



Photo: DOFAW

Seabirds

Koa'e 'ula or Red-tailed Tropicbird

Phaethon rubricauda

SPECIES STATUS:

State recognized as Indigenous
NatureServe Heritage Ranking G4/G5 -
Apparently secure/Secure
North American Waterbird Conservation Plan -
Moderate concern
Regional Seabird Conservation Plan - USFWS 2005

SPECIES INFORMATION: The koa'e 'ula or red-tailed tropicbird is a showy, white seabird (Family: Phaethontidae) related to boobies and frigatebirds. Four koa'e 'ula (red-tailed tropicbird) subspecies are recognized, and one (*P. r. roseotineta*) breeds in Hawai'i. Adult males and females are mostly white, although sometimes with pale pinkish wash, except for partial black eye ring and short eye line, black flanks, and black shafts of outer primaries; both sexes have long, narrow, tail feathers with red shafts. Large reddish orange bill with black tip; legs and feet are very small. Flight is characterized by strong flapping interspersed with gliding; koa'e 'ula (red-tailed tropicbird) are capable of flying long distances. Koa'e 'ula (red-tailed tropicbird) usually forage alone, but occasional with other species, most often far from land; often will follow ships. Koa'e 'ula (red-tailed tropicbird) captures prey by plunge diving. In Hawai'i, diet is mainly comprised of flyingfish, but also takes squid, mackerel scads, dolphinfish, truncated sunfish, and ballonfish. Koa'e 'ula (red-tailed tropicbird) breed in colonies and pairs remain together for years. At the beginning of the breeding season, pairs engage in complex aerial displays. Nests are placed on the ground, and generally are a simple scrape lined with some vegetation. In Hawai'i, breeding can occur throughout the year, but most nests are active between February and June. A single egg is laid per season, and both parents incubate the egg, and brood and feed the chick. No post-fledgling care is provided. Age at first breeding is between two and four years, and the oldest known individual was 23 years old.

DISTRIBUTION: Koa'e 'ula (red-tailed tropicbird) breed throughout the NWHI and at a limited number of sites on MHI, mostly on offshore islets, but possibly on Ni'ihau, Ka'ula, Lāna'i, and Kaho'olawe. Outside of Hawai'i, koa'e 'ula (red-tailed tropicbird) breed on oceanic islands in the Indian and Pacific oceans. Outside the breeding season, adults are solitary and pelagic, and their range is poorly known.

ABUNDANCE: In Hawai'i, population estimated at between 9,000 and 12,000 breeding pairs, with the largest populations occurring on Midway Atoll and Laysan. The worldwide population is estimated at 17,000 to 21,000 breeding pairs, with the majority residing in the Pacific Ocean.

LOCATION AND CONDITION OF KEY HABITAT: Terrestrial: Koa'e 'ula (red-tailed tropicbird) breed mainly on oceanic islands and coral atolls with shrubs, including beach magnolia (*Scaevola sericea*) and beach heliotrope (*Tournefortia argentea*). Koa'e 'ula (red-tailed tropicbird) nest on the ground, generally in inconspicuous places such as under vegetation or in cliff crevices. **Marine:** Pelagic.

THREATS:

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

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 koa'e 'ula (red-tailed tropicbird) should include the following:

- Eradication and control of introduced predators at current and potential breeding colonies.
- 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 koa'e 'ula (red-tailed tropicbird) include the following:

- Conduct long-term demographic studies to determine population trends, survival rates, and reproductive success.

References:

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