

RED-TAILED TROPICBIRD

Phaethon rubricaudai

Other: *Koa'e ula*

monotypic

breeding visitor, indigenous

The Red-tailed Tropicbird breeds throughout the tropical and subtropical Pacific and Indian oceans, including Johnston and Wake atolls (Amerson and Shelton 1976, Rauzon et al. 2008) and disperses into temperate waters during non-breeding periods (Harrison 1983, Pitman 1986, Marchant and Higgins 1990, Spear and Ainley 2005, CBRC 2007). It is an abundant breeder in the Northwestern Hawaiian Islands and a local breeder on several of the Southeastern Hawaiian Islands and surrounding islets, becoming increasingly common from southeast to northwest. They are present at colony sites in Feb-Oct but virtually absent during Nov-Jan, a very small proportion of birds remaining to nest during winter. Counts of breeding birds and nests indicate that this species increased substantially between the 1950s and the 2000s throughout the chain. See Gould et al. (1974) and Schreiber and Schreiber (1993) for more information on the natural history of this species in the Pacific.

Red-tailed Tropicbirds breed on all *Northwestern Hawaiian Islands*, with a total estimated population of 12,800 pairs during the 1980-2000s ([Table](#)). The largest breeding colonies, in descending order, are found on *Midway, Laysan, Kure, Lisianski, French Frigate, Nihoa, Necker, Pearl and Hermes*, and *Gardner Pinnacles* ([Table](#)). The population on Midway has increased from no birds in 1891 (Munro in Hadden 1941) and a few birds in 1902 (Bryan 1906) to about 7,500 pairs (and possibly more; *c.f.* an estimate of 19,000 by Fisher and Baldwin 1946) during the 2000s based on the increase of vegetation for breeding and (more recently) the removal of rats in 1997. Breeding within man-altered habitats is thought to have resulted in increased populations here, as well as at Kure and French Frigate (Fefer et al. 1987). Likewise, decimation of vegetation on Laysan by rabbits accounted for severely reduced breeding populations there in 1911 (150 pairs; Dill and Bryan 1912) and 1923 (40 pairs; Wetmore in Olson 1996b), followed by increases with the restoration of vegetation; a similar reduction and reclamation occurred on Lisianski. Information on the history of the species and data on breeding phenology for each Northwestern Island, compiled as part of the POBSP, can be found in the Atoll Research Bulletins for each breeding locality (see [Seabird Page](#)); see also Clapp and Woodward (1968), Rauzon (2001).

In the *Southeastern Hawaiian Islands*, an estimated 980 pairs of Red-tailed Tropicbirds bred in the 1980-2000s ([Table](#)), locally in crevices among inaccessible cliffs. Early explorers (Cook and King 1784, W. Beresford in Dixon 1789, Bloxham 1827a) noted them as commonly breeding on Kaula Rock and other offshore islets, where the central rectrices were collected for decorative purposes by native Hawaiians. The largest colonies occur on and near *Ni'ihau* ([Table](#)), where 250-400 pairs breed on Kaula Rock, 100-200 pairs breed on Lehua Islet (Richardson 1963, VanderWerf et al. 2007), and an undetermined number breed on the main island (Wilson and Evans 1899, Fisher 1951). In descending order of estimated population size ([Table](#)), they also breed on *Kaua'i* (primarily at and near Kilauea Point NWR, where they are increasing; Zaun et al. 2008), *O'ahu* (along the se. coast and on Manana, Mokumanu, Mokoli'i, and perhaps other

islets; VanderWerf 2007a), *Lana'i* (scattered around the island; Hirai 1978b, Munro 2007), *Kaho'olawe* (along the se. coast and on Pu'u Koa'e islet; Gon *et al* 1992), and *Moloka'i* (on Okala Islet). In 2008-2009 prospecting individuals were noted over Keana Point, O'ahu in Mar-May, suggesting the potential for breeding in the recovered beach-strand vegetation there. A report from a helicopter of 250+ unidentified tropicbirds over Mokapa Islet, Moloka'i 14 Jul 2005, may have represented an unusual incursion of this species. There are < 5 reports of birds above land on *Maui*: several sightings in the late 1980s of single birds above West Kaupo Gap (at 2300 m elevation) and one over Mokolea Pt. 23 Sep 1990. On *Hawai'i I*, up to 20 birds have been noted since 1994 courting along cliffs just W of Pololu Valley and at Upolu Airport near Hawi; they likely nest along remote cliffs there but actual breeding has yet to be confirmed. There are also 6-8 observations of single birds in widely scattered locales, including one found dead in a macadamia nut orchard in Keaau 7 Jun 1984 (BPBM 161229). At least 21 Red-tailed Tropicbirds were found stranded on O'ahu in 1990-2003 and turned into the SLP rehabilitation facility.

Increasing population trends have been reflected by numbers of birds and nests at Kilauea Pt. NWR, Kaua'i, and Manana Is., O'ahu. At the former location an observation of a single bird on 18 Aug 1971 was notable (*E* 35:105), after which counts of courting adults went from 6-20 in the 1970s (*E* 36:22, 37:63; Byrd and Zeillemaker 1981) to 20-40 in the 1980s, to >100 in the 1990s and early 2000s. In 1999-2000 45-65 nests were found and monitored by USFWS personnel. A similar increase occurred on Manana I., from a single nest documented in 1967 (*E* 28:34) to 10-12 nests >1983 (Swenson 1985). It is unknown why this archipelago-wide increase has occurred; Dole (1879) indicates a greater historical abundance of this species throughout the Southeastern Islands so perhaps populations are simply rebounding from declines related to human-induced pressures of the late 1800s and early 1900s, to which they have become more adapted.

Red-tailed Tropicbirds are seen infrequently in small numbers in offshore waters around Southeastern Islands in Mar-Sep, most often close to breeding islands. *At sea*, King (1970), Rowlett (2002), Spear *et al.* (1999), and Spear and Ainley (2005) recorded them regularly and in low densities throughout Hawaiian waters in Mar-Sep but less frequently in Oct-Feb. Higher densities recorded by King (1970) S and E of the islands in Oct-Nov perhaps suggests eastward movement of post-breeding birds from Hawaiian colonies (see also Spear and Ainley 2005).

Rothschild (1900) described Hawaiian populations as "*P.r. erubrescens*" based on slightly larger size and more pinkish to the plumage and mid-Pacific populations have later been referred to "*rothschildi*" and "*melanorhynchos*"; however, Tarburton (1989) has recommended monotypy for this species.

[Acronyms and Abbreviations](#)

[Literature cited](#)

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