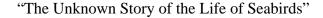
View from the Eyrie

Natural Selections Newsletter, Fall 2012 Chris Eberly, DoD PIF Coordinator





As natural resource managers on military installations, adaptive resource management is a basic premise for how we do our jobs. We rely on the best science available to plan for the appropriate management action, implement the action, then evaluate the effectiveness of the action. The U.S. Fish & Wildlife Service (USFWS) incorporates this philosophy into Strategic Habitat Conservation. However, what if the science is lacking for a resource you must manage?

Principle #15 of the Rio Declaration (from the 1992 Rio Conference, or "Earth Summit") notes: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." The precautionary principle thus tells us even though we may not think we know



Seabirds with longline fishing vessel. Photo: Kim Dietrich, NMFS

enough, we must still do what we can to prevent population declines or habitat degradation.

Seabirds are generally long-lived birds that spend the majority of their lives at sea. When they do come on land to nest, it is often in inaccessible and/or remote areas that make nest monitoring a challenge, at best. If you have even been on a pelagic fishing or birding trip you also know that many seabirds follow fishing boats to take advantage of a free meal in the form of bait or chum. Unsuspecting birds will grab bait from a bait line (which can be several miles long) as it leaves the fishing boat, get caught on the hook, and be dragged underwater where they drown. The *Agreement on the Conservation of Albatrosses and Petrels* (ACAP; http://www.acap.aq/) came into force in February 2004 due to declining seabird populations, known impacts from longline fisheries, and an overall lack of knowledge about the full life-cycle of these birds. Currently 13

member countries participate in ACAP, which covers 30 species of albatrosses, petrels and shearwaters. The U.S. is not an official signatory as of yet, since ACAP was initially created for species in the Southern Hemisphere. However, the U.S. participates via the National Oceanic and Atmospheric Administration (NOAA) as a "participating non-party" and one of the "range states" and Northern Hemisphere species have been recently included. While primarily focused on seabird



ACAP logo

by-catch issues, other key conservation measures within ACAP aim to restore breeding habitats, eliminate or control non-native species detrimental to albatrosses and petrels, initiate and support research, raise awareness, and exchange information.

So what does this have to do with the Department of Defense? Navy vessels do not engage in fisheries and rarely interact with seabirds while at sea. And while DoD lands do not harbor many seabird nesting colonies, some are potentially significant. The southeast tip of Ka'ula Island (or Ka'ula Rock; see photo, looking from the North) is used by the Navy for inert ordnance training.



Kaula Island (looking from the North). Photo: Wikipedia

Located off of Kaua'i, Ka'ula is free from predators and invasive species and could be one of the best nesting islands for seabirds in the region. Seabird numbers are declining at numerous nesting colonies, but biologists have been unable to access Ka'ula for a number of years due to training, access, and safety concerns. Back on "mainland" Kaua'i, the Pacific Missile Range Facility (PMRF)-Barking Sands is taking

steps to assist Newell's Shearwater (ESA-Threatened), Band-rumped Storm-Petrel (ESA-Candidate), and Wedge-tailed Shearwater by reducing or altering lighting on the site. Each fall the keiki (the Hawaiian word for "baby" or "child", literally meaning "the little one") of Kauai's native seabirds fly to the ocean for the first time using the moonlight on the sea to navigate their way. If the birds encounter lights from buildings, stadiums, or street lights, they circle them until they are exhausted and/or injured during their fall to the ground. Seabird aid stations, like the one John Burger of PMRF is showing in the photo, have been placed in key areas around Kaua'i and the group Save Our Shearwaters collects injured birds each morning and rehabilitates them with a high success rate. PMRF is shielding lights, redirecting them horizontally (to point downward), and experimenting with green lighting – literally. Initial results seem promising for seabirds, but more time is needed to better assess the overall success of these actions.

Seabirds, like many other native bird species in Hawai'i, are susceptible to introduced mammals. Rats, mongoose, dogs and cats predate eggs and young birds, and goats and hogs destroy habitat and trample nests. An expensive but highly effective solution is to fence nesting areas and remove non-native predators and herbivores. A fine mesh screen prevents both small and large mammals from entering the protected area. Seabirds have shown immediate positive results where this fencing has been installed. Wedge-tailed Shearwaters increased from 400 to more than 1,700 after only one year. Where appropriate, DoD is partnering with groups on projects like this to help



John Burger shows a seabird aid station at the entrance to PMRF Barking Sands. Photo: Chris Eberly

overall seabird (and honeycreeper) populations on and near DoD lands, which helps protect the mission and prevents more extinctions on this embattled island chain.

