

Satellite Tracking Leads to Compilation of Important Conservation Data

Title

A new study on Sooty Shearwaters in the California Current shows the benefit of seabird tracking data in identifying priority sites for seabird conservation at sea.

Satellite technologies, similar to those used by cell phone companies, are enabling scientists to track the sooty shearwater seabird species. The data helps to identify critical at-sea habitats for marine life and can further ecosystem-based management of the forage species on which seabirds and other marine predators rely.

Scientists James Harvey and Josh Adams of the Moss Landing Marine Laboratories are using the tracking data to test their hypothesis that the seabirds move based on feeding opportunities within the California Current system. With their tracking data, the scientists determined common feeding “hotspots,” discovered when the birds visited particular locations and how often, and characterised movement patterns. They found that these 'hotspots' do exist but tend to vary from year to year. In addition, the birds (when within 200 nautical miles of the coast) spent only about a quarter of their time in NOAA's National Marine Sanctuaries.

Having developed an algorithm for filtering and analysing the raw position data, the scientists will now be able to broaden their research to include other species of seabirds and evaluate the overall effects that certain types of fishing have on these birds as a whole. For many years, environmental researchers have worried that intense harvesting of forage species might reduce food resources for marine predators. With these findings, management systems can be enhanced to ensure that enough forage species are left for the seabirds and other marine predators.

BirdLife plans to conduct similar analysis using data in the Procellariiform Tracking database (www.seabirdtracking.org) to identify marine IBAs through regional projects such as the Barrow to Baja Initiative, which aims to identify a network of marine IBAs on the east coast of north America, stretching from Barrow in Alaska to Baja in Mexico. Read more [here](#). Download the publication [here](#).