Cuvier’s beaked whale (Ziphius cavirostris) is one of the most abundant and widespread species of beaked whale in the world, but its natural history remains very poorly understood. However, opportunistic sightings at Guadalupe Island, México from 2006-2008 and a pilot study undertaken there in 2009 revealed an exceptionally high encounter rate of Cuvier’s beaked whales, as well as the presence of several mother-calf pairs, suggesting that this remote location could be an important breeding and feeding ground for this species (Cárdenas-Hinojosa et al. 2015). Located 150 miles west of Baja California, Guadalupe Island represents a “natural laboratory” due to its low levels of human disturbance and protection as a Biosphere Reserve, and is a unique opportunity to study a rarely seen species in a relatively pristine environment.

**METHODS**

Research expeditions to Guadalupe Island were conducted aboard the R/V Martin Sheen (Figure 1A) in October 2016, May 2017, and November 2017, while field efforts in September 2017 were undertaken from a panga (Figure 1B). Visual surveys for Cuvier’s beaked whales (Figure 2A) were conducted to document the local abundance and distribution of this species, and pictures of individual whales were added to an existing photo-ID catalog. When possible, skin and blubber samples were collected via biopsy sampling via crossbow and tissue sample preservation. Deployments of (C) a drifting buoy mounted with two types of acoustic recorders (C-POD, SoundTrap) and (D) an anchored C-POD mooring.

**RESULTS**

A total of 104 sightings of Cuvier’s beaked whales were documented during the four field expeditions, and 22 biopsy samples were collected (Table 1, Figure 2B). The photo-ID catalog now contains data from 2006-2017 and includes 69 individual whales. Preliminary photo-ID analysis suggests a degree of long-term site fidelity and potential residency, as there were recaptures of 33 whales across various time scales. The longest recapture period was over 10 years (Figure 4, Zcav008). Another whale (Zcav016) has been resighted 12 times in the 8 years since it was first photographed. Numerous mother-calf pairs were observed over the study period (Figure 5); one breeding female (Zcav022) was first photographed in October 2016 while pregnant, and was then resighted with the same calf several times throughout the 2017 field efforts.

**FUTURE WORK**

Photo-ID data will be used to examine social structure and association patterns, and pictures of the 69 individual whales identified at Guadalupe Island will also be compared to the Cuvier’s beaked whale catalog of the Southern California Bight to assess potential regional movements and connectivity between these two populations. Tissue biopsy samples will be analyzed for genetics and stable isotopes. The passive acoustic recordings collected with C-PODs and a SoundTrap device will be used to assess the relative presence and distribution of echolocating odontocetes in the sampled areas.

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