

Seabirds



Photo: Fefer. USFWS

Blue-gray Noddy

Procelsterna cerulean

SPECIES STATUS:

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 blue-gray noddy or Necker Island tern is the world's smallest tern (Family: Laridae) and is widely distributed across the Pacific. Five subspecies are recognized, and one (*P. c. saxatilis*), is resident in Hawai'i. Adult males and females are entirely bluish gray and have a partial white eye-ring, a short, slender bill, and a shallow forked tail. Flight is characterized by constant and rapid wing beats. The blue-gray noddy feeds nearshore, often with other species, by hover-dipping and surface-dipping. The species captures the smallest prey of any Hawaiian seabird, mainly larval lizardfishes, flounders, goatfishes, and flyingfish, as well as squid, crustaceans, and insects. Blue-gray noddies use a variety of substrates for nesting. In Hawai'i, they nest in aggregations among cavities or crevices in lava flows. In Hawai'i, nesting appear to occur throughout the year, and eggs have been found March through September. Little is known about the breeding behavior or biology of the blue-gray noddy. The oldest known bird was 11 years old, but blue-gray noddies likely live longer.

DISTRIBUTION: Blue-gray noddies breed mainly on Necker and Nihoa, but small colonies also are present on La Perouse Pinnacle, French Frigate Shoals, and Gardner Pinnacles. Historically the species bred on Ka'ula Island off of Ni'ihau. Outside of Hawai'i, blue-gray noddies nest on islands throughout the Pacific Ocean. Blue-gray noddies typically remain near their breeding colonies year-round, and are rarely found far from land.

ABUNDANCE: In Hawai'i, population estimated at 3,600 breeding pairs with 3,500 pairs on Necker and Nihoa combined. Worldwide population estimated at 100,000 breeding pairs, but inaccessible nesting locations make accurate counts difficult.

LOCATION AND CONDITION OF KEY HABITAT: Terrestrial: Blue-gray noddies breed on remote islands and atolls. They nest on a variety of substrates, but in NWHI mostly use crevices or cavities in ancient lava flows. Currently all breeding colonies in Hawai'i occur in the Hawaiian Islands National Wildlife Refuge or the Midway Atoll National Wildlife Refuge.

Marine: Nearshore waters.

THREATS:

- Introduced predators. Like all seabirds, adults and nests are susceptible to predation by rats (*Rattus* spp.), and feral cats (*Felis silvestris*). All sites in NWHI are free of rats and cats.

- Native predators. On Nihoa and Laysan, native finches (*Telespiza* spp.) are responsible for considerable egg mortality.

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. In addition to these efforts, future management specific to Hawaiian populations of blue-gray noddy should include the following:

- Continue protection and management of wildlife sanctuaries and refuges.

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 the blue gray-noddy include the following:

- Development and implementation of standardized survey protocols to determine current population size and status.

References:

Kushlan JA, et al. 2002. Waterbird Conservation for the Americas: The North American waterbird conservation plan, Version 1 Waterbird Conservation for the Americas, Washington, DC. 78pp. Available at: www.waterbirdconservation.org.

NatureServe. 2003. Downloadable animal data sets. NatureServe Central Databases. Available at: <http://www.natureserve.org/getData/vertinvertedata.jsp> (March 10, 2005).

U.S. Fish and Wildlife Service. 2005. Regional seabird conservation plan, Pacific Region. U.S. Fish and Wildlife Service, Migratory Birds and Habitat Programs, Pacific Region. Portland, (OR): U.S. Fish and Wildlife Service.