



Photo: Forest and Kim Starr, USFWS

Seabirds

'Ewa'ewa or Sooty Tern

Sterna fuscata

SPECIES STATUS:

State recognized as Indigenous
NatureServe Heritage Rank G5 - Secure
North American Waterbird Conservation Plan -
Moderate concern
Regional Seabird Conservation Plan - USFWS 2005

SPECIES INFORMATION: The 'ewa'ewa or sooty tern is an abundant and gregarious tern (Family: Laridae) with a pantropical distribution, and is able to remain on the wing for years. Eight 'ewa'ewa (sooty tern) subspecies are recognized, and one (*S. f. oahuensis*) breeds in Hawai'i. Individuals have long, slender wings and a deeply forked tail. Adult males and females are blackish above, except for white forehead and white on the edges of the outer most tail feathers, and entirely white below. The sharp bill, legs, and feet are black. Flight is characterized by powerful flapping, gliding and soaring, capable of long distance migration and breeding adults remain aloft between breeding seasons. Generally forages in large mixed species feeding flocks, typically feeding over schools of predatory fishes, especially yellowfin tuna (*Neothunnus macropterus*) and skipjack tuna (*Katsuwonus pelamis*). 'Ewa'ewa (sooty tern) feed primarily by seizing prey from the water or air while on the wing, infrequently by shallow dives; species' plumage has poor waterproofing and easily becomes waterlogged. In Hawai'i, 'ewa'ewa (sooty tern) diet consists of squid, goatfish, flyingfish, and mackerel scad. Nests in large, dense colonies consisting of thousands to a million pairs of terns. Individuals return to natal colony to breed, some long-term pair bonds have been documented, and breeders prefer to return to previous nest locations. Nests are shallow scrapes often lined with bits of shell or vegetation. Timing of breeding varies among years and locations, even within Hawai'i, but generally eggs are laid beginning of February and most birds fledge by July. Both parents incubate single egg and brood and feed chick. Parents continue feeding young for two weeks after fledging and young remain aloft until they return to breed. Birds first breed between four and ten years of age and the oldest known individual was 32 years old.

DISTRIBUTION: 'Ewa'ewa (sooty tern) breed throughout the NWHI and on Moku Manu off of the island of O'ahu. Outside of Hawai'i, 'ewa'ewa (sooty tern) breed on most islands throughout the world's tropical oceans. Outside the breeding season, 'ewa'ewa (sooty tern) are highly pelagic.

ABUNDANCE: In Hawai'i, population estimated at greater than one million breeding pairs with the largest populations occurring on Laysan (500,000 pairs) and Lisianski (500,000 pairs). Worldwide population is estimated at between 60 and 80 million breeding pairs.

LOCATION AND CONDITION OF KEY HABITAT: Terrestrial: 'Ewa'ewa (sooty tern) breed on oceanic islands and atolls. Nest is usually on sandy substrates with sparse vegetation.
Marine: Pelagic.

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. 'Iwa or great frigatebirds (*Fregata minor*), cattle egrets (*Bubulcus ibis*), 'akekeke or ruddy turnstones, (*Arenaria interpres*) 'auku'u or black-crowned night herons (*Nycticorax nycticorax*), Laysan (*Telespiza cantans*) and Nihoa (*T. ultima*) finches will depredate eggs and chicks.
- Overfishing. Because 'ewa'ewa (sooty terns) rely on predatory fish to drive prey to the surface, overfishing may eventually affect Hawaiian populations.
- Oil pollution. 'Ewa'ewa (sooty terns) populations are vulnerable to oil spills.

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 'ewa'ewa (sooty terns) should include the following:

- Eradication and control of introduced predators at current and potential nesting sites.
- Continued protection and management of existing 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 'ewa'ewa (sooty terns) include the following:

- Model interactions and importance of predatory fish, seabirds, and their prey to determine the long-term effects of overfishing on 'ewa'ewa (sooty terns) populations.

References:

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

Schreiber EA, Feare DJ, Harrington BA, Murray BG, Robertson WB, Robertson MJ, Woolfenden GE. 2002. Sooty tern (*Sterna fuscata*). In *The Birds of North America*, No. 665 (Poole A, Gill F, editors.). Philadelphia, (PA): The Academy of Natural Sciences; and Washington DC: The American Ornithologists' Union.

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.