DIVING BEHAVIOR OF CUVIER'S BEAKED WHALES (ZIPHIUS CAVIROSTRIS) OFF CAPE HATTERAS, NORTH CAROLINA

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Beaked whales are among the world's deepest diving marine mammals, but they spend little time at the surface, making them poorly studied in relation to more accessible species. In addition, they have previously been involved in mass-strandings in association with the active sonar used during Navy training exercises. Data from short-term acoustic recording tags (DTAGs) has indicated that beaked whales forage almost exclusively in deep dives (typically beginning to echolocate around 500 meters depth) while remaining silent in shallow dives, potentially as a means of predator avoidance. Longer datasets on diving behavior and movement patterns have come from satellite-linked tags that can remain attached to the animals for up to several months. In this study, we analyzed data from satellite-linked time and depth recorders deployed on 9 Cuvier's beaked whales (*Ziphius cavirostris*) off the coast of Cape Hatteras, North Carolina, between 2014 and 2016. Preliminary analyses of location data indicate that they typically remain in relatively small areas over the continental slope. As in previously studied populations, they routinely perform very deep (presumably) foraging dives interspersed with several shallow dives in sequence. One animal was recorded executing a dive to 3,567.5 meters, which is beyond the current record for the species (2,992 meters). However, this result should be treated with caution, as it is beyond the tested range of the pressure sensors on the tag. Continued analysis on these dive parameters will include information on dive depths and durations, surface intervals, and dive rates, both during the day and at night. This provides a baseline of diving behavior for this species in this area, allowing us to determine whether their behavior is altered in response to sonar events and other anthropogenic disturbances.