

## Seabirds



Photo: Steve McConnell

# 'Akē'akē or Band-rumped Storm-Petrel

*Oceanodroma castro*

### SPECIES STATUS:

Federal candidate for listing

State listed as Endangered

State recognized as Indigenous

NatureServe Heritage Rank G4 - Apparently secure

North American Waterbird Conservation Plan - High concern

Regional Seabird Conservation Plan - USFWS 2005

**SPECIES INFORMATION:** The 'akē'akē or band-rumped storm-petrel is a medium sized, highly pelagic storm-petrel (Family: Hydrobatidae), and is the smallest and rarest seabird that breeds in Hawai'i. Adult males and females are primarily blackish-brown and have a sharply defined narrow white band across rump area. Flight is characterized by shallow wing beats and long glides just over the surface of the ocean. Forages alone or with conspecifics, 'akē'akē (band-rumped storm-petrel) feed while sitting on the water or by dipping prey while flapping just above the ocean surface, often pattering water with feet. No diet information from Hawai'i, but elsewhere primarily consists of small fish, squid, and some crustaceans. The species' breeding biology in Hawai'i is poorly known, but 'akē'akē (band-rumped storm-petrels) nest in burrows or natural cavities in a variety of high-elevation, inland habitats. Like most seabirds a single egg is laid per season. In Hawai'i, eggs are laid between May and June, and nestlings fledge in October. 'Akē'akē (band-rumped storm-petrel) likely do not breed until they are three to seven years old, and likely live for 15 to 20 years.

**DISTRIBUTION:** 'Akē'akē (band-rumped storm-petrel) breed on Kaua'i at elevations around 600 meters (1,950 feet), on Maui and the island of Hawai'i at elevations greater than 1,200 meters (3,900 feet), and on Lehua. Historically, the species was abundant and widespread throughout MHI. In the Pacific outside of Hawai'i, 'akē'akē (band-rumped storm-petrel) breed in Japan and on the Galapagos, and in the Atlantic on several islands including the Azores, Cape Verdes, and Ascension Island. The non-breeding season range includes the Pacific and Atlantic oceans.

**ABUNDANCE:** In Hawai'i, breeding population unknown, but likely very small. Breeding population on Kaua'i estimated at between 171 and 221 breeding pairs. Worldwide population is unknown, but likely less than 25,000 breeding pairs.

**LOCATION AND CONDITION OF KEY HABITAT:** 'Akē'akē (band-rumped storm-petrel) breed in a variety of remote, high-elevation, inland habitats. On Kaua'i, colonies are in steep valleys vegetated with shrubs and grasses. On Maui and the island of Hawai'i colonies occur on high, barren lava flows. Nest in burrows or crevices in rock or lava, also has been

documented using artificial nest boxes. Colonies on Maui occur in Haleakalā National Park and those on the island of Hawai'i occur in Hawai'i Volcanoes National Park.

#### **THREATS:**

- Introduced predators. Like all seabirds, adults and nests are susceptible to predation by pigs (*Sus scrofa*), rats (*Rattus* spp.), feral cats (*Felis silvestris*), and the small Indian mongoose (*Herpestes auropunctatus*).
- Introduced ungulates. Pigs, goats (*Capra hircus*), and mouflon sheep (*Ovis musimon*) degraded nesting habitat.
- Artificial lighting. Street and resort lights, especially in coastal regions, likely disorient fledglings causing them to eventually fall to the ground exhausted or increase their chance of colliding with artificial structures (i.e., fallout). Once on the ground, fledglings are unable to fly and are killed by cars, cats, and dogs (*Canis domesticus*) or die because of starvation or dehydration.
- Colony locations. Remoteness of colonies, as well as the habitat they occur in (e.g., steep terrain or dense forest) complicates predator and ungulate eradication or control.

**CONSERVATION ACTIONS:** The following management goals are important to Pacific seabird conservation: maintain, protect, and enhance habitat; eradicate or control non-natives; minimize bycatch and other negative effects of fishing; improve the effectiveness of oil spill response efforts; identify contaminants and hazardous substances; and minimize the effects of powerlines, towers, wind turbines and lights (USFWS 2005). The goal of these management actions is not only to protect seabird populations and their breeding colonies, but also to re-establish former breeding colonies thereby reducing the risk of extinction. Past actions directed at 'a'o or Newell's shearwater (*Puffinus auricularis*) have benefited 'akē'akē (band-rumped storm-petrel) populations and these include: the rescue and rehabilitation of downed fledglings by the conservation project Save Our Shearwaters, and efforts to shade resort lighting and streetlights. In addition to these efforts, future management specific to Hawaiian populations of 'akē'akē (band-rumped storm-petrel) should include the following:

- Determine population size and status.
- Locate additional colony sites.
- Locate potential sites for the establishment of new breeding colonies.
- Continue efforts to eradicate and control predators and ungulates, particularly on Lehua where birds have been recently observed.
- Continue to support efforts of Save Our Shearwater Program, particularly its outreach initiatives concerning raising public awareness of light fallout and rescue and rehabilitation program, and establish similar programs on other islands where appropriate.

**MONITORING:** Continue surveys of population and distribution in known and likely habitats.

**RESEARCH PRIORITIES:** Most research priorities for seabirds are related to determining the most appropriate methods for achieving the above goals. Research priorities specific to 'akē'akē (band-rumped storm-petrel) includes the following:

- Conduct basic life history studies to assess the management needs and conservation status of this poorly known species.
- Identify factors currently limiting populations.
- Determine the amount of mortality related to power lines and coastal lighting.

**References:**

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