on Track         Time:       14:15       WP#:       146       Lat:       36.058962       Long:       -74.25864         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       Off       Trackline:       45 - 44       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large grey body with wrinkles along posterior portion, large head
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large grey body with wrinkles along posterior portion, large headblowhole asymmetrically placed on left side of head.
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large grey body with wrinkles along posterior portion, large headblowhole asymmetrically placed on left side of head.92
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large grey body with wrinkles along posterior portion, large headblowhole asymmetrically placed on left side of head.92Photographer:ErinFrame numbers:85 - 93Spacer:94Calculated distance from Trackline:1.0 km
Initial sighting on Track         Time:       14:15       WP#:       146       Lat:       36.058962       Long:       -74.25864         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       Off       Trackline:       45 - 44       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left         Actual Time and Position of Sighting         Time:       14:21       WP#:       147       Lat:       36.050282       Long:       -74.255742         Species:       Physeter macrocephalus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Large grey body with wrinkles along posterior portion, large head         blowhole asymmetrically placed on left side of head.       92         Photographer:       Erin       Frame numbers:       85 - 93       Spacer:       94         Calculated distance from Trackline:       1.0 km       Internet mode for the side of sighting
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large grey body with wrinkles along posterior portion, large headblowhole asymmetrically placed on left side of head.Representative images used for Species ID:92Photographer:ErinFrame numbers:85 - 93Spacer:94Calculated distance from Trackline:1.0 km
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large grey body with wrinkles along posterior portion, large headblowhole asymmetrically placed on left side of head.Representative images used for Species ID:92Photographer:ErinFrame numbers:85 - 93Spacer:94Calculated distance from Trackline:1.0 kmFinal Time and Position of SightingTime:14:23WP#:148Lat:36.054911Long:-74.282856Calculated Distance Traveled:2.5 km
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large grey body with wrinkles along posterior portion, large headblowhole asymmetrically placed on left side of head.Representative images used for Species ID:92Photographer:ErinFrame numbers:85 - 93Spacer:94Calculated distance from Trackline:1.0 kmFinal Time and Position of SightingTime:14:23WP#:148Lat:36.054911Long:-74.282856Calculated Distance Traveled:2.5 kmEhavior and Additional Comments2.5 km
Initial sighting on TrackTime:14:15WP#:146Lat:36.058962Long:-74.25864Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OffTrackline:45 - 44Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:21WP#:147Lat:36.050282Long:-74.255742Species:Physeter macrocephalusNumbers (Low/High/Best):1/1/1Features used in Species ID:Large grey body with wrinkles along posterior portion, large headblowhole asymmetrically placed on left side of head.Representative images used for Species ID:92Photographer:ErinFrame numbers:85 - 93Spacer:94Calculated distance from Trackline:1.0 kmFinal Time and Position of SightingTime:14:23WP#:148Lat:36.054911Long:-74.282856Calculated Distance Traveled:2.5 km

Thu	irsday, August 2	22, 2013 Sigh	nting # 7		
Initial sighting of	on Track				
Time: 14:15	WP#: 146	Lat:	36.058962	Long:	-74.258640
Vertical Angle:	2 Horiz	ontal Bearing	g in Degrees:	90 Sighting	g Cue: Body
On/Off Effort:		Trackline:	44 - 45	Beaufort Sea S	tate: <u>3</u>
Observer: EI	<u>'in</u>	Observer sid	e: Right		
Actual Time and	d Position of S	Sighting			
Time: 14:23	WP#: 149	Lat:	36.050945	Long:	-74.282777
Species:Physeter n				Low/High/Best)	
Features used in					ion of body,
large asymmetrical					
Representative in	•	-		110, 111, 112, 119,	
Photographer:		ne numbers:	95 - 124	4 Space	r: <u>125</u>
Calculated distan	ice from Track	cline:	2.3 km		
Final Time and	Position of Si	ghting			
Time: <u>14:26</u>	WP#: <u>150</u>		36.05754	Long:	-74.275795
Calculated Distan	nce Traveled:	0.90	5 km		
Behavior and A	dditional Cor	nments			
	ırsday, August 2	22, 2013 Sigh	nting # 8		
Initial sighting o		Lati	26.047424	T	74 656 404
	WP#: 152		36.047134	Long:	-74.656491
Vertical Angle: _ On/Off Effort:		ontal Bearing Trackline:		90 Sighting Beaufort Sea S	
Observer: E		Observer sid		Deautort Sea S	
Actual Time and			ie. night		
Time: 14:39		0 0	26 05 22 22	Long:	-74.659556
Species:Tursiops tr		Lat	36.052323	Low/High/Best)	
Features used in		obust body app		- · ·	
present.	5 peeres 12. <u>ne</u>		curunce, unitor	ingrey coloration,	
Representative in	nages used for	r Species ID:		129, 137	
-	-	ne numbers:	126 - 13		r: 140
Calculated distan	ce from Track	cline:	0.64 km	I	
Final Time and	Position of Si	ghting			
Time: 14:50	WP#: 154	Lat:	36.055131	Long:	-74.651261
Calculated Dista			1 km	Long	74.031201
Behavior and A					
			o curfo co whit	podupelocelocel	procont
Loose grouping of a Animals slowed to a					
remainder of the sig	•	y ternamed at t	ne sundee taki	ig multiple bleating	, introdynout the
i ci i di la ci	jing.				

Tł	nursday, A	ugust 22	2, 2013 ${ m S}$	light	ing # 9				
Initial sighting	on Trac	k		C	C				
Time: 15:44	WP#:	167	Lat:		35.907502	I	long:	-74.6	58870
Vertical Angle:	2	Horizo	ntal Bea	ring i	n Degrees:	60	Sigh	ting Cue	: Spalsh
On/Off Effort:	On	Г	rackline	e:	3	Beau	fort Se	a State:	42
Observer:	Erin	(	Observer	side	Right				
Actual Time a	nd Positi	on of Si	ghting						
Time: 15:46	WP#:	168	Lat:	1	35.915245	Ι	long:	-74.6	62982
Species:Tursiops	truncatus		_		Numbers (	Low/H	igh/Be	est): 2	5 / 45 / 35
Features used in	1 Species	ID: Rob	ust body	appea	irance, unifor	m grey o	colorati	on except	lighter
blaze along anima	ıls side.								
Representative	images u	sed for S	Species 1	ID:		145	5, 153, 1	57	
Photographer:	Erin	Frame	e numbe	rs:	141 - 16	1	Sp	acer:	162
Calculated dista	nce from	Trackl	ine:		0.94 km				
Final Time and	l Positio	n of Sig	hting						
Time: 15:50	WP#:	169	Lat:		35.913848	I	Long:	-74.6	558081
Calculated Dist	ance Trav	veled:		0.47	km				
Behavior and A	Addition	al Com	ments						
Multiple groups, s	urfacing b	ut mostly	r traveling	) belov	v the surface.	Animal	s very a	ctive, cha	sing one
another, breachin	g.								

Monday, October 28, 2013 ${ m Sighting}~\#$ 1
Initial sighting on Track
Time:         9:35         WP#:         4         Lat:         36.121094         Long:         -74.688088
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>100</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 45 Beaufort Sea State: 1
Observer: Zach Observer side: Right
Actual Time and Position of Sighting
Time: 9:35 WP#: 5 Lat: 36.114021 Long: -74.689719
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 15/20/17
Features used in Species ID: Uniform gray, robust, white peduncles
Representative images used for Species ID: <u>No photos</u>
Photographer:         Zach         Frame numbers:         N/A         Spacer:         N/A
Calculated distance from Trackline: 0.800 km
Final Time and Position of Sighting
Time: <u>9:42</u> WP#: <u>7</u> Lat: <u>36.121443</u> Long: <u>-74.688694</u>
Calculated Distance Traveled: 0.8304 km
Behavior and Additional Comments
Three groups on surface, slow moving, some doing deeper dives
No photos
Monday, October 28, 2013 ${ m Sighting}~\#$ 2
Initial sighting on Track
Time:         9:35         WP#:         4         Lat:         36.121094         Long:         -74.688088
Vertical Angle:         2         Horizontal Bearing in Degrees:         60         Sighting Cue:         Body
Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:45Beaufort Sea State:1
On/Off Effort:OnTrackline:45Beaufort Sea State:1Observer:ErinObserver side:Left
On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting
On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       9:41       WP#:       6       Lat:       36.118893       Long:       -74.692822
On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting
On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       9:41       WP#:       6       Lat:       36.118893       Long:       -74.692822         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       8/10/8
On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       9:41       WP#:       6       Lat:       36.118893       Long:       -74.692822         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       8/10/8
On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       9:41       WP#:       6       Lat:       36.118893       Long:       -74.692822         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       8/10/8         Features used in Species ID:       Robust, dark color, blunt melon
On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       9:41       WP#:       6       Lat:       36.118893       Long:       -74.692822         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       8/10/8         Features used in Species ID:       Robust, dark color, blunt melon
On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       9:41       WP#:       6       Lat:       36.118893       Long:       -74.692822         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       8/10/8         Features used in Species ID:       Robust, dark color, blunt melon
On/Off Effort:       On       Trackline:       45       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       9:41       WP#:       6       Lat:       36.118893       Long:       -74.692822         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       8/10/8         Features used in Species ID:       Robust, dark color, blunt melon         Representative images used for Species ID:       210, 217, 243         Photographer:       Zach       Frame numbers:       206 - 260       Spacer:       261         Calculated distance from Trackline:       0.4906 km       Final Time and Position of Sighting
On/Off Effort:OnTrackline:45Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:9:41WP#:6Lat:36.118893Long:-74.692822Species:Globicephala macrorhynchusNumbers (Low/High/Best):8/10/8Features used in Species ID:Robust, dark color, blunt melonPhotographer:ZachFrame numbers:206 - 260Spacer:261Calculated distance from Trackline:0.4906 kmFinal Time and Position of SightingTime:9:42WP#:7Lat:36.121443Long:-74.688694
On/Off Effort:OnTrackline:45Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:9:41WP#:6Lat:36.118893Long:-74.692822Species:Globicephala macrorhynchusNumbers (Low/High/Best):8/10/8Features used in Species ID:Representative images used for Species ID:210, 217, 243Photographer:ZachFrame numbers:206 - 260Spacer:261Calculated distance from Trackline:0.4906 kmFinal Time and Position of SightingTime:9:42WP#:7Lat:36.121443Long:-74.688694Calculated Distance Traveled:0.4668 km0.4668 km </td
On/Off Effort:OnTrackline:45Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:9:41WP#:6Lat:36.118893Long:-74.692822Species:Globicephala macrorhynchusNumbers (Low/High/Best):8/10/8Features used in Species ID:Robust, dark color, blunt melonPhotographer:ZachFrame numbers:206 - 260Spacer:261Calculated distance from Trackline:0.4906 kmFinal Time and Position of SightingTime:9:42WP#:7Lat:36.121443Long:-74.688694
On/Off Effort:OnTrackline:45Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:9:41WP#:6Lat:36.118893Long:-74.692822Species:Globicephala macrorhynchusNumbers (Low/High/Best):8/10/8Features used in Species ID:Representative images used for Species ID:210, 217, 243Photographer:ZachFrame numbers:206 - 260Spacer:261Calculated distance from Trackline:0.4906 kmFinal Time and Position of SightingTime:9:42WP#:7Lat:36.121443Long:-74.688694Calculated Distance Traveled:0.4668 km0.4668 km </td
On/Off Effort:OnTrackline:45Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:9:41WP#:6Lat:36.118893Long:-74.692822Species:Globicephala macrorhynchusNumbers (Low/High/Best):8/10/8Features used in Species ID:Representative images used for Species ID:210, 217, 243Photographer:ZachFrame numbers:206 - 260Spacer:261Calculated distance from Trackline:0.4906 kmFinal Time and Position of SightingTime:9:42WP#:7Lat:36.121443Long:-74.688694Calculated Distance Traveled:0.4668 km0.4668 km </td

Monday, October 28, 2013 Sighting $\#$ 3
Initial sighting on Track
Time:         9:47         WP#:         11         Lat:         36.122524         Long:         -74.533742
Vertical Angle: 2 Horizontal Bearing in Degrees: 60 Sighting Cue: Body
On/Off Effort: On Trackline: 45 Beaufort Sea State: 1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         9:48         WP#:         12         Lat:         36.131832         Long:         -74.525365
Species:Tursiops truncatusNumbers (Low/High/Best):15/25/20
Features used in Species ID: Uniform gray, robust, white peduncles
Representative images used for Species ID: 277, 279, 285, 293
Photographer: Zach Frame numbers: 262 - 294 Spacer: 295
Calculated distance from Trackline: 1.280 km
Final Time and Position of Sighting
Time:     10:51     WP#:     13     Lat:     36.127492     Long:     -74.524121
Calculated Distance Traveled: 0.4953 km
Behavior and Additional Comments
Traveling just below the surface, jumping
Monday, October 28, 2013 Sighting # 4
Initial sighting on Track
Time:         11:02         WP#:         21         Lat:         36.049107         Long:         -74.414953
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Splash</u>
On/Off Effort:OnTrackline:44Beaufort Sea State:3Observer:ZachObserver side:Right
Actual Time and Position of Sighting
Time:         11:02         WP#:         22         Lat:         36.050359         Long:         -74.410421           Special Turning transformer         Numbers (Low/Ulich/Dest):         -20/10/10         -20/10/10         -20/10/10
Species: Tursiops truncatusNumbers (Low/High/Best):30/50/40Features used in Species ID:Uniform gray, robust, white peduncles
reatures used in Species ID. onnormigray, iobust, write pedureles
Representative images used for Species ID: 297, 299, 315
Photographer: Zach Frame numbers: 296-319 Spacer: 320
Calculated distance from Trackline: 0.4306 km
Final Time and Position of Sighting
8 8
Time: 11:08 WP#: 23 Lat: 36.045743 Long: -74.407162
Time:         11:08         WP#:         23         Lat:         36.045743         Long:         -74.407162           Calculated Distance Traveled:         0.5910 km         0.5910 km         0.5910 km         0.5910 km
Calculated Distance Traveled: 0.5910 km
Calculated Distance Traveled: 0.5910 km Behavior and Additional Comments
Calculated Distance Traveled: 0.5910 km
Calculated Distance Traveled: 0.5910 km Behavior and Additional Comments

Monday, October 28, 2013 Sighting $\#$ 5
Initial sighting on Track
Time: <u>11:23</u> WP#: <u>28</u> Lat: <u>36.049967</u> Long: <u>-74.962257</u>
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Splash</u>
On/Off Effort: On Trackline: 44 Beaufort Sea State: 1
Observer: Zach Observer side: Right
Actual Time and Position of Sighting
Time: 11:24 WP#: 29 Lat: 36.059610 Long: -74.960555
Species: Tursiops truncatus         Numbers (Low/High/Best):         6/6/6
Features used in Species ID: Uniform gray, robust, white peduncles
Representative images used for Species ID: 323, 326
Photographer: Zach Frame numbers: <u>321-333</u> Spacer: <u>334</u>
Calculated distance from Trackline: 1.083 km
Final Time and Position of Sighting
Time:         11:25         WP#:         30         Lat:         36.060568         Long:         -74.966801
Calculated Distance Traveled: 0.5715 km
Behavior and Additional Comments
Swimming in twos, jumping, regular surfacing
Manday October 00, 2012 Ci 1 (in 1 // C
Monday, October 28, 2013 Sighting # 6
Initial sighting on Track
Time: 11:50 WP#: 36 Lat: 35.976053 Long: -74.600772
Vertical Angle:4Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:43Beaufort Sea State:1
On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right
Actual Time and Position of Sighting
Time:         11:51         WP#:         37         Lat:         35.969512         Long:         -74.602950
Species: <i>Globicephala macrorhynchus</i> Numbers (Low/High/Best): 1/1/1
· · · · · · · · · · · · · · · · · · ·
Features used in Species ID: Dark in color, robust, blunt melon
Features used in Species ID: Dark in color, robust, blunt melon
Features used in Species ID:       Dark in color, robust, blunt melon         Representative images used for Species ID:       336, 345
Features used in Species ID:       Dark in color, robust, blunt melon         Representative images used for Species ID:       336, 345         Photographer:       Zach       Frame numbers:       355 - 354       Spacer:       355
Features used in Species ID:       Dark in color, robust, blunt melon         Representative images used for Species ID:       336, 345         Photographer:       Zach       Frame numbers:       355 - 354       Spacer:       355         Calculated distance from Trackline:       0.7533 km       0.7533 km       0.7533 km
Features used in Species ID:       Dark in color, robust, blunt melon         Representative images used for Species ID:       336, 345         Photographer:       Zach       Frame numbers:       355 - 354       Spacer:       355         Calculated distance from Trackline:       0.7533 km       Final Time and Position of Sighting       Final Time and Position of Sighting
Features used in Species ID:       Dark in color, robust, blunt melon         Representative images used for Species ID:       336, 345         Photographer:       Zach       Frame numbers:       355 - 354       Spacer:       355         Calculated distance from Trackline:       0.7533 km       0.7533 km       0.7533 km       0.7533 km         Final Time and Position of Sighting       Time:       11:55       WP#:       38       Lat:       35.965155       Long:       -74.597208
Features used in Species ID:       Dark in color, robust, blunt melon         Representative images used for Species ID:       336, 345         Photographer:       Zach       Frame numbers:       355 - 354       Spacer:       355         Calculated distance from Trackline:       0.7533 km       0.7533 km       0.7533 km       0.7533 km         Final Time and Position of Sighting       Time:       11:55       WP#:       38       Lat:       35.965155       Long:       -74.597208         Calculated Distance Traveled:       0.7083 km       0.7083 km       0.7083 km       0.7083 km
Features used in Species ID:       Dark in color, robust, blunt melon         Representative images used for Species ID:       336, 345         Photographer:       Zach       Frame numbers:       355 - 354       Spacer:       355         Calculated distance from Trackline:       0.7533 km       0.7533 km       0.7533 km       0.7533 km         Final Time and Position of Sighting       Time:       11:55       WP#:       38       Lat:       35.965155       Long:       -74.597208         Calculated Distance Traveled:       0.7083 km       0.7083 km       0.7083 km       0.7083 km
Features used in Species ID:       Dark in color, robust, blunt melon         Representative images used for Species ID:       336, 345         Photographer:       Zach       Frame numbers:       355 - 354       Spacer:       355         Calculated distance from Trackline:       0.7533 km       0.7533 km       0.7533 km       0.7533 km         Final Time and Position of Sighting       Time:       11:55       WP#:       38       Lat:       35.965155       Long:       -74.597208         Calculated Distance Traveled:       0.7083 km       0.7083 km       0.7083 km       0.7083 km
Features used in Species ID:       Dark in color, robust, blunt melon         Representative images used for Species ID:       336, 345         Photographer:       Zach       Frame numbers:       355 - 354       Spacer:       355         Calculated distance from Trackline:       0.7533 km       0.7533 km       0.7533 km       0.7533 km         Final Time and Position of Sighting       Time:       11:55       WP#:       38       Lat:       35.965155       Long:       -74.597208         Calculated Distance Traveled:       0.7083 km       0.7083 km       0.7083 km       0.7083 km

Monday, October 28, 2013 Sighting $\# 7$
Initial sighting on Track
Time:         11:57         WP#:         40         Lat:         35.977980         Long:         -74.543555
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Splash
On/Off Effort:         On         Trackline:         43         Beaufort Sea State:         1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         11:58         WP#:         41         Lat:         35.982661         Long:         -74.545324
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 15/25/20
Features used in Species ID: Uniform gray, robust, white peduncle
Representative images used for Species ID: 358, 362, 369, 376
Photographer:     Zach     Frame numbers:     356 - 382     Spacer:     383
Calculated distance from Trackline: 0.5443 km
Final Time and Position of Sighting
Time:         12:01         WP#:         42         Lat:         35.985625         Long:         -74.543024
Calculated Distance Traveled: 0.3892 km
Behavior and Additional Comments
Belly swimming, lots of surface activity, playing
Monday, October 28, 2013 Sighting # 8
Initial sighting on Track
Initial sighting on Track           Time:         12:04         WP#:         46         Lat:         35.978044         Long:         -74.432618
Initial sighting on TrackTime:12:04WP#:46Lat:35.978044Long:-74.432618Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:12:04WP#:46Lat:35.978044Long:-74.432618Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:43Beaufort Sea State:3
Initial sighting on TrackTime:12:04WP#:46Lat:35.978044Long:-74.432618Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:43Beaufort Sea State:3Observer:ErinObserver side:Left
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting
Initial sighting on TrackTime:12:04WP#:46Lat:35.978044Long:-74.432618Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:43Beaufort Sea State:3Observer:ErinObserver side:LeftImage: Sighting Cue:Actual Time and Position of SightingTime:12:05WP#:47Lat:35.978777Long:-74.446052
Initial sighting on TrackTime:12:04WP#:46Lat:35.978044Long:-74.432618Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:43Beaufort Sea State:3Observer:ErinObserver side:LeftActual Time and Position of SightingImage: State:11Time:12:05WP#:47Lat:35.978777Long:-74.446052Species:Tursiops truncatusNumbers (Low/High/Best):3/3/33/3/3
Initial sighting on TrackTime:12:04WP#:46Lat:35.978044Long:-74.432618Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:43Beaufort Sea State:3Observer:ErinObserver side:LeftImage: Sighting Cue:Actual Time and Position of SightingTime:12:05WP#:47Lat:35.978777Long:-74.446052
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left
Initial sighting on TrackTime:12:04WP#:46Lat:35.978044Long:-74.432618Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:43Beaufort Sea State:3Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:05WP#:47Lat:35.978777Long:-74.446052Species:Tursiops truncatusNumbers (Low/High/Best):3/3/3Features used in Species ID:Uniform gray, robust, white pedunclesN/A
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       12:05       WP#:       47       Lat:       35.978777       Long:       -74.446052         Species: Tursiops truncatus       Numbers (Low/High/Best):       3/3/3         Features used in Species ID:       Uniform gray, robust, white peduncles         Representative images used for Species ID:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Calculated distance from Trackline:       1.212 km       M       M       M
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left       4       Long:       -74.446052         Actual Time and Position of Sighting       Time:       12:05       WP#:       47       Lat:       35.978777       Long:       -74.446052         Species:       Tursiops truncatus       Numbers (Low/High/Best):       3/3/3         Features used in Species ID:       Uniform gray, robust, white peduncles       3/3/3         Representative images used for Species ID:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Calculated distance from Trackline:       1.212 km       Initial sighting       Initial sighting       Initial sighting
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       12:05       WP#:       47       Lat:       35.978777       Long:       -74.446052         Species:       Tursiops truncatus       Numbers (Low/High/Best):       3/3/3         Features used in Species ID:       Uniform gray, robust, white peduncles         Representative images used for Species ID:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Final Time and Position of Sighting       1.212 km       Time:       12:09       WP#:       48       Lat:       35.978814       Long:       -74.441494
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       12:05       WP#:       47       Lat:       35.978777       Long:       -74.446052         Species: Tursiops truncatus       Numbers (Low/High/Best):       3/3/3         Features used in Species ID:       Uniform gray, robust, white peduncles         Representative images used for Species ID:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Final Time and Position of Sighting       Time:       1.212 km       Calculated Distance Traveled:       0.4102 km
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       12:05       WP#:       47       Lat:       35.978777       Long:       -74.446052         Species:       Tursiops truncatus       Numbers (Low/High/Best):       3/3/3         Features used in Species ID:       Uniform gray, robust, white peduncles         Representative images used for Species ID:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Final Time and Position of Sighting       1.212 km       Time:       12:09       WP#:       48       Lat:       35.978814       Long:       -74.441494
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       12:05       WP#:       47       Lat:       35.978777       Long:       -74.446052         Species: Tursiops truncatus       Numbers (Low/High/Best):       3/3/3         Features used in Species ID:       Uniform gray, robust, white peduncles         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Final Time and Position of Sighting       Time:       12:09       WP#:       48       Lat:       35.978814       Long:       -74.441494         Calculated Distance       Trackline:       0.4102 km       Long:       -74.441494
Initial sighting on Track         Time:       12:04       WP#:       46       Lat:       35.978044       Long:       -74.432618         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       43       Beaufort Sea State:       3         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       12:05       WP#:       47       Lat:       35.978777       Long:       -74.446052         Species:       Tursiops truncatus       Numbers (Low/High/Best):       3/3/3         Features used in Species ID:       Uniform gray, robust, white peduncles         Representative images used for Species ID:       N/A         Photographer:       Zach       Frame numbers:       No photos       Spacer:       N/A         Calculated distance from Trackline:       1.212 km       Initial Time and Position of Sighting       Inite:       2:09       WP#:       48       Lat:       35.978814       Long:       -74.441494         Calculated Distance Traveled:       0.4102 km       Initial Supervisition       Behavior and Additional Comments

Monday, October 28, 2013 Sighting $\#$ 9
Initial sighting on Track
Time:         12:18         WP#:         52         Lat:         35.908093         Long:         -74.425007
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>100</u> Sighting Cue: <u>Splash</u>
On/Off Effort: On Trackline: 42 Beaufort Sea State: 3
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         12:23         WP#:         53         Lat:         35.905673         Long:         -74.423186
Species:Stenella frontalisNumbers (Low/High/Best):200/250/225
Features used in Species ID: Alternating light and dark pattern down body, spotting, white tip
to rostrum
Representative images used for Species ID:387,408,410Photographer:ZachFrame numbers:384-413Spacer:414
Photographer:       Zach       Frame numbers:       384 - 413       Spacer:       414         Calculated distance from Trackline:       0.3151 km
Final Time and Position of Sighting
Time:         12:24         WP#:         54         Lat:         35.906161         Long:         -74.428127           Calculated Distance Traveled:         0.4483 km         0.4483 km
Behavior and Additional Comments
Large group, somewhat scattered, jumping, all moving one direction
Monday, October 28, 2013 Sighting # 10
Monday, October 28, 2013 Sighting # 10
Initial sighting on Track
Initial sighting on Track           Time:         12:32         WP#:         57         Lat:         35.907041         Long:         -74.686297
Initial sighting on Track
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Splash
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:Left
Initial sighting on Track         Time:       12:32       WP#:       57       Lat:       35.907041       Long:       -74.686297         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left       Left
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftImage: Splash of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450
Initial sighting on Track         Time:       12:32       WP#:       57       Lat:       35.907041       Long:       -74.686297         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left       Left
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/6
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/6Features used in Species ID:Black in color, blunt head, large dorsal finPersentative images used for Species ID:
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/66/6/6Features used in Species ID:Black in color, blunt head, large dorsal finArme numbers:415, 416, 427, 428Photographer:ZachFrame numbers:415 - 431Spacer:432
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/6Features used in Species ID:Black in color, blunt head, large dorsal finPersentative images used for Species ID:
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/66/6/6Features used in Species ID:Black in color, blunt head, large dorsal finArme numbers:415, 416, 427, 428Photographer:ZachFrame numbers:415 - 431Spacer:432
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/6Features used in Species ID:Black in color, blunt head, large dorsal finPhotographer:ZachZachFrame numbers:415-431Spacer:432Calculated distance from Trackline:0.4467 km
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/6Features used in Species ID:Black in color, blunt head, large dorsal finPhotographer:ZachFrame numbers:415.416,427,428Photographer:ZachFrame numbers:415.431Spacer:432Calculated distance from Trackline:0.4467 kmFinal Time and Position of Sighting
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/6Features used in Species ID:Black in color, blunt head, large dorsal finPhotographer:ZachFrame numbers:415.431Spacer:432Calculated distance from Trackline:0.4467 kmFinal Time and Position of SightingTime:12:33WP#:59Lat:35.906860Long:-74.699133
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/6Features used in Species ID:Black in color, blunt head, large dorsal finRepresentative images used for Species ID:415.416,427,428Photographer:ZachFrame numbers:415-431Spacer:432Calculated distance from Trackline:0.4467 kmFinal Time and Position of SightingTime:12:33WP#:59Lat:35.906860Long:-74.699133Calculated Distance Traveled:1.302 km
Initial sighting on TrackTime:12:32WP#:57Lat:35.907041Long:-74.686297Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:12:33WP#:58Lat:35.903083Long:-74.685450Species:Globicephala macrorhynchusNumbers (Low/High/Best):6/6/6Features used in Species ID:Black in color, blunt head, large dorsal finRepresentative images used for Species ID:415.416,427,428Photographer:ZachFrame numbers:415-431Spacer:432Calculated distance from Trackline:0.4467 kmFinal Time and Position of SightingTime:12:33WP#:59Lat:35.906860Long:-74.699133Calculated Distance Traveled:1.302 km

Monday, October 28, 2013 Sighting $\#$ 11
Initial sighting on Track
Time: <u>12:36</u> WP#: <u>62</u> Lat: <u>35.909179</u> Long: <u>-74.779837</u>
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Splash
On/Off Effort: On Trackline: 42 Beaufort Sea State: 1
Observer: Zach Observer side: Right
Actual Time and Position of Sighting
Time:         12:36         WP#:         63         Lat:         35.915063         Long:         -74.780864
Species:Tursiops truncatusNumbers (Low/High/Best):6/6/6
Features used in Species ID: Uniform gray, robust, white peduncles
Representative images used for Species ID: 442
Representative images used for Species ID:442Photographer:ZachFrame numbers:433 - 452Spacer:453
Calculated distance from Trackline: 0.6608 km
Final Time and Position of Sighting
Time:         12:39         WP#:         65         Lat:         35.907829         Long:         -74.778094           Calculated Distance Traveled:         0.8422 km         0.8422 km         -74.778094         -74.778094
Behavior and Additional Comments
Sitting just below the surface not moving much
Monday, October 28, 2013 Sighting # 12 Initial sighting on Track
Time:         12:36         WP#:         62         Lat:         35.909179         Long:         -74.779837
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Splash
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:1
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:1Observer:ZachObserver side:Right
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:1Observer:ZachObserver side:RightActual Time and Position of Sighting
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:1Observer:ZachObserver side:RightActual Time and Position of SightingTime:12:39WP#:64Lat:35.914425Long:-74.781194
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:1Observer:ZachObserver side:RightActual Time and Position of SightingTime:12:39WP#:64Lat:35.914425Long:-74.781194
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6         Features used in Species ID:       Black bodied, blunt melon, large dorsal fin
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6         Features used in Species ID:       Black bodied, blunt melon, large dorsal fin       1         Representative images used for Species ID:       434, 448
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6         Features used in Species ID:       Black bodied, blunt melon, large dorsal fin         Representative images used for Species ID:         433 - 452       Spacer:       453
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6         Features used in Species ID:       Black bodied, blunt melon, large dorsal fin         Representative images used for Species ID:         433 - 452       Spacer:       453         Calculated distance from Trackline:       0.5960 km
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6         Features used in Species ID:       Black bodied, blunt melon, large dorsal fin         Representative images used for Species ID:         433 - 452       Spacer:       453         Calculated distance from Trackline:       0.5960 km       453         Final Time and Position of Sighting
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:42Beaufort Sea State:1Observer:ZachObserver side:RightActual Time and Position of SightingTime:12:39WP#:64Lat:35.914425Long:-74.781194Species:Globicephala macrorhynchusNumbers (Low/High/Best):5/7/6Features used in Species ID:Black bodied, blunt melon, large dorsal finRepresentative images used for Species ID:433 - 452Spacer:453Calculated distance from Trackline:0.5960 kmFinal Time and Position of SightingTime:12:39WP#:65Lat:35.907829Long:-74.778094
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6         Features used in Species ID:       Black bodied, blunt melon, large dorsal fin         Representative images used for Species ID:         433 - 452       Spacer:       453         Calculated distance from Trackline:       0.5960 km       5         Final Time and Position of Sighting         Time:       12:39       WP#:       65       Lat:       35.907829       Long:       -74.778094         Calculated Distance Traveled:       0.7848 km       0.7848 km       0.7848 km       0.7848 km       0.7848 km
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6         Features used in Species ID:       Black bodied, blunt melon, large dorsal fin         Features used for Species ID:         434, 448         Photographer:       Zach       Frame numbers:       433 - 452       Spacer:       453         Calculated distance from Trackline:       0.5960 km       1       1       1       1         Final Time and Position of Sighting       Time:       12:39       WP#:       65       Lat:       35.907829       Long:       -74.778094         Calculated Distance Traveled:       0.7848 km       0.7848 km       0       0       1       1
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6         Features used in Species ID:       Black bodied, blunt melon, large dorsal fin         Representative images used for Species ID:         433 - 452       Spacer:       453         Calculated distance from Trackline:       0.5960 km       5         Final Time and Position of Sighting         Time:       12:39       WP#:       65       Lat:       35.907829       Long:       -74.778094         Calculated Distance Traveled:       0.7848 km       0.7848 km       0.7848 km       0.7848 km       0.7848 km
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       42       Beaufort Sea State:       1         Observer:       Zach       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:39       WP#:       64       Lat:       35.914425       Long:       -74.781194         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       5/7/6         Features used in Species ID:       Black bodied, blunt melon, large dorsal fin         Features used for Species ID:         434, 448         Photographer:       Zach       Frame numbers:       433 - 452       Spacer:       453         Calculated distance from Trackline:       0.5960 km       1       1       1       1         Final Time and Position of Sighting       Time:       12:39       WP#:       65       Lat:       35.907829       Long:       -74.778094         Calculated Distance Traveled:       0.7848 km       0.7848 km       0       0       1       1

Monday, October 28, 2013 Sighting # 13
Initial sighting on Track
Time:         15:14         WP#:         78         Lat:         35.058787         Long:         -75.156764
Vertical Angle: 2 Horizontal Bearing in Degrees: 120 Sighting Cue: Body
On/Off Effort: On Trackline: 29 Beaufort Sea State: 2
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         15:20         WP#:         79         Lat:         35.064253         Long:         -75.154661
Species:Tursiops truncatusNumbers (Low/High/Best):8/12/11
Features used in Species ID: Uniform gray, robust, white peduncles
Representative images used for Species ID: 461
Photographer:ZachFrame numbers:454 - 464Spacer:465Calculated distance from Trackline:0.6372 km
Final Time and Position of Sighting
Time:         15:23         WP#:         80         Lat:         35.060741         Long:         -75.156011
Calculated Distance Traveled: 0.4094 km
Behavior and Additional Comments
Swimming just below the surface, fast travel, 2 groups, evasive
Monday, October 28, 2013 Sighting # 14
Initial sighting on Track
Time:         15:26         WP#:         82         Lat:         34.993722         Long:         -75.068731
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Splash
On/Off Effort: On Trackline: 29 Beaufort Sea State: 2
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         15:29         WP#:         83         Lat:         35.005833         Long:         -75.066890
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 15/22/20
Features used in Species ID: Uniform gray, robust, white peduncles
Representative images used for Species ID: 475, 481
Photographer:         Zach         Frame numbers:         466 - 481         Spacer:         482
Calculated distance from Trackline: 1.357 km
Final Time and Position of Sighting
Time: 15:33 WP#: 84 Lat: 34.996904 Long: -75.069608
Calculated Distance Traveled: 1.023 km
Behavior and Additional Comments
Traveling fast, jumping, swimming subsurface

	Monday, O	ctober 2	8, 2013 Sig	ghting # 13			
Initial sightin	ng on Trac	:k		6			
Time: 16:07	WP#:	90	Lat:	35.166933	Long:	-75.43	3329
Vertical Angl	e: 3	Horizo	ntal Beari	ng in Degrees:	110 Sighti	ng Cue:	Splash
On/Off Effort	On	r	Frackline:	2	Beaufort Sea	State:	28
Observer:	Zach	(	Observer s	ide: Right			
Actual Time	and Positi	ion of S	ighting				
Time: 16:08	WP#:	91	Lat:	35.170267	Long:	-75.42	3025
Species: Tursio	os truncatus			Numbers (I	Low/High/Bes	st): 4	1/4/4
Features used	in Species	ID: Uni	iform gray, r	obust, white pedu	incles		
Representativ	e images u	sed for	Species II	):	489		
Photographer	Zach	Fram	e numbers	: 483 - 490	) Space	cer:	491
Calculated dis	stance fron	n Trackl	line:	1.007 km			
Final Time a	nd Positio	n of Sig	ghting				
Time: 16:12	WP#:	92	Lat:	35.170612	Long:	-75.42	4402
Calculated Di	stance Tra	veled:	0.1	1309 km			
Behavior and	l Addition	al Com	ments				

Friday, March 22, 2013 Sighting $\#$ 1
Initial sighting on Track
Time: 14:56 WP#: 35 Lat: 30.105041 Long: -80.380472
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: <u>3</u> Beaufort Sea State: <u>2</u>
Observer: Zach Observer side: Left
Actual Time and Position of Sighting
Time:         15:00         WP#:         36         Lat:         30.108723         Long:         80.398359
Species: Stenella frontalis Numbers (Low/High/Best): 12 / 15 / 14
Features used in Species ID: Variable spotting pattern between individuals, white tip to rostrum.
Representative images used for Species ID: 44, 48, 64, 78
Photographer:         Ryan         Frame numbers:         28 - 85         Spacer:         86
Calculated distance from Trackline: 1.77 km
Final Time and Position of Sighting
Time:         15:06         WP#:         37         Lat:         30.112497         Long:         -80.398536
Calculated Distance Traveled: 0.42 km
Behavior and Additional Comments
One animal with a sizable fish in its mouth.
Friday, March 22, 2013 Sighting $\#$ 2
Initial sighting on Track
Time:         15:15         WP#:         40         Lat:         30.103929         Long:         -80.105794
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 3 Beaufort Sea State: 2
Observer: Zach Observer side: Left
Actual Time and Position of Sighting
Time:         15:18         WP#:         41         Lat:         30.106511         Long:         -80.117174
Species: Tursiops truncatus       Numbers (Low/High/Best): 3 / 4 / 3
Features used in Species ID: Robust body appearance, white peduncle coloration
Representative images used for Species ID: 88, 91, 93
Photographer: Ryan Frame numbers: 87-96 Spacer: 97
Calculated distance from Trackline: 1.13 km
Final Time and Position of Sighting
Time:         15:20         WP#:         42         Lat:         30.107340         Long:         -80.121255
Calculated Distance Traveled: 0.40 km
Behavior and Additional Comments
Two of the animals staying close to one another and of different size, possible mom / juvenile pair
White peduncles present
White peduncles present

	Friday,	March 22	, 2013 Sig	hting # 3			
Initial sighting	on Trac	:k	U	C			
Time: 15:35	WP#:	46	Lat:	30.164918	Long	g:79	.853449
Vertical Angle:	3	Horizon	ntal Bearin	g in Degrees:	60 Si	ghting Cu	e: Splash
On/Off Effort:	On	Т	rackline:	4	Beaufort	Sea State:	2
Observer: F	Ryan	C	Observer si	de: Right			
Actual Time ar	nd Positi	ion of Si	ghting				
Time: 15:37	WP#:	47	Lat:	30.165759	Long	g:79	.849605
Species: Tursiops	truncatus			Numbers (I	Low/High/	Best):	3/3/3
Features used in	Species	s ID: Rob	ust body app	pearance, white p	oeduncle co	loration	
Representative i	images u	ised for S	Species ID:		110 - 1	113	
Photographer:	Ryan	Frame	numbers:	98 - 123	5	Spacer:	124
Calculated dista	nce fron	n Trackli	ne:	0.38 km			
Final Time and	l Positio	n of Sigl	hting				
		n or sigi	nung				
Time: 15:42		0	0	30.168036	Long	g:79	.841694
Time: <u>15:42</u> Calculated Dista	WP#:	48	Lat:		Long	g:79	0.841694
	WP#: ance Tra	48 veled:	Lat:		Long	g:79	0.841694
Calculated Dista	WP#: ance Tra Addition	48 veled:	Lat:		Long	g:79	0.841694
Calculated Dista Behavior and A	WP#: ance Tra Addition	48 veled:	Lat:		Long	g:79	0.841694
Calculated Dista Behavior and A	WP#: ance Tra Addition	48 veled:	Lat:		Long	g:79	0.841694

Thursday, May 9, 2013 Sighting $\#$ 1
Initial sighting on Track
Time:         9:40         WP#:         7         Lat:         30.499045         Long:         -80.382285
Vertical Angle: 2 Horizontal Bearing in Degrees: 60 Sighting Cue: Splash
On/Off Effort: On Trackline: 9 Beaufort Sea State: 2
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time:         9:44         WP#:         8         Lat:         30.499629         Long:         -80.383822
Species:Tursiops truncatus         Numbers (Low/High/Best):         12/15/15
Features used in Species ID: Robust, uniform gray body
Representative images used for Species ID: 5,6
Photographer:       Erin       Frame numbers:       1 - 16       Spacer:       17         Calculated distance from Trackline:       0.16 km
Final Time and Position of Sighting
Time:         9:50         WP#:         9         Lat:         30.498676         Long:         -80.386642
Calculated Distance Traveled: 0.29 km
Behavior and Additional Comments
Group dove after initial sighting. During the first two times we tried to circle the animals the group
would dive from the surface as we approached then reappear once we had passed.
Not a cooperative group
Thursday, May 9, 2013 Sighting # 2
Initial sighting on Track
Initial sighting on Track           Time:         10:12         WP#:         15         Lat:         30.434412         Long:         -80.274911
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       3
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       3
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left
Initial sighting on TrackTime:10:12WP#:15Lat:30.434412Long:-80.274911Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:8Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:14WP#:16Lat:30.437419Long:-80.272449Species:Turnsiops truncatusNumbers (Low/High/Best):6/7/6
Initial sighting on TrackTime:10:12WP#:15Lat:30.434412Long:-80.274911Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:8Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingLong:-80.272449Time:10:14WP#:16Lat:30.437419Long:-80.272449
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left         Actual Time and Position of Sighting         Time:       10:14       WP#:       16       Lat:       30.437419       Long:       -80.272449         Species:       Turnisiops truncatus       Numbers (Low/High/Best):       6/7/6         Features used in Species ID:       Robust, uniform gray body
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       10:14       WP#:       16       Lat:       30.437419       Long:       -80.272449         Species:       Tuncatus       Numbers (Low/High/Best):       6/7/6         Features used in Species ID:       Robust, uniform gray body       20, 25, 29
Initial sighting on TrackTime:10:12WP#:15Lat:30.434412Long:-80.274911Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:8Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:14WP#:16Lat:30.437419Long:-80.272449Species:Tursiops truncatusNumbers (Low/High/Best):6/7/6Features used in Species ID:Robust, uniform gray bodyPhotographer:ErinFrame numbers:18 - 32Spacer:33
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       10:14       WP#:       16       Lat:       30.437419       Long:       -80.272449         Species: Tursiops truncatus       Numbers (Low/High/Best):       6/7/6         Features used in Species ID:       Robust, uniform gray body       6/7/6         Representative images used for Species ID:       20, 25, 29       20, 25, 29         Photographer:       Erin       Frame numbers:       18 - 32       Spacer:       33         Calculated distance from Trackline:       0.40 km       0.40 km       0.40 km       0.40 km
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       10:14       WP#:       16       Lat:       30.437419       Long:       -80.272449         Species: Tursiops truncatus       Numbers (Low/High/Best):       6/7/6         Features used in Species ID:       Robust, uniform gray body
Initial sighting on TrackTime:10:12WP#:15Lat:30.434412Long:-80.274911Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:8Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:14WP#:16Lat:30.437419Long:-80.272449Species:Tursiops truncatusNumbers (Low/High/Best):6 / 7 / 6Features used in Species ID:Representative images used for Species ID:20, 25, 29Photographer:ErinFrame numbers:18 - 32Spacer:33Calculated distance from Trackline:0.40 km33Long:-80.270761Final Time and Position of SightingTime:10:18WP#:17Lat:30.430933Long:-80.270761
Initial sighting on Track         Time:       10:12       WP#:       15       Lat:       30.434412       Long:       -80.274911         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       3         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       10:14       WP#:       16       Lat:       30.437419       Long:       -80.272449         Species: Tursiops truncatus       Numbers (Low/High/Best):       6/7/6         Features used in Species ID:       Robust, uniform gray body
Initial sighting on TrackTime:10:12WP#:15Lat:30.434412Long:-80.274911Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:8Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:14WP#:16Lat:30.437419Long:-80.272449Species:Tursiops truncatusNumbers (Low/High/Best):6 / 7 / 6Features used in Species ID:Representative images used for Species ID:20, 25, 29Photographer:ErinFrame numbers:18 - 32Spacer:33Calculated distance from Trackline:0.40 km33Long:-80.270761Final Time and Position of SightingTime:10:18WP#:17Lat:30.430933Long:-80.270761
Initial sighting on TrackTime:10:12WP#:15Lat:30.434412Long:-80.274911Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:8Beaufort Sea State:3Observer:RyanObserver side:LeftActual Time and Position of SightingTime:10:14WP#:16Lat:30.437419Long:-80.272449Species:Fursiops truncatusNumbers (Low/High/Best):6 / 7 / 6Features used in Species ID:Robust, uniform gray bodyRepresentative images used for Species ID:20, 25, 29Photographer:ErinFrame numbers:18 - 32Spacer:33Calculated distance from Trackline:0.40 kmFinal Time and Position of SightingTime:10:18WP#:17Lat:30.430933Long:-80.270761Calculated Distance Traveled:0.73 km
Initial sighting on TrackTime:10:12WP#:15Lat:30.434412Long:-80.274911Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:8Beaufort Sea State:3Observer:RyanObserver side:LeftLong:-80.272449Actual Time and Position of SightingTime:10:14WP#:16Lat:30.437419Long:-80.272449Species:Fursiops truncatusNumbers (Low/High/Best):6/7/66/7/6Features used in Species ID:Representative images used for Species ID:20, 25, 2920Photographer:ErinFrame numbers:18 - 32Spacer:33Calculated distance from Trackline:0.40 km17Lat:30.430933Long:-80.270761Final Time and Position of SightingTime:10:18WP#:17Lat:30.430933Long:-80.270761Calculated Distance Traveled:0.73 kmBehavior and Additional Comments0.73 km10.73 km10.73 km

Thursday, May 9, 2013 Sighting $\#$ 3	
Initial sighting on Track	
Time: 10:52 WP#: 25 Lat: 30.364665 Long: -80.396043	
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Splas</u>	h
On/Off Effort: On Trackline: 7 Beaufort Sea State: 2	
Observer: Ryan Observer side: Left	
Actual Time and Position of Sighting	
Time:         10:56         WP#:         26         Lat:         30.364507         Long:         -80.396673	
Species:Stenella frontalisNumbers (Low/High/Best):15/20/16	5
Features used in Species ID: Alternating light and dark pattern down body, spotted, white tip	
to nose	
Representative images used for Species ID: 46	
Photographer:ErinFrame numbers:34 - 51Spacer:52Calculated distance from Trackline:0.06 km	
Final Time and Position of Sighting	
Time:         10:59         WP#:         27         Lat:         30.361042         Long:         -80.399348	
Calculated Distance Traveled: 0.46 km	
Behavior and Additional Comments	
Densely packed group showing slow travel at the surface.	
Thursday, May 9, 2013 Sighting # 4	
Initial sighting on Track	
Time: 11:02 WP#: 29 Lat: 30.364403 Long: -80.532206	
Vertical Angle: 3 Horizontal Bearing in Degrees: 100 Sighting Cue: Splas	h
On/Off Effort: On Trackline: 7 Beaufort Sea State: 2	
Observer: Erin Observer side: Right	
Actual Time and Position of Sighting	
Time:         11:04         WP#:         30         Lat:         30.359587         Long:         -80.524511	
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 3/3/3	
Features used in Species ID: Robust, uniform gray	
Representative images used for Species ID: 59	
Photographer: Erin Frame numbers: 53 - 60 Spacer: 61	
Calculated distance from Trackline: 0.91 km	
Final Time and Position of Sighting	
Final Time and Position of SightingTime:11:09WP#:31Lat:30.359107Long:-80.529278	
Time:         11:09         WP#:         31         Lat:         30.359107         Long:         -80.529278           Calculated Distance Traveled:         0.46 km         0.46 km         -80.529278         -80.529278	
Time:11:09WP#:31Lat:30.359107Long:-80.529278Calculated Distance Traveled:0.46 kmBehavior and Additional Comments	
Time:         11:09         WP#:         31         Lat:         30.359107         Long:         -80.529278           Calculated Distance Traveled:         0.46 km         0.46 km         -80.529278         -80.529278	
Time:11:09WP#:31Lat:30.359107Long:-80.529278Calculated Distance Traveled:0.46 kmBehavior and Additional Comments	

Thursday, May 9, 2013 Sighting $\#$ 5
Initial sighting on Track
Time:         11:13         WP#:         34         Lat:         30.363939         Long:         -80.678222
Vertical Angle: 2 Horizontal Bearing in Degrees: 100 Sighting Cue: Splash
On/Off Effort: On Trackline: 7 Beaufort Sea State: 2
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time:         11:15         WP#:         35         Lat:         30.36249         Long:         -80.672674
Species:Stenella frontalis         Numbers (Low/High/Best):         2/2/2
Features used in Species ID: Alternating light and dark pattern down body, spotting
Representative images used for Species ID: 63,64
Photographer:       Erin       Frame numbers:       62 - 67       Spacer:       68         Calculated distance from Trackline:       0.56 km
Final Time and Position of Sighting
Time:         11:18         WP#:         36         Lat:         30.36579         Long:         -80.670469
Calculated Distance Traveled: 0.42 km
Behavior and Additional Comments
Well spread out group surfacing quickly then diving back to ~10ft underwater.
Thursday May 9 2013 Sighting # 6
Thursday, May 9, 2013 Sighting # 6 Initial sighting on Track
Time:         12:58         WP#:         45         Lat:         30.301318         Long:         -80.292046
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: 6 Beaufort Sea State: 2
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time:         13:03         WP#:         46         Lat:         30.308573         Long:         -80.293577
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 2/2/2
Features used in Species ID: Robust, uniform gray
Representative images used for Species ID: 70
Photographer:         Erin         Frame numbers:         69 - 71         Spacer:         72
Calculated distance from Trackline: 0.82 km
Final Time and Position of Sighting
Time: 13:07 WP#: 47 Lat: 30.309511 Long: -80.287683
Calculated Distance Traveled: 0.58 km
Behavior and Additional Comments
Pair of animals at the surface close together, some breaching then diving from surface.

Thursday,	May 9, 2013 Sigh	ting # 7		
Initial sighting on Track	_	-		
Time: <u>13:37</u> WP#:	57 Lat:	30.231834	Long:	80.302707
Vertical Angle: 2 H			90 Sighting (	Cue: Body
On/Off Effort: On	Trackline:	5	Beaufort Sea Sta	te:2
Observer: Erin	Observer side	e: Right		
Actual Time and Position	ı of Sighting			
Time: 13:39 WP#:	58 Lat:	30.236874	Long:	80.298098
Species:Tursiops truncatus			ow/High/Best):	1/1/1
Features used in Species II	D: <u>Robust, uniform g</u>	ray		
Representative images use	-	72 74	73	75
<b>e</b> 1 — —	Frame numbers:		Spacer:	75
Calculated distance from 7		0.71 KIII		
Final Time and Position				
	59 Lat:		Long:	-80.296309
Calculated Distance Trave	led:0.32	km		
<b>Behavior and Additional</b>	Comments			
Single animal surfacing regular	rly - no signs of avoid	ance.		
Thursday	May 0 2012 Sigh	ting # 9		
Initial sighting on Track	May 9, 2013 Sigh	ting # 0		
Time: 13:45 WP#:	61 Lat	30.232534	Long:	Q0 272577
Vertical Angle: 2 H			_	Cue: Splash
On/Off Effort: On	Trackline:		Beaufort Sea Sta	
Observer: Erin	Observer side			
Actual Time and Position			_	
Time: <u>13:46</u> WP#:		20 222070	Long: -	90 272201
Species:Stenella frontalis	02 Lat.		ow/High/Best):	7/10/9
Features used in Species II	D. Alternating light a	· · · · · · · · · · · · · · · · · · ·	<u> </u>	
to nose	<u></u>			. <u></u>
Representative images use	d for Species ID:		88, 89	
	Frame numbers:	76 - 89	Spacer:	90
Calculated distance from 7	Trackline:	0.13 km		
Final Time and Position	of Sighting			
Time: 13:50 WP#:	63 Lat:	30.242315	Long:	-80.372723
Calculated Distance Trave				
Behavior and Additional				
Group near a light green sub-s				
Group of 8 with a single outlier				
stoup of o with a single odtiel				

Thursday, May 9, 2013 Sighting $\#$ 9
Initial sighting on Track
Time:         13:55         WP#:         65         Lat:         30.231472         Long:         -80.506765
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>45</u> Sighting Cue: <u>Body</u>
On/Off Effort: Trackline: Beaufort Sea State:
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time:         13:56         WP#:         66         Lat:         30.233065         Long:         -80.511431
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 6/7/6
Features used in Species ID: Robust, uniform gray
Representative images used for Species ID:93
Photographer:         Erin         Frame numbers:         91 - 94         Spacer:         95
Calculated distance from Trackline: 0.48 km
Final Time and Position of Sighting
Time:         14:00         WP#:         67         Lat:         30.235039         Long:         -80.511694
Calculated Distance Traveled: 0.22 km
Behavior and Additional Comments
Not a cooperative group
Thursday, May 9, 2013 Sighting # 10
Initial sighting on Track
Initial sighting on Track           Time:         14:09         WP#:         72         Lat:         30.167506         Long:         -80.630582
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:Left
Initial sighting on Track         Time:       14:09       WP#:       72       Lat:       30.167506       Long:       -80.630582         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftImage: 14:14WP#:73Lat:30.158026Long:-80.628438
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:14WP#:73Lat:30.158026Long:-80.628438Species:Tursiops truncatusNumbers (Low/High/Best):4/4/4
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftImage: 14:14WP#:73Lat:30.158026Long:-80.628438
Initial sighting on Track         Time:       14:09       WP#:       72       Lat:       30.167506       Long:       -80.630582         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left         Actual Time and Position of Sighting         Time:       14:14       WP#:       73       Lat:       30.158026       Long:       -80.628438         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Robust, uniform gray
Initial sighting on Track         Time:       14:09       WP#:       72       Lat:       30.167506       Long:       -80.630582         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       14:14       WP#:       73       Lat:       30.158026       Long:       -80.628438         Species: Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Robust, uniform gray
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:14WP#:73Lat:30.158026Long:-80.628438Species:FrancatusNumbers (Low/High/Best):4/4/4Features used in Species ID:Representative images used for Species ID:97, 102Photographer:ErinFrame numbers:96 - 105Spacer:106
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:14WP#:73Lat:30.158026Long:-80.628438Species:Tursiops truncatusNumbers (Low/High/Best):4/4/4Features used in Species ID:Robust, uniform grayPhotographer:ErinFrame numbers:96 - 105Spacer:106Calculated distance from Trackline:1.07 km
Initial sighting on Track         Time:       14:09       WP#:       72       Lat:       30.167506       Long:       -80.630582         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:14WP#:73Lat:30.158026Long:-80.628438Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best):4/4/4Features used in Species ID:Robust, uniform grayPhotographer:ErinFrame numbers:96 - 105Spacer:106Calculated distance from Trackline:1.07 kmFinal Time and Position of SightingTime:14:14WP#:74Lat:30.159565Long:-80.63243
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:14WP#:73Lat:30.158026Long:-80.628438Species:Tursiops truncatusNumbers (Low/High/Best):4 / 4 / 4Features used in Species ID:Representative images used for Species ID:97, 102Photographer:ErinFrame numbers:96 - 105Spacer:106Calculated distance from Trackline:1.07 km1.07 km1.02Final Time and Position of SightingTime:14:14WP#:74Lat:30.159565Long:-80.63243Calculated Distance Traveled:0.42 km0.42 km1.07 km1.01 km1.01 km
Initial sighting on Track         Time:       14:09       WP#:       72       Lat:       30.167506       Long:       -80.630582         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left         Actual Time and Position of Sighting         Time:       14:14       WP#:       73       Lat:       30.158026       Long:       -80.628438         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4 / 4 / 4         Features used in Species ID:       Robust, uniform gray
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:14WP#:73Lat:30.158026Long:-80.628438Species:Tursiops truncatusNumbers (Low/High/Best):4/4/4Features used in Species ID:Representative images used for Species ID:97, 102Photographer:ErinFrame numbers:96 - 105Spacer:106Calculated distance from Trackline:1.07 km1.07 kmFinal Time and Position of SightingTime:14:14WP#:74Lat:30.159565Long:-80.63243Calculated Distance Traveled:0.42 km0.42 km1.07 km
Initial sighting on TrackTime:14:09WP#:72Lat:30.167506Long:-80.630582Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:14WP#:73Lat:30.158026Long:-80.628438Species:Tursiops truncatusNumbers (Low/High/Best):4 / 4 / 4Features used in Species ID:Robust, uniform grayRepresentative images used for Species ID:97, 102Photographer:ErinFrame numbers:96 - 105Spacer:106Calculated distance from Trackline:1.07 kmFinal Time and Position of SightingTime:14:14WP#:74Lat:30.159565Long:-80.63243Calculated Distance Traveled:0.42 kmBehavior and Additional Comments

	Thursday, Ma	y 9, 2013 Sigh	ting # 11		
Initial sighting o	n Track	-	-		
Time: 14:23	WP#:79	Lat:	30.167641	Long:	-80.302271
Vertical Angle:	2 Hori	zontal Bearing	in Degrees:	100 Sighting	Cue: Body
On/Off Effort:		Trackline:		Beaufort Sea St	ate: 2
Observer: Eri	n	Observer sid	e: Right	_	
Actual Time and	l Position of	Sighting			
Time: 14:26	WP#: 80	Lat:	30.162511	Long:	-80.300768
Species:Tursiops tru				Low/High/Best):	3/3/3
Features used in S	Species ID: <u>F</u>	lobust, uniform g	ray		
	1.0	a : 15			
Representative in			107 112	111	110
Photographer:				2 Spacer	: 113
Calculated distant			0.39 KIII		
Final Time and 1					
Time: 14:27			30.162363	Long:	-80.304545
Calculated Distan	ice Traveled	0.36	5 km	_	
Behavior and Ac	lditional Co	mments			
Pair of animals plus a	a single.				
	Thursday Ma	v 0 2013 Sigh	ting # 12		
Initial sighting o		y 9, 2013 Sigh	$\operatorname{ting} \# TZ$		
Time: 14:40		Lat	30 166008	Long:	70 91992
Vertical Angle:					
On/Off Effort:		-		Beaufort Sea St	
Observer: Rya		Observer sid			
Actual Time and				_	
Time: 14:42		0 0	30.174165	Long:	70 910260
Species: Grampus g		Lat		Low/High/Best):	-79.819369 16 / 20 / 18
Features used in S		Blunt heat, cleft in	•	<b>.</b> /	10/20/18
Representative in	nages used fo	or Species ID:		118, 128, 129, 13 <sup>-</sup>	I
-	-	me numbers:	114 - 134	4 Spacer	: 135
Calculated distant	ce from Trac	kline:	0.81 km		
Final Time and 1	Position of S	Sighting			
Time: 14:44	WP#: 87	Lat:	30.173313	Long:	-79.815185
Calculated Distan			km		
Behavior and Ad				_	
Animals hanging at					
annus hunging at	and surface.				

Thursday, May 9, 2013 $\mathbf{Sighting} \ \# \ 13$
Initial sighting on Track
Time:         15:05         WP#:         100         Lat:         30.099313         Long:         -80.31319
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: <u>3</u> Beaufort Sea State: <u>2</u>
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time:         15:11         WP#:         101         Lat:         30.103609         Long:         -80.30791
Species:Tursiops truncatusNumbers (Low/High/Best):7/9/8
Features used in Species ID: Robust, uniform gray
Representative images used for Species ID:146Photographer:ErinFrame numbers:136 - 150Spacer:151
Photographer:       Erin       Frame numbers:       136 - 150       Spacer:       151         Calculated distance from Trackline:       0.70 km       0.70 km       0.70 km
Final Time and Position of Sighting         Time:       NA       WP#:       NA       Lat:       NA       Long:       NA
Time:     NA     WP#:     NA     Lat:     NA     Long:     NA       Calculated Distance Traveled:     NA
Behavior and Additional Comments
Groups of 3-4 hanging below the surface
Thursday, May 9, 2013 Sighting # 14
Thursday, May 9, 2013 Sighting # 14 Initial sighting on Track
Initial sighting on Track
Initial sighting on Track           Time:         15:31         WP#:         109         Lat:         30.033391         Long:         -80.46231
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:Splash
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:Left
Initial sighting on Track         Time:       15:31       WP#:       109       Lat:       30.033391       Long:       -80.46231         Vertical Angle:       2       Horizontal Bearing in Degrees:       45       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       2       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       Left
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:Left1Actual Time and Position of SightingTime:15:33WP#:110Lat:30.03829Long:-80.464253
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:33WP#:110Lat:30.03829Long:-80.464253Species:Stenella frontalisNumbers (Low/High/Best):13 / 15 / 14Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipto nose
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:33WP#:110Lat:30.03829Long:-80.464253Species:Stenella frontalisNumbers (Low/High/Best):13/15/14Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipto noseRepresentative images used for Species ID:115, 171, 176
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:LeftLeftActual Time and Position of SightingTime:15:33WP#:110Lat:30.03829Long:-80.464253Species:Stenella frontalisNumbers (Low/High/Best):13 / 15 / 14Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipto nose115, 171, 176Photographer:ErinFrame numbers:152 - 180Spacer:181
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:33WP#:110Lat:30.03829Long:-80.464253Species:Stenella frontalisNumbers (Low/High/Best):13/15/14Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipto noseRepresentative images used for Species ID:115, 171, 176Photographer:ErinFrame numbers:152 - 180Spacer:181Calculated distance from Trackline:0.58 km
Initial sighting on Track         Time:       15:31       WP#:       109       Lat:       30.033391       Long:       -80.46231         Vertical Angle:       2       Horizontal Bearing in Degrees:       45       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       2       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       15:33       WP#:       110       Lat:       30.03829       Long:       -80.464253         Species: Stenella frontalis       Numbers (Low/High/Best):       13 / 15 / 14         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to nose       Representative images used for Species ID:       115, 171, 176         Photographer:       Erin       Frame numbers:       152 - 180       Spacer:       181         Calculated distance from Trackline:       0.58 km       Image:       181       Image:       Image: <td< td=""></td<>
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:33WP#:110Lat:30.03829Long:-80.464253Species:Stenella frontalisNumbers (Low/High/Best):13 / 15 / 14Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipto noseRepresentative images used for Species ID:115, 171, 176Photographer:ErinFrame numbers:152 - 180Spacer:181Calculated distance from Trackline:0.58 km0.58 km50.047186Long:-80.464008Time:15:36WP#:111Lat:30.047186Long:-80.464008
Initial sighting on Track         Time:       15:31       WP#:       109       Lat:       30.033391       Long:       -80.46231         Vertical Angle:       2       Horizontal Bearing in Degrees:       45       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       2       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       15:33       WP#:       110       Lat:       30.03829       Long:       -80.464253         Species: Stenella frontalis       Numbers (Low/High/Best):       13 / 15 / 14         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to nose       Representative images used for Species ID:       115, 171, 176         Photographer:       Erin       Frame numbers:       152 - 180       Spacer:       181         Calculated distance from Trackline:       0.58 km       52 - 180       Spacer:       181
Initial sighting on TrackTime:15:31WP#:109Lat:30.033391Long:-80.46231Vertical Angle:2Horizontal Bearing in Degrees:45Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:15:33WP#:110Lat:30.03829Long:-80.464253Species:Stenella frontalisNumbers (Low/High/Best):13 / 15 / 14Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipto noseRepresentative images used for Species ID:115, 171, 176Photographer:ErinFrame numbers:152 - 180Spacer:181Calculated distance from Trackline:0.58 km0.58 km50.047186Long:-80.464008Time:15:36WP#:111Lat:30.047186Long:-80.464008
Initial sighting on Track         Time:       15:31       WP#:       109       Lat:       30.033391       Long:       -80.46231         Vertical Angle:       2       Horizontal Bearing in Degrees:       45       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       2       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left         Actual Time and Position of Sighting         Time:       15:33       WP#:       110       Lat:       30.03829       Long:       -80.464253         Species: Stenella frontalis       Numbers (Low/High/Best):       13 / 15 / 14         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to nose       Representative images used for Species ID:       115, 171, 176         Photographer:       Erin       Frame numbers:       152 - 180       Spacer:       181         Calculated distance from Trackline:       0.58 km       Image:       -80.464008       Image:       -80.464008         Calculated Distance Traveled:       1.0 km       Image:       -80.464008       Image:       -80.464008         Calculated Distance Traveled:       1.0 km       Image:       -80.
Initial sighting on Track         Time:       15:31       WP#:       109       Lat:       30.033391       Long:       -80.46231         Vertical Angle:       2       Horizontal Bearing in Degrees:       45       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       2       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       15:33       WP#:       110       Lat:       30.03829       Long:       -80.464253         Species:       Stenella frontalis       Numbers (Low/High/Best):       13/15/14         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to nose       Representative images used for Species ID:       115,171,176         Photographer:       Erin       Frame numbers:       152 - 180       Spacer:       181         Calculated distance from Trackline:       0.58 km       Image:       -80.464008       Calculated Distance Traveled:       1.0 km         Behavior and Additional Comments       1.0 km       Image:       -80.464008       Image:       -80.464008

Thursday, May 9, 2013 Sighting $\#$ 15	
Initial sighting on Track	
Time: 15:38 WP#: 113 Lat: 30.033857 Long: -80.400841	
	lash
	1
Observer: Ryan Observer side: Left	
Actual Time and Position of Sighting	
Time:         15:44         WP#:         114         Lat:         30.03593         Long:         -80.414157	
Species: Tursiops truncatus       Numbers (Low/High/Best): 4/8/	7
Features used in Species ID: Robust, uniform gray	
Representative images used for Species ID: 192, 193	
Representative images used for Species ID:192, 193Photographer:ErinFrame numbers:182 - 196Spacer:197	
Calculated distance from Trackline: 1.3 km	
Final Time and Position of SightingTime:15:45WP#:115Lat:30.040481Long:-80.408145	-
Time:         15:45         WP#:         115         Lat:         30.040481         Long:         -80.408145           Calculated Distance Traveled:         0.77 km         0.77 km         0.77 km         0.77 km	)
Behavior and Additional Comments	
Thursday, May 9, 2013 Sighting # 16 Initial sighting on Track	
Time: 15:47 WP#: 117 Lat: 30.033244 Long: -80.335262	>
	- ody
	1
Observer: Ryan Observer side: Left	
Actual Time and Position of Sighting	
Time: 15:50 WP#: 118 Lat: 30.03817 Long: -80.33479	
Species:Stenella frontalis Numbers (Low/High/Best): 3/3/	
Features used in Species ID: Alternating light and dark patterns down the body, spotting, wh	
tip on nose	
Representative images used for Species ID: 199, 201	
Photographer: Erin Frame numbers: 198 - 203 Spacer: 204	
Calculated distance from Trackline: 0.55 km	
Final Time and Position of Sighting	
Time: 15:51 WP#: 119 Lat: 30.030348 Long: -80.309958	3
Calculated Distance Traveled: 2.5 km	
Behavior and Additional Comments	

Thursday, May 9, 2013 $\mathbf{Sighting} \ \# \ 17$
Initial sighting on Track
Time: 16:01 WP#: 122 Lat: 30.033082 Long: -79.943361
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 2 Beaufort Sea State: 1
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time: 16:03 WP#: 123 Lat: 30.028715 Long: -79.944436
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): <u>3/3/3</u>
Features used in Species ID: Uniform gray, robust
Representative images used for Species ID: 208
Photographer: Erin Frame numbers: 205 - 210 Spacer: 211
Calculated distance from Trackline: 0.50 km
Final Time and Position of Sighting
Time: NA WP#: NA Lat: NA Long: NA
Calculated Distance Traveled: NA
Behavior and Additional Comments
Well spaced single animals
Thursday, May 9, 2013 Sighting # 18
Initial sighting on Track
Initial sighting on Track           Time:         16:34         WP#:         133         Lat:         29.964418         Long:         -80.438055
Initial sighting on TrackTime:16:34WP#:133Lat:29.964418Long:-80.438055Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on TrackTime:16:34WP#:133Lat:29.964418Long:-80.438055Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left
Initial sighting on TrackTime:16:34WP#:133Lat:29.964418Long:-80.438055Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1
Initial sighting on TrackTime:16:34WP#:133Lat:29.964418Long:-80.438055Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:16:36WP#:134Lat:29.962992Long:-80.43161
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species: Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip to nose
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to nose       Representative images used for Species ID:       213, 217
Initial sighting on TrackTime:16:34WP#:133Lat:29.964418Long:-80.438055Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1Observer:RyanObserver side:LeftLeftActual Time and Position of SightingTime:16:36WP#:134Lat:29.962992Long:-80.43161Species:Stenella frontalisNumbers (Low/High/Best):5 / 6 / 6Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipto noseRepresentative images used for Species ID:213, 217Photographer:ErinFrame numbers:212 - 217Spacer:218
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1       1         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species:       Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip to nose         Representative images used for Species ID:       213, 217         Photographer:       Erin       Frame numbers:       212 - 217       Spacer:       218         Calculated distance from Trackline:       0.64 km       0.64 km       0.64 km       0.64 km
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to nose       E       213, 217         Photographer:       Erin       Frame numbers:       212 - 217       Spacer:       218         Calculated distance from Trackline:       0.64 km       M       M       M
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:      80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip to nose         Representative images used for Species ID:       213, 217         Photographer:       Erin       Frame numbers:       212 - 217       Spacer:       218         Calculated distance from Trackline:       0.64 km       Mathematical sector       -80.431098         Time:       16:37       WP#:       135       Lat:       29.958778       Long:       -80.431098
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to nose       E       213, 217         Photographer:       Erin       Frame numbers:       212 - 217       Spacer:       218         Calculated distance from Trackline:       0.64 km       M       M       M
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:      80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip to nose         Representative images used for Species ID:       213, 217         Photographer:       Erin       Frame numbers:       212 - 217       Spacer:       218         Calculated distance from Trackline:       0.64 km       Mathematical sector       -80.431098         Time:       16:37       WP#:       135       Lat:       29.958778       Long:       -80.431098
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip to nose         Representative images used for Species ID:       213, 217         Photographer:       Erin       Frame numbers:       212 - 217       Spacer:       218         Calculated distance from Trackline:       0.64 km       Matternation of Sighting       -80.431098         Time:       16:37       WP#:       135       Lat:       29.958778       Long:       -80.431098         Calculated Distance Traveled:       0.47 km       0.47 km       Matternatione       -80.431098    <
Initial sighting on Track         Time:       16:34       WP#:       133       Lat:       29.964418       Long:       -80.438055         Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       16:36       WP#:       134       Lat:       29.962992       Long:       -80.43161         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 6 / 6         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip to nose         Representative images used for Species ID:       213, 217         Photographer:       Erin       Frame numbers:       212 - 217       Spacer:       218         Calculated distance from Trackline:       0.64 km       Matternation of Sighting       -80.431098         Time:       16:37       WP#:       135       Lat:       29.958778       Long:       -80.431098         Calculated Distance Traveled:       0.47 km       0.47 km       Matternatione       -80.431098    <

Friday, May 10, 2013 Sighting $\#$ 1
Initial sighting on Track
Time: 9:04 WP#: 4 Lat: 30.233290 Long: -80.408154
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Splash</u>
On/Off Effort: On Trackline: 5 Beaufort Sea State: 1
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time: 9:05 WP#: 5 Lat: 30.235295 Long: -80.409763
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 3/4/4
Features used in Species ID: Uniform grey body, robust appearance
Representative images used for Species ID: 18, 21, 37, 38
Photographer: Ryan Frame numbers: <u>1-43</u> Spacer: <u>44</u>
Calculated distance from Trackline: 0.27 km
Final Time and Position of Sighting
Time:         9:08         WP#:         6         Lat:         30.227764         Long:         -80.407860
Calculated Distance Traveled: 0.86 km
Behavior and Additional Comments
Playing at the surface, splashing around, feeding and showing bellies. Calf was observed.
Friday, May 10, 2013 Sighting # 2
Initial sighting on Track
Initial sighting on Track           Time:         9:29         WP#:         14         Lat:         30.299580         Long:         -79.865394
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:Body
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:Right
Initial sighting on Track         Time:       9:29       WP#:       14       Lat:       30.299580       Long:       -79.865394         Vertical Angle:       1       Horizontal Bearing in Degrees:       45       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       6       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351Species:TruncatusNumbers (Low/High/Best):10/15/13
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351Species:Tursiops truncatusNumbers (Low/High/Best):10 / 15 / 13Features used in Species ID:Uniform grey, robust body appearance, white coloration on top
Initial sighting on Track         Time:       9:29       WP#:       14       Lat:       30.299580       Long:       -79.865394         Vertical Angle:       1       Horizontal Bearing in Degrees:       45       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       6       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1       Actual Time and Position of Sighting         Time:       9:30       WP#:       15       Lat:       30.302153       Long:       -79.857351         Species:       Tursiops truncatus       Numbers (Low/High/Best):       10 / 15 / 13         Features used in Species ID:       Uniform grey, robust body appearance, white coloration on top of peduncle.
Initial sighting on Track         Time:       9:29       WP#:       14       Lat:       30.299580       Long:       -79.865394         Vertical Angle:       1       Horizontal Bearing in Degrees:       45       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       6       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1       Actual Time and Position of Sighting         Time:       9:30       WP#:       15       Lat:       30.302153       Long:       -79.857351         Species:       Tursiops truncatus       Numbers (Low/High/Best):       10/15/13         Features used in Species ID:       Uniform grey, robust body appearance, white coloration on top         of peduncle.       55-58, 60, 66, 67, 72, 76
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351Species:Tursiops truncatusNumbers (Low/High/Best):10 / 15 / 13Features used in Species ID:Uniform grey, robust body appearance, white coloration on topof peduncle.Representative images used for Species ID:55-58, 60, 66, 67, 72, 76Photographer:RyanFrame numbers:45-86Spacer:87
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351Species:Tursiops truncatusNumbers (Low/High/Best):10/15/1310/15/13Features used in Species ID:Uniform grey, robust body appearance, white coloration on topof peduncle.Representative images used for Species ID:55-58, 60, 66, 67, 72, 7687Photographer:RyanFrame numbers:45-86Spacer:87Calculated distance from Trackline:0.82 km8787
Initial sighting on Track         Time:       9:29       WP#:       14       Lat:       30.299580       Long:       -79.865394         Vertical Angle:       1       Horizontal Bearing in Degrees:       45       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       6       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       9:30       WP#:       15       Lat:       30.302153       Long:       -79.857351         Species:       Turciops truncatus       Numbers (Low/High/Best):       10 / 15 / 13         Features used in Species ID:       Uniform grey, robust body appearance, white coloration on top of peduncle.         Representative images used for Species ID:       55-58, 60, 66, 67, 72, 76         Photographer:       Ryan       Frame numbers:       45-86       Spacer:       87         Calculated distance from Trackline:       0.82 km       M       M       M         Final Time and Position of Sighting       10.82 km       M       M       M
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351Species:Tursiops truncatusNumbers (Low/High/Best):10 / 15 / 13Features used in Species ID:Uniform grey, robust body appearance, white coloration on topof peduncle.Representative images used for Species ID:55-58, 60, 66, 67, 72, 76Photographer:RyanFrame numbers:45-86Spacer:87Calculated distance from Trackline:0.82 kmFinal Time and Position of SightingTime:9:33WP#:16Lat:30.302279Long:-79.866376
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351Species:Tursiops truncatusNumbers (Low/High/Best):10 / 15 / 13Features used in Species ID:Uniform grey, robust body appearance, white coloration on topof peduncle.Representative images used for Species ID:55-58, 60, 66, 67, 72, 76Photographer:RyanFrame numbers:45-86Spacer:87Calculated distance from Trackline:0.82 kmFinal Time and Position of SightingTime:9:33WP#:16Lat:30.302279Long:-79.866376Calculated Distance Traveled:0.87 km
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351Species:Tursiops truncatusNumbers (Low/High/Best):10 / 15 / 13Features used in Species ID:Uniform grey, robust body appearance, white coloration on topof peduncle.Representative images used for Species ID:55-58, 60, 66, 67, 72, 76Photographer:RyanFrame numbers:45-86Spacer:87Calculated distance from Trackline:0.82 kmTime:9:33WP#:16Lat:30.302279Long:-79.866376Calculated Distance Traveled:0.87 kmBehavior and Additional Comments
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351Species:Tursiops truncatusNumbers (Low/High/Best):10 / 15 / 13Features used in Species ID:Uniform grey, robust body appearance, white coloration on topof peduncle.Representative images used for Species ID:55-58, 60, 66, 67, 72, 76Photographer:RyanFrame numbers:45-86Spacer:87Calculated distance from Trackline:0.82 kmFinal Time and Position of SightingTime:9:33WP#:16Lat:30.302279Long:-79.866376Calculated Distance Traveled:0.87 km
Initial sighting on TrackTime:9:29WP#:14Lat:30.299580Long:-79.865394Vertical Angle:1Horizontal Bearing in Degrees:45Sighting Cue:BodyOn/Off Effort:OnTrackline:6Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:9:30WP#:15Lat:30.302153Long:-79.857351Species:Tursiops truncatusNumbers (Low/High/Best):10 / 15 / 13Features used in Species ID:Uniform grey, robust body appearance, white coloration on topof peduncle.Representative images used for Species ID:55-58, 60, 66, 67, 72, 76Photographer:RyanFrame numbers:45-86Spacer:87Calculated distance from Trackline:0.82 kmTime:9:33WP#:16Lat:30.302279Long:-79.866376Calculated Distance Traveled:0.87 kmBehavior and Additional Comments

	Friday	<sup>,</sup> May 10	, 2013 Sigi	ning # J			
Initial sighting o	on Trac	k	-	-			
Time: <u>9:45</u>	WP#:	20	Lat:	30.299813	Long:	-80.31	7442
Vertical Angle:	3	Horizor	ntal Bearing	g in Degrees:		nting Cue:	
On/Off Effort:	On	Т	rackline:	6	Beaufort S	ea State:	1
Observer: Ry	an	С	bserver sic	le: Right			
Actual Time and	l Positi	on of Sig	ghting				
Time: 9:46	WP#:	21	Lat:	30.304065	Long:	-80.31	0493
Species: Tursiops tr				Numbers (			/2/2
Features used in S	Species	ID: Unif	orm grey col	oration, robust	body appearar	nce.	
Representative in					88		01
Photographer:				88 - 90 0.82 km	Sp	acer:	91
Calculated distan				0.02 KIII			
Final Time and			-		_		
Time: <u>9:47</u>		22			Long:	-80.31	1129
Calculated Distar	nce Trav	veled:	0.4	1 km			
Behavior and A	ddition	al Comr	nents				
Animals traveling fa	st, well sj	paced out	form one ar	nother, strong s	urfacings causi	ng noticeab	le splash.
	Friday	. May 10	2012 Sigl	nting # 1			
Initial sighting o			, 2013 Sigl	nting # 4			
Initial sighting o	on Trac	k		C	Long	-80.64	0795
Time: 9:55	on Trac WP#:	<b>k</b> 25	Lat:	30.299341		-80.64	
Time: <u>9:55</u> Vertical Angle: _	on Trac WP#: 1	<b>k</b> 25 Horizor	Lat:	30.299341 g in Degrees:	90 Sigl	nting Cue:	Body
Time: <u>9:55</u> Vertical Angle: _ On/Off Effort:	on Trac WP#: 1 On	<b>k</b> 25 Horizor T	Lat:	30.299341 g in Degrees: 6		nting Cue:	Body
Time: <u>9:55</u> Vertical Angle: _ On/Off Effort: _ Observer:Er	on Trac WP#: 1 On in	k 25 Horizor T C	Lat: ntal Bearing rackline: Observer sic	30.299341 g in Degrees:	90 Sigl	nting Cue:	Body
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and	m Trac WP#: <u>1</u> On in d Positi	k 25 Horizor T C on of Sig	Lat: ntal Bearing rackline: Dbserver sic ghting	30.299341 g in Degrees: 6 le: Left	90 Sigh Beaufort S	nting Cue: ] ea State: _	Body 1
Time: 9:55 Vertical Angle: _ On/Off Effort: _ Observer: Er Actual Time and Time: 9:56	WP#: <u>1</u> On in <b>H Positi</b> WP#:	k 25 Horizor T C on of Sig	Lat: ntal Bearing rackline: Dbserver sic ghting	30.299341 g in Degrees: 6 le: Left 30.301435	90 Sigh Beaufort S Long:	nting Cue: ] ea State:	Body 1 3184
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species:Stenella fro	on Trac WP#: 1 On in d Positie WP#:	k <u>25</u> Horizor T C on of Sig <u>26</u>	Lat: ntal Bearing rackline: Dbserver sic ghting Lat:	30.299341 g in Degrees: 6 le: Left 30.301435 Numbers (	90 Sigh Beaufort S Long: Low/High/B	-80.60 est): 3	Body 1 3184 / 3 / 3
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: Stenella fro Features used in S	on Trac WP#: <u>1</u> On in <b>1 Positi</b> WP#: ontalis Species	k <u>25</u> Horizor T C on of Sig <u>26</u> ID: <u>Alter</u>	Lat: ntal Bearing rackline: Dbserver sic ghting Lat:	30.299341 g in Degrees: 6 le: Left 30.301435 Numbers (	90 Sigh Beaufort S Long: Low/High/B	-80.60 est): 3	Body 1 3184 / 3 / 3
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: <i>Stenella fro</i> Features used in S body, white tip to th	on Trac WP#: <u>1</u> On in <b>1 Positi</b> WP#: ontalis Species ne rostrui	k <u>25</u> Horizor T C on of Sig <u>26</u> ID: <u>Alter</u> m	Lat:	30.299341 g in Degrees: 6 le: Left 30.301435 Numbers ( and dark patter	90 Sigh Beaufort S Long: Low/High/B	-80.60 est): 3	Body 1 3184 / 3 / 3
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: <i>Stenella fro</i> Features used in S body, white tip to th Representative in	on Trac WP#: <u>1</u> On in <b>1 Positi</b> <b>4 Positi</b> WP#: <u>]</u> ontalis Species ne rostrum nages us	k 25 Horizor T C on of Sig 26 ID: Alter m sed for S	Lat:	<u>30.299341</u> g in Degrees: <u>6</u> le: <u>Left</u> <u>30.301435</u> Numbers ( and dark patter	90 Sigh Beaufort S Long: Low/High/B n along body, 97	-80.60 est): 3	Body 1 3184 / 3 / 3
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: <i>Stenella fro</i> Features used in S body, white tip to th	on Trac WP#: 1 On in d Positi WP#: ontalis Species ne rostrui nages us Ryan	k 25 Horizor T C on of Sig 26 ID: <u>Alter</u> m sed for S Frame	Lat:	<u>30.299341</u> g in Degrees: <u>6</u> le: <u>Left</u> <u>30.301435</u> Numbers ( and dark patter <u>92 - 109</u>	90 Sigh Beaufort S Long: Low/High/B n along body, 97	-80.60 est): 3 spots visible	Body 1 3184 / 3 / 3 along
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: <i>Stenella fro</i> Features used in S body, white tip to th Representative in Photographer: Calculated distan	n Trac WP#: <u>1</u> On in <b>1 Positi</b> <b>1 Positi</b> WP#: <u>5 pocies</u> ne rostruu nages us Ryan ce from	k 25 Horizor T C on of Sig 26 ID: Alter m sed for S Frame n Trackli	Lat:	30.299341 g in Degrees: 6 de: Left 30.301435 Numbers ( and dark patter 92 - 10!	90 Sigh Beaufort S Long: Low/High/B n along body, 97	-80.60 est): 3 spots visible	Body 1 3184 / 3 / 3 along
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: <i>Stenella fro</i> Features used in S body, white tip to th Representative in Photographer: Ocalculated distan	on Trac WP#: 1 On in d Positie WP#: ontalis Species ne rostrum nages us Ryan ce from Position	k 25 Horizor T C on of Sig 26 ID: Alter m sed for S Frame Trackli n of Sigl	Lat:	30.299341 g in Degrees: 6 le: Left 30.301435 Numbers ( and dark patter 92 - 105 0.76 km	90 Sigh Beaufort S Long: Low/High/B n along body, 97 5 Sp	ea State:	Body 1 3184 / 3 / 3 along 106
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: <i>Stenella fro</i> Features used in S body, white tip to th Representative in Photographer: Calculated distan	on Trac WP#: <u>1</u> On in <b>1 Positi</b> <b>4 Positi</b> WP#: ontalis Species ne rostrum nages us Ryan ce from <b>Position</b> WP#:	k 25 Horizor T C on of Sig 26 ID: Alter m sed for S Frame n Trackli n of Sigl 27	Lat:	30.299341 g in Degrees: 6 de: Left 30.301435 Numbers ( and dark patter 92 - 10!	90 Sigh Beaufort S Long: Low/High/B n along body, 97 5 Sp	-80.60 est): 3 spots visible	Body 1 3184 / 3 / 3 along 106
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: Stenella fro Features used in S body, white tip to th Representative in Photographer: Ocalculated distan Final Time and Time: 9:58 Calculated Distan	on Trac WP#: 1 On in d Positie WP#: ontalis Species ne rostrum nages us Ryan ce from Position WP#: ce from	k 25 Horizor T C on of Sig 26 ID: Alter m sed for S Frame Trackli n of Sigl 27 veled:	Lat:	30.299341 g in Degrees: 6 de: Left 30.301435 Numbers ( and dark patter 92 - 109 0.76 km 30.310475	90 Sigh Beaufort S Long: Low/High/B n along body, 97 5 Sp	ea State:	Body 1 3184 / 3 / 3 along 106
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: Stenella fro Features used in S body, white tip to th Representative in Photographer: Ocalculated distan Final Time and Time: 9:58 Calculated Distar Behavior and Action	on Trac WP#: <u>1</u> On in <b>1</b> Positie WP#: ontalis Species ne rostrum nages us Ryan ce from WP#: wP#: ce from WP#: the Trav	k 25 Horizor T C on of Sig 26 ID: Alten Sed for S Frame Trackli n of Sigl 27 veled:	Lat:	30.299341 g in Degrees: 6 de: Left 30.301435 Numbers ( and dark patter 92 - 109 0.76 km 30.310475	90 Sigh Beaufort S Long: Low/High/B n along body, 97 5 Sp	ea State:	Body 1 3184 / 3 / 3 along 106
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: Stenella fro Features used in S body, white tip to th Representative in Photographer: Ocalculated distan Final Time and Time: 9:58 Calculated Distan	on Trac WP#: <u>1</u> On in <b>1</b> Positie WP#: ontalis Species ne rostrum nages us Ryan ce from WP#: wP#: ce from WP#: the Trav	k 25 Horizor T C on of Sig 26 ID: Alten Sed for S Frame Trackli n of Sigl 27 veled:	Lat:	30.299341 g in Degrees: 6 de: Left 30.301435 Numbers ( and dark patter 92 - 109 0.76 km 30.310475	90 Sigh Beaufort S Long: Low/High/B n along body, 97 5 Sp	ea State:	Body 1 3184 / 3 / 3 along 106
Time: 9:55 Vertical Angle: On/Off Effort: Observer: Er Actual Time and Time: 9:56 Species: Stenella fro Features used in S body, white tip to th Representative in Photographer: Ocalculated distan Final Time and Time: 9:58 Calculated Distar Behavior and Action	on Trac WP#: <u>1</u> On in <b>1</b> Positie WP#: ontalis Species ne rostrum nages us Ryan ce from WP#: wP#: ce from WP#: the Trav	k 25 Horizor T C on of Sig 26 ID: Alten Sed for S Frame Trackli n of Sigl 27 veled:	Lat:	30.299341 g in Degrees: 6 de: Left 30.301435 Numbers ( and dark patter 92 - 109 0.76 km 30.310475	90 Sigh Beaufort S Long: Low/High/B n along body, 97 5 Sp	ea State:	Body 1 3184 / 3 / 3 along 106

Frida	y, May 10, 2013 ${ m Sigh}$	nting # 5		
Initial sighting on Tra	ck	-		
Time: <u>10:10</u> WP#	33 Lat:	30.366284	Long:	-80.457310
Vertical Angle: 2			90 Sighting	g Cue: <u>Body</u>
On/Off Effort: On		7	Beaufort Sea S	tate: 1
Observer: Ryan	Observer sid	le: Right	_	
Actual Time and Posit	ion of Sighting			
Time: 10:12 WP#	34 Lat:	30.361910	Long:	-80.462921
Species: Tursiops truncatus			ow/High/Best):	5/5/5
Features used in Specie	s ID: Uniform grey colo	oration, robust b	ody appearance.	
Representative images			118	
Photographer: Ryan			Space	r: <u>131</u>
Calculated distance from	n Trackline:	0.73 km		
<b>Final Time and Position</b>	on of Sighting			
Time: <u>10:14</u> WP#	35 Lat:	30.368774	Long:	-80.463311
Calculated Distance Tra	aveled: 0.7	6 km		
Behavior and Addition	nal Comments			
Traveling together, just bel	ow the surface with qui	ck surfacings.		
	·	<u> </u>		
Initial sighting on Tra	37 Lat: Horizontal Bearing	30.366269 g in Degrees:	Long: 90 Sighting Beaufort Sea S	
Observer: Erin	Observer sid	le: Left		
Actual Time and Posit	ion of Sighting			
Time: 10:17 WP#	0 0	30.372800	Long:	-80.365265
Species:Stenella frontalis			ow/High/Best):	
Features used in Specie	s ID: Alternating light	· · ·	<b>U</b> /	
clearly present, white tip to		•		
Representative images	used for Species ID:		145	
Photographer: Ryan	_	132 - 155	Space	r: 156
Calculated distance from	n Trackline:	0.84 km	I	
Final Time and Position	on of Sighting			
Time: 10:20 WP#		30.372348	Long:	-80.367310
Calculated Distance Tra		0 km	Long	00.307310
			L	
Behavior and Addition			·	
Staving close together just				
staying close together just	below the surface, some	e belly to belly sv	vimming observed	d.
	below the surface, some	e belly to belly sv	vimming observed	d

Friday, May 10, 2013 Sighting $\# 7$
Initial sighting on Track
Time:         10:28         WP#:         43         Lat:         30.366705         Long:         -80.081756
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>100</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 7 Beaufort Sea State: 1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         10:30         WP#:         44         Lat:         30.373555         Long:         -80.090506
Species:Grampus griseus         Numbers (Low/High/Best):         6/6/6
Features used in Species ID: Blunt head, cleft in middle, bodies covered with white scars.
Representative images used for Species ID:157, 159, 162, 164, 183Photographer:RyanFrame numbers:157 - 194Spacer:195
Photographer:RyanFrame numbers:157 - 194Spacer:195Calculated distance from Trackline:1.13 km
Final Time and Position of Sighting
Time:         10:32         WP#:         45         Lat:         30.378844         Long:         -80.087177           Calculated Distance Traveled:         0.67 km         0.67 km         -80.087177
Behavior and Additional Comments
Traveling just under the surface with long surfacings.
Friday, May 10, 2013 Sighting # 8         Initial sighting on Track         Time:       10:53       WP#:       50       Lat:       30.432661       Long:       -80.237966         Vertical Angle:       2       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       1
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:         10:56         WP#:         51         Lat:         30.436293         Long:         -80.235362
Species:Stenella frontalis         Numbers (Low/High/Best):         55 / 60 / 58           Features used in Species ID:         Alternating light and dark coloration along animals body, spotting
clearly present, white tip to rostrum
Representative images used for Species ID: 213, 227, 230, 235
Photographer: Ryan Frame numbers: 196-239 Spacer: 240
Calculated distance from Trackline: 0.47 km
Final Time and Position of Sighting
Time: 10:57 WP#: 52 Lat: 30.439882 Long: -80.244272
Calculated Distance Traveled: 0.94 km
Behavior and Additional Comments
Behavior and Additional Comments
Behavior and Additional Comments Two groups, traveling just below the surface, each group tightly packed.

1 Hudy, May 10, 2010	Sighting # 9
Initial sighting on Track	
Time: <u>11:03</u> WP#: <u>55</u> Lat	30.432377 Long: -80.434498
Vertical Angle: <u>1</u> Horizontal Be	earing in Degrees: <u>60</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackli	ne: 8 Beaufort Sea State: 1
Observer: Ryan Observ	er side: <u>Right</u>
Actual Time and Position of Sighting	5
Time: <u>11:04</u> WP#: <u>56</u> Lat	: 30.432531 Long: -80.438154
Species:Stenella frontalis	Numbers (Low/High/Best): <u>6/6/6</u>
	light and dark coloration along animals body, spotting
clearly present, white tip to rostrum	
Representative images used for Specie	
Photographer: Ryan Frame numb	
Calculated distance from Trackline:	0.33 KIII
Final Time and Position of Sighting	
Time: <u>11:09</u> WP#: <u>57</u> Lat	8
Calculated Distance Traveled:	1.17 km
<b>Behavior and Additional Comments</b>	
One group of 4 and a pair traveling just below	v the surface, calves observed, all animal making short
surfacings.	
	Si 1 (in 1 10
Friday, May 10, 2013	Signing # 10
Initial sighting on TrackTime:11:14WP#:61Lat	20.421601 Lange 00.656100
	aring in Degrees: 90 Sighting Cue: Body
	ne: 8 Beaufort Sea State: 1
Observer: Erin Observ	
	er side: Left
Actual Time and Position of Sighting	er side: Left
Actual Time and Position of Sighting Time: <u>11:15</u> WP#: <u>62</u> Lat	er side: Left 30.424997 Long: -80.646442
Actual Time and Position of Sighting Time: <u>11:15</u> WP#: <u>62</u> Lat Species: <i>Tursiops truncatus</i>	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18/22/20
Actual Time and Position of Sighting Time: <u>11:15</u> WP#: <u>62</u> Lat	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18/22/20
Actual Time and Position of Sighting Time: <u>11:15</u> WP#: <u>62</u> Lat Species: <i>Tursiops truncatus</i> Features used in Species ID: <u>Uniform gra</u>	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18 / 22 / 20 ey coloration, robust body appearance.
Actual Time and Position of Sighting         Time:       11:15       WP#:       62       Lat         Species:       Tursiops truncatus         Features used in Species ID:       Uniform group         Representative images used for Species	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18/22/20 ey coloration, robust body appearance. s ID: 258, 263
Actual Time and Position of Sighting Time: <u>11:15</u> WP#: <u>62</u> Lat Species: <i>Tursiops truncatus</i> Features used in Species ID: <u>Uniform gra</u>	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18 / 22 / 20 ey coloration, robust body appearance. S ID: 258, 263 pers: 257 - 283 Spacer: 284
Actual Time and Position of Sighting         Time:       11:15       WP#:       62       Lat         Species:       Tursiops truncatus         Features used in Species ID:       Uniform grupher         Representative images used for Specie         Photographer:       Ryan       Frame numb         Calculated distance from Trackline:	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18/22/20 ey coloration, robust body appearance. s ID: 258, 263
Actual Time and Position of Sighting Time: <u>11:15</u> WP#: <u>62</u> Lat Species: <i>Tursiops truncatus</i> Features used in Species ID: <u>Uniform gra</u> Representative images used for Species Photographer: <u>Ryan</u> Frame numb Calculated distance from Trackline: <u>Final Time and Position of Sighting</u>	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18 / 22 / 20 ey coloration, robust body appearance. 5 ID: 258, 263 bers: 257 - 283 Spacer: 284 1.19 km
Actual Time and Position of Sighting         Time:       11:15       WP#:       62       Lat         Species:       Tursiops truncatus         Features used in Species ID:       Uniform group         Representative images used for Species         Photographer:       Ryan       Frame numb         Calculated distance from Trackline:	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18/22/20 ey coloration, robust body appearance. s ID: 258, 263 s ID: 257 - 283 Spacer: 284 1.19 km : 30.426508 Long: -80.651211
Actual Time and Position of Sighting         Time:       11:15       WP#:       62       Lat         Species:       Tursiops truncatus         Features used in Species ID:       Uniform group         Representative images used for Species         Photographer:       Ryan         Frame numb         Calculated distance from Trackline:         Final Time and Position of Sighting         Time:       11:18         WP#:       63       Lat         Calculated Distance Traveled:	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18 / 22 / 20 ey coloration, robust body appearance. 5 ID: 258, 263 bers: 257 - 283 Spacer: 284 1.19 km
Actual Time and Position of Sighting         Time:       11:15       WP#:       62       Lat         Species:       Tursiops truncatus         Features used in Species ID:       Uniform group         Representative images used for Species         Photographer:       Ryan       Frame numb         Calculated distance from Trackline:	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18 / 22 / 20 ey coloration, robust body appearance. S ID: 258, 263 Ders: 257 - 283 Spacer: 284 1.19 km : 30.426508 Long: -80.651211 0.49 km
Actual Time and Position of Sighting         Time:       11:15       WP#:       62       Lat         Species:       Tursiops truncatus         Features used in Species ID:       Uniform group         Representative images used for Species         Photographer:       Ryan         Frame numb         Calculated distance from Trackline:         Final Time and Position of Sighting         Time:       11:18         WP#:       63       Lat         Calculated Distance Traveled:	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18 / 22 / 20 ey coloration, robust body appearance. S ID: 258, 263 Ders: 257 - 283 Spacer: 284 1.19 km : 30.426508 Long: -80.651211 0.49 km
Actual Time and Position of Sighting         Time:       11:15       WP#:       62       Lat         Species:       Tursiops truncatus         Features used in Species ID:       Uniform group         Representative images used for Species         Photographer:       Ryan       Frame numb         Calculated distance from Trackline:	er side: Left 30.424997 Long: -80.646442 Numbers (Low/High/Best): 18 / 22 / 20 ey coloration, robust body appearance. S ID: 258, 263 Ders: 257 - 283 Spacer: 284 1.19 km : 30.426508 Long: -80.651211 0.49 km

Friday, May 10, 2013 Sighting $\#$ 11
Initial sighting on Track
Time: 11:38 WP#: 71 Lat: 30.500624 Long: -80.290504
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Splash
On/Off Effort: On Trackline: 9 Beaufort Sea State: 2
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time: 11:34 WP#: 72 Lat: 30.509741 Long: -80.287540
Species:Stenella frontalis         Numbers (Low/High/Best):         20 / 28 / 27
Features used in Species ID: Alternating light and dark coloration along animals body, spotting
clearly present, white tip to rostrum.
Representative images used for Species ID:    315, 332, 337, 390
Photographer:         Ryan         Frame numbers:         285 - 338         Spacer:         339
Calculated distance from Trackline: 1.05 km
Final Time and Position of Sighting
Time:         11:42         WP#:         73         Lat:         30.502253         Long:         -80.290460
Calculated Distance Traveled: 0.88 km
Behavior and Additional Comments
Splashing, swimming in circles, surfacing hard and traveling fast.
Friday May 10, 2012 Sighting # 12
Friday, May 10, 2013 Sighting # 12
Initial sighting on Track
Initial sighting on Track           Time:         11:44         WP#:         75         Lat:         30.500670         Long:         -80.202322
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:Body
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:Left
Initial sighting on Track         Time:       11:44       WP#:       75       Lat:       30.500670       Long:       -80.202322         Vertical Angle:       2       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       9       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftTime:11:47WP#:76Lat:30.506527Long:-80.198527
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:TurncatusNumbers (Low/High/Best):8/8/8
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftTime:11:47WP#:76Lat:30.506527Long:-80.198527
Initial sighting on Track         Time:       11:44       WP#:       75       Lat:       30.500670       Long:       -80.202322         Vertical Angle:       2       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       9       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       11:47       WP#:       76       Lat:       30.506527       Long:       -80.198527         Species:       Tursiops truncatus       Numbers (Low/High/Best):       8/8/8         Features used in Species ID:       Uniform grey coloration, robust body appearance
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform grey coloration, robust body appearanceRepresentative images used for Species ID:342, 358
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:Features used in Species ID:Uniform grey coloration, robust body appearance8 / 8 / 8Features used in Species ID:342, 358Photographer:RyanFrame numbers:340 - 358Spacer:359
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform grey coloration, robust body appearanceRepresentative images used for Species ID:342, 358Photographer:RyanFrame numbers:340 - 358Spacer:359Calculated distance from Trackline:0.75 km
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:Features used in Species ID:Uniform grey coloration, robust body appearanceRepresentative images used for Species ID:340 - 358Spacer:359Calculated distance from Trackline:0.75 kmFinal Time and Position of Sighting
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:FrancatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform grey coloration, robust body appearanceRepresentative images used for Species ID:340 - 358Spacer:359Calculated distance from Trackline:0.75 kmFinal Time and Position of SightingTime:11:51WP#:77Lat:30.505488Long:-80.203774
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform grey coloration, robust body appearanceRepresentative images used for Species ID:342, 358Photographer:RyanFrame numbers:340 - 358Spacer:359Calculated distance from Trackline:0.75 kmFinal Time and Position of SightingTime:11:51WP#:77Lat:30.505488Long:-80.203774Calculated Distance Traveled:0.52 km
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform grey coloration, robust body appearanceRepresentative images used for Species ID:342, 358Photographer:RyanFrame numbers:340 - 358Spacer:359Calculated distance from Trackline:0.75 kmFinal Time and Position of SightingTime:11:51WP#:77Lat:30.505488Long:-80.203774Calculated Distance Traveled:0.52 kmBehavior and Additional Comments
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform grey coloration, robust body appearanceRepresentative images used for Species ID:342, 358Photographer:RyanFrame numbers:340 - 358Spacer:359Calculated distance from Trackline:0.75 kmFinal Time and Position of SightingTime:11:51WP#:77Lat:30.505488Long:-80.203774Calculated Distance Traveled:0.52 km
Initial sighting on TrackTime:11:44WP#:75Lat:30.500670Long:-80.202322Vertical Angle:2Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:9Beaufort Sea State:2Observer:ErinObserver side:LeftActual Time and Position of SightingTime:11:47WP#:76Lat:30.506527Long:-80.198527Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform grey coloration, robust body appearanceRepresentative images used for Species ID:342, 358Photographer:RyanFrame numbers:340 - 358Spacer:359Calculated distance from Trackline:0.75 kmFinal Time and Position of SightingTime:11:51WP#:77Lat:30.505488Long:-80.203774Calculated Distance Traveled:0.52 kmBehavior and Additional Comments

Friday, May 10, 2013 $Sighting \# 13$
Initial sighting on Track
Time: 11:55 WP#: 80 Lat: 30.500456 Long: -80.099191
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Breach</u>
On/Off Effort: On Trackline: 9 Beaufort Sea State: 2
Observer: Right Observer side: Ryan
Actual Time and Position of Sighting
Time:         11:55         WP#:         81         Lat:         30.491044         Long:         -80.103064
Species:Stenella frontalisNumbers (Low/High/Best):30 / 35 / 30
Features used in Species ID: Alternating light and dark body coloration, spotting clearly present
white tip to rostrum
Representative images used for Species ID: <u>366, 385, 388</u>
Photographer:RyanFrame numbers:360 - 406Spacer:407Calculated distance from Trackline:1.11 km
Final Time and Position of Sighting
Time:         11:59         WP#:         82         Lat:         30.495220         Long:         -80.106386
Calculated Distance Traveled: 0.56 km
Behavior and Additional Comments
Group well spaced out, swimming in circles, some animals breaching.
$Fridey \; Max \; 40 \; 2042 \; Gial 14in \; a \; \# \; 14$
Friday, May 10, 2013 Sighting # 14
Initial sighting on Track
Time:         12:15         WP#:         87         Lat:         30.565741         Long:         -80.025477
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:Body
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:Right
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of Sighting
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:12:16WP#:88Lat:30.568157Long:-80.020547
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:12:16WP#:88Lat:30.568157Long:-80.020547Species:Grampus griseusNumbers (Low/High/Best):18/25/19
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:12:16WP#:88Lat:30.568157Long:-80.020547Species:Grampus griseusNumbers (Low/High/Best):18 / 25 / 1918 / 25 / 19Features used in Species ID:Blunt head, cleft down the middle, white scarring down the animals
Time:       12:15       WP#:       87       Lat:       30.565741       Long:       -80.025477         Vertical Angle:       3       Horizontal Bearing in Degrees:       110       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       12:16       WP#:       88       Lat:       30.568157       Long:       -80.020547         Species:       Grampus griseus       Numbers (Low/High/Best):       18 / 25 / 19         Features used in Species ID:       Blunt head, cleft down the middle, white scarring down the animals body.
Time:       12:15       WP#:       87       Lat:       30.565741       Long:       -80.025477         Vertical Angle:       3       Horizontal Bearing in Degrees:       110       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:16       WP#:       88       Lat:       30.568157       Long:       -80.020547         Species:       Grampus griseus       Numbers (Low/High/Best):       18 / 25 / 19         Features used in Species ID:       Blunt head, cleft down the middle, white scarring down the animals body.         Representative images used for Species ID:       423, 442, 462, 478
Time:       12:15       WP#:       87       Lat:       30.565741       Long:       -80.025477         Vertical Angle:       3       Horizontal Bearing in Degrees:       110       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       12:16       WP#:       88       Lat:       30.568157       Long:       -80.020547         Species:       Grampus griseus       Numbers (Low/High/Best):       18 / 25 / 19         Features used in Species ID:       Blunt head, cleft down the middle, white scarring down the animals body.
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:12:16WP#:88Lat:30.568157Long:-80.020547Species:Grampus griseusNumbers (Low/High/Best):18 / 25 / 1918 / 25 / 19Features used in Species ID:Blunt head, cleft down the middle, white scarring down the animalsbody.Representative images used for Species ID:423, 442, 462, 478Photographer:RyanFrame numbers:408 - 494Spacer:495Calculated distance from Trackline:0.54 km
Time:       12:15       WP#:       87       Lat:       30.565741       Long:       -80.025477         Vertical Angle:       3       Horizontal Bearing in Degrees:       110       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       12:16       WP#:       88       Lat:       30.568157       Long:       -80.020547         Species:       Grampus griseus       Numbers (Low/High/Best):       18/25/19       18/25/19         Features used in Species ID:       Blunt head, cleft down the middle, white scarring down the animals body.       423, 442, 462, 478         Photographer:       Ryan       Frame numbers:       408 - 494       Spacer:       495         Calculated distance from Trackline:       0.54 km       Minitian       Minitian       Minitian         Final Time and Position of Sighting       Minitian       Minitian       Minitian       Minitian
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:12:16WP#:88Lat:30.568157Long:-80.020547Species:Grampus griseusNumbers (Low/High/Best):18 / 25 / 1918 / 25 / 19Features used in Species ID:Blunt head, cleft down the middle, white scarring down the animalsbody.Representative images used for Species ID:408 - 494Spacer:495Calculated distance from Trackline:0.54 km.408 - 494Spacer:495Final Time and Position of SightingTime:12:21WP#:89Lat:30.579598Long:-80.029556
Time:12:15WP#:87Lat:30.565741Long:80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:12:16WP#:88Lat:30.568157Long:80.020547Species:Grampus griseusNumbers (Low/High/Best):18 / 25 / 19Features used in Species ID:Blunt head, cleft down the middle, white scarring down the animalsbody.Representative images used for Species ID:423, 442, 462, 478495Photographer:RyanFrame numbers:408 - 494Spacer:495Calculated distance from Trackline:0.54 km540.02955656Time:12:21WP#:89Lat:30.579598Long:-80.029556Calculated Distance Traveled:1.54 km565656
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:12:16WP#:88Lat:30.568157Long:-80.020547Species:Grampus griseusNumbers (Low/High/Best):18 / 25 / 19Features used in Species ID:Blunt head, cleft down the middle, white scarring down the animalsbody.Representative images used for Species ID:423, 442, 462, 478Photographer:RyanFrame numbers:408 - 494Spacer:495Calculated distance from Trackline:0.54 kmFinal Time and Position of SightingTime:12:21WP#:89Lat:30.579598Long:-80.029556Calculated Distance Traveled:1.54 kmBehavior and Additional Comments
Time:12:15WP#:87Lat:30.565741Long:80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:12:16WP#:88Lat:30.568157Long:80.020547Species:Grampus griseusNumbers (Low/High/Best):18 / 25 / 19Features used in Species ID:Blunt head, cleft down the middle, white scarring down the animalsbody.Representative images used for Species ID:423, 442, 462, 478495Photographer:RyanFrame numbers:408 - 494Spacer:495Calculated distance from Trackline:0.54 km540.02955656Time:12:21WP#:89Lat:30.579598Long:-80.029556Calculated Distance Traveled:1.54 km565656
Time:12:15WP#:87Lat:30.565741Long:-80.025477Vertical Angle:3Horizontal Bearing in Degrees:110Sighting Cue:BodyOn/Off Effort:OnTrackline:10Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:12:16WP#:88Lat:30.568157Long:-80.020547Species:Grampus griseusNumbers (Low/High/Best):18 / 25 / 19Features used in Species ID:Blunt head, cleft down the middle, white scarring down the animalsbody.Representative images used for Species ID:423, 442, 462, 478Photographer:RyanFrame numbers:408 - 494Spacer:495Calculated distance from Trackline:0.54 kmFinal Time and Position of SightingTime:12:21WP#:89Lat:30.579598Long:-80.029556Calculated Distance Traveled:1.54 kmBehavior and Additional Comments

			ighting # 15		
Initial sighting on	I Tracl	K	_		
Time: 12:24	WP#:	91 Lat:	30.565816	Long:8	80.147737
Vertical Angle:	1	Horizontal Bear	ing in Degrees:	Ū	
On/Off Effort:	On	Trackline		Beaufort Sea State	e: 1
Observer: Ryar	<u>่</u> ก	Observer	side: Right		
Actual Time and	Positio	on of Sighting			
Time: 12:24	WP#:	92 Lat:	30.563264	Long: -8	0.139916
Species:Tursiops trur				Low/High/Best):	3/3/3
Features used in S	pecies	ID: Uniform grey	coloration, robust l	body appearance.	
				500	
Representative ima	ages us	ed for Species I	D: :s:496 - 50	500	504
Photographer: Calculated distance				3 Spacer: _	504
			0.00 KIII		
Final Time and P				T	
Time: <u>12:30</u>				Long:8	30.1/2/60
Calculated Distance			3.24 km		
Behavior and Ad	ditiona	al Comments			
<b>Initial sighting on</b> Time: 12:33	n Tracl	, May 10, 2013 Sj k 96 Lat:	30.565775	Long: -8	30 279575
Vertical Angle:	-		ring in Degrees:	0	
On/Off Effort:			: 10	Beaufort Sea State	ne. Body
Observer: Erin			side: Left		
Actual Time and					
		n at Nighting			
11me 12.34			30 562008		e: 2
	WP#:	97 Lat:	30.562998 Numbers (		e: 2 0.267676
Species:Unidentified	WP#: _   Delphir	97 Lat:		Long:8 Low/High/Best):	e: 2
Species:Unidentified	WP#: _   Delphir	97 Lat:			e: 2 0.267676
Species:Unidentified Features used in Sp	WP#: _   <i>Delphir</i> pecies	97 Lat: nid ID: NA	Numbers (		e: 2 0.267676
Species:Unidentified Features used in Sp Representative ima Photographer: Ry	WP#: _ I Delphir pecies ages us yan	97 Lat: hid ID: NA wed for Species I Frame number	Numbers (           D:	Low/High/Best):	e: 2 0.267676
Species:Unidentified Features used in Sp Representative ima Photographer: Ry	WP#: _ I Delphir pecies ages us yan	97 Lat: hid ID: NA wed for Species I Frame number	Numbers (           D:	Low/High/Best):	e: 2 0.267676 2/2/2
Species:Unidentified Features used in Sp Representative ima Photographer:	WP#: _ I Delphir pecies ages us yan e from	97 Lat:	Numbers (     D:     rs:   NA	Low/High/Best):	e: 2 0.267676 2/2/2
Species:Unidentified Features used in Sp Representative ima Photographer: <u>Ry</u> Calculated distance <b>Final Time and P</b>	WP#: _ I Delphir pecies ages us yan e from	97 Lat:	Numbers (     D:     rs:   NA	Low/High/Best): No photos Spacer:	e: 2 0.267676 2/2/2
Species:Unidentified Features used in Sp Representative ima Photographer: Calculated distance Final Time and P Time:	WP#: _ l Delphir pecies ages us yan e from <b>cosition</b> WP#: _	97 Lat:	Numbers (1 D:	Low/High/Best): No photos Spacer:	e: 2 0.267676 2/2/2 NA
Species:Unidentified Features used in Sp Representative ima Photographer: <u>Ry</u> Calculated distance <b>Final Time and P</b> Time: <u>12:42</u> Calculated Distance	WP#: _ l Delphir pecies ages us yan e from <b>osition</b> WP#: _ ce Trav	97 Lat:	Numbers (2 D:	Low/High/Best): No photos Spacer:	e: 2 0.267676 2/2/2 NA
Species: Unidentified Features used in Sp Representative ima Photographer: <u>Ry</u> Calculated distance <b>Final Time and P</b> Time: <u>12:42</u> Calculated Distance <b>Behavior and Ade</b>	WP#: _ l Delphir pecies ages us yan e from cosition WP#: _ ce Trav ditiona	97 Lat:	Numbers (1 D:	Low/High/Best): No photos Spacer: _  Long:	e: 2 0.267676 2/2/2 NA 80.268708
Species: Unidentified Features used in Sp Representative ima Photographer: <u>Ry</u> Calculated distance <b>Final Time and P</b> Time: <u>12:42</u> Calculated Distance <b>Behavior and Ade</b>	WP#: _ l Delphir pecies ages us yan e from cosition WP#: _ ce Trav ditiona	97 Lat:	Numbers (1 D:	Low/High/Best): No photos Spacer:	e: 2 0.267676 2/2/2 NA 80.268708
Species:Unidentified Features used in Sp Representative ima Photographer: Ry Calculated distance <b>Final Time and P</b> Time: 12:42 Calculated Distance <b>Behavior and Ade</b>	WP#: _ l Delphir pecies ages us yan e from cosition WP#: _ ce Trav ditiona	97 Lat:	Numbers (1 D:	Low/High/Best): No photos Spacer: _  Long:	e: 2 30.267676 2/2/2 NA 30.268708

Friday, May 10, 2013 Sighting $\#$ 17	
Initial sighting on Track	
Time: 12:51 WP#: 100 Lat: 30.565161 Long: -80.622429	
Vertical Angle: 2 Horizontal Bearing in Degrees: 60 Sighting Cue: Body	
On/Off Effort: On Trackline: 10 Beaufort Sea State: 2	
Observer: Ryan Observer side: Right	
Actual Time and Position of Sighting	
Time: 12:53 WP#: 101 Lat: 30.567770 Long: -80.621680	
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 6/6/6	
Features used in Species ID: Uniform grey coloration, robust body appearance.	
Representative images used for Species ID: 512, 514	
Photographer: Ryan Frame numbers: 506 - 528 Spacer: 529	
Calculated distance from Trackline: 0.72 km	
Final Time and Position of Sighting	
Time: 12:54 WP#: 102 Lat: 30.572842 Long: -80.626348	
Calculated Distance Traveled: 0.72 km	
Behavior and Additional Comments	
Animals moving in different directions.	
Friday, May 10, 2013 Sighting # 18 <b>Initial sighting on Track</b> Time: 14:39 WP#: 113 Lat: 29.966332 Long: -80.471847	
Vertical Angle: 1 Horizontal Bearing in Degrees: 90 Sighting Cue: Body	
On/Off Effort: On Trackline: 1 Beaufort Sea State: 1	
Observer: Erin Observer side: Left	
Actual Time and Position of Sighting	
Time:         14:40         WP#:         114         Lat:         29.968842         Long:         -80.477942           Species:Stenella frontalis         Numbers (Low/High/Best):         15 / 20 / 17	_
Species:Stenella frontalis       Numbers (Low/High/Best):       15 / 20 / 17         Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present,	_
white tip to rostrum.	_
Representative images used for Species ID: 538, 540, 542	_
Photographer: Ryan Frame numbers: 530 - 547 Spacer: 548	_
Calculated distance from Trackline: 0.65 km	_
Final Time and Position of Sighting	
Time:         14:42         WP#:         115         Lat:         29.968081         Long:         -80.455569	_
Calculated Distance Traveled: 2.16 km	
Behavior and Additional Comments	
Traveling just below the surface, darting and some belly to belly swimming.	

Species:Globicephala macrorhynchus       Numbers (Low/High/Best): 10/10/10         Features used in Species ID: Large, black bodied animals with blunt heads and grey "suspenders markings behind dorsal fin.       559, 568, 572, 576, 582, 587, 592         Representative images used for Species ID: 559, 568, 572, 576, 582, 587, 592       549 - 599       Spacer: 600         Calculated distance from Trackline: 0.06 km       600       600         Final Time and Position of Sighting       113 km       600         Calculated Distance Traveled: 1.13 km       11.3 km       600         Behavior and Additional Comments       1.13 km       600         Logging at the surface, hardly moving, 3 calves present.       600       600         Friday, May 10, 2013 Sighting # 20       100       Sighting Cue: Body         Imitial sighting on Track       10       Beaufort Sea State: 1         Observer:       10       Beaufort Sea State: 1         Observer:       Erin       Observer side: Left         Actual Time and Position of Sighting       13/20/18       13/20/18         Features used in Species ID: Alternating light and dark body coloration, spotting clearly present white tip to rostrum.       13/20/18         Representative images used for Species ID:       613, 629       630         Photographer:       Ryan       Frame numbers: 601-629       Spacer: 63		Friday	/, May 10,	, 2013 Sig	hting # 19		
Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       3         On/Off Effort:       Off       Trackline:       1-2       Beaufort Sea State:       0         Observer:       Byan       Observer side:       Bight       0       0         Actual Time and Position of Sighting       Time:       1501       WP#:       124       Lat:       30.000017       Long:       -79.783467         Species:Globicephala macrohynchus       Numbers (Low/High/Best):       10 / 10 / 10       Features used in Species ID:       559,568,572,576,582,587,592         Photographer:       Ryan       Frame numbers:       549 - 599       Spacer:       600         Calculated distance from Trackline:       0.06 km       0       600       600         Final Time and Position of Sighting       Time:       1520       WP#:       125       Lat:       30.009806       Long:       -79.780448         Calculated Distance Traveled:       1.13 km       Behavior and Additional Comments       Logging at the surface, hardly moving, 3 calves present.       600         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       13 / 20 / 18	Initial sighting o	on Trac	k	U	C		
Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       3         On/Off Effort:       Off       Trackline:       1-2       Beaufort Sea State:       0         Observer:       Byan       Observer side:       Bight       0       0         Actual Time and Position of Sighting       Time:       1501       WP#:       124       Lat:       30.000017       Long:       -79.783467         Species:Globicephala macrohynchus       Numbers (Low/High/Best):       10 / 10 / 10       Features used in Species ID:       559,568,572,576,582,587,592         Photographer:       Ryan       Frame numbers:       549 - 599       Spacer:       600         Calculated distance from Trackline:       0.06 km       0       600       600         Final Time and Position of Sighting       Time:       1520       WP#:       125       Lat:       30.009806       Long:       -79.780448         Calculated Distance Traveled:       1.13 km       Behavior and Additional Comments       Logging at the surface, hardly moving, 3 calves present.       600         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       13 / 20 / 18	Time: <u>15:00</u>	WP#:	123	Lat:	29.999860	Long:	-79.784083
On/Off Effort:       Off       Trackline:       1-2       Beaufort Sea State:       0         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting       Time:       15:01       WP#:       124       Lat:       30.000017       Long:       -79.783467         Species:Globicephola macrothynchus       Numbers (Low/High/Best):       10 / 10 / 10       10 / 10 / 10         Features used in Species ID:       Large, black bodied animals with blunt heads and grey "suspender:       markings behind dorsal fin.         Representative images used for Species ID:       559, 568, 572, 576, 582, 587, 592       Photographer:       Ryan         Photographer:       Ryan       Frame numbers:       549 - 599       Spacer:       600         Calculated distance from Trackline:       0.06 km       0.06 km       113 km       Behavior and Additional Comments         Logging at the surface, hardly moving, 3 calves present.       10       Eduator       Rody on/Off Effort:       0       Sighting Cuc:       Body On/Off Effort:         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Soughting Cuc:       Body On/Off Effort:       0       Sighting Cuc:	Vertical Angle:	1	Horizon				
Actual Time and Position of Sighting         Time:       15:01       WP#:       124       Lat:       30.00017       Long:       -79.783467         Species:       Globicephale macrorhynchus       Numbers (Low//High/Best):       10 / 10 / 10         Features used in Species ID:       Large, black bodied animals with blunt heads and grey "suspenders markings behind dorsal fin.         Representative images used for Species ID:       559, 568, 572, 576, 582, 587, 592         Photographer:       Ryan       Frame numbers:       549 - 599       Spacer:       600         Calculated distance from Trackline:       0.06 km       0.06 km       0.02 km       0.00000 km         Final Time and Position of Sighting       Time:       15:40       WP#:       125       Lat:       30.009806       Long:       -79.780448         Calculated Distance Traveled:       1.13 km       Behavior and Additional Comments       0.031307       Long:       -80.427476         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         Observer:       Erin       Observer side:       Left       Actual Time and Position of Sighting       10 / 20 / 18         Features used in Species ID:       Atternating light and dark body coloration, spotting clearly present white tip to rostrum.       <	On/Off Effort:	Off	T	rackline:	1 - 2		
Time:       15:01       WP#:       124       Lat:       30.000017       Long:       -79.783467         Species:       Globicephala macrorhynchus       Numbers (Low/High/Best):       10/10/10         Features used in Species ID:       Large, black bodied animals with blunt heads and grey "suspender markings behind dorsal fin.         Representative images used for Species ID:       559, 568, 572, 576, 582, 587, 592         Photographer:       Ryan       Frame numbers:       549 - 599       Spacer:       600         Calculated distance from Trackline:       0.06 km	Observer: Ry	an	0	bserver si	de: Right		
Species: Globicephala macrorhynchus       Numbers (Low/High/Best):       10 / 10 / 10         Features used in Species ID:       Large, black bodied animals with blunt heads and grey "suspenders markings behind dorsal fin.         Representative images used for Species ID:       559, 568, 572, 576, 582, 587, 592         Photographer:       Ryan       Frame numbers:         Species       0.06 km         Final Time and Position of Sighting         Time:       15:40       WP#:         125       Lat:       30.009806       Long:       -79.780448         Calculated Distance from Trackline:       0.06 km       Initial Sighting on Track       Initial sighting on Track         Elogging at the surface, hardly moving, 3 calves present.       Initial sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Initial Sighting Cue:       Body         Actual Time and Position of Sighting       Numbers:       601-629       Spacer:       630         Species:Stenella frontalis       Numbers:       Long:       -80.426692       Species:Stenella frontalis       In / 20 / 18         Features used in Species ID:       Att:       30.042331       Long:       -80.4	Actual Time and	d Positi	on of Sig	ghting			
Features used in Species ID:       Large, black bodied animals with blunt heads and grey "suspender:         markings behind dorsal fin.       Step 559, 568, 572, 576, 582, 587, 592         Photographer:       Ryan       Frame numbers:       549-599       Spacer:       600         Calculated distance from Trackline:       0.06 km       0.06 km       600         Final Time and Position of Sighting       Time:       15:40       WP#:       125       Lat:       30.009806       Long:       -79.780448         Calculated Distance Traveled:       1.13 km       Edsaure       Galculated Distance Traveled:       1.13 km         Behavior and Additional Comments       Logging at the surface, hardly moving, 3 calves present.       Galculated Distance Track       Friday, May 10, 2013 Sighting # 20         Initial sighting on Track       Time:       15:23       WP#:       133       Lat:       30.031307       Long:       -80.427476         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cuc:       Body         Observer:       Frin       Observer side:       Left       Observer:       10       Sighting Cuc:       Body         Observer:       Frin       Observer side:       Left       13 / 20 / 18       Features used in Species ID:       Alternating light a	Time: 15:01	WP#:	124	Lat:	30.000017	Long:	-79.783467
markings behind dorsal fin. Representative images used for Species ID: 559, 568, 572, 576, 582, 587, 592 Photographer: Ryan Frame numbers: 549 - 599 Spacer: 600 Calculated distance from Trackline: 0.06 km Final Time and Position of Sighting Time: 15:40 WP#: 125 Lat: 30.009806 Long: -79.780448 Calculated Distance Traveled: 1.13 km Behavior and Additional Comments Logging at the surface, hardly moving, 3 calves present. Friday, May 10, 2013 Sighting # 20 Initial sighting on Track Time: 15:23 WP#: 133 Lat: 30.031307 Long: -80.427476 Vertical Angle: 2 Horizontal Bearing in Degrees: 100 Sighting Cue: Body On/Off Effort: On Trackline: 10 Beaufort Sea State: 1 Observer: Erin Observer side: Left Actual Time and Position of Sighting Time: 15:25 WP#: 134 Lat: 30.042331 Long: -80.426692 Species:Stenella frontalis Numbers (Low/High/Best): 13 / 20 / 18 Features used in Species ID: Alternating light and dark body coloration, spotting clearly present white tip to rostrum. Representative images used for Species ID: 613, 629 Photographer: Ryan Frame numbers: 601 - 629 Spacer: 630 Calculated Distance Traveled: 0.80 km Behavior and Additional Comments Behavior and Additional Comments							
Photographer:       Ryan       Frame numbers:       549 - 599       Spacer:       600         Calculated distance from Trackline:       0.06 km         Final Time and Position of Sighting         Time:       15:40       WP#:       125       Lat:       30.009806       Long:       -79.780448         Calculated Distance Traveled:       1.13 km       Behavior and Additional Comments       Behavior and Additional Comments         Logging at the surface, hardly moving, 3 calves present.		-	ID: <u>Larg</u>	e, black bod	ied animals with	blunt heads and g	grey "suspenders"
Calculated distance from Trackline:0.06 km							587, 592
Final Time and Position of Sighting         Time:       15:40       WP#:       125       Lat:       30.009806       Long:       -79.780448         Calculated Distance Traveled:       1.13 km         Behavior and Additional Comments         Logging at the surface, hardly moving, 3 calves present.         Friday, May 10, 2013 Sighting # 20         Initial sighting on Track         Time:       15:23       WP#:       133       Lat:       30.031307       Long:       -80.427476         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Actual Time and Position of Sighting         Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present       white tip to rostrum.         Representative images used for Species ID:       613, 629       Spacer:       630         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       1.2 km       Final Time and Position of Sighting       -80.432912						Space	r: <u>600</u>
Time: 15:40 WP#: 125 Lat: 30.009806 Long: -79.780448 Calculated Distance Traveled: 1.13 km Behavior and Additional Comments Logging at the surface, hardly moving, 3 calves present. Friday, May 10, 2013 Sighting # 20 Initial sighting on Track Time: 15:23 WP#: 133 Lat: 30.031307 Long: -80.427476 Vertical Angle: 2 Horizontal Bearing in Degrees: 100 Sighting Cue: Body On/Off Effort: On Trackline: 10 Beaufort Sea State: 1 Observer: Erin Observer side: Left Actual Time and Position of Sighting Features used in Species ID: Alternating light and dark body coloration, spotting clearly present white tip to rostrum. Representative images used for Species ID: 613, 629 Photographer: Ryan Frame numbers: 601-629 Spacer: 630 Calculated distance from Trackline: 1.2 km Final Time and Position of Sighting Time: 15:28 WP#: 135 Lat: 30.047128 Long: -80.432912 Calculated Distance Traveled: 0.80 km Behavior and Additional Comments	Calculated distan	ce fron	n Trackli	ne:	0.06 km		
Calculated Distance Traveled: <u>1.13 km</u> Behavior and Additional Comments Logging at the surface, hardly moving, 3 calves present. Friday, May 10, 2013 Sighting # 20 Initial sighting on Track Time: <u>15:23</u> WP#: <u>133</u> Lat: <u>30.031307</u> Long: <u>-80.427476</u> Vertical Angle: <u>2</u> Horizontal Bearing in Degrees: <u>100</u> Sighting Cue: <u>Body</u> On/Off Effort: <u>On</u> Trackline: <u>10</u> Beaufort Sea State: <u>1</u> Observer: <u>Erin</u> Observer side: <u>Left</u> Actual Time and Position of Sighting Time: <u>15:25</u> WP#: <u>134</u> Lat: <u>30.042331</u> Long: <u>-80.426692</u> Species: <i>Stenella frontalis</i> Numbers (Low/High/Best): <u>13 / 20 / 18</u> Features used in Species ID: <u>Alternating light and dark body coloration, spotting clearly present</u> white tip to rostrum. Representative images used for Species ID: <u>613, 629</u> Photographer: <u>Ryan</u> Frame numbers: <u>601 - 629</u> Spacer: <u>630</u> Calculated distance from Trackline: <u>1.2 km</u> Final Time and Position of Sighting Time: <u>15:28</u> WP#: <u>135</u> Lat: <u>30.047128</u> Long: <u>-80.432912</u> Calculated Distance Traveled: <u>0.80 km</u>	Final Time and	Positio	n of Sigh	nting			
Behavior and Additional Comments         Logging at the surface, hardly moving, 3 calves present.         Friday, May 10, 2013 Sighting # 20         Initial sighting on Track         Time: 15:23       WP#: 133         Lat: 30.031307       Long: -80.427476         Vertical Angle: 2       Horizontal Bearing in Degrees: 100       Sighting Cue: Body         On/Off Effort: On       Trackline: 10       Beaufort Sea State: 1         Observer: Erin       Observer side: Left       Actual Time and Position of Sighting         Time: 15:25       WP#: 134       Lat: 30.042331       Long: -80.426692         Species:Stenella frontalis       Numbers (Low/High/Best): 13 / 20 / 18         Features used in Species ID: Alternating light and dark body coloration, spotting clearly present white tip to rostrum.         Representative images used for Species ID: 613, 629         Photographer: Ryan       Frame numbers: 601 - 629       Spacer: 630         Calculated distance from Trackline: 1.2 km         Final Time and Position of Sighting         Time: 15:28       WP#: 135       Lat: 30.047128       Long: -80.432912         Calculated Distance Traveled: 0.80 km         Behavior and Additional Comments	Time: 15:40	WP#:	125	Lat:	30.009806	Long:	-79.780448
Friday, May 10, 2013 Sighting # 20         Initial sighting on Track         Time:       15:23       WP#:       133       Lat:       30.031307       Long:       -80.427476         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left	Calculated Distan	nce Tra	veled:	1.1	3 km		
Friday, May 10, 2013 Sighting # 20         Initial sighting on Track         Time:       15:23       WP#:       133       Lat:       30.031307       Long:       -80.427476         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left	Behavior and A	ddition	al Comn	nents			
Friday, May 10, 2013 Sighting # 20         Initial sighting on Track         Time:       15:23       WP#:       133       Lat:       30.031307       Long:       -80.427476         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left	l ogging at the surfa	ace, hard	lv movina.	. 3 calves pre	esent.		
Initial sighting on Track         Time:       15:23       WP#:       133       Lat:       30.031307       Long:       -80.427476         Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1       1         Actual Time and Position of Sighting       Time:       15:25       WP#:       134       Lat:       30.042331       Long:       -80.426692         Species: Stenella frontalis       Numbers (Low/High/Best):       13 / 20 / 18         Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present white tip to rostrum.         Representative images used for Species ID:       613, 629         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       1.2 km       1.2 km       1.2 km         Final Time and Position of Sighting       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       1.2 km       1.2 km <th></th> <th></th> <th>.,</th> <th></th> <th></th> <th></th> <th></th>			.,				
Vertical Angle:       2       Horizontal Bearing in Degrees:       100       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Observer side:       Left         Actual Time and Position of Sighting       Numbers (Low/High/Best):       13 / 20 / 18         Species: Stenella frontalis       Numbers (Low/High/Best):       13 / 20 / 18         Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present         white tip to rostrum.       Representative images used for Species ID:       613, 629         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       1.2 km       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       135       Long:       -80.432912		on Trac	k	0	C	I ong:	-80 427476
On/Off Effort:       On       Trackline:       10       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       15:25       WP#:       134       Lat:       30.042331       Long:       -80.426692         Species:       Stenella frontalis       Numbers (Low/High/Best):       13 / 20 / 18         Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present         white tip to rostrum.       Representative images used for Species ID:       613, 629         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       Image:       -80.432912         Final Time and Position of Sighting       Time:       15:28       WP#:       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       Image:       -80.432912						_ •	
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Time:       15:25       WP#:       134       Lat:       30.042331       Long:       -80.426692         Species:       Stenella frontalis       Numbers (Low/High/Best):       13 / 20 / 18         Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present white tip to rostrum.         Representative images used for Species ID:       613, 629         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km         Final Time and Position of Sighting         Time:       15:28       WP#:       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       M       0.80 km       0.80 km							
Actual Time and Position of Sighting         Time:       15:25       WP#:       134       Lat:       30.042331       Long:       -80.426692         Species:       Stenella frontalis       Numbers (Low/High/Best):       13 / 20 / 18         Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present         white tip to rostrum.         Representative images used for Species ID:       613, 629         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       1.2 km       Final Time and Position of Sighting         Time:       15:28       WP#:       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       Mage:       -80.432912							
Time:       15:25       WP#:       134       Lat:       30.042331       Long:       -80.426692         Species:       Stenella frontalis       Numbers (Low/High/Best):       13/20/18         Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present         white tip to rostrum.         Representative images used for Species ID:       613,629         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       1.2 km       Final Time and Position of Sighting         Time:       15:28       WP#:       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       M       0.80 km       0.80 km	Actual Time and	d Positi	on of Sig	phting			
Species:Stenella frontalis       Numbers (Low/High/Best):       13 / 20 / 18         Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present         white tip to rostrum.       Representative images used for Species ID:       613, 629         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       1.2 km       Final Time and Position of Sighting         Time:       15:28       WP#:       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       Memory       -80.432912			-		30 042331	Long	-80,426692
Features used in Species ID:       Alternating light and dark body coloration, spotting clearly present white tip to rostrum.         Representative images used for Species ID:       613, 629         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       1.2 km         Final Time and Position of Sighting       Time:       15:28       WP#:       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       Mage:       -80.432912							
Representative images used for Species ID:       613,629         Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       1.2 km       630       630         Final Time and Position of Sighting       Time:       15:28       WP#:       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       600       600       600         Behavior and Additional Comments       Comments       600       600       600       600       600	-		ID: Alter	nating light	,	- /	
Photographer:       Ryan       Frame numbers:       601 - 629       Spacer:       630         Calculated distance from Trackline:       1.2 km       1.2 km       630       630         Final Time and Position of Sighting       Time:       15:28       WP#:       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       600 km       600 km       600 km	white tip to rostrum	1.					
Calculated distance from Trackline:       1.2 km         Final Time and Position of Sighting						613, 629	
Final Time and Position of Sighting         Time: 15:28       WP#: 135       Lat: 30.047128       Long: -80.432912         Calculated Distance Traveled: 0.80 km         Behavior and Additional Comments	<b>U</b> 1 —					Space	r: 630
Time:       15:28       WP#:       135       Lat:       30.047128       Long:       -80.432912         Calculated Distance Traveled:       0.80 km       0.80 km       Behavior and Additional Comments	Calculated distan	ce fron	n Trackli	ne:	1.2 km		
Calculated Distance Traveled: 0.80 km Behavior and Additional Comments	Final Time and	Positio	n of Sigh	nting			
Calculated Distance Traveled: 0.80 km Behavior and Additional Comments	Time: 15:28		0	•	30.047128	Long:	-80.432912
	Calculated Distar	nce Tra	veled:				
	Behavior and A	ddition	al Com	nents			
					below the surfa	ce.	
	groups, or	2 digitaly	puerce, t				

F	riday, May 10	), 2013 Sigh	nting # 21			
Initial sighting on <b>T</b>		U	e			
Time: 16:21 W	<b>P#:</b> 151	Lat:	30.165538	Long:	-80.37	0590
Vertical Angle: 1	Horizo	ntal Bearing	g in Degrees:	90 Sight	ting Cue:	Body
On/Off Effort: Or	ר 1	Trackline:	4	Beaufort Se	a State:	2
Observer: Ryan	(	Observer sid	le: Right			
Actual Time and Po	osition of Si	ghting				
Time: 16:22 W	P#: 152	Lat:	30.174365	Long:	-80.37	0741
Species: Tursiops trunce	atus		Numbers (L	ow/High/Be	est): 5	/5/5
Features used in Spe	cies ID: Unit	form grey colo	oration, robust b	ody appearan	ce.	
Representative imag	es used for S	Species ID:		635		
Representative imag Photographer: Ryan		1			acer:	640
1 0	n Frame	e numbers:	631 - 639		acer:	640
Photographer: Ryan	n Frame from Trackl	e numbers: _ ine:	631 - 639		acer:	640
Photographer: <u>Ryan</u> Calculated distance	n Frame from Trackli sition of Sig	numbers:	631 - 639 0.98 km	Spa	acer:	
Photographer:Ryan Calculated distance : Final Time and Pos	n Frame from Trackl sition of Sig 'P#: 153	hting	631 - 639 0.98 km 30.167651	Spa		
Photographer: <u>Ryan</u> Calculated distance <b>Final Time and Pos</b> Time: <u>16:23</u> W	n Frame from Trackli sition of Sig (P#: 153 Traveled:	hting Lat:	631 - 639 0.98 km 30.167651	Spa		
Photographer: <u>Ryan</u> Calculated distance : <b>Final Time and Pos</b> Time: <u>16:23</u> W Calculated Distance	n Frame from Trackli sition of Sig P#: 153 Traveled: tional Com	hting Lat:	631 - 639 0.98 km 30.167651	Spa		
Photographer: <u>Ryan</u> Calculated distance = <b>Final Time and Pos</b> Time: <u>16:23</u> W Calculated Distance <b>Behavior and Addi</b>	n Frame from Trackli sition of Sig P#: 153 Traveled: tional Com	hting Lat:	631 - 639 0.98 km 30.167651	Spa		
Photographer: <u>Ryan</u> Calculated distance = <b>Final Time and Pos</b> Time: <u>16:23</u> W Calculated Distance <b>Behavior and Addi</b>	n Frame from Trackli sition of Sig P#: 153 Traveled: tional Com	hting Lat:	631 - 639 0.98 km 30.167651	Spa		

Thursday, June 20, 2013 $\mathbf{Sighting}~\#$ 1
Initial sighting on Track
Time:         10:58         WP#:         15         Lat:         30.433373         Long:         -80.605617
Vertical Angle: <u>2</u> Horizontal Bearing in Degrees: <u>150</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 8 Beaufort Sea State: 2
Observer: Zach Observer side: Left
Actual Time and Position of Sighting
Time:         11:06         WP#:         16         Lat:         30.429801         Long:         -80.617737
Species:Unidentified Stenella         Numbers (Low/High/Best):         2/2/2
Features used in Species ID: N/A
Representative images used for Species ID:
Photographer: N/A Frame numbers: N/A Spacer: N/A
Calculated distance from Trackline: 1.23 km
Final Time and Position of Sighting
Time:   N/A   WP#:   N/A   Lat:   N/A   Long:   N/A
Calculated Distance Traveled: N/A
Behavior and Additional Comments
No photos
Thursday, June 20, 2013 Sighting $\#$ 2
Initial sighting on Track
Initial sighting on Track           Time:         11:23         WP#:         19         Lat:         30.434251         Long:         -80.014101
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash
Initial sighting on TrackTime:11:23WP#:19Lat:30.434251Long:-80.014101Vertical Angle:2Horizontal Bearing in Degrees:150Sighting Cue:SplashOn/Off Effort:OnTrackline:8Beaufort Sea State:2
Initial sighting on TrackTime:11:23WP#:19Lat:30.434251Long:-80.014101Vertical Angle:2Horizontal Bearing in Degrees:150Sighting Cue:SplashOn/Off Effort:OnTrackline:8Beaufort Sea State:2Observer:ZachObserver side:Left
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left
Initial sighting on TrackTime:11:23WP#:19Lat:30.434251Long:-80.014101Vertical Angle:2Horizontal Bearing in Degrees:150Sighting Cue:SplashOn/Off Effort:OnTrackline:8Beaufort Sea State:2Observer:ZachObserver side:LeftLeftTime:11:27WP#:20Lat:30.431533Long:-80.022973
Initial sighting on TrackTime:11:23WP#:19Lat:30.434251Long:-80.014101Vertical Angle:2Horizontal Bearing in Degrees:150Sighting Cue:SplashOn/Off Effort:OnTrackline:8Beaufort Sea State:2Observer:ZachObserver side:LeftActual Time and Position of SightingTime:11:27WP#:20Lat:30.431533Long:-80.022973Species:Unidentified DelphinidNumbers (Low/High/Best):1/1/1
Initial sighting on TrackTime:11:23WP#:19Lat:30.434251Long:-80.014101Vertical Angle:2Horizontal Bearing in Degrees:150Sighting Cue:SplashOn/Off Effort:OnTrackline:8Beaufort Sea State:2Observer:ZachObserver side:LeftLeftTime:11:27WP#:20Lat:30.431533Long:-80.022973
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left         Actual Time and Position of Sighting         Time:       11:27       WP#:       20       Lat:       30.431533       Long:       -80.022973         Species:       Unidentified Delphinid       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       N/A
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       11:27       WP#:       20       Lat:       30.431533       Long:       -80.022973         Species:Unidentified Delphinid       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       N/A         Representative images used for Species ID:       N/A         Photographer:       N/A       Frame numbers:       N/A
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left       2         Actual Time and Position of Sighting       Time:       11:27       WP#:       20       Lat:       30.431533       Long:       -80.022973         Species:Unidentified Delphinid       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       N/A         Photographer:       N/A       Frame numbers:       N/A         Photographer:       N/A       Frame numbers:       N/A         Calculated distance from Trackline:       0.90 km       Spacer:       N/A
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left         Actual Time and Position of Sighting         Time:       11:27       WP#:       20       Lat:       30.431533       Long:       -80.022973         Species:       Unidentified Delphinid       Numbers (Low/High/Best):       1 / 1 / 1         Features used in Species ID:       N/A         Representative images used for Species ID:       N/A         Photographer:       N/A       Frame numbers:       N/A         Photographer:       N/A       Frame numbers:       N/A         Final Time and Position of Sighting
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left         Actual Time and Position of Sighting         Time:       11:27       WP#:       20       Lat:       30.431533       Long:       -80.022973         Species:       Unidentified Delphinid       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       N/A         Photographer:       N/A       Frame numbers:       N/A         Photographer:       N/A       Frame numbers:       N/A         Final Time and Position of Sighting       Time:       0.90 km         Time:       N/A       WP#:       N/A       Long:       N/A
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       11:27       WP#:       20       Lat:       30.431533       Long:       -80.022973         Species:       Unidentified Delphinid       Numbers (Low/High/Best):       1 / 1 / 1         Features used in Species ID:       N/A         Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Photographer:       N/A       Frame numbers:       0.90 km       Spacer:       N/A       Calculated distance from Trackline:       0.90 km         Final Time and Position of Sighting       Time:       N/A       WP#:       N/A       Long:       N/A         Calculated Distance Traveled:       N/A       N/A       Long:       N/A
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left         Actual Time and Position of Sighting         Time:       11:27       WP#:       20       Lat:       30.431533       Long:       -80.022973         Species:       Unidentified Delphinid       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       N/A         Photographer:       N/A       Frame numbers:       N/A         Photographer:       N/A       Frame numbers:       N/A         Final Time and Position of Sighting       Time:       0.90 km         Time:       N/A       WP#:       N/A       Long:       N/A
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       11:27       WP#:       20       Lat:       30.431533       Long:       -80.022973         Species:       Unidentified Delphinid       Numbers (Low/High/Best):       1 / 1 / 1         Features used in Species ID:       N/A         Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Photographer:       N/A       Frame numbers:       0.90 km       Spacer:       N/A       Calculated distance from Trackline:       0.90 km         Final Time and Position of Sighting       Time:       N/A       WP#:       N/A       Long:       N/A         Calculated Distance Traveled:       N/A       N/A       Long:       N/A
Initial sighting on Track         Time:       11:23       WP#:       19       Lat:       30.434251       Long:       -80.014101         Vertical Angle:       2       Horizontal Bearing in Degrees:       150       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Zach       Observer side:       Left         Actual Time and Position of Sighting         Time:       11:27       WP#:       20       Lat:       30.431533       Long:       -80.022973         Species:       Unidentified Delphinid       Numbers (Low/High/Best):       1 / 1 / 1         Features used in Species ID:       N/A         Representative images used for Species ID:       N/A         Photographer:       N/A       Frame numbers:       N/A       Spacer:       N/A         Calculated distance from Trackline:       0.90 km       Image:       N/A       Calculated Distance Traveled:       N/A         Time:       N/A       WP#:       N/A       Lat:       N/A       Long:       N/A         Calculated Distance Traveled:       N/A       MA       Behavior and Additional Comments       Image:       N/A    <

Thursday, June 20, 2013 Sighting $\#$ 3
Initial sighting on Track
Time:         11:36         WP#:         27         Lat:         30.367329         Long:         -79.818538
Vertical Angle: <u>2</u> Horizontal Bearing in Degrees: <u>60</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 7 Beaufort Sea State: 2
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:         11:40         WP#:         25         Lat:         30.361350         Long:         -79.818280
Species:Unidentified Delphinid Numbers (Low/High/Best): 1/1/1
Features used in Species ID: N/A
Representative images used for Species ID:
Photographer: N/A Frame numbers: N/A Spacer: N/A
Calculated distance from Trackline: 0.67 km
Final Time and Position of Sighting
Time:     N/A     WP#:     N/A     Lat:     N/A     Long:     N/A
Calculated Distance Traveled: N/A
Behavior and Additional Comments
No photos
Thursday, June 20, 2013 ${ m Sighting}~\#~~4$
Initial sighting on Track
Time:         12:40         WP#:         32         Lat:         30.264949         Long:         -79.788488
Vertical Angle:         3         Horizontal Bearing in Degrees:         90         Sighting Cue:         Body
On/Off Effort:         Off         Trackline:         6-5         Beaufort Sea State:         2
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:         12:41         WP#:         33         Lat:         30.266891         Long:         -79.788749
Species: Tursiops truncatus Numbers (Low/High/Best): 7/7/7
Features used in Species ID: Uniform gray body, robust
Representative images used for Species ID: 43, 46, 50
Representative images used for Species ID:43, 46, 50Photographer:RyanFrame numbers:39 - 86Spacer:87
Calculated distance from Trackline: 0.22 km
Final Time and Desition of Sighting
Final Time and Position of Sighting
Time:         12:45         WP#:         34         Lat:         30.270195         Long:         -79.794255
Time:         12:45         WP#:         34         Lat:         30.270195         Long:         -79.794255           Calculated Distance Traveled:         0.64 km         0.64 km         -79.794255         -79.794255
Time:         12:45         WP#:         34         Lat:         30.270195         Long:         -79.794255
Time:         12:45         WP#:         34         Lat:         30.270195         Long:         -79.794255           Calculated Distance Traveled:         0.64 km         0.64 km         -79.794255         -79.794255
Time:         12:45         WP#:         34         Lat:         30.270195         Long:         -79.794255           Calculated Distance Traveled:         0.64 km         0.64 km         -79.794255         -79.794255

Initial sighting on TrackTime:8:58WP#:Vertical Angle:2HOn/Off Effort:On	ine 21, 2013 Sigl	U	
Vertical Angle: 2 H On/Off Effort: On			
On/Off Effort: On	7 Lat:	29.967055	Long:80.098226
	orizontal Bearing	g in Degrees: 13	<sup>30</sup> Sighting Cue: Body
	Trackline:	1 Be	eaufort Sea State: 2
Observer: Zach	Observer sid	le: Left	
Actual Time and Position	of Sighting		
Time: <u>9:14</u> WP#:	8 Lat:	29.965022	Long: -80.107845
Species:Tursiops truncatus			v/High/Best): <u>3/3/3</u>
Features used in Species ID	: Uniform gray, rol	oust animals, white	peduncles
Representative images used			8, 9, 12
Photographer: Ryan I			Spacer:15
Calculated distance from T	rackline:	0.95 km	_
Final Time and Position o	of Sighting		
Time: <u>9:18</u> WP#:	9 Lat:	29.953993	Long:
Calculated Distance Travel	ed:1.2	3 km	
Behavior and Additional	Comments		
Travel, white peduncles			
	ine 21, 2013 $\operatorname{Sigl}$	nting # 2	
Initial sighting on Track			
Time: <u>9:25</u> WP#:			Long:
Time:9:25WP#:Vertical Angle:1H	orizontal Bearing	g in Degrees: 12	20 Sighting Cue: Body
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:On	orizontal Bearing Trackline:	g in Degrees: 12 1 Be	6
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:OnObserver:Zach	orizontal Bearing Trackline: Observer sic	g in Degrees: 12 1 Be	20 Sighting Cue: Body
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:OnObserver:ZachActual Time and Position	orizontal Bearing Trackline: Observer sic of Sighting	g in Degrees: 12 1 Be	20 Sighting Cue: Body
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:OnObserver:ZachActual Time and Position	orizontal Bearing Trackline: Observer sic	g in Degrees: 12 1 Be le: Left 29.976420	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:OnObserver:ZachActual Time and PositionTime:9:26WP#:Species:Grampus griseus	orizontal Bearing Trackline: Observer sic of Sighting 13 Lat:	g in Degrees: <u>12</u> <u>1</u> Be le: <u>Left</u> <u>29.976420</u> Numbers (Lov	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9/11/10
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:OnObserver:ZachActual Time and PositionTime:9:26WP#:	orizontal Bearing Trackline: Observer sic of Sighting 13 Lat:	g in Degrees: <u>12</u> <u>1</u> Be le: <u>Left</u> <u>29.976420</u> Numbers (Lov	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9/11/10
Time:       9:25       WP#:	orizontal Bearing Trackline: Observer sic of Sighting 13 Lat: D: Gray with white s	g in Degrees: 12 1 Be le: Left 29.976420 Numbers (Low scarring, blunt head	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9/11/10 , cleft in middle
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:OnObserver:ZachActual Time and PositionTime:9:26WP#:Species:Grampus griseusFeatures used in Species IDRepresentative images used	orizontal Bearing Trackline: Observer sic of Sighting 13 Lat: D: Gray with white s	g in Degrees:12 Be de:Left 29.976420 Numbers (Low scarring, blunt head	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9 / 11 / 10 , cleft in middle 6, 24, 27, 32, 35
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:OnObserver:ZachActual Time and PositionTime:9:26WP#:Species:Grampus griseusFeatures used in Species IDRepresentative images usedPhotographer:RyanH	orizontal Bearing Trackline: Observer sic of Sighting 13 Lat: D: Gray with white s I for Species ID: Frame numbers:	g in Degrees: 12 1 Be le: Left 29.976420 Numbers (Low scarring, blunt head 1 16 -50	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9/11/10 , cleft in middle
Time: 9:25 WP#: Vertical Angle: 1 H On/Off Effort: On Observer: Zach Actual Time and Position Time: 9:26 WP#: Species:Grampus griseus Features used in Species ID Representative images used Photographer: Ryan H Calculated distance from T	orizontal Bearing Trackline: Observer sic of Sighting 13 Lat: Gray with white set 1 for Species ID: Frame numbers: ackline:	g in Degrees:12 Be de:Left 29.976420 Numbers (Low scarring, blunt head	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9 / 11 / 10 , cleft in middle 6, 24, 27, 32, 35
Time:       9:25       WP#:	orizontal Bearing Trackline: Observer sic of Sighting 13 Lat: D: Gray with white size 1 for Species ID: Frame numbers: rackline: of Sighting	g in Degrees: 12 1 Be le: Left 29.976420 Numbers (Low scarring, blunt head 1 16 -50	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9 / 11 / 10 , cleft in middle 6, 24, 27, 32, 35
Time:       9:25       WP#:	orizontal Bearing Trackline: Observer sid of Sighting 13 Lat: Observer sid Contemporal content of Sighting 14 Lat: Observer sides Content of Sighting 14 Lat: Observer sides Content of Sighting Content of Sighti	g in Degrees: 12 1 Be le: Left 29.976420 Numbers (Low scarring, blunt head 1 16 -50	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9 / 11 / 10 , cleft in middle 6, 24, 27, 32, 35
Time:       9:25       WP#:          Vertical Angle:       1       H         On/Off Effort:       On         Observer:       Zach         Actual Time and Position         Time:       9:26         WP#:          Species:       Grampus griseus         Features used in Species ID	orizontal Bearing Trackline: Observer sid of Sighting 13 Lat: Observer sid Contemporal content of Sighting 14 Lat: Observer sides Content of Sighting 14 Lat: Observer sides Content of Sighting Content of Sighti	g in Degrees: 12 1 Be le: Left 29.976420 Numbers (Low scarring, blunt head 1 16 -50 1.19 km	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9 / 11 / 10 , cleft in middle 6, 24, 27, 32, 35 Spacer: 51
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:OnObserver:ZachActual Time and PositionTime:9:26WP#:Species:Grampus griseusFeatures used in Species IDRepresentative images usedPhotographer:RyanRight and Position ofTime:9:32WP#:	orizontal Bearing Trackline: Observer sid of Sighting 13 Lat: D: Gray with white set I for Species ID: Frame numbers: f Sighting 14 Lat: ed:0.3	g in Degrees:12 Be de:Left  29.976420 Numbers (Low scarring, blunt head 1 1 1 1 6 -50 1 	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9 / 11 / 10 , cleft in middle 6, 24, 27, 32, 35 Spacer: 51
Time:       9:25       WP#:	orizontal Bearing Trackline: Observer sid of Sighting 13 Lat: D: Gray with white set I for Species ID: Frame numbers: f Sighting 14 Lat: ed:0.3	g in Degrees:12 Be de:Left  29.976420 Numbers (Low scarring, blunt head 1 1 1 1 6 -50 1 	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9 / 11 / 10 , cleft in middle 6, 24, 27, 32, 35 Spacer: 51
Time:9:25WP#:Vertical Angle:1HOn/Off Effort:OnObserver:ZachActual Time and PositionTime:9:26WP#:Species:Grampus griseusFeatures used in Species IDRepresentative images usedPhotographer:RyanRinal Time and Position ofTime:9:32WP#:Calculated Distance TravelBehavior and Additional	orizontal Bearing Trackline: Observer sid of Sighting 13 Lat: D: Gray with white set I for Species ID: Frame numbers: f Sighting 14 Lat: ed:0.3	g in Degrees:12 Be de:Left  29.976420 Numbers (Low scarring, blunt head 1 1 1 1 6 -50 1 	20 Sighting Cue: Body eaufort Sea State: 2 Long: -79.920542 v/High/Best): 9 / 11 / 10 , cleft in middle 6, 24, 27, 32, 35 Spacer: 51

Friday, June 21, 2013 Sighting $\# 3$
Initial sighting on Track
Time: 9:46 WP#: 19 Lat: 30.030017 Long: -80.070314
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>150</u> Sighting Cue: <u>Body</u>
On/Off Effort:         On         Trackline:         2         Beaufort Sea State:         2
Observer: Zach Observer side: Left
Actual Time and Position of Sighting
Time:         9:47         WP#:         20         Lat:         30.028698         Long:         -80.055636
Species: Unidentified Delphinid Numbers (Low/High/Best): 1/1/1
Features used in Species ID: N/A
Representative images used for Species ID:
Photographer: N/A Frame numbers: N/A Spacer: N/A
Calculated distance from Trackline: 1.42 km
Final Time and Position of Sighting
Time:   N/A   WP#:   N/A   Lat:   N/A   Long:   N/A
Calculated Distance Traveled: N/A
Behavior and Additional Comments
Delp or small whale
Friday, June 21, 2013 Sighting # 4
Initial sighting on Track
Time:9:51WP#:22Lat:30.031085Long:-80.170490Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:Body
Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:2Beaufort Sea State:2
Observer:     Zach     Observer side:     Left
Actual Time and Position of Sighting
Time:         9:53         WP#:         23         Lat:         30.026501         Long:         -80.170572           Species/Twist         Numbers (Leng)         -80.170572         -80.170572         -80.170572
Species:Tursiops truncatusNumbers (Low/High/Best):6/6/6Features used in Species ID:Uniform gray, robust
Teatures used in Species ID. Onioringray, robust
Representative images used for Species ID: 57,63
Photographer: Ryan Frame numbers: 55 - 68 Spacer: 69
Calculated distance from Trackline: 0.51 km
Final Time and Position of Sighting
Time:         9:58         WP#:         24         Lat:         30.025972         Long:         -80.168250
Calculated Distance Traveled: $0.23 \text{ km}$
Behavior and Additional Comments
Behavior and Additional Comments Diving deep from surface while we were circling

Frid	ay, June 2	1, 2013 Sigh	ting $\#$ 5			
Initial sighting on Tr		U	C			
Time: 10:16 WP	#: 31	Lat:	30.099921	Long:	-80.6647	/83
Vertical Angle: 2	_ Horizo	ontal Bearing	g in Degrees:	90 Sight	ing Cue: 🔤	Splash
On/Off Effort: On		Trackline:		Beaufort Sea	a State:	2
Observer: Ryan		Observer sid	e: Right			
Actual Time and Pos	ition of S	bighting				
Time: 10:18 WP	#: 32	Lat:	30.092055	Long:	-80.6646	90
Species: Tursiops truncate				Low/High/Bes	st):3 / 5	5/4
Features used in Speci	es ID: <u>Un</u>	iform gray, rob	oust			
Representative images				75	0	-
Photographer: Ryan				Spa	cer:8	5
Calculated distance fro	om Track	line:	0.87 KM			
Final Time and Posit						
	#: 33		30.087916	Long:	-80.6694	160
Calculated Distance T	raveled:	0.6	5 km			
<b>Behavior and Additie</b>	onal Com	iments				
Calf present						
		4 aa 4a G' 1				
		1, 2013 Sigh	nting# 6			
Initial sighting on Tr	ack	C	C			
Initial sighting on TrTime:10:32WP	<b>ack</b> #: <u>38</u>	Lat:	30.101387		-80.3502	
Initial sighting on TrTime:10:32WPVertical Angle:2	<b>ack</b> #: <u>38</u> Horizo	Lat:	30.101387 g in Degrees:	130 Sight	ing Cue:	Splash
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:On	ack #: <u>38</u> Horizo	Lat:	30.101387 g in Degrees: 3	130 Sight	ing Cue:	Splash
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:Zach	ack #: <u>38</u> Horizo	Lat:	30.101387 g in Degrees: 3	130 Sight	ing Cue:	Splash
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and Post	ack #: <u>38</u> Horizo ition of S	Lat: ontal Bearing Trackline: Observer sid	30.101387 g in Degrees: 3 le: Left	130 Sight Beaufort Sea	ing Cue: a State:	Splash 2
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WP	ack #: <u>38</u> Horizo ition of S #: <u>39</u>	Lat: ontal Bearing Trackline: Observer sid	30.101387 g in Degrees: 3 le: Left 30.097726	130 Sight Beaufort Sea	ing Cue: a State: -80.3561	Splash 2 20
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncate	ack #: <u>38</u> Horizo ition of S #: <u>39</u>	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I	130 Sight Beaufort Sea	ing Cue: a State: -80.3561	Splash 2 20
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WP	ack #: <u>38</u> Horizo ition of S #: <u>39</u>	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I	130 Sight Beaufort Sea	ing Cue: a State: -80.3561	Splash 2 20
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncateFeatures used in Species	ack #: <u>38</u> Horizo ition of S #: <u>39</u> Js tes ID: <u>Un</u>	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I	130 Sight Beaufort Sea Long: Low/High/Bes	ing Cue: a State: -80.3561	Splash 2 20
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncateFeatures used in SpeciRepresentative images	ack         #:       38         Horizo         ition of S         #:       39         Js         es ID:       Un         s used for	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I	130 Sight Beaufort Sea Long: Low/High/Bes	ing Cue: a State: -80.3561 st):2 / 3	Splash 2 20 3 / 3
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncateFeatures used in SpeciesRepresentative imagesPhotographer:Ryan	ack         #: 38         Horizo         ition of S         #: 39	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I oust 86 - 96	130 Sight Beaufort Sea Long: Low/High/Bes	ing Cue: a State: -80.3561 st):2 / 3	Splash 2 20
Initial sighting on Tr Time: 10:32 WP Vertical Angle: 2 On/Off Effort: On Observer: Zach Actual Time and Pos Time: 10:37 WP Species: <i>Tursiops truncate</i> Features used in Species Representative images Photographer: Ryan Calculated distance free	ack #: 38 Horizo ition of S #: 39 used for s used for Fram om Track	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I	130 Sight Beaufort Sea Long: Low/High/Bes	ing Cue: a State: -80.3561 st):2 / 3	Splash 2 20 3 / 3
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncateFeatures used in SpeciesRepresentative imagesPhotographer:RyanCalculated distance fromFinal Time and Position	ack #: 38 Horizo ition of S #: 39 Js tes ID: Un s used for Fram om Track ion of Sig	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I oust 86 - 96 0.70 km	130       Sight:         Beaufort Sea            Long:           Long:           Long:           92           Spa	ing Cue: a State: -80.3561 st):3 cer:9	Splash 2 20 3 / 3 7 7
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncateFeatures used in SpeciRepresentative imagesPhotographer:RyanCalculated distance freeFinal Time and PositTime:10:40WP	ack #: 38 Horizo ition of S #: 39 Js es ID: Un s used for Fram om Track ion of Sig #: 40	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I oust 86 - 96 0.70 km 30.094275	130       Sight:         Beaufort Sea            Long:           Long:           Long:           92           Spa	ing Cue: a State: -80.3561 st):2 / 3	Splash 2 20 3 / 3 7 7
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncateFeatures used in SpeciesRepresentative imagesPhotographer:RyanCalculated distance fromTime:10:40WPCalculated Distance T	ack #: 38 Horizo ition of S #: 39 Js tes ID: Un s used for Fram om Track ion of Sig #: 40 raveled:	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I oust 86 - 96 0.70 km	130       Sight:         Beaufort Sea            Long:           Long:           Long:           92           Spa	ing Cue: a State: -80.3561 st):3 cer:9	Splash 2 20 3 / 3 7 7
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncateFeatures used in SpeciRepresentative imagesPhotographer:RyanCalculated distance freeFinal Time and PositTime:10:40WP	ack #: 38 Horizo ition of S #: 39 Js tes ID: Un s used for Fram om Track ion of Sig #: 40 raveled:	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I oust 86 - 96 0.70 km 30.094275	130       Sight:         Beaufort Sea            Long:           Long:           Long:           92           Spa	ing Cue: a State: -80.3561 st):3 cer:9	Splash 2 20 3 / 3 7 7
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncateFeatures used in SpeciesRepresentative imagesPhotographer:RyanCalculated distance fromTime:10:40WPCalculated Distance T	ack #: 38 Horizo ition of S #: 39 Js tes ID: Un s used for Fram om Track ion of Sig #: 40 raveled:	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I oust 86 - 96 0.70 km 30.094275	130       Sight:         Beaufort Sea            Long:           Long:           Long:           92           Spa	ing Cue: a State: -80.3561 st):3 cer:9	Splash 2 20 3 / 3 7 7
Initial sighting on TrTime:10:32WPVertical Angle:2On/Off Effort:OnObserver:ZachActual Time and PosTime:10:37WPSpecies:Tursiops truncateFeatures used in SpeciesRepresentative imagesPhotographer:RyanCalculated distance fromTime:10:40WPCalculated Distance T	ack #: 38 Horizo ition of S #: 39 Js tes ID: Un s used for Fram om Track ion of Sig #: 40 raveled:	Lat:	30.101387 g in Degrees: 3 le: Left 30.097726 Numbers (I oust 86 - 96 0.70 km 30.094275	130       Sight:         Beaufort Sea            Long:           Long:           Long:           92           Spa	ing Cue: a State: -80.3561 st):3 cer:9	Splash 2 20 3 / 3 7 7

Friday, June 21, 2013 Sighting $\# 7$	
Initial sighting on Track	
Time:         10:48         WP#:         44         Lat:         30.101632         Long:         -80.078071	
Vertical Angle: 2 Horizontal Bearing in Degrees: 80 Sighting Cue: Brea	ach
On/Off Effort: Trackline: Beaufort Sea State:	
Observer: Zach Observer side: Left	
Actual Time and Position of Sighting	
Time:         10:50         WP#:         45         Lat:         30.104927         Long:         -80.073517	
Species:Tursiops truncatus         Numbers (Low/High/Best):         6/8/7	7
Features used in Species ID: Uniform gray , robust, white peduncles	
Representative images used for Species ID:	
Photographer:       Ryan       Frame numbers:       100 - 111       Spacer:       112         Calculated distance from Trackline:       0.57 km	
Final Time and Position of Sighting	
Time:         11:02         WP#:         46         Lat:         30.108072         Long:         -80.073696	
Calculated Distance Traveled: 0.35 km	
Behavior and Additional Comments	
Assumed last position. White peduncles, spread out group all in singles	
Friday, June 21, 2013 Sighting # 8         Initial sighting on Track         Time:       11:23       WP#:       52       Lat:       30.165234       Long:       -80.517337         Vertical Angle:       3       Horizontal Bearing in Degrees:       100       Sighting Cue:       Bo         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Right	
Actual Time and Position of Sighting	
Time: 11:24 WP#: 53 Lat: 30.169890 Long: -80.515658	
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 8/9/8	3
Features used in Species ID: Uniform gray, robust	
Representative images used for Species ID: 113, 127	
Photographer:RyanFrame numbers:113 - 132Spacer:133	
Calculated distance from Trackline: 0.54 km	
Final Time and Position of Sighting	
Time:         11:33         WP#:         54         Lat:         30.172113         Long:         -80.511046	
Time:         11:33         WP#:         54         Lat:         30.172113         Long:         -80.511046           Calculated Distance Traveled:         0.51 km         0.51 km         -80.511046<	
Time:         11:33         WP#:         54         Lat:         30.172113         Long:         -80.511046	
Time:         11:33         WP#:         54         Lat:         30.172113         Long:         -80.511046           Calculated Distance Traveled:         0.51 km         0.51 km         -80.511046<	
Time:         11:33         WP#:         54         Lat:         30.172113         Long:         -80.511046           Calculated Distance Traveled:         0.51 km         0.51 km         -80.511046<	

Friday, June 21, 2013 Sighting # 9
Initial sighting on Track
Time:         12:06         WP#:         69         Lat:         30.300596         Long:         -80.546329
Vertical Angle: 2 Horizontal Bearing in Degrees: 110 Sighting Cue: Splash
On/Off Effort: On Trackline: 6 Beaufort Sea State: 2
Observer: Zach Observer side: Left
Actual Time and Position of Sighting
Time:         12:08         WP#:         70         Lat:         30.294445         Long:         -80.542902
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 5/7/6
Features used in Species ID: Uniform gray, robust
Representative images used for Species ID: 140, 153, 157
Photographer: Ryan Frame numbers: 134-159 Spacer:
Calculated distance from Trackline: 0.76 km
Final Time and Position of Sighting
Time:         12:23         WP#:         72         Lat:         30.285702         Long:         -80.543131
Calculated Distance Traveled: 0.97 km
Behavior and Additional Comments
Mixed group of Ttr and Sfr, see sighting 10.
Friday, June 21, 2013 Sighting # 10
Initial sighting on Track
Time:12:06WP#:69Lat:30.300596Long:-80.546329Vertical Angle:2Horizontal Bearing in Degrees:110Sighting Cue:Splash
On/Off Effort: On Trackline: 6 Beaufort Sea State: 2
Observer: Zach Observer side: Left
Actual Time and Position of Sighting
Time:         12:16         WP#:         71         Lat:         30.300538         Long:         -80.542854
Species: Stenella frontalis Numbers (Low/High/Best): 40 / 50 / 45
Features used in Species ID: Alternating light and dark pattern down body, white tip to nose
spotting
Representative images used for Species ID: 178, 203, 204, 216, 218
Photographer:RyanFrame numbers:160 - 221Spacer:222
Photographer:RyanFrame numbers:160 - 221Spacer:222Calculated distance from Trackline:0.33 km
Calculated distance from Trackline:       0.33 km         Final Time and Position of Sighting         Time:       12:23         WP#:       72         Lat:       30.285702         Long:       -80.543131
Calculated distance from Trackline: 0.33 km Final Time and Position of Sighting
Calculated distance from Trackline:       0.33 km         Final Time and Position of Sighting         Time:       12:23         WP#:       72         Lat:       30.285702         Long:       -80.543131
Calculated distance from Trackline:       0.33 km         Final Time and Position of Sighting         Time:       12:23         WP#:       72         Lat:       30.285702         Long:       -80.543131         Calculated Distance Traveled:       1.65 km
Calculated distance from Trackline:       0.33 km         Final Time and Position of Sighting         Time:       12:23         WP#:       72         Lat:       30.285702         Long:       -80.543131         Calculated Distance Traveled:       1.65 km         Behavior and Additional Comments

Wedneso	day, Sep	· · · · ,						
Initial sighting (	on Trac	k	Ũ	C				
Time: 9:30	WP#:	7	Lat:	30.567884	Lon	g:	-80.38833	5
Vertical Angle:	1	Horizon	tal Bearing	g in Degrees:	60 S	ighting	Cue: B	Body
On/Off Effort:		Tr	ackline:	10	Beaufort	Sea Sta	ate:	2
Observer: E	rin	0	bserver sic	le: Left				
Actual Time and	d Positi	on of Sig	hting					
Time: 9:35	WP#:	8	Lat:	30.572533	Lon	g:	-80.390993	3
Species:Stenella fro				Numbers (				/ 35
Features used in	Species	ID: Alter	nating light	and dark patter	n down boo	dy, spotti	ng	
<u> </u>		1.6 0	· 1D		2 0 10	22.26		
Representative in					3, 9, 19,		33	
Photographer: Calculated distar						Spacer:		
				0.50 km				
Final Time and		0	0	20 567175			00 00 007	10
Time: <u>9:39</u>				30.567175	Lon	g:	-80.39687	9
Calculated Dista				2 km				
Behavior and A								
n a tight group, sor		surface, so	ome below.	Traveling, hittin	g the surfac	e. Swimr	ning in pa	irs.
	and Ttr.							
Mixed group of Sfra								
Wednes			2013 Sigl	nting # 2				
Wedness I <b>nitial sighting (</b> Time: <u>10:22</u> Vertical Angle: _ On/Off Effort: _	0n Trac WP#: 1 On	<b>k</b> <u>19</u> Horizon Tr	Lat: tal Bearing cackline:	30.498691 g in Degrees: 9		ighting		30 30dy 1
Wedness I <b>nitial sighting (</b> Time: <u>10:22</u> Vertical Angle: _ On/Off Effort: _	0n Trac WP#: 1 On	<b>k</b> <u>19</u> Horizon Tr	Lat: tal Bearing cackline:	30.498691 g in Degrees:	90 S	ighting	Cue: B	Body
Wedness Initial sighting of Time: <u>10:22</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>Ry</u> Actual Time and	WP#: <u>1</u> On van d Positi	k <u>19</u> Horizon Tr Ol on of Sig	Lat: tal Bearing rackline: bserver sic	30.498691 g in Degrees: 9 le: Right	90 S Beaufort	ighting	Cue: B	Body
Wednese Initial sighting of Fime: 10:22 Vertical Angle: On/Off Effort: Observer:Ry Actual Time and Fime:	WP#: <u>1</u> On yan d Positi WP#:	k <u>19</u> Horizon Tr Ol on of Sig	Lat: tal Bearing rackline: bserver sic	30.498691 g in Degrees: 9 le: Right 30.505879	90 S Beaufort	g:	Cue: <u>B</u> ate:	3ody 1 4
Wedneso <b>initial sighting o</b> Fime: 10:22 Vertical Angle: _ On/Off Effort: _ Observer:Ry Actual Time and Fime:10:24 Species:Stenella from	Market Ma	k 19 Horizon Tr Ol on of Sig 20	Lat: tal Bearing rackline: bserver sic thting Lat:	30.498691 g in Degrees: 9 le: <u>Right</u> 30.505879 Numbers (1	90 S Beaufort Low/High	g: Best):	Cue: ate: -80.635534 16 / 25	3ody 1 4
Wedneso (nitial sighting of Fime: 10:22 Vertical Angle: _ On/Off Effort: _ Observer:Ry Actual Time and Fime:10:24 Species: Stenella from	Market Ma	k 19 Horizon Tr Ol on of Sig 20	Lat: tal Bearing rackline: bserver sic thting Lat:	30.498691 g in Degrees: 9 le: <u>Right</u> 30.505879 Numbers (1	90 S Beaufort Low/High	g: Best):	Cue: ate: -80.635534 16 / 25	3ody 1 4
Wednese Initial sighting of Time: 10:22 Vertical Angle: _ On/Off Effort: _ Observer:Ry Actual Time and Time: 10:24 Species: Stenella fro Features used in	on Trac WP#: <u>1</u> On /an d Positi WP#: Species	k 19 Horizon Tr Ol on of Sig 20 ID: Alter	Lat: tal Bearing fackline: bserver sic thting Lat: nating light	30.498691 g in Degrees: 9 le: Right 30.505879 Numbers (2 and dark patter	90 S Beaufort Lom Low/High	ighting Sea Sta g: /Best): dy, spotti	Cue: ate: -80.635534 16 / 25	3ody 1 4
Wednese Initial sighting of Time: 10:22 Vertical Angle: _ On/Off Effort: _ Observer:Ry Actual Time and Time:10:24 Species: Stenella from Features used in Representative in	Den Trac WP#: <u>1</u> On van d Positi WP#: ontalis Species mages u	k <u>19</u> Horizon Tr Ol on of Sig <u>20</u> ID: <u>Altern</u> sed for Sp	Lat: tal Bearing rackline: bserver sic thing Lat: nating light pecies ID:	30.498691 g in Degrees: 9 le: <u>Right</u> 30.505879 Numbers (1 and dark patter	90 S Beaufort Low/High	ighting Sea Sta g: /Best): dy, spotti 48	Cue: ate: -80.635534  16 / 25 ng	3ody 1 4 / 20
Wednese Initial sighting of Fime: <u>10:22</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>Ry</u> Actual Time and Fime: <u>10:24</u> Species: <i>Stenella fre</i> Features used in Representative in Photographer: <u></u>	on Trac WP#: <u>1</u> On yan d Positi WP#: ontalis Species mages us Ryan	k <u>19</u> Horizon Tr Ol on of Sig <u>20</u> ID: <u>Alter</u> sed for Sj Frame	Lat:	<u>30.498691</u> g in Degrees: <u>9</u> le: <u>Right</u> <u>30.505879</u> Numbers (1 and dark patter <u>34 - 60</u>	90 S Beaufort Lom Low/High	ighting Sea Sta g: /Best): dy, spotti	Cue: ate: -80.635534  16 / 25 ng	3ody 1 4 / 20
Wedneso Initial sighting of Time: 10:22 Vertical Angle: _ On/Off Effort: _ Observer:Ry Actual Time and Time:10:24 Species: Stenella from Features used in Representative in Photographer: Calculated distan	on Trac WP#: <u>1</u> On van d Positi WP#: ontalis Species mages un Ryan nce from	k 19 Horizon Tr Ol on of Sig 20 ID: Altern sed for Sp Frame Tracklir	Lat:	30.498691 g in Degrees: 9 le: <u>Right</u> 30.505879 Numbers (1 and dark patter	90 S Beaufort Lom Low/High	ighting Sea Sta g: /Best): dy, spotti 48	Cue: ate: -80.635534  16 / 25 ng	3ody 1 4 / 20
Wednese Initial sighting of Fime: 10:22 Vertical Angle: _ On/Off Effort: _ Observer:Ry Actual Time and Fine: 10:24 Species: Stenella fro Features used in Representative in Photographer: Calculated distar Final Time and	on Trac WP#: <u>1</u> On van d Positi WP#: ontalis Species mages un <u>Ryan</u> nee from Position	k 19 Horizon Tr Ol on of Sig 20 ID: <u>Altern</u> sed for Sp Frame Tracklir n of Sigh	Lat:	30.498691 g in Degrees: 9 le: <u>Right</u> 30.505879 Numbers (1 and dark patter 34 - 60 0.80 km	90 S Beaufort Lom Low/High n down boo 35,	g: /Best): dy, spotti 48 Spacer:	Cue: B ate: 61	3ody 1 4 / 20
Wednese Initial sighting of Fime: 10:22 Vertical Angle: On/Off Effort: Observer: Ry Actual Time and Features used in Representative in Photographer: Calculated distar Final Time and Time: 10:27	on Trac WP#: <u>0</u> 0n van d Positi WP#: ontalis Species mages us Ryan nee from Position WP#:	k 19 Horizon Tr Ol on of Sig 20 ID: Altern sed for Sp Frame Tracklir n of Sigh 21	Lat:	30.498691 g in Degrees: 9 le: <u>Right</u> 30.505879 Numbers (1 and dark patter 34 - 60 0.80 km 30.505682	90 S Beaufort Lom Low/High n down boo 35,	g: /Best): dy, spotti 48 Spacer:	Cue: ate: -80.635534  16 / 25 ng	3ody 1 4 / 20
Wednese Initial sighting of Fime: 10:22 Vertical Angle: On/Off Effort: Observer:Ry Actual Time and Fime: 10:24 Species: Stenella from Features used in Representative in Photographer: Calculated distant Final Time and Fime: Calculated Distant	bn Trac WP#: <u>1</u> On van d Positi WP#: ontalis Species mages us Ryan nee from <b>Position</b> WP#: nce Trav	k 19 Horizom Tr Of on of Sig 20 ID: Altern sed for Sp Frame Tracklin n of Sigh 21 veled:	Lat:	30.498691 g in Degrees: 9 le: <u>Right</u> 30.505879 Numbers (1 and dark patter 34 - 60 0.80 km	90 S Beaufort Lom Low/High n down boo 35,	g: /Best): dy, spotti 48 Spacer:	Cue: B ate: 61	3ody 1 4 / 20
Wedneso Initial sighting of Time: 10:22 Vertical Angle: _ On/Off Effort: _ Observer:Ry Actual Time and Time:10:24 Species: Stenella from Features used in Representative in Photographer: Calculated distant Final Time and Time:10:27 Calculated Distant Behavior and A	on Trac WP#: <u>1</u> On yan d Positi WP#: Species mages un Ryan nce from WP#: nce from WP#: nce Trav	k 19 Horizon Tr Ol on of Sig 20 ID: Altern sed for Sj Frame Tracklir n of Sigh 21 veled:	Lat:	30.498691 g in Degrees: 9 le: <u>Right</u> 30.505879 Numbers (1 and dark patter 34 - 60 0.80 km 30.505682 4 km	90 S Beaufort Lom Low/High n down boo 35,	g: /Best): dy, spotti 48 Spacer:	Cue: B ate: 61	3ody 1 4 / 20
Mixed group of Sfr a Wedneso Initial sighting o Time: 10:22 Vertical Angle: _ On/Off Effort: _ Observer:Ry Actual Time and Time: 10:24 Species: Stenella fr Features used in Representative in Photographer: Calculated distar Final Time and Time: 10:27 Calculated Distar Behavior and A	on Trac WP#: <u>1</u> On yan d Positi WP#: Species mages un Ryan nce from WP#: nce from WP#: nce Trav	k 19 Horizon Tr Ol on of Sig 20 ID: Altern sed for Sj Frame Tracklir n of Sigh 21 veled:	Lat:	30.498691 g in Degrees: 9 le: <u>Right</u> 30.505879 Numbers (1 and dark patter 34 - 60 0.80 km 30.505682 4 km	90 S Beaufort Lom Low/High n down boo 35,	g: /Best): dy, spotti 48 Spacer:	Cue: B ate: 61	3ody 1 4 / 20

Wednesday	y, September 4	4, 2013 Sigł	nting # 3		
Initial sighting on	Track	_	-		
Time: 11:16	WP#: <u>33</u>	Lat:	30.365257	Long:	-80.387014
Vertical Angle:				45 Sighting	Cue: Splash
On/Off Effort:		Frackline:		Beaufort Sea Sta	ate: 1
Observer: Erin		Observer sid	le: Left		
Actual Time and I	Position of Si	ighting			
Time: 11:17		Lat:	30.366270	Long:	-80.382744
Species:Stenella from				ow/High/Best):	
Features used in Sp	pecies ID: <u>Alte</u>	ernating light	and dark pattern	down body, spotti	ng
	1.0	~			
Representative ima				77, 79, 82, 86	07
Photographer: Ry		e numbers:		Spacer:	87
Calculated distance			0.42 KIII	_	
Final Time and Po	_	-			
	WP#: <u>35</u>		30.367591	_ Long:	-80.391472
Calculated Distance	e Traveled:	0.8	5 km		
Behavior and Add	litional Com	ments			
Jumping, darting, calv	es present.				
Wadaaada	v Sontombor	1 2012 5:~1	tin ~ # 1		
Initial sighting on	y, September 4 Track	+, 2010 Sigi	ning # 4		
Time: 11:27		Lat:	30.365109	Long:	-80 576020
Vertical Angle:		-			
On/Off Effort:		Frackline:		Beaufort Sea Sta	
Observer: Ryan			le: Right	Seauloit Sea Sa	
Actual Time and				-	
Time: 11:28		0 0	30.372094	Long:	-80.571879
Species: Tursiops trun		Lat		ow/High/Best):	4/4/4
Features used in Sp		form arev. rol		ow/mgn/best).	+/+/+
		<u> </u>			
Representative ima	ges used for	Species ID:		93, 94	
Photographer: Ry	an Frame	e numbers:	88 - 106	Spacer:	107
Calculated distance	from Trackl	ine:	0.87 km		
Final Time and Po	osition of Sig	hting			
	WP#: 41	Lat:	30.362828	Long:	-80.576495
Calculated Distance	e Traveled:		2 km	_ 0	
Behavior and Add	_				
Swimming close toget			iust helow		
owinining close toget		i on sundee of	Just below		

Wednesday, September 4, 2013 ${ m Sighting}~\#~5$
Initial sighting on Track
Time: 11:33 WP#: 45 Lat: 30.364598 Long: -80.694253
Vertical Angle: 2 Horizontal Bearing in Degrees: 100 Sighting Cue: Splash
On/Off Effort: On Trackline: 7 Beaufort Sea State: 1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time: 11:34 WP#: 46 Lat: 30.355202 Long: -80.685832
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 4/4/4
Features used in Species ID: Uniform gray, robust
Representative images used for Species ID: 120, 124
Photographer:   Ryan   Frame numbers:   108 - 128   Spacer:   129
Calculated distance from Trackline: 1.32 km
Final Time and Position of Sighting
Time:         11:37         WP#:         47         Lat:         30.356509         Long:         -80.689317
Calculated Distance Traveled: 0.36 km
Behavior and Additional Comments
Jumping, darting, swimming different directions
Wednesday, September 4, 2013 Sighting # 6
Initial sighting on Track
Initial sighting on Track           Time:         13:22         WP#:         56         Lat:         29.963770         Long:         -80.569673
Initial sighting on TrackTime:13:22WP#:56Lat:29.963770Long:-80.569673Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right
Initial sighting on TrackTime:13:22WP#:56Lat:29.963770Long:-80.569673Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:13:23WP#:57Lat:29.963326Long:-80.571982
Initial sighting on TrackTime:13:22WP#:56Lat:29.963770Long:-80.569673Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:13:23WP#:57Lat:29.963326Long:-80.571982Species:Tursiops truncatusNumbers (Low/High/Best):7/10/7
Initial sighting on TrackTime:13:22WP#:56Lat:29.963770Long:-80.569673Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:13:23WP#:57Lat:29.963326Long:-80.571982
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       13:23       WP#:       57       Lat:       29.963326       Long:       -80.571982         Species:       Tursiops truncatus       Numbers (Low/High/Best):       7/10/7         Features used in Species ID:       Robust body appearance, uniform grey coloration
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       13:23       WP#:       57       Lat:       29.963326       Long:       -80.571982         Species:       Tursiops truncatus       Numbers (Low/High/Best):       7/10/7         Features used in Species ID:       Robust body appearance, uniform grey coloration         I 30, 133, 134, 135
Initial sighting on TrackTime:13:22WP#:56Lat:29.963770Long:-80.569673Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:13:23WP#:57Lat:29.963326Long:-80.571982Species:Tursiops truncatusNumbers (Low/High/Best):7 / 10 / 7Features used in Species ID:Robust body appearance, uniform grey colorationRepresentative images used for Species ID:130, 133, 134, 135Photographer:RyanFrame numbers:130 - 159Spacer:143
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       13:23       WP#:       57       Lat:       29.963326       Long:       -80.571982         Species:       Tursiops truncatus       Numbers (Low/High/Best):       7/10/7         Features used in Species ID:       Robust body appearance, uniform grey coloration         Representative images used for Species ID:       130, 133, 134, 135         Photographer:       Ryan       Frame numbers:       130 - 159       Spacer:       143         Calculated distance from Trackline:       0.23 km       0.23 km       0.23 km
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       13:23       WP#:       57       Lat:       29.963326       Long:       -80.571982         Species:       Tursiops truncatus       Numbers (Low/High/Best):       7/10/7         Features used in Species ID:       Robust body appearance, uniform grey coloration         Representative images used for Species ID:       130, 133, 134, 135         Photographer:       Ryan       Frame numbers:       130 - 159       Spacer:       143         Calculated distance from Trackline:       0.23 km       Mathia       143
Initial sighting on TrackTime:13:22WP#:56Lat:29.963770Long:-80.569673Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:13:23WP#:57Lat:29.963326Long:-80.571982Species:Tursiops truncatusNumbers (Low/High/Best):7/10/7Features used in Species ID:Robust body appearance, uniform grey colorationRepresentative images used for Species ID:130, 133, 134, 135Photographer:RyanFrame numbers:130-159Spacer:143Calculated distance from Trackline:0.23 km-80.563266Final Time and Position of SightingTime:13:24WP#:58Lat:29.964839Long:-80.563266
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1       Actual Time and Position of Sighting         Time:       13:23       WP#:       57       Lat:       29.963326       Long:       -80.571982         Species:       Tursiops truncatus       Numbers (Low/High/Best):       7 / 10 / 7         Features used in Species ID:       Robust body appearance, uniform grey coloration         Representative images used for Species ID:       130, 133, 134, 135         Photographer:       Ryan       Frame numbers:       130-159       Spacer:       143         Calculated distance from Trackline:       0.23 km       143       143       143         Final Time and Position of Sighting       132.4       WP#:       58       Lat:       29.964839       Long:       -80.563266         Calculated Distance       Traveled:       0.86 km       0.86 km       0.86 km       0.86
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       13:23       WP#:       57       Lat:       29.963326       Long:       -80.571982         Species:       Tursiops truncatus       Numbers (Low/High/Best):       7 / 10 / 7         Features used in Species ID:       Robust body appearance, uniform grey coloration         Representative images used for Species ID:       130, 133, 134, 135         Photographer:       Ryan       Frame numbers:       130 - 159       Spacer:       143         Calculated distance from Trackline:       0.23 km       132 - 159       Spacer:       143         Final Time and Position of Sighting       Time:       13:24       WP#:       58       Lat:       29.964839       Long:       -80.563266         Calculated Distance Traveled:       0.86 km       0.86 km       130.133
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1       Actual Time and Position of Sighting         Time:       13:23       WP#:       57       Lat:       29.963326       Long:       -80.571982         Species:       Tursiops truncatus       Numbers (Low/High/Best):       7 / 10 / 7         Features used in Species ID:       Robust body appearance, uniform grey coloration         Representative images used for Species ID:       130, 133, 134, 135         Photographer:       Ryan       Frame numbers:       130-159       Spacer:       143         Calculated distance from Trackline:       0.23 km       143       143       143         Final Time and Position of Sighting       132.4       WP#:       58       Lat:       29.964839       Long:       -80.563266         Calculated Distance       Traveled:       0.86 km       0.86 km       0.86 km       0.86
Initial sighting on Track         Time:       13:22       WP#:       56       Lat:       29.963770       Long:       -80.569673         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right         Actual Time and Position of Sighting         Time:       13:23       WP#:       57       Lat:       29.963326       Long:       -80.571982         Species:       Tursiops truncatus       Numbers (Low/High/Best):       7 / 10 / 7         Features used in Species ID:       Robust body appearance, uniform grey coloration         Representative images used for Species ID:       130, 133, 134, 135         Photographer:       Ryan       Frame numbers:       130 - 159       Spacer:       143         Calculated distance from Trackline:       0.23 km       132 - 159       Spacer:       143         Final Time and Position of Sighting       Time:       13:24       WP#:       58       Lat:       29.964839       Long:       -80.563266         Calculated Distance Traveled:       0.86 km       0.86 km       130.133

Wednesday, September 4, 2013 Sighting $\#$ 7
Initial sighting on Track
Time: 13:26 WP#: 60 Lat: 29.965349 Long: -80.477053
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: 1 Beaufort Sea State: 1
Observer: Ryan Observer side: Right
Actual Time and Position of Sighting
Time:         13:27         WP#:         61         Lat:         29.964453         Long:         -80.485104
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 8/12/8
Features used in Species ID: Uniform gray, robust
Representative images used for Species ID: 144, 157, 158
Photographer: Ryan Frame numbers: 144 - 159 Spacer: 160
Calculated distance from Trackline: 0.78 km
Final Time and Position of Sighting
Time:         13:33         WP#:         62         Lat:         29.961632         Long:         -80.486164
Calculated Distance Traveled: 0.33 km
Behavior and Additional Comments
Spaced out, swimming subsurface, milling
Wednesday, September 4, 2013 Sighting # 8
Initial sighting on Track
Initial sighting on Track           Time:         13:35         WP#:         64         Lat:         29.966698         Long:         -80.398874
Initial sighting on TrackTime:13:35WP#:64Lat:29.966698Long:-80.398874Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Body
Initial sighting on Track           Time:         13:35         WP#:         64         Lat:         29.966698         Long:         -80.398874
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Left
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left
Initial sighting on TrackTime:13:35WP#:64Lat:29.966698Long:-80.398874Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1Observer:ErinObserver side:LeftImage: 13:37WP#:65Lat:29.970169Long:-80.404552
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       13:37       WP#:       65       Lat:       29.970169       Long:       -80.404552         Species: Tursiops truncatus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Uniform gray, robust
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting         Time:       13:37       WP#:       65       Lat:       29.970169       Long:       -80.404552         Species:       Tursiops truncatus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Uniform gray, robust       1/1/1
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Uniform gray, robust       1/1/1         Features used in Species ID:       Uniform gray, robust       1/1/1         Representative images used for Species ID:       164 - 166         Photographer:       Ryan       Frame numbers:       161 - 173
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting         Time:       13:37       WP#:       65       Lat:       29.970169       Long:       -80.404552         Species:       Tursiops truncatus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Uniform gray, robust       1/1/1
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Uniform gray, robust       1/1/1         Features used in Species ID:       Uniform gray, robust       1/1/1         Representative images used for Species ID:       164 - 166       164 - 166         Photographer:       Ryan       Frame numbers:       161 - 173       Spacer:       174
Initial sighting on TrackTime:13:35WP#:64Lat:29.966698Long:-80.398874Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:1Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:13:37WP#:65Lat:29.970169Long:-80.404552Species:Tursiops truncatusNumbers (Low/High/Best):1/1/1Features used in Species ID:Uniform gray, robustFrame numbers:161-173Spacer:174Calculated distance from Trackline:0.67 kmFinal Time and Position of SightingTime:13:38WP#:66Lat:29.969916Long:-80.395889
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       13:37       WP#:       65       Lat:       29.970169       Long:       -80.404552         Species:       Tursiops truncatus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Uniform gray, robust       1       1         Representative images used for Species ID:       164 - 166       164         Photographer:       Ryan       Frame numbers:       161 - 173       Spacer:       174         Calculated distance from Trackline:       0.67 km       174       174
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       13:37       WP#:       65       Lat:       29.970169       Long:       -80.404552         Species:       Tursiops truncatus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Uniform gray, robust       1         Photographer:       Ryan       Frame numbers:       161 - 173       Spacer:       174         Calculated distance from Trackline:       0.67 km       174       174       174         Final Time and Position of Sighting       Time:       13:38       WP#:       66       Lat:       29.969916       Long:       -80.395889
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       13:37       WP#:       65       Lat:       29.970169       Long:       -80.404552         Species:       Tursiops truncatus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Uniform gray, robust       1/1/1         Representative images used for Species ID:       164 - 166         Photographer:       Ryan       Frame numbers:       161 - 173       Spacer:       174         Calculated distance from Trackline:       0.67 km       174       174         Final Time and Position of Sighting       10.67 km       10.67 km       10.63 km         Time:       13:38       WP#:       66       Lat:       29.969916       Long:       -80.395889         Calculated Distance       0.84 km
Initial sighting on Track         Time:       13:35       WP#:       64       Lat:       29.966698       Long:       -80.398874         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       1       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting         Time:       13:37       WP#:       65       Lat:       29.970169       Long:       -80.404552         Species:       Tursiops truncatus       Numbers (Low/High/Best):       1/1/1         Features used in Species ID:       Uniform gray, robust       1/1/1         Representative images used for Species ID:       164 - 166         Photographer:       Ryan       Frame numbers:       161 - 173       Spacer:       174         Calculated distance from Trackline:       0.67 km       174       174       174         Final Time and Position of Sighting       10.7 km       174       174       174         Calculated Distance Traveled:       0.84 km       0.84 km       184       183.395889       189       183.395889       183.395889

Wednesday, September 4, 2013 ${ m Sighting}~\#~~9$
Initial sighting on Track
Time: 13:48 WP#: 68 Lat: 29.965993 Long: -80.043430
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: 1 Beaufort Sea State: 1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time: 13:50 WP#: 69 Lat: 29.964516 Long: -80.043015
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 16/20/18
Features used in Species ID: Uniform gray, robust
Representative images used for Species ID: 189, 190, 193, 199 - 201
Photographer:         Ryan         Frame numbers:         175 - 208         Spacer:         209
Calculated distance from Trackline: 0.17 km
Final Time and Position of Sighting
Time:         13:54         WP#:         70         Lat:         29.972558         Long:         -80.048500
Calculated Distance Traveled: 1.04 km
Behavior and Additional Comments
Calves present. Milling, occasionally surfacing, staying in a close group. 2nd group joined.
Wednesday, September 4, 2013 Sighting # 10
Initial sighting on Track
Initial sighting on Track           Time:         14:10         WP#:         74         Lat:         30.031529         Long:         -80.031020
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:Splash
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:Right
Initial sighting on Track         Time:       14:10       WP#:       74       Lat:       30.031529       Long:       -80.031020         Vertical Angle:       1       Horizontal Bearing in Degrees:       120       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       2       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       Right
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405Species:Tursiops truncatusNumbers (Low/High/Best):8/8/8
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405
Initial sighting on Track         Time:       14:10       WP#:       74       Lat:       30.031529       Long:       -80.031020         Vertical Angle:       1       Horizontal Bearing in Degrees:       120       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       2       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       14:12       WP#:       75       Lat:       30.036378       Long:       -80.028405         Species: Tursiops truncatus       Numbers (Low/High/Best):       8 / 8 / 8         Features used in Species ID:       Uniform gray, robust
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform gray, robustActual for Species ID:210, 216
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform gray, robustRepresentative images used for Species ID:210, 216Photographer:RyanFrame numbers:210 - 218Spacer:219
Initial sighting on Track         Time:       14:10       WP#:       74       Lat:       30.031529       Long:       -80.031020         Vertical Angle:       1       Horizontal Bearing in Degrees:       120       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       2       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       14:12       WP#:       75       Lat:       30.036378       Long:       -80.028405         Species:       Tursiops truncatus       Numbers (Low/High/Best):       8 / 8 / 8         Features used in Species ID:       Uniform gray, robust       8 / 8 / 8         Representative images used for Species ID:       210, 216         Photographer:       Ryan       Frame numbers:       210-218       Spacer:       219         Calculated distance from Trackline:       0.60 km       0.60 km       10.00 km       10.00 km
Initial sighting on Track         Time:       14:10       WP#:       74       Lat:       30.031529       Long:       -80.031020         Vertical Angle:       1       Horizontal Bearing in Degrees:       120       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       2       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Right       1         Actual Time and Position of Sighting       Time:       14:12       WP#:       75       Lat:       30.036378       Long:       -80.028405         Species:       Tursiops truncatus       Numbers (Low/High/Best):       8 / 8 / 8         Features used in Species ID:       Uniform gray, robust       8 / 8 / 8         Representative images used for Species ID:       210, 216         Photographer:       Ryan       Frame numbers:       210 - 218       Spacer:       219         Calculated distance from Trackline:       0.60 km       60 km       10       10       10
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405Species:Fursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform gray, robustRepresentative images used for Species ID:210-218Spacer:219Calculated distance from Trackline:0.60 kmFinal Time and Position of SightingTime:14:14WP#:76Lat:30.037728Long:-80.029558
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform gray, robustPhotographer:RyanFrame numbers:210 - 218Spacer:219Calculated distance from Trackline:0.60 kmFinal Time and Position of SightingTime:14:14WP#:76Lat:30.037728Long:-80.029558Calculated Distance Traveled:0.19 km0.19 km-80.029558-80.029558
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform gray, robustPhotographer:RyanFrame numbers:210 - 218Spacer:219Calculated distance from Trackline:0.60 kmFinal Time and Position of SightingTime:14:14WP#:76Lat:30.037728Long:-80.029558Calculated Distance Traveled:0.19 kmBehavior and Additional Comments210 - 218Spacer:219
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform gray, robustPhotographer:RyanFrame numbers:210 - 218Spacer:219Calculated distance from Trackline:0.60 kmFinal Time and Position of SightingTime:14:14WP#:76Lat:30.037728Long:-80.029558Calculated Distance Traveled:0.19 km0.19 km-80.029558-80.029558
Initial sighting on TrackTime:14:10WP#:74Lat:30.031529Long:-80.031020Vertical Angle:1Horizontal Bearing in Degrees:120Sighting Cue:SplashOn/Off Effort:OnTrackline:2Beaufort Sea State:1Observer:RyanObserver side:RightActual Time and Position of SightingTime:14:12WP#:75Lat:30.036378Long:-80.028405Species:Tursiops truncatusNumbers (Low/High/Best):8 / 8 / 8Features used in Species ID:Uniform gray, robustPhotographer:RyanFrame numbers:210 - 218Spacer:219Calculated distance from Trackline:0.60 kmFinal Time and Position of SightingTime:14:14WP#:76Lat:30.037728Long:-80.029558Calculated Distance Traveled:0.19 kmBehavior and Additional Comments210 - 218Spacer:219

Wednesday, September 4, 2013 ${ m Sighting}~\#$ 11
Initial sighting on Track
Time:         14:32         WP#:         79         Lat:         30.031128         Long:         -80.611338
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>120</u> Sighting Cue: <u>Splash</u>
On/Off Effort:         On         Trackline:         2         Beaufort Sea State:         1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time:         14:34         WP#:         80         Lat:         30.027039         Long:         -80.601611
Species:Tursiops truncatus         Numbers (Low/High/Best):         2/2/2
Features used in Species ID: Uniform gray, robust
Representative images used for Species ID: 220, 221, 232, 237, 241
Photographer:     Right     Frame numbers:     220 - 241     Spacer:     242
Calculated distance from Trackline: 1.04 km
Final Time and Position of Sighting
Time:         14:37         WP#:         81         Lat:         30.028661         Long:         -80.605595
Calculated Distance Traveled: 0.42 km
Behavior and Additional Comments
Deep diving, illusive, changing directions
Wednesday, September 4, 2013 Sighting # 12
Initial sighting on Track
Initial sighting on Track           Time:         14:49         WP#:         88         Lat:         30.100670         Long:         -80.455087
Initial sighting on Track         Time:       14:49       WP#:       88       Lat:       30.100670       Long:       -80.455087         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash
Initial sighting on TrackTime:14:49WP#:88Lat:30.100670Long:-80.455087Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:3Beaufort Sea State:1
Initial sighting on TrackTime:14:49WP#:88Lat:30.100670Long:-80.455087Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:3Beaufort Sea State:1Observer:ErinObserver side:Left
Initial sighting on Track         Time:       14:49       WP#:       88       Lat:       30.100670       Long:       -80.455087         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       Left
Initial sighting on Track         Time:       14:49       WP#:       88       Lat:       30.100670       Long:       -80.455087         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:50       WP#:       84       Lat:       30.104249       Long:       -80.457311
Initial sighting on TrackTime:14:49WP#:88Lat:30.100670Long:-80.455087Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:3Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingImage: SplashSpecies: Tursiops truncatusSpecies: Tursiops truncatusNumbers (Low/High/Best):2/2/2
Initial sighting on Track         Time:       14:49       WP#:       88       Lat:       30.100670       Long:       -80.455087         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:50       WP#:       84       Lat:       30.104249       Long:       -80.457311
Initial sighting on Track         Time:       14:49       WP#:       88       Lat:       30.100670       Long:       -80.455087         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:50       WP#:       84       Lat:       30.104249       Long:       -80.457311         Species:       Tursiops truncatus       Numbers (Low/High/Best):       2/2/2         Features used in Species ID:       Uniform gray, robust
Initial sighting on Track         Time:       14:49       WP#:       88       Lat:       30.100670       Long:       -80.455087         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:50       WP#:       84       Lat:       30.104249       Long:       -80.457311         Species:       Tursiops truncatus       Numbers (Low/High/Best):       2 / 2 / 2         Features used in Species ID:       Uniform gray, robust       1         Representative images used for Species ID:       247, 252, 258, 260       1
Initial sighting on TrackTime:14:49WP#:88Lat:30.100670Long:-80.455087Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:3Beaufort Sea State:1Observer:ErinObserver side:LeftLeftActual Time and Position of SightingTime:14:50WP#:84Lat:30.104249Long:-80.457311Species:Fursiops truncatusNumbers (Low/High/Best):2 / 2 / 2Features used in Species ID:Uniform gray, robustRepresentative images used for Species ID:247, 252, 258, 260Photographer:RyanFrame numbers:243 - 260Spacer:261
Initial sighting on Track         Time:       14:49       WP#:       88       Lat:       30.100670       Long:       -80.455087         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:50       WP#:       84       Lat:       30.104249       Long:       -80.457311         Species:       Tursiops truncatus       Numbers (Low/High/Best):       2 / 2 / 2         Features used in Species ID:       Uniform gray, robust       2       2         Representative images used for Species ID:       247, 252, 258, 260       261         Photographer:       Ryan       Frame numbers:       243 - 260       Spacer:       261         Calculated distance from Trackline:       0.45 km       0.45 km       0.45 km       0.45 km
Initial sighting on Track         Time:       14:49       WP#:       88       Lat:       30.100670       Long:       -80.455087         Vertical Angle:       1       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:50       WP#:       84       Lat:       30.104249       Long:       -80.457311         Species:       Tursiops truncatus       Numbers (Low/High/Best):       2 / 2 / 2         Features used in Species ID:       Uniform gray, robust       2         Representative images used for Species ID:       247, 252, 258, 260       261         Photographer:       Ryan       Frame numbers:       243 - 260       Spacer:       261         Calculated distance from Trackline:       0.45 km       1       1       1
Initial sighting on TrackTime:14:49WP#:88Lat:30.100670Long:-80.455087Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:3Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:50WP#:84Lat:30.104249Long:-80.457311Species:Tursiops truncatusNumbers (Low/High/Best):2 / 2 / 2Features used in Species ID:Uniform gray, robustPhotographer:RyanFrame numbers:243 - 260Spacer:261Calculated distance from Trackline:0.45 kmFinal Time and Position of SightingTime:14:55WP#:90Lat:30.102789Long:-80.461810
Initial sighting on TrackTime:14:49WP#:88Lat:30.100670Long:-80.455087Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:3Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:50WP#:84Lat:30.104249Long:-80.457311Species:TurnicatusNumbers (Low/High/Best):2 / 2 / 2Features used in Species ID:Uniform gray, robustFrame numbers:243 - 260Photographer:RyanFrame numbers:243 - 260Spacer:261Calculated distance from Trackline:0.45 kmFinal Time and Position of SightingTime:14:55WP#:90Lat:30.102789Long:-80.461810Calculated Distance Traveled:0.46 km
Initial sighting on TrackTime:14:49WP#:88Lat:30.100670Long:-80.455087Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:3Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:50WP#:84Lat:30.104249Long:-80.457311Species:Tursiops truncatusNumbers (Low/High/Best):2 / 2 / 2Features used in Species ID:Uniform gray, robustPhotographer:RyanFrame numbers:243 - 260Spacer:261Calculated distance from Trackline:0.45 kmFinal Time and Position of SightingTime:14:55WP#:90Lat:30.102789Long:-80.461810Calculated Distance Traveled:0.46 kmBehavior and Additional Comments
Initial sighting on TrackTime:14:49WP#:88Lat:30.100670Long:-80.455087Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:3Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:50WP#:84Lat:30.104249Long:-80.457311Species:TurnicatusNumbers (Low/High/Best):2 / 2 / 2Features used in Species ID:Uniform gray, robustFrame numbers:243 - 260Photographer:RyanFrame numbers:243 - 260Spacer:261Calculated distance from Trackline:0.45 kmFinal Time and Position of SightingTime:14:55WP#:90Lat:30.102789Long:-80.461810Calculated Distance Traveled:0.46 km
Initial sighting on TrackTime:14:49WP#:88Lat:30.100670Long:-80.455087Vertical Angle:1Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:3Beaufort Sea State:1Observer:ErinObserver side:LeftActual Time and Position of SightingTime:14:50WP#:84Lat:30.104249Long:-80.457311Species:Tursiops truncatusNumbers (Low/High/Best):2 / 2 / 2Features used in Species ID:Uniform gray, robustPhotographer:RyanFrame numbers:243 - 260Spacer:261Calculated distance from Trackline:0.45 kmFinal Time and Position of SightingTime:14:55WP#:90Lat:30.102789Long:-80.461810Calculated Distance Traveled:0.46 kmBehavior and Additional Comments

Wedne	sday, Sep	tember 4	4, 2013 <b>S</b>	ight	ing # 13					
Initial sighting	on Trac	k		Ū	C					
Time: 15:48	WP#:	69	Lat:		30.233165	L	ong:	-80	).5058	07
Vertical Angle:	2	Horizo	ntal Bear	ring	in Degrees:	90	Sight	ing Cu	e:	Body
On/Off Effort:	On	]	Frackline	:	5	Beauf	ort Sea	a State:	:	1
Observer:	Ryan	(	Observer	side	: Right					
Actual Time a	nd Positi	on of Si	ighting							
Time: 15:49	WP#:	99	Lat:		30.234601	L	ong:	-80	.5063	38
Species:Tursiops	truncatus		_		Numbers (	Low/Hi	gh/Be	st):	1/1	/1
Features used in	1 Species	ID: Uni	form gray,	, robu	st					
Representative	images u	sed for	Species I	D:			268			
Photographer:	Ryan	Frame	e number	rs:	262 - 27	1	Spa	cer:	27	72
Calculated dista	ance from	n Trackl	ine:		0.17 km					
Final Time and	d Positio	n of Sig	hting							
Time: 15:52	WP#:	100	Lat:		30.233578	L	ong:	-80	).5093	83
Calculated Dist	ance Tra	veled:		0.31	km					
Behavior and A	Addition	al Com	ments							

Thursda	y, Septem	ber 5, 201	<sup>3</sup> Sigh	ting # 1			
Initial sighting on			U	C			
Time: 9:12	WP#:	5 La	at:	30.232787	Long:	-	79.887676
Vertical Angle:	2 Hc	orizontal H	Bearing	in Degrees:		hting (	Cue: Spla
_	On			5	Beaufort S	•	
Observer: Erin		Obser	ver side	e: Right			
Actual Time and							
			-	30.235449	Long	_	79.883109
Species:Stenella atte	-				Low/High/E		
Features used in Spectres		· Slender b	odv. lon				
eye and down to vent							
Representative ima					3, 9, 12,		
Photographer:		rame nun		1 - 14		oacer:	15
Calculated distance					5]	jucci.	
Final Time and Po		0 0	-	20 220650	Lana		70 000675
	WP#:			30.229659	Long:	-	-79.889675
Calculated Distanc	e Travele	ea:	0.9	Km	-		
went on. Group was o	difficult to p	ohotograpi	n becaus	se of their beha	vior.		
Thursda	y, Septem			ting # 2	vior.		
Thursda Initial sighting on	y, Septem I <b>Track</b>	ber 5, 201	<sup>3</sup> Sigh	ting # 2			.80 355053
Thursda Initial sighting on Time: 9:47	y, Septem I <b>Track</b> WP#: <u>1</u>	ber 5, 201	<sup>3</sup> Sigh	ting # 2 30.299907	Long:		-80.355953
Thursda Initial sighting on Time: <u>9:47</u> Vertical Angle:	y, Septem I <b>Track</b> WP#: <u>1</u> <u>1</u> Hc	ber 5, 201 1 <u>2</u> La prizontal F	3 Sigh at: Bearing	ting # 2 30.299907 in Degrees:	Long: Sig	hting (	Cue: Boo
Thursda Initial sighting on Time: <u>9:47</u> Vertical Angle: On/Off Effort:	y, Septem I <b>Track</b> WP#: <u>1</u> <u>1</u> Ho On	ber 5, 201 12 La prizontal H Track	3 Sigh at: Bearing line:	ting # 2 30.299907 in Degrees: 6	Long:	hting (	Cue: Boo
Thursda Initial sighting on Time: <u>9:47</u> Vertical Angle: On/Off Effort: Observer:Ryar	y, Septem I <b>Track</b> WP#: <u>1</u> <u>1</u> Ho On	ber 5, 201 1 <u>2</u> La prizontal I Track Obser	3 Sigh at: Bearing line: ver side	ting # 2 30.299907 in Degrees:	Long: Sig	hting (	Cue: Boo
Thursda Initial sighting on Time: <u>9:47</u> Vertical Angle: <u></u> On/Off Effort: <u>(</u> Observer: <u>Ryar</u> Actual Time and	y, Septem Track WP#: <u>1</u> <u>1</u> Ho On n Position	ber 5, 201 2 La prizontal H Track Obser of Sightin	3 Sigh at: Bearing line: ver side ng	ting # 2 30.299907 in Degrees: 6 e: Left	Long: 90 Sig Beaufort S	hting ( ea Sta	Cue: Boc te: 2
Thursda Initial sighting on Time: 9:47 Vertical Angle: 0 On/Off Effort: 0 Observer: Ryar Actual Time and 1 Time: 9:48	y, Septem Track WP#: <u>1</u> <u>1</u> Ho On D Position ( WP#: <u>1</u>	ber 5, 201 2 La prizontal H Track Obser of Sightin	3 Sigh at: Bearing line: ver side	ting # 2 30.299907 in Degrees: 6 e: Left 30.300761	Long: 90 Sig Beaufort S	hting ( ea Sta	Cue: <u>Boc</u> te: <u>2</u> 80.353526
Thursda Initial sighting on Time: 9:47 Vertical Angle: 0 On/Off Effort: 0 Observer: Ryar Actual Time and 1 Time: 9:48 V Species: Tursiops trur	y, Septem Track WP#: <u>1</u> <u>1</u> Ho On <b>1</b> Position ( WP#: <u>1</u> natus	ber 5, 201 <u>12</u> La prizontal H Track Obser of Sightin <u>3</u> La	<sup>3</sup> Sigh at: Bearing line: ver side ng at:	ting # 2 <u>30.299907</u> in Degrees: <u>6</u> e: <u>Left</u> <u>30.300761</u> Numbers (	Long: 90 Sig Beaufort S	hting ( ea Sta	Cue: Boc te: 2
Thursda Initial sighting on Time: 9:47 Vertical Angle: 0 On/Off Effort: 0 Observer: Ryar Actual Time and 1 Time: 9:48 V Species: Tursiops trur	y, Septem Track WP#: <u>1</u> <u>1</u> Ho On <b>1</b> Position ( WP#: <u>1</u> natus	ber 5, 201 <u>12</u> La prizontal H Track Obser of Sightin <u>3</u> La	<sup>3</sup> Sigh at: Bearing line: ver side ng at:	ting # 2 <u>30.299907</u> in Degrees: <u>6</u> e: <u>Left</u> <u>30.300761</u> Numbers (	Long: 90 Sig Beaufort S	hting ( ea Sta	Cue: <u>Boc</u> te: <u>2</u> 80.353526
Thursda Initial sighting on Time: 9:47 Vertical Angle: On/Off Effort: Observer:Ryar Actual Time and T Time: 9:48 Species: <i>Tursiops trur</i> Features used in Sp	y, Septem Track WP#: 1 1 Ho On Position WP#: 1 neatus pecies ID:	ber 5, 201 <u>12</u> La prizontal H Track Obser of Sightin <u>3</u> La : Uniform g	3 Sigh at: Bearing line: ver side ng at: grey colo	ting # 2 <u>30.299907</u> in Degrees: <u>6</u> e: <u>Left</u> <u>30.300761</u> Numbers (	Long: 90 Sig Beaufort S Long: Low/High/E	hting ( ea Sta	Cue: <u>Boc</u> te: <u>2</u> 80.353526
Thursda <b>Initial sighting on</b> Time: 9:47 Vertical Angle: On/Off Effort: 0 Observer: Ryar <b>Actual Time and</b> Time: 9:48 Species: <i>Tursiops trur</i> Features used in Species: <i>Tursiops trur</i> Features used in Species: <i>Tursiops trur</i>	y, Septem Track WP#: 1 1 Ho Dn Position WP#: 1 ncatus pecies ID ages used	ber 5, 201 <u>12</u> La prizontal H Track Obser of Sightin <u>3</u> La : Uniform c for Speci	3 Sigh at: Bearing line: ver side ng at: grey colo	ting # 2 <u>30.299907</u> in Degrees: <u>6</u> e: <u>Left</u> <u>30.300761</u> Numbers ( pration	Long: 90 Sig Beaufort S Long: Low/High/F	hting ( ea Sta Best):	Cue: <u>Boc</u> te: <u>2</u> 80.353526 8/9/8
Thursda <b>Initial sighting on</b> Time: 9:47 Vertical Angle: 0 On/Off Effort: 0 Observer: Ryar <b>Actual Time and</b> Time: 9:48 Species: <i>Tursiops trur</i> Features used in Species: <i>Tursiops trur</i> Features used in Species: Internative imation of the sector of	y, Septem Track WP#: 1 1 Ho On n Position WP#: 1 ncatus pecies ID ages used rin F	ber 5, 201 2 La brizontal H Track Obser of Sightin 3 La : Uniform c for Speci rame nun	3 Sigh at: Bearing line: ver side ng at: grey colo	ting # 2 30.299907 in Degrees: 6 e: Left 30.300761 Numbers ( pration 16-31	Long: 90 Sig Beaufort S Long: Low/High/F	hting ( ea Sta	Cue: <u>Boc</u> te: <u>2</u> 80.353526 8/9/8
Thursda Initial sighting on Time: 9:47 Vertical Angle: On/Off Effort: Observer:Ryar Actual Time and Time: 9:48 Species: <i>Tursiops trur</i> Features used in Sp Representative ima Photographer:En Calculated distance	y, Septem Track WP#: 1 1 Ho On Position WP#: 1 ncatus pecies ID ages used rin F e from Tr	ber 5, 201 2 La Drizontal H Track Obser of Sightin 3 La : Uniform c for Speci rame num ackline: _	3 Sigh at: Bearing line: ver side ng at: grey colo es ID: _ nbers: _	ting # 2 <u>30.299907</u> in Degrees: <u>6</u> e: <u>Left</u> <u>30.300761</u> Numbers ( pration	Long: 90 Sig Beaufort S Long: Low/High/F	hting ( ea Sta Best):	Cue: <u>Boc</u> te: <u>2</u> 80.353526 8/9/8
Thursda Initial sighting on Time: 9:47 Vertical Angle: On/Off Effort: Observer:Ryar Actual Time and Time: 9:48 Species:Tursiops trur Features used in Sp Representative ima Photographer:En Calculated distance Final Time and Page	y, Septem Track WP#: 1 1 Ho On Position WP#: 1 mages used rin F e from Tr osition of	ber 5, 201 12 La brizontal F Track Obser of Sightin 3 La : Uniform g for Speci rame num ackline: _ f Sighting	3 Sigh at: Bearing line: ver side ng at: grey colo es ID: _ nbers: _	ting # 2 30.299907 in Degrees: 6 e: Left 30.300761 Numbers ( pration 16-31	Long: 90 Sig Beaufort S Long: Low/High/E	hting ( ea Sta Best):	Cue: <u>Boc</u> te: <u>2</u> 80.353526 8/9/8
Thursda Initial sighting on Time: 9:47 Vertical Angle: On/Off Effort: Observer:Ryar Actual Time and Time: 9:48 Species:Tursiops trur Features used in Sp Representative ima Photographer:En Calculated distance Final Time and Po	y, Septem Track WP#: 1 1 Ho On Position WP#: 1 ncatus pecies ID ages used rin F e from Tr	ber 5, 201 12 La brizontal H Track Obser of Sightin 3 La : Uniform c for Speci rame num ackline: _ f Sighting	3 Sigh at: Bearing line: ver side ng at: grey colo es ID: _ nbers: _	ting # 2 30.299907 in Degrees: 6 e: Left 30.300761 Numbers ( pration 16-31	Long: 90 Sig Beaufort S Long: Low/High/E	hting ( ea Sta Best): pacer: _	Cue: <u>Boc</u> te: <u>2</u> 80.353526 8/9/8
Initial sighting on         Time:       9:47         Vertical Angle:	y, Septem Track WP#: 1 1 Ho On Position of WP#: 1 hocatus pecies ID ages used rin F e from Tr osition of WP#: 1	ber 5, 201          12       La         12       La         prizontal I       Track         Obser       Obser         of Sightin       3         3       La         for Speci       rame num         ackline:	3 Sigh at: Bearing line: ver side ng at: des ID: at: gat:	ting # 2 30.299907 in Degrees: 6 e: Left 30.300761 Numbers ( pration 16 - 31 0.25 km	Long: 90 Sig Beaufort S Long: Low/High/E	hting ( ea Sta Best): pacer: _	Cue: <u>Boc</u> te: <u>2</u> 80.353526 8/9/8 32
Thursda Initial sighting on Time: 9:47 Vertical Angle:  On/Off Effort:  Observer:  Ryar Actual Time and  Time: 9:48 Species: <i>Tursiops trur</i> Features used in Species: <i>Tursiops trur</i> Features used in Species: <i>Tursiops trur</i> Calculated distance Final Time and Pe Time: 9:55	y, Septem Track WP#: 1 1 Ho On Position of WP#: 1 ocatus pecies ID: ages used rin F: e from Tr osition of WP#: 1 ce Travele	ber 5, 201          12       La         12       La         prizontal F       Track         Obser       Obser         of Sightin       3       La         3       La       La         i       Uniform g       Go         for Speci       rame num       ackline:         ackline:       G       Sighting         14       La       La	3 Sigh at: Bearing line: ver side ng at: grey colo es ID: _ nbers: g at: 1 k	ting # 2 <u>30.299907</u> in Degrees: <u>6</u> e: <u>Left</u> <u>30.300761</u> Numbers ( <u>577100</u> <u>16 - 31</u> <u>0.25 km</u> <u>30.294211</u>	Long: 90 Sig Beaufort S Long: Low/High/E	hting ( ea Sta Best): pacer: _	Cue: <u>Boc</u> te: <u>2</u> 80.353526 8/9/8 32
Thursda Initial sighting on Time: 9:47 Vertical Angle:  On/Off Effort:  Observer:  Ryar Actual Time and  Time: 9:48 Species: <i>Tursiops trur</i> Features used in Sp Representative ima Photographer:  En Calculated distance Final Time and Po Time: 9:55 Calculated Distance Behavior and Add	y, Septem Track WP#: 1 1 Ho On Position of WP#: 1 ncatus pecies ID ages used rin F e from Tr osition of WP#: 1 ce Travele ditional C	ber 5, 201          12       La         12       La         orizontal H       Track         Obser       Obser         of Sightin       3       La         3       La       La         i Uniform c       Iniform c       Iniform c         for Speci       rame num       ackline:       Iniform c         f Sighting       Iniform c       Iniform c       Iniform c         Id       La       La       Iniform c         Comment       Iniform c       Iniform c       Iniform c	3 Sigh at: Bearing line: ver side ng at: grey colo es ID: des ID: bers: at: s	ting # 2 30.299907 in Degrees: 6 e: Left 30.300761 Numbers ( pration 16 - 31 0.25 km 30.294211 km	Long: 90 Sig Beaufort S Long: Low/High/E 21 21 Sj Long:	hting ( ea Sta Best): pacer:	Cue: <u>Boc</u> te: <u>2</u> 80.353526 8/9/8 32 -80.361115
Thursda Initial sighting on Time: 9:47 Vertical Angle: On/Off Effort: 0 Observer: Ryar Actual Time and Time: 9:48 V Species: Tursiops trur Features used in Sp Representative ima Photographer: En Calculated distance Final Time and Pa Time: 9:55 V Calculated Distance	y, Septem Track WP#: 1 1 Ho On Position WP#: 1 motion WP#: 1 motion ages used rin Fi e from Tr osition of WP#: 1 ce Travele ditional C	ber 5, 201          2       La         orizontal H       Track         obser       Obser         of Sightin       3       La         3       La       La         i Uniform g       Iniform g       Iniform g         for Speci       rame num       Iniform g         i Uniform g       Iniform g       Iniform g         for Speci       Iniform g       Iniform g         for Speci       Iniform g       Iniform g         i Uniform g       Iniform g       Iniform g         for Sighting       Iniform g       Iniform g         i Sighting       Iniform g       Ini	3 Sigh at: Bearing line: ver side ng at: grey colo es ID: des ID: at: s at: at: bers: g at: at: g at: g at: g at: g at:	ting # 2 30.299907 in Degrees: 6 e: Left 30.300761 Numbers ( oration 16 - 31 0.25 km 30.294211 km	Long: 90 Sig Beaufort S Long: Low/High/E 21 21 Sj Long:	hting ( ea Sta Best): pacer:	Cue: <u>Boc</u> te: <u>2</u> 80.353526 8/9/8 32 -80.361115

Thursday, September 5, 2013 Sighting $\#$ 3
Initial sighting on Track
Time:         10:55         WP#:         28         Lat:         30.433119         Long:         -80.427431
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Splash</u>
On/Off Effort:         On         Trackline:         8         Beaufort Sea State:         2
Observer:Erin Observer side:Right
Actual Time and Position of Sighting
Time:         11:00         WP#:         29         Lat:         30.443162         Long:         -80.427117
Species:Tursiops truncatusNumbers (Low/High/Best):3 / 3 / 3
Features used in Species ID: Robust body appearance, uniform grey coloration, robust dorsal fin
Representative images used for Species ID: <u>36, 37, 41</u>
Photographer:       Erin       Frame numbers:       34 - 43       Spacer:       44         Calculated distance from Trackline:       1.11 km
Final Time and Position of Sighting
Time:         11:00         WP#:         30         Lat:         30.442425         Long:         -80.424415
Calculated Distance Traveled: 0.27 km
Behavior and Additional Comments
Group of three animals surfacing regularly showing slow travel, milling about.
Thursday, September 5, 2013 Sighting # 4
Initial sighting on Track
Time:         11:20         WP#:         37         Lat:         30.499997         Long:         -80.445198
Vertical Angle: 2 Horizontal Bearing in Degrees: 100 Sighting Cue: Body
On/Off Effort: On Trackline: 9 Beaufort Sea State: 2
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time:       11:21       WP#:       38       Lat:       30.505443       Long:       -80.442981
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 1/1/1
Features used in Species ID: Robust body appearance, uniform grey coloration, robust dorsal fin
Representative images used for Species ID: 45,48
Photographer:    Erin    Frame numbers:    45 - 50    Spacer:    51
Calculated distance from Trackline: 0.64 km
Final Time and Position of Sighting
Time:         11:24         WP#:         39         Lat:         30.504146         Long:         -80.447908
Calculated Distance Traveled: 0.49 km
Behavior and Additional Comments
Single animal at first observation traveling sub surface at moderate speed.

Thursday, September 5, 2013 ${ m Sighting}~\#~~5$	
Initial sighting on Track	
Time: 11:29 WP#: 41 Lat: 30.500025 Long:	-80.285036
Vertical Angle: 2 Horizontal Bearing in Degrees: 100 Sightin	
On/Off Effort: On Trackline: 9 Beaufort Sea S	State: 2
Observer: Ryan Observer side: Left	
Actual Time and Position of Sighting	
	-80.291870
Species:Stenella frontalis Numbers (Low/High/Best)	
Features used in Species ID: Alternating light and dark coloration down the ani	
Light blaze to dorsal fin, darker blaze behind dorsal fin, spotting across some of anim	
Representative images used for Species ID: 52, 61, 65	
Photographer: Erin Frame numbers: 52 - 69 Space	er: 70
Calculated distance from Trackline: 0.66 km	
Final Time and Position of Sighting	
	-80.294216
Calculated Distance Traveled: 0.44 km	
Behavior and Additional Comments	
Approximately three groups of animals (small groups) additional group of 10 nearby	<i>.</i>
Thursday, September 5, 2013 Sighting # 6	
Thursday, September 5, 2013 Sighting # 6 Initial sighting on Track	
ee	-79.947294
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:Vertical Angle:2Horizontal Bearing in Degrees:90Sightin	-79.947294 g Cue: Splash
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:	g Cue: Splash
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:Vertical Angle:2Horizontal Bearing in Degrees:90Sightin	g Cue: Splash
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:Vertical Angle:2Horizontal Bearing in Degrees:90SightinOn/Off Effort:OnTrackline:9Beaufort Sea S	g Cue: Splash
Initial sighting on Track         Time:       11:44       WP#:       46       Lat:       30.499648       Long:         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sightin         On/Off Effort:       On       Trackline:       9       Beaufort Sea S         Observer:       Erin       Observer side:       Right	g Cue: Splash State: 2
Initial sighting on Track         Time:       11:44       WP#:       46       Lat:       30.499648       Long:	g Cue: Splash State: 2 -79.946208
Initial sighting on Track         Time:       11:44       WP#:       46       Lat:       30.499648       Long:         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sightin         On/Off Effort:       On       Trackline:       9       Beaufort Sea S         Observer:       Erin       Observer side:       Right	g Cue: Splash State: 2 -79.946208 ): 4/4/4
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:Vertical Angle:2Horizontal Bearing in Degrees:90SightinOn/Off Effort:OnTrackline:9Beaufort Sea SObserver:ErinObserver side:RightActual Time and Position of SightingTime:11:46WP#:47Lat:30.488333Long:Species:TurncatusNumbers (Low/High/Best)	g Cue: Splash State: 2 -79.946208 ): 4/4/4
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:Vertical Angle:2Horizontal Bearing in Degrees:90SightinOn/Off Effort:OnTrackline:9Beaufort Sea SObserver:ErinObserver side:RightActual Time and Position of SightingTime:11:46WP#:47Lat:30.488333Long:Species:TurncatusNumbers (Low/High/Best)	g Cue: Splash State: 2 -79.946208 ): 4/4/4
Initial sighting on Track         Time:       11:44       WP#:       46       Lat:       30.499648       Long:         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sightin         On/Off Effort:       On       Trackline:       9       Beaufort Sea S         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting       Time:       11:46       WP#:       47       Lat:       30.488333       Long:       Species: Tursiops truncatus         Species: Tursiops truncatus       Numbers (Low/High/Best)       Features used in Species ID:       Robust body appearance, uniform grey coloration.	g Cue: Splash State: 2 -79.946208 ): 4/4/4
Initial sighting on Track         Time:       11:44       WP#:       46       Lat:       30.499648       Long:         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sightin         On/Off Effort:       On       Trackline:       9       Beaufort Sea S         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting       Time:       11:46       WP#:       47       Lat:       30.488333       Long:       Species:Tursiops truncatus         Species:Tursiops truncatus       Numbers (Low/High/Best)       Features used in Species ID:       Robust body appearance, uniform grey coloration.         Representative images used for Species ID:       71, 73, 75	g Cue: Splash State: 2 -79.946208 ): 4/4/4
Initial sighting on Track         Time:       11:44       WP#:       46       Lat:       30.499648       Long:         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sightin         On/Off Effort:       On       Trackline:       9       Beaufort Sea S         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting       Time:       11:46       WP#:       47       Lat:       30.488333       Long:       Species:         Species:       Tursiops truncatus       Numbers (Low/High/Best)       Features used in Species ID:       Representative images used for Species ID:       71, 73, 75         Photographer:       Erin       Frame numbers:       71-79       Space         Calculated distance from Trackline:       1.26 km       1.26 km	g Cue: Splash State: 2 -79.946208 ): 4/4/4
Initial sighting on Track         Time:       11:44       WP#:       46       Lat:       30.499648       Long:         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sightin         On/Off Effort:       On       Trackline:       9       Beaufort Sea S         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting       Time:       11:46       WP#:       47       Lat:       30.488333       Long:       Species:         Species:       Tursiops truncatus       Numbers (Low/High/Best)       Features used in Species ID:       Representative images used for Species ID:       71, 73, 75         Photographer:       Erin       Frame numbers:       71 - 79       Space         Calculated distance from Trackline:       1.26 km       Final Time and Position of Sighting	g Cue: Splash State: 2 -79.946208 ): 4/4/4
Initial sighting on Track         Time:       11:44       WP#:       46       Lat:       30.499648       Long:	g Cue: Splash State: 2 -79.946208 ): 4/4/4 er: 80
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:Vertical Angle:2Horizontal Bearing in Degrees:90SightinOn/Off Effort:OnTrackline:9Beaufort Sea SObserver:ErinObserver side:RightActual Time and Position of SightingTime:11:46WP#:47Lat:Species:Tursiops truncatusNumbers (Low/High/Best)Features used in Species ID:Robust body appearance, uniform grey coloration.Representative images used for Species ID:71, 73, 75Photographer:ErinFrame numbers:Time:11:47WP#:48Lat:30.493116Long:Calculated Distance Traveled:0.56 km	g Cue: Splash State: 2 -79.946208 ): 4/4/4 er: 80
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:Vertical Angle:2Horizontal Bearing in Degrees:90SightinOn/Off Effort:OnTrackline:9Beaufort Sea SObserver:ErinObserver side:RightActual Time and Position of SightingTime:11:46WP#:47Lat:Species:Tursiops truncatusNumbers (Low/High/Best)Features used in Species ID:Robust body appearance, uniform grey coloration.Representative images used for Species ID:71, 73, 75Photographer:ErinFrame numbers:71-79SpaceCalculated distance from Trackline:1.26 kmFinal Time and Position of SightingTime:11:47WP#:48Lat:Soldaya116Long:Calculated Distance Traveled:0.56 km	g Cue: Splash State: 2 -79.946208 ): 4/4/4 er: 80
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:Vertical Angle:2Horizontal Bearing in Degrees:90SightinOn/Off Effort:OnTrackline:9Beaufort Sea SObserver:ErinObserver side:RightActual Time and Position of SightingTime:11:46WP#:47Lat:Species:Tursiops truncatusNumbers (Low/High/Best)Features used in Species ID:Robust body appearance, uniform grey coloration.Representative images used for Species ID:71, 73, 75Photographer:ErinFrame numbers:Time:11:47WP#:48Lat:30.493116Long:Calculated Distance Traveled:0.56 km	g Cue: Splash State: 2 -79.946208 ): 4/4/4 er: 80
Initial sighting on TrackTime:11:44WP#:46Lat:30.499648Long:Vertical Angle:2Horizontal Bearing in Degrees:90SightinOn/Off Effort:OnTrackline:9Beaufort Sea SObserver:ErinObserver side:RightActual Time and Position of SightingTime:11:46WP#:47Lat:Species:Tursiops truncatusNumbers (Low/High/Best)Features used in Species ID:Robust body appearance, uniform grey coloration.Representative images used for Species ID:71, 73, 75Photographer:ErinFrame numbers:71-79SpaceCalculated distance from Trackline:1.26 kmFinal Time and Position of SightingTime:11:47WP#:48Lat:30.493116Long:Calculated Distance Traveled:0.56 km	g Cue: Splash State: 2 -79.946208 ): 4/4/4 er: 80

Initial sighting o	ay, Sep	tember 5,	2013 Sigi	nting # 7				
	on Trac	k	C	C				
Time: 12:01	WP#:	53	Lat:	30.566605	L	ong:	-80.027	7333
Vertical Angle:					45	Sighting	Cue: _	Body
On/Off Effort:			ackline:		Beaufo	ort Sea Sta	ate:	2
Observer: Er	in	Ol	oserver sid	le: <u>Right</u>				
Actual Time and	d Positi	on of Sig	hting					
Time: 12:02	WP#:	54	Lat:	30.573902	L	ong:	-80.035	5006
Species:Grampus g				Numbers (I				
Features used in						all falcate c	lorsal fi	n,
animals with dark b								
Representative in	-	-				, 88, 96		100
<b>U</b> 1 —			numbers:	81 - 101		Spacer:		102
Calculated distan				1.09 km				
Final Time and								
Time: 12:06			Lat:		L	ong:	-80.033	3283
Calculated Distar	nce Trav	veled:	0.1	9 km				
Behavior and A	ddition	al Comm	ents					
Single group - anim	als withir	n one body	length of o	ne another. Lei	surely pa	ice to group	o surfac	ing
frequently and regu	larly							
Just a pleasant spec	ies.							
			2013 Sigi	nting # 8				
Initial sighting o			Lot		T	_	00.26	24.04
Time: <u>12:16</u>	WP#:		Lat:	30.566562		ong:		
Vertical Angle: On/Off Effort:			ackline:	g in Degrees:		Sighting		
	rin			10		ort Sea Sta		
	IN	U			Deaut		ate	2
				le: Right				Ζ
Actual Time and		on of Sig	hting	le: Right				
Actual Time and Time: 12:17	WP#:	on of Sig	hting	le: <u>Right</u> 30.574702		ong:	-80.372	2299
Actual Time and Time: <u>12:17</u> Species:Stenella fro	WP#: ]	on of Sig 58	hting Lat:	le: <u>Right</u> 30.574702 Numbers (I	Low/Hi	gh/Best):	-80.372	2299 / 6 / 5
Actual Time and Time: <u>12:17</u> Species: <i>Stenella fre</i> Features used in S	WP#: _ ontalis Species	on of Sig 58 ID: White	hting Lat:	le: <u>Right</u> 30.574702 Numbers (I um, alternating	Low/Hi	gh/Best):	-80.372	2299 / 6 / 5
Actual Time and Time: <u>12:17</u> Species:Stenella fro Features used in a along length of bod	WP#: ] ontalis Species ly, spottir	on of Sig 58 ID: <u>White</u> ng present	hting Lat: e tip to rostr on larger ar	le: Right 30.574702 Numbers (I um, alternating nimals.	Low/Hig light anc	gh/Best): I dark body	-80.372	2299 / 6 / 5
Actual Time and Time: <u>12:17</u> Species: <i>Stenella fro</i> Features used in a along length of bod Representative in	WP#: ontalis Species ly, spottir nages us	on of Sig 58 ID: <u>White</u> ng present sed for Sp	hting Lat: e tip to rostr on larger ar pecies ID:	le: <u>Right</u> 30.574702 Numbers (I um, alternating nimals.	Low/Hi Low/Hi light and	gh/Best): I dark body 8 , 110	-80.372 4 	2299 / 6 / 5 tion
Actual Time and Time: <u>12:17</u> Species: <i>Stenella fro</i> Features used in a along length of bod Representative in Photographer:	WP#: ] ontalis Species ly, spottir nages us Erin	on of Sig 58 ID: <u>White</u> ing present sed for Sp Frame	hting Lat: e tip to rostr on larger ar pecies ID: numbers: _	le: <u>Right</u> 30.574702 Numbers (I um, alternating nimals. 103 - 110	Low/Hi Low/Hi light and	gh/Best): I dark body	-80.372 4 	2299 / 6 / 5
Actual Time and Time: <u>12:17</u> Species: <i>Stenella</i> fro Features used in a along length of bod Representative in Photographer: <u>Calculated distan</u>	WP#: ] ontalis Species ly, spottir nages us Erin ice from	ID: <u>White</u> g present sed for Sp Frame	hting Lat: e tip to rostr on larger ar pecies ID: numbers: e:	le: <u>Right</u> 30.574702 Numbers (I um, alternating nimals. 103 - 110	Low/Hi Low/Hi light and	gh/Best): I dark body 8 , 110	-80.372 4 	2299 / 6 / 5 tion
Actual Time and Time: <u>12:17</u> Species: <i>Stenella fro</i> Features used in a along length of bod Representative in Photographer: <u>Calculated distan</u> Final Time and	WP#:	on of Sig 58 ID: <u>White</u> og present sed for Sp Frame Tracklin n of Sigh	hting Lat: e tip to rostr on larger ar pecies ID: numbers: ting	le: Right 30.574702 Numbers (I um, alternating nimals. 103 - 110 0.99 km	Low/Hi light and 10 0	gh/Best): I dark body 8,110 Spacer:	-80.372 4 / colorat	2299 / 6 / 5 tion 111
Actual Time and Time: <u>12:17</u> Species: <i>Stenella fro</i> Features used in a along length of bod Representative in Photographer: <u>Calculated distan</u> Final Time and Time: <u>12:20</u>	WP#: ] ontalis Species ly, spottir nages us <u>Erin</u> ace from <b>Position</b> WP#:	on of Sig 58 ID: White ng present sed for Sp Frame Tracklin n of Sigh 59	hting Lat: e tip to rostr on larger ar pecies ID: numbers: ting Lat:	le: <u>Right</u> 30.574702 Numbers (I um, alternating nimals. 103 - 110 0.99 km 30.570375	Low/Hi light and 10 0	gh/Best): I dark body 8 , 110	-80.372 4 / colorat	2299 / 6 / 5 tion 111
Actual Time and Time: <u>12:17</u> Species: <i>Stenella fro</i> Features used in a along length of bod Representative in Photographer: <u>Calculated distan</u> Final Time and	WP#: ] ontalis Species ly, spottir nages us <u>Erin</u> ace from <b>Position</b> WP#:	on of Sig 58 ID: White ng present sed for Sp Frame Tracklin n of Sigh 59	hting Lat: e tip to rostr on larger ar pecies ID: numbers: ting	le: <u>Right</u> 30.574702 Numbers (I um, alternating nimals. 103 - 110 0.99 km 30.570375	Low/Hi light and 10 0	gh/Best): I dark body 8,110 Spacer:	-80.372 4 / colorat	2299 / 6 / 5 tion 111
Actual Time and Time: <u>12:17</u> Species: <i>Stenella</i> fro Features used in a along length of bod Representative in Photographer: <u>Calculated distan</u> Final Time and Time: <u>12:20</u>	WP#: ] ontalis Species ly, spottir nages us Erin ice from <b>Position</b> WP#: nce Trav	ID: White Sed for Sp Frame for Trackline n of Sigh S9 Veled:	hting Lat:	le: <u>Right</u> 30.574702 Numbers (I um, alternating nimals. 103 - 110 0.99 km 30.570375	Low/Hi light and 10 0	gh/Best): I dark body 8,110 Spacer:	-80.372 4 / colorat	2299 / 6 / 5 tion 111
Actual Time and Time: <u>12:17</u> Species: <i>Stenella</i> fro Features used in a along length of bod Representative in Photographer: <u>Calculated distan</u> Final Time and Time: <u>12:20</u> Calculated Distan	WP#:	ID: White Sed for Sp Frame part Trackling of Sight 59 veled: al Comm	hting Lat:	le: <u>Right</u> 30.574702 Numbers (I um, alternating nimals. 103 - 110 0.99 km 30.570375 0 km	Low/Hi light and 10 0	gh/Best): I dark body 8,110 Spacer:	-80.372 4 / colorat	2299 / 6 / 5 tion 111
Actual Time and Time: <u>12:17</u> Species: <i>Stenella</i> fro Features used in a along length of bod Representative in Photographer: <u>Calculated distan</u> Final Time and Time: <u>12:20</u> Calculated Distan Behavior and Action	WP#:	ID: White Sed for Sp Frame part Trackling of Sight 59 veled: al Comm	hting Lat:	le: <u>Right</u> 30.574702 Numbers (I um, alternating nimals. 103 - 110 0.99 km 30.570375 0 km	Low/Hi light and 10 0	gh/Best): I dark body 8,110 Spacer:	-80.372 4 / colorat	2299 / 6 / 5 tion 111
Actual Time and Time: <u>12:17</u> Species: <i>Stenella</i> fro Features used in a along length of bod Representative in Photographer: <u>Calculated distan</u> Final Time and Time: <u>12:20</u> Calculated Distan Behavior and Action	WP#:	ID: White Sed for Sp Frame part Trackling of Sight 59 veled: al Comm	hting Lat:	le: <u>Right</u> 30.574702 Numbers (I um, alternating nimals. 103 - 110 0.99 km 30.570375 0 km	Low/Hi light and 10 0	gh/Best): I dark body 8,110 Spacer:	-80.372 4 / colorat	2299 / 6 / 5 tion 111

Thursday, September 5, 2013 ${ m Sighting}~\#~~9$
Initial sighting on Track
Time:         14:07         WP#:         68         Lat:         30.166809         Long:         -80.492337
Vertical Angle: <u>2</u> Horizontal Bearing in Degrees: <u>100</u> Sighting Cue: <u>Body</u>
On/Off Effort: Trackline: Beaufort Sea State:
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time:         14:13         WP#:         69         Lat:         30.171990         Long:         -80.501133
Species:Stenella frontalis         Numbers (Low/High/Best):         1/1/1
Features used in Species ID: Alternating light and dark body coloration, spotting pattern present
on animals, white tip to rostrum
Representative images used for Species ID: <u>None taken</u>
Photographer:         Erin         Frame numbers:         NA         Spacer:         NA           Calculated distance from Trackline:         1.02 km         1
Final Time and Position of Sighting
Time:   NA   WP#:   NA   Lat:   NA   Long:   NA
Calculated Distance Traveled: NA
Behavior and Additional Comments
Only a single animal observed - no resight.
Thursday Sontomber 5, 2013 Sighting # 10
Thursday, September 5, 2013 Sighting # 10 Initial sighting on Track
Initial signing on Track
Time: 14:14 WP#: 71 Lat: 30.166576 Long: -80.452564
Time:14:14WP#:71Lat:30.166576Long:-80.452564Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Body
Vertical Angle: 2 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:1
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:1Observer:RyanObserver side:Left
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of Sighting
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:19       WP#:       72       Lat:       30.162467       Long:       -80.453415
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:19WP#:72Lat:30.162467Long:-80.453415Species:Stenella frontalisNumbers (Low/High/Best):5 / 5 / 5
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting         Time:       14:19       WP#:       72       Lat:       30.162467       Long:       -80.453415         Species:       Stenella frontalis       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       White tip to rostrum, spotting pattern across animals body
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:19       WP#:       72       Lat:       30.162467       Long:       -80.453415         Species: Stenella frontalis       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       White tip to rostrum, spotting pattern across animals body         alternating light and dark color pattern down the length of the animals body.
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting         Time:       14:19       WP#:       72       Lat:       30.162467       Long:       -80.453415         Species:       Stenella frontalis       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       White tip to rostrum, spotting pattern across animals body         alternating light and dark color pattern down the length of the animals body.         Representative images used for Species ID:       112, 116, 123
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:19       WP#:       72       Lat:       30.162467       Long:       -80.453415         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       White tip to rostrum, spotting pattern across animals body         alternating light and dark color pattern down the length of the animals body.       112, 116, 123
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:19WP#:72Lat:30.162467Long:-80.453415Species:Stenella frontalisNumbers (Low/High/Best):5 / 5 / 5Features used in Species ID:White tip to rostrum, spotting pattern across animals bodyalternating light and dark color pattern down the length of the animals body.Representative images used for Species ID:112, 116, 123Photographer:ErinFrame numbers:112 - 124Spacer:125Calculated distance from Trackline:0.46 km
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:19       WP#:       72       Lat:       30.162467       Long:       -80.453415         Species: Stenella frontalis       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       White tip to rostrum, spotting pattern across animals body         alternating light and dark color pattern down the length of the animals body.         Representative images used for Species ID:       112, 116, 123         Photographer:       Erin       Frame numbers:       112-124         Calculated distance from Trackline:       0.46 km
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:19WP#:72Lat:30.162467Long:-80.453415Species:Stenella frontalisNumbers (Low/High/Best):5 / 5 / 5Features used in Species ID:White tip to rostrum, spotting pattern across animals bodyalternating light and dark color pattern down the length of the animals body.Representative images used for Species ID:112, 116, 123Photographer:ErinFrame numbers:112-124Spacer:125Calculated distance from Trackline:0.46 kmFinal Time and Position of SightingTime:14:22WP#:73Lat:30.167640Long:-80.452756
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:19WP#:72Lat:30.162467Long:-80.453415Species:Stenella frontalisNumbers (Low/High/Best):5 / 5 / 55Features used in Species ID:White tip to rostrum, spotting pattern across animals bodyalternating light and dark color pattern down the length of the animals body.Representative images used for Species ID:112 · 112 · 116, 123Photographer:ErinFrame numbers:112 - 124Spacer:125Calculated distance from Trackline:0.46 km
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:19WP#:72Lat:30.162467Long:-80.453415Species:Stenella frontalisNumbers (Low/High/Best):5 / 5 / 5Features used in Species ID:White tip to rostrum, spotting pattern across animals bodyalternating light and dark color pattern down the length of the animals body.Representative images used for Species ID:112, 116, 123Photographer:ErinFrame numbers:112 - 124Spacer:125Calculated distance from Trackline:0.46 km-80.452756Time:14:22WP#:73Lat:30.167640Long:-80.452756Calculated Distance Traveled:0.58 kmBehavior and Additional Comments
Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:1Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:19WP#:72Lat:30.162467Long:-80.453415Species:Stenella frontalisNumbers (Low/High/Best):5 / 5 / 55Features used in Species ID:White tip to rostrum, spotting pattern across animals bodyalternating light and dark color pattern down the length of the animals body.Representative images used for Species ID:112 · 112 · 116, 123Photographer:ErinFrame numbers:112 - 124Spacer:125Calculated distance from Trackline:0.46 km
Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       1         Observer:       Ryan       Observer side:       Left       1         Actual Time and Position of Sighting       Time:       14:19       WP#:       72       Lat:       30.162467       Long:       -80.453415         Species:Stenella frontalis       Numbers (Low/High/Best):       5 / 5 / 5       5       5         Features used in Species ID:       White tip to rostrum, spotting pattern across animals body       alternating light and dark color pattern down the length of the animals body.         Representative images used for Species ID:       112,116,123       125         Photographer:       Erin       Frame numbers:       112-124       Spacer:       125         Calculated distance from Trackline:       0.46 km       125       125       125       126         Time:       14:22       WP#:       73       Lat:       30.167640       Long:       -80.452756         Calculated Distance Traveled:       0.58 km       0.58 km       125       142       142

Thursday, September 5, 2013 ${ m Sighting}~\#~11$
Initial sighting on Track
Time:         14:23         WP#:         75         Lat:         30.167344         Long:         -80.393443
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: 4 Beaufort Sea State: 1
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time: 14:24 WP#: 76 Lat: 30.162 Long: -80.397471
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 15/18/16
Features used in Species ID: Robust body and rostrum, uniform grey coloration, robust dorsal
fin
Representative images used for Species ID: 129
Photographer: Erin Frame numbers: 126 - 132 Spacer: 133
Calculated distance from Trackline: 0.71 km
Final Time and Position of Sighting
Time: 14:27 WP#: 77 Lat: 30.165516 Long: -80.390053
Calculated Distance Traveled: 0.81 km
Behavior and Additional Comments
Multiple small scattered groups between 5 & 8 animals
Thursday, September 5, 2013 Sighting $\#$ 12
Initial sighting on Track
11me: 14:29 WP#: /9 Lat: 30.16/194 Long: -80.339365
Time:14:29WP#:79Lat:30.167194Long:-80.339365Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:Body
Vertical Angle: <u>3</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2
Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:Left
Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of Sighting
Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:32WP#:80Lat:30.166837Long:-80.338649
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       2         Actual Time and Position of Sighting       Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species:Stenella frontalis       Numbers (Low/High/Best):       4/6/5
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       2         Actual Time and Position of Sighting       Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species:Stenella frontalis       Numbers (Low/High/Best):       4/6/5         Features used in Species ID:       Smaller dorsal fin with lighter blaze up to dorsal fin, spotting pattern
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       2         Actual Time and Position of Sighting         Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species:       Stenella frontalis       Numbers (Low/High/Best):       4 / 6 / 5         Features used in Species ID:       Smaller dorsal fin with lighter blaze up to dorsal fin, spotting pattern across body.
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       2         Actual Time and Position of Sighting       Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species:Stenella frontalis       Numbers (Low/High/Best):       4/6/5         Features used in Species ID:       Smaller dorsal fin with lighter blaze up to dorsal fin, spotting pattern         across body.       Representative images used for Species ID:       134, 137, 139
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       2         Actual Time and Position of Sighting       Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species:Stenella frontalis       Numbers (Low/High/Best):       4 / 6 / 5         Features used in Species ID:       Smaller dorsal fin with lighter blaze up to dorsal fin, spotting pattern         across body.       Representative images used for Species ID:       134, 137, 139         Photographer:       Erin       Frame numbers:       134 - 140       Spacer:       141
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       2         Actual Time and Position of Sighting       Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species:Stenella frontalis       Numbers (Low/High/Best):       4/6/5         Features used in Species ID:       Smaller dorsal fin with lighter blaze up to dorsal fin, spotting pattern         across body.       Representative images used for Species ID:       134, 137, 139         Photographer:       Erin       Frame numbers:       134 - 140       Spacer:       141         Calculated distance from Trackline:       0.08 km       0.08 km       0.08 km
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       2         Actual Time and Position of Sighting       Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species: Stenella frontalis       Numbers (Low/High/Best):       4/6/5       4/6/5         Features used in Species ID:       Smaller dorsal fin with lighter blaze up to dorsal fin, spotting pattern across body.         Representative images used for Species ID:       134, 137, 139         Photographer:       Erin       Frame numbers:       134-140       Spacer:       141         Calculated distance from Trackline:       0.08 km       0.08 km       141
Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:32WP#:80Lat:30.166837Long:-80.338649Species:Stenella frontalisNumbers (Low/High/Best):4 / 6 / 5Features used in Species ID:Smaller dorsal fin with lighter blaze up to dorsal fin, spotting patternacross body.Representative images used for Species ID:134, 137, 139Photographer:ErinFrame numbers:134 - 140Calculated distance from Trackline:0.08 kmFinal Time and Position of SightingTime:14:34WP#:81Lat:30.170141Long:-80.342498
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species:Stenella frontalis       Numbers (Low/High/Best):       4/6/5       Features used in Species ID:       Smaller dorsal fin with lighter blaze up to dorsal fin, spotting pattern         across body.       Representative images used for Species ID:       134, 137, 139         Photographer:       Erin       Frame numbers:       134 - 140       Spacer:       141         Calculated distance from Trackline:       0.08 km
Vertical Angle:3Horizontal Bearing in Degrees:90Sighting Cue:BodyOn/Off Effort:OnTrackline:4Beaufort Sea State:2Observer:RyanObserver side:LeftActual Time and Position of SightingTime:14:32WP#:80Lat:30.166837Long:-80.338649Species:Stenella frontalisNumbers (Low/High/Best):4 / 6 / 5Features used in Species ID:Smaller dorsal fin with lighter blaze up to dorsal fin, spotting patternacross body.Representative images used for Species ID:134, 137, 139Photographer:ErinFrame numbers:134 - 140Calculated distance from Trackline:0.08 kmFinal Time and Position of SightingTime:14:34WP#:81Lat:30.170141Long:-80.342498
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       Left         Actual Time and Position of Sighting       Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species:Stenella frontalis       Numbers (Low/High/Best):       4/6/5       Features used in Species ID:       Smaller dorsal fin with lighter blaze up to dorsal fin, spotting pattern         across body.       Representative images used for Species ID:       134, 137, 139         Photographer:       Erin       Frame numbers:       134 - 140       Spacer:       141         Calculated distance from Trackline:       0.08 km
Vertical Angle:       3       Horizontal Bearing in Degrees:       90       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       4       Beaufort Sea State:       2         Observer:       Ryan       Observer side:       Left       2         Actual Time and Position of Sighting       Time:       14:32       WP#:       80       Lat:       30.166837       Long:       -80.338649         Species:       Stenella frontalis       Numbers (Low/High/Best):       4/6/5         Features used in Species ID:       Smaller dorsal fin with lighter blaze up to dorsal fin, spotting pattern across body.         Representative images used for Species ID:       134, 137, 139         Photographer:       Erin       Frame numbers:       134 - 140       Spacer:       141         Calculated distance from Trackline:       0.08 km       141       Calculated Distance Traveled:       0.52 km         Behavior and Additional Comments       0.52 km       142       143       143       143

Thursday, September 5, 2013 ${ m Sighting}~\#~13$
Initial sighting on Track
Time:         15:14         WP#:         87         Lat:         30.099192         Long:         -80.567882
Vertical Angle: <u>2</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Body</u>
On/Off Effort: On Trackline: <u>3</u> Beaufort Sea State: <u>2</u>
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time:         15:17         WP#:         88         Lat:         30.092804         Long:         -80.561323
Species:Tursiops truncatus         Numbers (Low/High/Best):         4/6/6
Features used in Species ID: Robust body and dorsal fin, uniform grey coloration.
Representative images used for Species ID:144, 146Photographer:ErinFrame numbers:159Spacer:160
Photographer:         Erin         Frame numbers:         159         Spacer:         160           Calculated distance from Trackline:         0.95 km         0.95 km <td< td=""></td<>
Final Time and Position of Sighting
Time:         15:20         WP#:         89         Lat:         30.096473         Long:         -80.564387
Calculated Distance Traveled: 0.50 km
Behavior and Additional Comments
Trio and single animals, tail slapping observed from one animal. Group milling about interacting
with one another under the surface.
Thursday, September 5, 2013 Sighting $\#$ 14
Initial sighting on Track
Time: 15:44 WP#: 95 Lat: 30.033039 Long: -80.139547
Vertical Angle: 2 Horizontal Bearing in Degrees: 45 Sighting Cue: Splash
On/Off Effort: On Trackline: 2 Beaufort Sea State: 2
Observer: Ryan Observer side: Left
Actual Time and Position of Sighting
Time:         15:50         WP#:         96         Lat:         30.040520         Long:         -80.137770
Species: Tursiops truncatus Numbers (Low/High/Best): 9/9/9
Features used in Species ID: Uniform grey coloration, robust body appearance.
Representative images used for Species ID: 163, 165
Photographer: Erin Frame numbers: 161 - 173 Spacer: 174
Calculated distance from Trackline: 0.85 km
Final Time and Position of Sighting
Time: 15:50 WP#: 97 Lat: 30.036097 Long: -80.121547
Calculated Distance Traveled: 1.64 km
Behavior and Additional Comments
Disperse groups of pairs or single animals.

Thu	rsday, Sep	tember {	5, 2013 Sig	ting # 15			
Initial sightin	g on Trac	k	-				
Time: 16:00	WP#:	99	Lat:	30.039805	Long:	-79.81	6970
Vertical Angle	2	Horizo	ntal Bearin	ng in Degrees:	60 Sightin	g Cue:	Splash
On/Off Effort:	On	]	Trackline:	2	Beaufort Sea S	State:	1
Observer:	Ryan	(	Observer s	ide: Left			
Actual Time a	and Positi	ion of Si	ighting				
Time: 16:00	WP#:	100	Lat:	30.039238	Long:	-79.814	4079
Species:Tursiop	s truncatus			Numbers (I	Low/High/Best)	: 19/	20/19
Features used	in Species	ID: <u>Uni</u>	form grey co	oloration, robust b	ody appearance.		
Representative	e images u	sed for	Species ID	):	177, 185, 188, 18	39	
Photographer:			e numbers:	175 - 195	5 Space	er:	196
Calculated dis	tance fron	n Trackl	ine:	0.29 km			
Final Time ar	nd Positio	n of Sig	hting				
Time: 16:03	WP#:	101	Lat:	30.040753	Long:	-79.81	5037
Calculated Dis	stance Tra	veled:	0.	19 km			
Behavior and	Addition	al Com	ments				
Disperse group s	howing slo	w travel a	it the surface	e, pairs or single a	nimals interacting	J, chasing	j one
another.							

Friday, September 6, 2013 Sighting $\#$ 1	
Initial sighting on Track	
Time: 9:47 WP#: 118 Lat: 30.499349 Long:	-80.432010
	hting Cue: Splash
On/Off Effort: On Trackline: 9 Beaufort S	ea State: 2
Observer: Ryan Observer side: Right	
Actual Time and Position of Sighting	
	-80.428540
Species: Stenella frontalis Numbers (Low/High/E	Best): 30 / 40 / 35
Features used in Species ID: Alternating light and dark pattern down body,	spotting
Representative images used for Species ID:6,7	10
e 1	pacer: 19
Calculated distance from Trackline: 0.39 km	
Final Time and Position of Sighting	
	-80.429727
Calculated Distance Traveled: 0.14 km	
Behavior and Additional Comments	
Larger group, all went under when we flew over, 2 groups traveling fast, belly sv	vimming
Friday, September 6, 2013 Sighting # 2	
Initial sighting on Track	
	-80.466671
U	hting Cue:Splash
	ea State: 2
Observer: Erin Observer side: Left	•u State:
Actual Time and Position of Sighting	
	-80.463564
Species: Stenella frontalis Numbers (Low/High/E	
Features used in Species ID: Alternating light and dark pattern down body	
	<u> </u>
Representative images used for Species ID: 21, 26, 30	), 32
Photographer: Ryan Frame numbers: 20-38 S	pacer: 39
Calculated distance from Trackline: 0.91 km	
Final Time and Position of Sighting	
Time: 9:57 WP#: 124 Lat: 30.493192 Long:	-80.471266
Calculated Distance Traveled: 0.76 km	
Behavior and Additional Comments	
In a tight group, traveling fast, quick surfacings	

Initial sighting on Track
Time: 9:59 WP#: 127 Lat: 30.499133 Long: -80.545107
Vertical Angle:         2         Horizontal Bearing in Degrees:         90         Sighting Cue:         Body
On/Off Effort: On Trackline: 9 Beaufort Sea State: 1
Observer: Erin Observer side: Left
Actual Time and Position of Sighting
Time: 10:00 WP#: 128 Lat: 30.495026 Long: -80.537739
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 1/1/1
Features used in Species ID: Uniform gray, robust
Representative images used for Species ID: 43
Photographer: Ryan Frame numbers: 40-48 Spacer: 49
Calculated distance from Trackline: 0.84 km
Final Time and Position of Sighting
Time:         10:02         WP#:         129         Lat:         30.491936         Long:         -80.542527           Calculated Distance Traveled:         0.57 km         0.57 km         -80.542527
Behavior and Additional Comments
Shark came up and chased Ttr down. Ttr playing with plastic prior.
Friday, September 6, 2013 Sighting # 4 Initial sighting on Track
Time: 10:11 WP#: 134 Lat: 30.433509 Long: -80.640160
Vertical Angle: 2 Horizontal Bearing in Degrees: 60 Sighting Cue: Body
On/Off Effort: On Trackline: 8 Beaufort Sea State: 1
On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       1         Observer:       Erin       Observer side:       Left
Observer: Erin Observer side: Left
Observer:     Erin     Observer side:     Left       Actual Time and Position of Sighting
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Long:       -80.640863         Time:       10:12       WP#:       135       Lat:       30.436669       Long:       -80.640863
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       End       End         Time:       10:12       WP#:       135       Lat:       30.436669       Long:       -80.640863         Species:       Turnsiops truncatus       Numbers (Low/High/Best):       4/4/4
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Long:       -80.640863         Time:       10:12       WP#:       135       Lat:       30.436669       Long:       -80.640863
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       End Species:       Time:       10:12       WP#:       135       Lat:       30.436669       Long:       -80.640863         Species:       Turnsiops truncatus       Numbers (Low/High/Best):       4/4/4
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       End to be an en
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Image: Time:       10:12       WP#:       135       Lat:       30.436669       Long:       -80.640863         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Uniform gray, robust         Epresentative images used for Species ID:
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       End to be an en
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Image: Time:       10:12       WP#:       135       Lat:       30.436669       Long:       -80.640863         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Uniform gray, robust         Representative images used for Species ID:       52         Photographer:       Ryan       Frame numbers:       50 - 56       Spacer:       57         Calculated distance from Trackline:       0.36 km       0.36 km       57
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Image: Time:       10:12       WP#:       135       Lat:       30.436669       Long:       -80.640863         Species:       Turnsiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Uniform gray, robust         Representative images used for Species ID:       52         Photographer:       Ryan       Frame numbers:       50 - 56       Spacer:       57         Calculated distance from Trackline:       0.36 km       Final Time and Position of Sighting
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Image: Time:       10:12       WP#:       135       Lat:       30.436669       Long:       -80.640863         Species:       Turnsiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Uniform gray, robust       52         Representative images used for Species ID:       50 - 56       Spacer:       57         Calculated distance from Trackline:       0.36 km       Final Time and Position of Sighting         Final Time and Position of Sighting       Eat:       30.438723       Long:       -80.640162
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Image: Second Structure       Second Structure </td
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Image: Species: Tursiops truncatus       Species: Image: Species: Tursiops truncatus       Species: Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Uniform gray, robust       Image: Species: 52       Species: 52         Representative images used for Species ID:       52       Species: 57       Species: 57         Calculated distance from Trackline:       0.36 km       Image: Species: 57       Species: 57         Final Time and Position of Sighting       Image: Species:       Species: 30.438723       Long: -80.640162         Calculated Distance Traveled:       0.24 km       Image: Species: 0.24 km       Image: Species: 0.24 km
Observer:       Erin       Observer side:       Left         Actual Time and Position of Sighting       Features and Position of Sighting       Long:       -80.640863         Species:       Tursiops truncatus       Numbers (Low/High/Best):       4/4/4         Features used in Species ID:       Uniform gray, robust       4/4/4         Representative images used for Species ID:       52         Photographer:       Ryan       Frame numbers:       50 - 56       Spacer:       57         Calculated distance from Trackline:       0.36 km       0.36 km       57         Final Time and Position of Sighting       Time:       10:18       WP#:       136       Lat:       30.438723       Long:       -80.640162         Calculated Distance Traveled:       0.24 km       0.24 km       0.24 km       0.24 km

Time: <u>9:11</u>	WP#: _	5	Lat:	30.567560	Lor	g:	-80.58179	93
Vertical Angle:				in Degrees:		ighting	Cue: S	plash
On/Off Effort:			kline:	•	Beaufor			3
Observer: Hea	ather	Obs	erver sid	e: Left				
Actual Time an	d Positio	on of Sight	ting					
Time: 9:14		-	Lat:	30.584009	Lor	g:	-80.58847	'5
Species:Stenella fi	rontalis			Numbers (1	Low/High	/Best):	8/12	
Features used in	Species 1	ID: Alternat	ting light a	and dark patter	n down bo	dy, spotti	ing, white	tip
on rostrum								
Representative i					9, 13			
Photographer:				5-28		Spacer	29	)
Calculated distant				1.94 km				
Final Time and		0	0					
Time: <u>9:18</u>	_	7			Lor	g:	-80.59508	31
Calculated Dista	ince Trav	eled:	0.65	5 km				
Behavior and A	adulona	I Comme	nts					
Initial sighting	on Track		Sigh	ting # 2				
Time: 9:27	WP#:	6	Lat:	30.568125	Lor		-80.28320	
Time: <u>9:27</u> Vertical Angle:	WP#:	6 <sup>]</sup> Horizontal	Lat: l Bearing	30.568125 in Degrees:	100 S	ighting	Cue: [	Body
Time: <u>9:27</u> Vertical Angle: ] On/Off Effort: _	WP#:  On	6 ] Horizontal Trac	Lat: l Bearing ckline:	30.568125 in Degrees: 10		ighting	Cue: [	
Time: <u>9:27</u> Vertical Angle: ] On/Off Effort: _ Observer:	WP#:  On Erin	6 ] Horizontal Trac Obs	Lat: l Bearing ckline: erver sid	30.568125 in Degrees: 10	100 S	ighting	Cue: [	Body
Time: <u>9:27</u> Vertical Angle: On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an	WP#:	6 ] Horizontal Trac Obs on of Sight	Lat: l Bearing ckline: erver sid <b>ting</b>	30.568125 in Degrees: 10 e: Right	100 S Beaufor	ighting Sea Sta	Cue: <u></u>	Body 2
Time: <u>9:27</u> Vertical Angle: On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an Time: <u>9:29</u>	WP#:	6 ] Horizontal Trac Obs on of Sight	Lat: l Bearing ckline: erver sid <b>ting</b>	30.568125 in Degrees: 10 e: Right 30.558824	100 S Beaufor	ighting Sea Sta	Cue: ate:	Body 2
Time: 9:27 Vertical Angle: On/Off Effort: Observer: E Actual Time an Time: 9:29 Species:Stenella fi	WP#:	6 ] Horizontal Trac Obs on of Sight	Lat: l Bearing ckline: erver sid ting Lat:	30.568125 in Degrees: 10 e: Right 30.558824 Numbers (1	100 S Beaufor Lor Low/High	g: /Best):	Cue: ate: -80.28802 10 / 15	Body 2 2 20 5 / 12
Time: 9:27 Vertical Angle: On/Off Effort: Observer: E Actual Time an Time: 9:29 Species: Stenella fi Features used in	WP#:	6 ] Horizontal Trac Obs on of Sight	Lat: l Bearing ckline: erver sid ting Lat:	30.568125 in Degrees: 10 e: Right 30.558824 Numbers (1	100 S Beaufor Lor Low/High	g: /Best):	Cue: ate: -80.28802 10 / 15	Body 2 2 20 5 / 12
Time: 9:27 Vertical Angle: On/Off Effort: Observer: E Actual Time an Time: 9:29 Species: <i>Stenella fi</i> Features used in on rostrum	WP#:	6 ] Horizontal Trac Obs on of Sight 13 ] ID: <u>Alternat</u>	Lat: l Bearing ckline: erver sid ting Lat: ting light a	30.568125 in Degrees: 10 e: Right 30.558824 Numbers (1	100 S Beaufor Lor Low/High	ighting Sea Sta g: /Best): dy, spotti	Cue: ate: -80.28802 10 / 15	Body 2 2 20 5 / 12
Time: 9:27 Vertical Angle: On/Off Effort: Conditional Angle: On/Off Effort: Conditional Angle: Condititational Angle: Conditationa Angle: Conditional Angle: Conditit	WP#:	6 ] Horizontal Trac Obs on of Sight 13 ] ID: <u>Alternat</u> ed for Spe Frame nu	Lat: l Bearing ckline: erver sid ting Lat: ting light a rcies ID: umbers: _	30.568125 in Degrees: 10 e: Right 30.558824 Numbers (1	100 S Beaufor Low/High n down bo	ighting Sea Sta g: /Best): dy, spotti	Cue: ate: -80.28802  10 / 15 ing, white	Body 2 20 5 / 12 tip
Time: 9:27 Vertical Angle: On/Off Effort: Conditional Angle: On/Off Effort: Conditional Angle: Condititational Angle: Conditationa Angle: Conditional Angle: Conditit	WP#:	6 ] Horizontal Trac Obs on of Sight 13 ] ID: <u>Alternat</u> ed for Spe Frame nu	Lat: l Bearing ckline: erver sid ting Lat: ting light a rcies ID: umbers: _	30.568125 (in Degrees: 10 e: Right 30.558824 Numbers (1 and dark patter	100 S Beaufor Low/High n down bo	ighting Sea Sta g: /Best): dy, spotti 38	Cue: ate: -80.28802  10 / 15 ing, white	Body 2 20 5 / 12 tip
Time: 9:27 Vertical Angle: On/Off Effort: Conditional Angle: On/Off Effort	WP#:	6 ] Horizontal Trac Obs on of Sight 13 ] ID: <u>Alternat</u> ed for Spe Frame nu Trackline:	Lat: l Bearing ckline: erver sid ting Lat: ting light a ccies ID: umbers:	30.568125 in Degrees: 10 e: Right 30.558824 Numbers (1 and dark patter 30 - 39	100 S Beaufor Low/High n down bo	ighting Sea Sta g: /Best): dy, spotti 38	Cue: ate: -80.28802  10 / 15 ing, white	Body 2 20 5 / 12 tip
Initial sighting Time: 9:27 Vertical Angle: On/Off Effort: Observer: E Actual Time an Time: 9:29 Species: <i>Stenella fi</i> Features used in on rostrum Representative i Photographer: Calculated distan Final Time and Time: 9:31	WP#:	6 ] Horizontal Trac Obs on of Sight 13 ] ID: <u>Alternat</u> ed for Spe Frame nu Trackline: of Sightin	Lat: l Bearing ckline: erver sid ting Lat: ting light a ccies ID: umbers:	30.568125 in Degrees: 10 e: Right 30.558824 Numbers (1 and dark patter 30 - 39	100 S Beaufor Low/High n down bo	ighting Sea Sta g: /Best): dy, spotti 38 Spacer:	Cue: ate: -80.28802  10 / 15 ing, white	Body 2 20 5 / 12 tip
Time: 9:27 Vertical Angle: On/Off Effort: Observer: E Actual Time an Time: 9:29 Species: <i>Stenella fi</i> Features used in on rostrum Representative i Photographer: Calculated distan Final Time and Time: 9:31	WP#:	6 ] Horizontal Trac Obs on of Sight 13 ] ID: Alternat ed for Spe Frame nu Trackline: of Sightin 14 ]	Lat: l Bearing ckline: erver sid ting Lat: ting light a ccies ID: umbers: ccies ID: umbers: function of the second second of the second of the second second of the second of the second second of the second of the second of the second second of the second of the secon	30.568125 in Degrees: 10 e: Right 30.558824 Numbers (J and dark patter 30 - 39 1.13 km	100 S Beaufor Low/High n down bo	ighting Sea Sta g: /Best): dy, spotti 38 Spacer:	Cue: ate: -80.28802  10 / 15 ing, white : 40	Body 2 20 5 / 12 tip
Time: 9:27 Vertical Angle: On/Off Effort: Observer: E Actual Time an Time: 9:29 Species: <i>Stenella fi</i> Features used in on rostrum Representative i Photographer: Calculated distant Final Time and Time: 9:31 Calculated Distant	WP#: _ 	6 ] Horizontal Trac Obs on of Sight 13 ] ID: Alternat ed for Spe Frame nu Trackline: of Sightin 14 ] eled:	Lat: I Bearing ckline: erver sid ting Lat: ting light a ccies ID: mbers: mg Lat: 1.7	30.568125 in Degrees: 10 e: Right 30.558824 Numbers (1 and dark patter 30 - 39 1.13 km 30.566095	100 S Beaufor Low/High n down bo	ighting Sea Sta g: /Best): dy, spotti 38 Spacer:	Cue: ate: -80.28802  10 / 15 ing, white : 40	Body 2 20 5 / 12 tip
Time: 9:27 Vertical Angle: On/Off Effort: Observer: E Actual Time an Time: 9:29 Species: <i>Stenella fi</i> Features used in on rostrum Representative i Photographer: Calculated distant Final Time and	WP#: _ 	6 ] Horizontal Trac Obs on of Sight 13 ] ID: Alternat ed for Spe Frame nu Trackline: of Sightin 14 ] eled:	Lat: I Bearing ckline: erver sid ting Lat: ting light a ccies ID: mbers: mg Lat: 1.7!	30.568125 in Degrees: 10 e: Right 30.558824 Numbers (1 and dark patter 30 - 39 1.13 km 30.566095	100 S Beaufor Low/High n down bo	ighting Sea Sta g: /Best): dy, spotti 38 Spacer:	Cue: ate: -80.28802  10 / 15 ing, white : 40	Body 2 20 5 / 12 tip

Thursday, October 17, 2013 ${ m Sighting}~\#$ 3
Initial sighting on Track
Time: 10:21 WP#: 28 Lat: 30.433979 Long: -80.606116
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Splash</u>
On/Off Effort: On Trackline: 8 Beaufort Sea State: 2
Observer: Heather Observer side: Left
Actual Time and Position of Sighting
Time: 10:24 WP#: 29 Lat: 30.436226 Long: -80.608824
Species: <i>Tursiops truncatus</i> Numbers (Low/High/Best): 5/8/6
Features used in Species ID: Uniform gray animals, robust
Representative images used for Species ID: 45
Photographer:   Erin   Frame numbers:   41 - 45   Spacer:   46
Calculated distance from Trackline: 0.36 km
Final Time and Position of Sighting
Time: 10:26 WP#: 30 Lat: 30.432516 Long: -80.601095
Calculated Distance Traveled: 0.85 km
Behavior and Additional Comments
Diving, not much time at the surface
Thursday, October 17, 2013 Sighting # 4
Initial sighting on Track
Initial sighting on Track           Time:         10:27         WP#:         32         Lat:         30.433591         Long:         -80.560190
Initial sighting on TrackTime:10:27WP#:32Lat:30.433591Long:-80.560190Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:Splash
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right
Initial sighting on TrackTime:10:27WP#:32Lat:30.433591Long:-80.560190Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:8Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:10:29WP#:33Lat:30.427726Long:-80.562642
Initial sighting on TrackTime:10:27WP#:32Lat:30.433591Long:-80.560190Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:8Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:10:29WP#:33Lat:30.427726Long:-80.562642Species:Stenella frontalisNumbers (Low/High/Best):8 / 12 / 10
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting       Time:       10:29       WP#:       33       Lat:       30.427726       Long:       -80.562642         Species: Stenella frontalis       Numbers (Low/High/Best):       8 / 12 / 10         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       10:29       WP#:       33       Lat:       30.427726       Long:       -80.562642         Species:       Stenella frontalis       Numbers (Low/High/Best):       8 / 12 / 10         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to rostrum       Image:       Image:       Image:       Image:
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       10:29       WP#:       33       Lat:       30.427726       Long:       -80.562642         Species:       Stenella frontalis       Numbers (Low/High/Best):       8 / 12 / 10         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to rostrum       Representative images used for Species ID:       51, 53, 61
Initial sighting on TrackTime:10:27WP#:32Lat:30.433591Long:-80.560190Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:8Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:10:29WP#:33Lat:30.427726Long:-80.562642Species:Stenella frontalisNumbers (Low/High/Best):8 / 12 / 10Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipto rostrumRepresentative images used for Species ID:51, 53, 61Photographer:ErinFrame numbers:47 - 65Spacer:66
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       10:29       WP#:       33       Lat:       30.427726       Long:       -80.562642         Species:       Stenella frontalis       Numbers (Low/High/Best):       8 / 12 / 10         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to rostrum       Representative images used for Species ID:       51, 53, 61         Photographer:       Erin       Frame numbers:       47 - 65       Spacer:       66         Calculated distance from Trackline:       0.69 km       66       66       66
Initial sighting on TrackTime:10:27WP#:32Lat:30.433591Long:-80.560190Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:SplashOn/Off Effort:OnTrackline:8Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:10:29WP#:33Lat:30.427726Long:-80.562642Species:Stenella frontalisNumbers (Low/High/Best):8 / 12 / 10Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipto rostrumRepresentative images used for Species ID:51, 53, 61Photographer:ErinFrame numbers:47 - 65Spacer:66Calculated distance from Trackline:0.69 kmFinal Time and Position of SightingTime:10:31WP#:34Lat:30.428622Long:-80.560912
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       2         Actual Time and Position of Sighting       Time:       10:29       WP#:       33       Lat:       30.427726       Long:       -80.562642         Species:Stenella frontalis       Numbers (Low/High/Best):       8 / 12 / 10         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to rostrum       Representative images used for Species ID:       51, 53, 61         Photographer:       Erin       Frame numbers:       47 - 65       Spacer:       66         Calculated distance from Trackline:       0.69 km       10.69 km       10.19 km       10.19 km
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       10:29       WP#:       33       Lat:       30.427726       Long:       -80.562642         Species:Stenella frontalis       Numbers (Low/High/Best):       8 / 12 / 10         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to rostrum       Time numbers:       47 - 65       Spacer:       66         Calculated distance from Trackline:       0.69 km       66       66       66         Calculated Distance Traveled:       0.19 km       -80.560912       -80.560912       66         Behavior and Additional Comments       0.19 km       -80.560912       -80.560912       -80.560912
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       2         Actual Time and Position of Sighting       Time:       10:29       WP#:       33       Lat:       30.427726       Long:       -80.562642         Species:Stenella frontalis       Numbers (Low/High/Best):       8 / 12 / 10         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to rostrum       Representative images used for Species ID:       51, 53, 61         Photographer:       Erin       Frame numbers:       47 - 65       Spacer:       66         Calculated distance from Trackline:       0.69 km       10.69 km       10.19 km       10.19 km
Initial sighting on Track         Time:       10:27       WP#:       32       Lat:       30.433591       Long:       -80.560190         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Splash         On/Off Effort:       On       Trackline:       8       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       10:29       WP#:       33       Lat:       30.427726       Long:       -80.562642         Species:Stenella frontalis       Numbers (Low/High/Best):       8 / 12 / 10         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         to rostrum       Time numbers:       47 - 65       Spacer:       66         Calculated distance from Trackline:       0.69 km       66       66       66         Calculated Distance Traveled:       0.19 km       -80.560912       -80.560912       66         Behavior and Additional Comments       0.19 km       -80.560912       -80.560912       -80.560912

Thur				•			
Initial sighting (	on Trac	k					
Time: 13:47			Lat:	30.031630	Long:	-80.30	4910
Vertical Angle:					U	ting Cue:	
On/Off Effort:				2	Beaufort Se	0	2
Observer: E	rin	C	Observer si	de: Right			
Actual Time an	d Positi	on of Si	ghting				
Time: 13:48		61		30.032212	Long	-80.30	4650
Species:Stenella fr		•••		Numbers (1			
Features used in		ID: Alte					
on rostrum	-						
Representative in	nages u	sed for S	Species ID:		69, 71, 72, 2	73	
Photographer:					Spa	acer:	74
Calculated distar	nce from	n Trackli	ne:	0.07 km			
Final Time and	Positio	n of Sig	hting				
Time: 13:53	WP#:	62	Lat:	30.029494	Long:	-80.30	3168
Calculated Dista	nce Trav	veled:	0.3	33 km			
Behavior and A	ddition	al Comi	ments				
few subgroups/sev							
Thu	sday, O	ctober 17	7, 2013 Sig	hting # 6			
Thur Initial sighting (			7, 2013 Sig	hting # 6			
Initial sighting of Time: 13:59	on Trac WP#:	<b>k</b> 42	Lat:	30.031349	Long:		
Initial sighting of Time: <u>13:59</u> Vertical Angle:	on Trac WP#: 3	k 42 Horizoi	Lat:	30.031349 g in Degrees:	110 Sight	ting Cue:	Splash
Initial sighting of Time: <u>13:59</u> Vertical Angle: _ On/Off Effort: _	On Trac WP#: 3 On	k 42 Horizon T	Lat: ntal Bearin `rackline: _	30.031349 g in Degrees: 2		ting Cue:	Splash
Initial sighting of Time: <u>13:59</u> Vertical Angle:	On Trac WP#: 3 On	k 42 Horizon T	Lat: ntal Bearin `rackline: _	30.031349 g in Degrees:	110 Sight	ting Cue:	Splash
Initial sighting of Time: <u>13:59</u> Vertical Angle: _ On/Off Effort: _	On Trac WP#: 3 On other	k 42 Horizon T C	Lat: ntal Bearin Trackline: Observer sid	30.031349 g in Degrees: 2	110 Sight	ting Cue:	Splash
Initial sighting of Time: <u>13:59</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>Hea</u> Actual Time and	on Trac WP#: <u>3</u> On ther d Positi	k 42 Horizon T C on of Si	Lat: ntal Bearin `rackline: _ Dbserver sig	30.031349 g in Degrees: 2 de: Left	110 Sight Beaufort Se	ting Cue: a State:	Splash 2
Initial sighting of Time: <u>13:59</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>Hea</u> Actual Time and Time: <u>14:00</u> Species: <i>Stenella fr</i>	On Trac WP#: <u>3</u> On ther d Positi WP#: oontalis	k 42 Horizon T C on of Si 65	Lat:	<u>30.031349</u> g in Degrees: <u>2</u> de: <u>Left</u> <u>30.023095</u> Numbers (I	<u>110</u> Sight Beaufort Sea Long: Low/High/Be	ting Cue: a State:	Splash 2 6503 / 3 / 3
Initial sighting of Time: <u>13:59</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>Hea</u> Actual Time and Time: <u>14:00</u> Species: <i>Stenella fr</i>	On Trac WP#: <u>3</u> On ther d Positi WP#: oontalis	k 42 Horizon T C on of Si 65	Lat:	<u>30.031349</u> g in Degrees: <u>2</u> de: <u>Left</u> <u>30.023095</u> Numbers (I	<u>110</u> Sight Beaufort Sea Long: Low/High/Be	ting Cue: a State:	Splash 2 6503 / 3 / 3
Initial sighting of Time: <u>13:59</u> Vertical Angle: <u></u> On/Off Effort: <u></u> Observer: <u>Hea</u> Actual Time and Time: <u>14:00</u> Species: <i>Stenella fr</i> Features used in on rostrum	on Trac WP#: <u>3</u> On tther d Positi WP#: ontalis Species	k Horizon T C on of Si 65 ID: <u>Alte</u>	Lat: ntal Bearin `rackline: _ Observer sid ghting Lat: rnating light	30.031349 g in Degrees: 2 de: Left 30.023095 Numbers (lagrand dark patter)	<u>110</u> Sight Beaufort Sea Long: Low/High/Be	ting Cue: a State:	Splash 2 6503 / 3 / 3
Initial sighting of Time: 13:59 Vertical Angle: 0 On/Off Effort: 0 Observer: Hea Actual Time and Time: 14:00 Species: <i>Stenella fr</i> Features used in on rostrum Representative in	on Trac WP#: <u>3</u> On tther d Positi WP#: ontalis Species mages u	k 42 Horizon T C on of Si 65 ID: Alte sed for S	Lat:	30.031349 g in Degrees: 2 de: Left 30.023095 Numbers (I	<u>110</u> Sight Beaufort Sea Long: _ Low/High/Be n down body, s	-80.48 est): 3 potting, wh	Splash 2 6503 / 3 / 3 hite tip
Initial sighting of Time: 13:59 Vertical Angle: _ On/Off Effort: _ Observer: Hea Actual Time and Time: 14:00 Species: <i>Stenella fr</i> Features used in on rostrum Representative in Photographer: _	on Trac WP#: <u>3</u> On onther d Positi WP#: ontalis Species mages u Erin	k 42 Horizon T C on of Si 65 ID: Alte sed for S Frame	Lat:	30.031349 g in Degrees: 2 de: Left 30.023095 Numbers (1 and dark patter 75 - 80	<u>110</u> Sight Beaufort Sea Long: _ Low/High/Be n down body, s	ting Cue: a State:	Splash 2 6503 / 3 / 3 hite tip
Initial sighting of Time: 13:59 Vertical Angle: _ On/Off Effort: _ Observer: Hea Actual Time and Time: 14:00 Species: Stenella fr Features used in on rostrum Representative in Photographer: _ Calculated distar	on Trac WP#: <u>3</u> On onther <b>d Positi</b> WP#: ontalis Species mages u Erin ace from	k 42 Horizon T C on of Si 65 ID: <u>Alte</u> sed for S Frame h Trackli	Lat:	30.031349 g in Degrees: 2 de: Left 30.023095 Numbers (1 and dark patter 75 - 80	<u>110</u> Sight Beaufort Sea Long: _ Low/High/Be n down body, s	-80.48 est): 3 potting, wh	Splash 2 6503 / 3 / 3 hite tip
Initial sighting of Time: <u>13:59</u> Vertical Angle: <u>0</u> On/Off Effort: <u>0</u> Observer: <u>Heat</u> Actual Time and Time: <u>14:00</u> Species: <i>Stenella fr</i> Features used in on rostrum Representative in Photographer: <u>Calculated distar</u> Final Time and	on Trac WP#: <u>3</u> On atther d Positi WP#: ontalis Species mages u Erin nce from Positio	k 42 Horizon T C on of Si 65 ID: <u>Alte</u> sed for S Frame Trackli n of Sig	Lat:	30.031349 g in Degrees: 2 de: Left 30.023095 Numbers (I and dark patter 75 - 80 1.46 km	<u>110</u> Sight Beaufort Sea Long: _ Low/High/Be n down body, s	-80.48 est): 3 potting, wh	Splash 2 6503 / 3 / 3 hite tip
Initial sighting of Time: 13:59 Vertical Angle: 0n/Off Effort: 0 Observer: Hea Actual Time and Time: 14:00 Species: Stenella fr Features used in on rostrum Representative in Photographer: 0 Calculated distar Final Time and Time: 14:04	on Trac WP#: <u>3</u> On tther d Positi WP#: ontalis Species mages u Erin nce from Position WP#:	k 42 Horizon T C on of Si 65 ID: Alte sed for S Frame Trackli n of Sigl 66	Lat:	30.031349 g in Degrees: 2 de: Left 30.023095 Numbers (l and dark patter 75 - 80 1.46 km 30.019018	<u>110</u> Sight Beaufort Sea Long: Low/High/Be n down body, s 78 78 Spa	-80.48 est): 3 potting, wh	Splash 2 6503 / 3 / 3 nite tip 81
Initial sighting of Time: <u>13:59</u> Vertical Angle: <u>0</u> On/Off Effort: <u>0</u> Observer: <u>Heat</u> Actual Time and Time: <u>14:00</u> Species: <i>Stenella fr</i> Features used in on rostrum Representative in Photographer: <u>Calculated distar</u> Final Time and	on Trac WP#: <u>3</u> On tther d Positi WP#: ontalis Species mages u Erin nce from Position WP#:	k 42 Horizon T C on of Si 65 ID: Alte sed for S Frame Trackli n of Sigl 66	Lat:	30.031349 g in Degrees: 2 de: Left 30.023095 Numbers (l and dark patter 75 - 80 1.46 km 30.019018	<u>110</u> Sight Beaufort Sea Long: Low/High/Be n down body, s 78 78 Spa	a State:	Splash 2 6503 / 3 / 3 nite tip 81
Initial sighting of Time: 13:59 Vertical Angle: 0n/Off Effort: 0 Observer: Hea Actual Time and Time: 14:00 Species: Stenella fr Features used in on rostrum Representative in Photographer: 0 Calculated distar Final Time and Time: 14:04	on Trac WP#: <u>3</u> On tther d Positi WP#: ontalis Species mages u Erin tece from <b>Positio</b> WP#: nce Trav	k 42 Horizon T C on of Si 65 ID: Alte sed for S Frame Trackli n of Sigl 66 veled:	Lat:	30.031349 g in Degrees: 2 de: Left 30.023095 Numbers (l and dark patter 75 - 80 1.46 km 30.019018	<u>110</u> Sight Beaufort Sea Long: Low/High/Be n down body, s 78 78 Spa	a State:	Splash 2 6503 / 3 / 3 nite tip 81
Initial sighting of Time: 13:59 Vertical Angle: 0 On/Off Effort: 0 Observer: Head Actual Time and Time: 14:00 Species: Stenella fr Features used in on rostrum Representative in Photographer: 0 Calculated distar Final Time and Time: 14:04 Calculated Dista	on Trac WP#: <u>3</u> On tther d Positi WP#: ontalis Species mages u Erin tce from <b>Position</b> WP#: nce Trav	k 42 Horizon T C on of Si 65 ID: Alte sed for S Frame Trackli n of Sigl 66 veled: al Comm	Lat:	30.031349 g in Degrees: 2 de: Left 30.023095 Numbers (I and dark patter 75 - 80 1.46 km 30.019018	<u>110</u> Sight Beaufort Sea Long: Low/High/Be n down body, s 78 78 Spa	a State:	Splash 2 6503 / 3 / 3 nite tip 81

Thursday, October 17, 2013 ${ m Sighting}\#$	7
Initial sighting on Track	
Time: 14:09 WP#: 69 Lat: 30.0316	568 Long: -80.596201
Vertical Angle: <u>1</u> Horizontal Bearing in Deg	rees: <u>90</u> Sighting Cue: <u>Body</u>
	Beaufort Sea State:1
Observer: Erin Observer side: R	ight
Actual Time and Position of Sighting	
Time: 14:15 WP#: 70 Lat: 30.0341	30 Long: -80.596828
	bers (Low/High/Best): 2/2/2
Features used in Species ID: Uniform gray, robust	
Representative images used for Species ID:	84
Photographer: Erin Frame numbers: 8	
Calculated distance from Trackline: 0.28 km	1
Final Time and Position of Sighting	
Time: N/A WP#: N/A Lat: N/A	Long:N/A
Calculated Distance Traveled: N/A	
Behavior and Additional Comments	
The local data control C: 1 /	0
Thursday, October 17, 2013 Sighting #	δ
Initial sighting on Track	
Time: 14:18 WP#: 73 Lat: 30.0190	0
Vertical Angle: <u>1</u> Horizontal Bearing in Deg On/Off Effort: On Trackline: 2	• • •
Observer: Heather Observer side:	
Actual Time and Position of Sighting	
Time: 14:25 WP#: 74 Lat: 30.0276	
•	bers (Low/High/Best): <u>6/8/7</u>
Features used in Species ID: <u>Alternating light and dark</u> rostrum	pattern down body, spotting, white tip to
Representative images used for Species ID:	89, 92, 94
· · · ·	88 - 97 Spacer: 98
Calculated distance from Trackline: 1.04 km	I
	·
Final Time and Position of Sighting	
Time: 14:26 WP#: 75 Lat: 30.0370	097 Long: -80.681291
Calculated Distance Traveled: 1.08 km	
Behavior and Additional Comments	
Initially broke for something further out but saw dolphins or	the break track. The initial sighting was
never relocated. Spaced out, lots of singles.	

Thursday, October 17, 2013 Sighting $\#$ 9
Initial sighting on Track
Time:         14:31         WP#:         52         Lat:         30.100222         Long:         -80.660696
Vertical Angle: <u>1</u> Horizontal Bearing in Degrees: <u>90</u> Sighting Cue: <u>Splash</u>
On/Off Effort: On Trackline: <u>3</u> Beaufort Sea State: <u>2</u>
Observer: Erin Observer side: Right
Actual Time and Position of Sighting
Time:         14:33         WP#:         80         Lat:         30.098440         Long:         -80.666253
Species:Stenella frontalisNumbers (Low/High/Best):5 / 5 / 5
Features used in Species ID: Alternating light and dark pattern down body, spotting, white tip
on rostrum
Representative images used for Species ID:101, 102, 109Photographer:ErinFrame numbers:99 - 113Spacer:114
Photographer:ErinFrame numbers:99-113Spacer:114Calculated distance from Trackline:0.57 km
Final Time and Position of Sighting
Time:         14:34         WP#:         81         Lat:         30.098747         Long:         -80.668043
Calculated Distance Traveled: 0.18 km
Behavior and Additional Comments
Mom/calf pair
Thursday, October 17, 2013 Sighting # 10 Initial sighting on Track
Initial sighting on Track
Initial sighting on Track           Time:         14:43         WP#:         85         Lat:         30.100850         Long:         -80.366104
Initial sighting on Track
Initial sighting on Track         Time:       14:43       WP#:       85       Lat:       30.100850       Long:       -80.366104         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach
Initial sighting on Track         Time:       14:43       WP#:       85       Lat:       30.100850       Long:       -80.366104         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right
Initial sighting on Track         Time:       14:43       WP#:       85       Lat:       30.100850       Long:       -80.366104         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right
Initial sighting on Track         Time:       14:43       WP#:       85       Lat:       30.100850       Long:       -80.366104         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right
Initial sighting on TrackTime:14:43WP#:85Lat:30.100850Long:-80.366104Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:3Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:14:48WP#:86Lat:30.095534Long:-80.362398
Initial sighting on TrackTime:14:43WP#:85Lat:30.100850Long:-80.366104Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:3Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingImage: State:2Sec:Sec:Time:14:48WP#:86Lat:30.095534Long:-80.362398Species:Stenella frontalisNumbers (Low/High/Best):10/15/12
Initial sighting on TrackTime:14:43WP#:85Lat:30.100850Long:-80.366104Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:3Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:14:48WP#:86Lat:30.095534Long:-80.362398Species:Stenella frontalisNumbers (Low/High/Best):10 / 15 / 12Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipon rostrumRepresentative images used for Species ID:120, 127
Initial sighting on TrackTime:14:43WP#:85Lat:30.100850Long:-80.366104Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:3Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingRightTime:14:48WP#:86Lat:30.095534Long:-80.362398Species:Stenella frontalisNumbers (Low/High/Best):10 / 15 / 12Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipon rostrumRepresentative images used for Species ID:120, 127120, 127Photographer:ErinFrame numbers:115 - 129Spacer:130
Initial sighting on TrackTime:14:43WP#:85Lat:30.100850Long:-80.366104Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:3Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:14:48WP#:86Lat:30.095534Long:-80.362398Species:Stenella frontalisNumbers (Low/High/Best):10 / 15 / 12Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipon rostrumRepresentative images used for Species ID:120, 127
Initial sighting on TrackTime:14:43WP#:85Lat:30.100850Long:-80.366104Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:3Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:14:48WP#:86Lat:30.095534Long:-80.362398Species:Stenella frontalisNumbers (Low/High/Best):10 / 15 / 12Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipon rostrumRepresentative images used for Species ID:120, 127Photographer:ErinFrame numbers:115 - 129Spacer:130
Initial sighting on Track         Time:       14:43       WP#:       85       Lat:       30.100850       Long:       -80.366104         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       Right         Actual Time and Position of Sighting       Time:       14:48       WP#:       86       Lat:       30.095534       Long:       -80.362398         Species:       Stenella frontalis       Numbers (Low/High/Best):       10 / 15 / 12         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip on rostrum         Representative images used for Species ID:       120, 127         Photographer:       Erin       Frame numbers:       115 - 129       Spacer:       130         Calculated distance from Trackline:       0.69 km       0.69 km       0.69 km       0.69 km
Initial sighting on Track         Time:       14:43       WP#:       85       Lat:       30.100850       Long:      80.366104         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       2         Actual Time and Position of Sighting       Time:       14:48       WP#:       86       Lat:       30.095534       Long:       -80.362398         Species:       Stenella frontalis       Numbers (Low/High/Best):       10 / 15 / 12         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         on rostrum       Representative images used for Species ID:       120, 127         Photographer:       Erin       Frame numbers:       115 - 129       Spacer:       130         Calculated distance from Trackline:       0.69 km       130       130
Initial sighting on Track         Time:       14:43       WP#:       85       Lat:       30.100850       Long:       -80.366104         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       2         Actual Time and Position of Sighting       Time:       14:48       WP#:       86       Lat:       30.095534       Long:       -80.362398         Species: Stenella frontalis       Numbers (Low/High/Best):       10/15/12       Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         on rostrum       Representative images used for Species ID:       120, 127         Photographer:       Erin       Frame numbers:       115 - 129       Spacer:       130         Calculated distance from Trackline:       0.69 km       Image:       -80.363460         Final Time and Position of Sighting       Long:       -80.363460
Initial sighting on TrackTime:14:43WP#:85Lat:30.100850Long:-80.366104Vertical Angle:2Horizontal Bearing in Degrees:90Sighting Cue:BreachOn/Off Effort:OnTrackline:3Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:14:48WP#:86Lat:30.095534Long:-80.362398Species:Stenella frontalisNumbers (Low/High/Best):10 / 15 / 12Features used in Species ID:Alternating light and dark pattern down body, spotting, white tipon rostrumRepresentative images used for Species ID:120, 127Photographer:ErinFrame numbers:115 - 129Spacer:130Calculated distance from Trackline:0.69 kmFinal Time and Position of SightingTime:14:50WP#:87Lat:30.096024Long:-80.363460Calculated Distance Traveled:0.12 km
Initial sighting on Track         Time:       14:43       WP#:       85       Lat:       30.100850       Long:       -80.366104         Vertical Angle:       2       Horizontal Bearing in Degrees:       90       Sighting Cue:       Breach         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       14:48       WP#:       86       Lat:       30.095534       Long:       -80.362398         Species:       Stenella frontalis       Numbers (Low/High/Best):       10 / 15 / 12         Features used in Species ID:       Alternating light and dark pattern down body, spotting, white tip         on rostrum       Representative images used for Species ID:       120, 127         Photographer:       Erin       Frame numbers:       115 - 129       Spacer:       130         Calculated distance from Trackline:       0.69 km

Thursday, October 17, 2013 Sighting $\#$ 11
Initial sighting on Track
Time: 14:55 WP#: 89 Lat: 30.100973 Long: -80.182685
Vertical Angle: 1 Horizontal Bearing in Degrees: 90 Sighting Cue: Body
On/Off Effort: On Trackline: <u>3</u> Beaufort Sea State: <u>2</u>
Observer: Heather Observer side: Left
Actual Time and Position of Sighting
Time: 14:57 WP#: 90 Lat: 30.105991 Long: -80.180904
Species: Grampus griseus Numbers (Low/High/Best): 7/7/7
Features used in Species ID: Blunt head, white scarring down body, cleft in middle of head
Representative images used for Species ID:135, 136, 138
Photographer:         Erin         Frame numbers:         131 - 143         Spacer:         144
Calculated distance from Trackline: 0.58 km
Final Time and Position of Sighting
Time: 15:00 WP#: 91 Lat: 30.104580 Long: -80.180525
Calculated Distance Traveled: 0.16 km
Behavior and Additional Comments
Very chill, little surface activity
Thursday, October 17, 2013 Sighting # 12
Initial sighting on Track
Initial sighting on Track           Time:         15:03         WP#:         93         Lat:         30.100982         Long:         -80.080096
Initial sighting on TrackTime: 15:03WP#: 93Lat: 30.100982Long: -80.080096Vertical Angle: 1Horizontal Bearing in Degrees: 60Sighting Cue: Body
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting       Tat:       30.100921       Long:       -80.080960
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       15:04       WP#:       94       Lat:       30.100921       Long:       -80.080960         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 5 / 5
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting       Tat:       30.100921       Long:       -80.080960
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       15:04       WP#:       94       Lat:       30.100921       Long:       -80.080960         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       Uniform gray, robust
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       2         Actual Time and Position of Sighting       Time:       15:04       WP#:       94       Lat:       30.100921       Long:       -80.080960         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       Uniform gray, robust       147, 148, 150
Initial sighting on TrackTime:15:03WP#:93Lat:30.100982Long:-80.080096Vertical Angle:1Horizontal Bearing in Degrees:60Sighting Cue:BodyOn/Off Effort:OnTrackline:3Beaufort Sea State:2Observer:ErinObserver side:RightActual Time and Position of SightingTime:15:04WP#:94Lat:30.100921Long:-80.080960Species:FuncatusNumbers (Low/High/Best):5 / 5 / 5Features used in Species ID:Uniform gray, robustRepresentative images used for Species ID:Photographer:ErinFrame numbers:145 - 154Spacer:155
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right         Actual Time and Position of Sighting         Time:       15:04       WP#:       94       Lat:       30.100921       Long:       -80.080960         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       Uniform gray, robust         Representative images used for Species ID:       147, 148, 150         Photographer:       Erin       Frame numbers:       145 - 154       Spacer:       155         Calculated distance from Trackline:       0.08 km       0.08 km       155
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       4       4       4         Actual Time and Position of Sighting       Time:       15:04       WP#:       94       4       4       5       5         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 5 / 5       5         Features used in Species ID:       Uniform gray, robust       147, 148, 150       147         Photographer:       Erin       Frame numbers:       145 - 154       Spacer:       155         Calculated distance from Trackline:       0.08 km       0.08 km       5       155         Final Time and Position of Sighting       Time:       N/A       Long:       N/A
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       4       Actual Time and Position of Sighting         Time:       15:04       WP#:       94       Lat:       30.100921       Long:       -80.080960         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       Uniform gray, robust       5 / 5 / 5         Representative images used for Species ID:       147, 148, 150         Photographer:       Erin       Frame numbers:       145 - 154       Spacer:       155         Calculated distance from Trackline:       0.08 km       155       155       155         Final Time and Position of Sighting       Time:       N/A       Long:       N/A         Calculated Distance Traveled:       N/A       Long:       N/A
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       4       4       4         Actual Time and Position of Sighting       Time:       15:04       WP#:       94       4       4       5       5         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 5 / 5       5         Features used in Species ID:       Uniform gray, robust       147, 148, 150       147         Photographer:       Erin       Frame numbers:       145 - 154       Spacer:       155         Calculated distance from Trackline:       0.08 km       0.08 km       5       155         Final Time and Position of Sighting       Time:       N/A       Long:       N/A
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       4       Actual Time and Position of Sighting         Time:       15:04       WP#:       94       Lat:       30.100921       Long:       -80.080960         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       Uniform gray, robust       5 / 5 / 5         Representative images used for Species ID:       147, 148, 150         Photographer:       Erin       Frame numbers:       145 - 154       Spacer:       155         Calculated distance from Trackline:       0.08 km       155       155       155         Final Time and Position of Sighting       Time:       N/A       Long:       N/A         Calculated Distance Traveled:       N/A       Long:       N/A
Initial sighting on Track         Time:       15:03       WP#:       93       Lat:       30.100982       Long:       -80.080096         Vertical Angle:       1       Horizontal Bearing in Degrees:       60       Sighting Cue:       Body         On/Off Effort:       On       Trackline:       3       Beaufort Sea State:       2         Observer:       Erin       Observer side:       Right       4       Actual Time and Position of Sighting         Time:       15:04       WP#:       94       Lat:       30.100921       Long:       -80.080960         Species:       Tursiops truncatus       Numbers (Low/High/Best):       5 / 5 / 5         Features used in Species ID:       Uniform gray, robust       5 / 5 / 5         Representative images used for Species ID:       147, 148, 150         Photographer:       Erin       Frame numbers:       145 - 154       Spacer:       155         Calculated distance from Trackline:       0.08 km       155       155       155         Final Time and Position of Sighting       Time:       N/A       Long:       N/A         Calculated Distance Traveled:       N/A       Long:       N/A

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			-				Initial sighting
312170	ong:80.3	Long	30.166126	Lat:		0	Time: 15:36
	•						Vertical Angle:
	ort Sea State:		3	-			On/Off Effort:
				Observer sid	_	-	Observer: E
				lighting	– tion of S	nd Posit	Actual Time an
309161	ong: -80.3	Long	30 175892				Time: 15:38
	gh/Best):	<u> </u>			-	-	Species:Tursiops t
2/2/2	gii/ <b>De</b> st)	Low/Ingh/					Features used in
				~ ~ ~		~F	
	157			Species ID:	used for	images	Representative i
161	Spacer:	0 S	156 - 160	e numbers:	Fram	Erin	Photographer:
			1.12 km	line:	m Track	ance from	Calculated dista
				ghting	on of Sig	d Positio	Final Time and
N/A	ong: N	Long	N/A	-	-		Time: N/A
	6		Ά	N	aveled:	- tance Tra	Calculated Dista
		_		ments	nal Com	Addition	Behavior and A
			ting # 14	7, 2013 Sigh			
525558	ong: -80.5	Long	C	C .	ıck	g on Tra	Initial sighting
	ong: <u>-80.5</u> Sighting Cue:		30.165796	Lat:	<b>ick</b> : 104	g on Tra WP#:	Initial sighting Time: 15:47
e: Body	Sighting Cue	90 Sig	30.165796 in Degrees:	Lat:	ick : <u>104</u> Horizo	g on Tra WP#: :2	Initial sighting Time: <u>15:47</u> Vertical Angle:
e: Body	U	90 Sig	30.165796 in Degrees: 4	Lat:	<b>ick</b> : <u>104</u> Horizo	g on Tra WP#: 2 On	Initial sighting Time: <u>15:47</u> Vertical Angle: ] On/Off Effort: _
e: Body	Sighting Cue	90 Sig	30.165796 in Degrees: 4	Lat: ontal Bearing Trackline: Observer sid	ick : <u>104</u> Horizo	g on Tra WP#: 2 On Erin	Initial sighting Time: <u>15:47</u> Vertical Angle: ] On/Off Effort: <u></u> Observer: <u>E</u>
e: <u>Body</u> 2	Sighting Cue: ort Sea State:	90 Sig Beaufort S	30.165796 in Degrees: 4 e: Right	Lat: ontal Bearing Trackline: Observer sid	tion of S	g on Tra WP#: 2 On Erin	Initial sighting Time: <u>15:47</u> Vertical Angle: ] On/Off Effort: <u></u> Observer: <u>E</u> Actual Time an
2 Body 2 527591	Sighting Cues fort Sea State:	90 Sig Beaufort S Long	30.165796 in Degrees: 4 e: Right 30.166598	Lat: ontal Bearing Trackline: Observer sid	tion of S	g on Tra WP#: 2 On Erin MD Posit	Initial sightingTime:15:47Vertical Angle:]On/Off Effort:_Observer:EActual Time anTime:15:48
527591 5/6/6	Sighting Cue: fort Sea State: ong:	90 Sig Beaufort S Long Low/High/J	30.165796 in Degrees: 4 e: Right 30.166598 Numbers (I	Lat: ontal Bearing Trackline: Observer sid <b>Sighting</b> Lat:	tion of S	g on Tra WP#: 0n Erin MD Positi WP#: frontalis	Initial sightingTime:15:47Vertical Angle:]On/Off Effort:_Observer:_EActual Time andTime:15:48Species:Stenella for
527591 5/6/6	Sighting Cue: fort Sea State: ong:	90 Sig Beaufort S Long Low/High/J	30.165796 in Degrees: 4 e: Right 30.166598 Numbers (I	Lat: ontal Bearing Trackline: Observer sid <b>Sighting</b> Lat:	tion of S	g on Tra WP#: 0n Erin MD Positi WP#: frontalis	Initial sighting Time: 15:47 Vertical Angle: On/Off Effort: 0 Observer: E Actual Time and Time: 15:48 Species: Stenella for Features used in
527591 5/6/6	Sighting Cue: fort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body	30.165796 in Degrees: 4 e: Right 30.166598 Numbers (I	Lat:	tion of S 105 105 105	g on Tra WP#: 0n Erin MD Positi WP#: frontalis in Specie	Initial sighting Time: 15:47 Vertical Angle: ] On/Off Effort: 0 Observer: E Actual Time an Time: 15:48 Species: Stenella fi Features used in on rostrum
527591 5/6/6	Sighting Cue: ort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body	30.165796 in Degrees: 4 e: Right 30.166598 Numbers (I	Lat:	tion of S 105 105 105 105 105 105 105 105 105 105	g on Tra WP#: On Erin M Posit frontalis in Specie images u Erin	Initial sighting Time: <u>15:47</u> Vertical Angle: ] On/Off Effort: <u>0</u> Observer: <u>E</u> Actual Time an Time: <u>15:48</u> Species: <i>Stenella fi</i> Features used in on rostrum Representative i Photographer: <u></u>
2 Body 2 527591 5 / 6 / 6 white tip	Sighting Cue: ort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body	30.165796 in Degrees: 4 2: Right 30.166598 Numbers (I nd dark patter	Lat:	tion of S 105 105 105 105 105 105 105 105 105 105	g on Tra WP#: On Erin M Posit frontalis in Specie images u Erin	Initial sighting Time: <u>15:47</u> Vertical Angle: ] On/Off Effort: <u>0</u> Observer: <u>E</u> Actual Time an Time: <u>15:48</u> Species: <i>Stenella fi</i> Features used in on rostrum Representative i Photographer: <u></u>
2 Body 2 527591 5 / 6 / 6 white tip	Sighting Cue: ort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body	30.165796 in Degrees: 4 2: Right 30.166598 Numbers (I nd dark pattern 162 - 184	Lat:	tion of S 105 105 105 105 105 105 105 105 105 105	g on Tra WP#: 0n Erin and Posit frontalis in Specie images u Erin cance fron	Initial sighting Time: <u>15:47</u> Vertical Angle: <u>]</u> On/Off Effort: <u>_</u> Observer: <u>E</u> Actual Time and Time: <u>15:48</u> Species: <i>Stenella fi</i> Features used in on rostrum Representative i Photographer: <u>_</u> Calculated distat
2 Body 2 527591 5 / 6 / 6 white tip	Sighting Cue: ort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body 181, 1 4 S	30.165796 in Degrees: 4 2: Right 30.166598 Numbers (I nd dark pattern 162 - 184	Lat:	tion of S 105 105 105 105 105 105 105 105 105 105	g on Tra WP#: On Erin Ind Positi frontalis in Specie images to Erin cance front	Initial sighting Time: <u>15:47</u> Vertical Angle: ] On/Off Effort: <u>0</u> Observer: <u>E</u> Actual Time an Time: <u>15:48</u> Species: <i>Stenella fi</i> Features used in on rostrum Representative i Photographer: <u></u>
2 527591 5 / 6 / 6 white tip 185	Sighting Cue: ort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body 181, 1 4 S	30.165796 in Degrees: 4 2: Right 30.166598 Numbers (I nd dark pattern 162 - 184 0.21 km	Lat:	tion of S i 104 Horizo tion of S i 105 es ID: Alt used for Fram m Track on of Sig N/A	g on Tra WP#: On Erin and Positic frontalis in Specie images u Erin cance fron d Positic WP#:	Initial sighting Time: 15:47 Vertical Angle: On/Off Effort: 0 Observer: E Actual Time and Time: 15:48 Species: Stenella for Features used in on rostrum Representative i Photographer: 0 Calculated distar Final Time and
2 527591 5 / 6 / 6 white tip 185	Sighting Cue: ort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body 181, 1 4 S	30.165796 in Degrees: 4 2: Right 30.166598 Numbers (I nd dark pattern 162 - 184 0.21 km	Lat:	tion of S 105 105 105 105 105 105 105 105	g on Tra WP#: On Erin Ind Position frontalis in Specie images to Erin cance from d Position WP#: tance Tra	Initial sighting Time: 15:47 Vertical Angle: On/Off Effort: 0 Observer: E Actual Time and Time: 15:48 Species: Stenella for Features used in on rostrum Representative i Photographer: 0 Calculated distant Final Time and Time: N/A Calculated Distant
2 527591 5 / 6 / 6 white tip 185	Sighting Cue: ort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body 181, 1 4 S	30.165796 in Degrees: 4 2: Right 30.166598 Numbers (I nd dark pattern 162 - 184 0.21 km	Lat:	tion of S 105 105 105 105 105 105 105 105	g on Tra WP#: On Erin Ind Position frontalis in Specie images to Erin cance from d Position WP#: tance Tra	Initial sighting Time: 15:47 Vertical Angle: 0n/Off Effort: 0 Observer: E Actual Time and Time: 15:48 Species: Stenella fr Features used in on rostrum Representative i Photographer: 0 Calculated dista Final Time and Time: N/A Calculated Dista Behavior and A
2 527591 5 / 6 / 6 white tip 185	Sighting Cue: ort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body 181, 1 4 S	30.165796 in Degrees: 4 2: Right 30.166598 Numbers (I nd dark pattern 162 - 184 0.21 km	Lat:	tion of S 105 105 105 105 105 105 105 105	g on Tra WP#: On Erin Ind Position frontalis in Specie images to Erin cance from d Position WP#: tance Tra	Initial sighting Time: 15:47 Vertical Angle: On/Off Effort: 0 Observer: E Actual Time and Time: 15:48 Species: Stenella for Features used in on rostrum Representative i Photographer: 0 Calculated distant Final Time and Time: N/A Calculated Distant
2527591 5/6/ white t	Sighting Cue: ort Sea State: ong:	90 Sig Beaufort S Long Low/High/J n down body 181, 1 4 S	30.165796 in Degrees: 4 e: Right 30.166598 Numbers (I nd dark pattern 162 - 184 0.21 km	Lat:	tion of S 105 105 105 105 105 105 105 105	g on Tra WP#: On Erin Ind Position frontalis in Specie images to Erin cance from d Position WP#: tance Tra	Initial sighting Time: 15:47 Vertical Angle: On/Off Effort: 0 Observer: E Actual Time and Time: 15:48 Species: Stenella for Features used in on rostrum Representative i Photographer: 0 Calculated distant Final Time and Time: N/A Calculated Distant