

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 small proportion of populations remaining to nest during winter. Counts of breeding birds and nests indicate that this species increased substantially between the 1950s and mid-2010s 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 1980s-mid 2010s ([Table](#)). The largest breeding colonies, in descending order, were found on *Midway, Laysan, Kure, Lisianski, French Frigate, Nihoa, Necker, Pearl and Hermes*, and *Gardner Pinnacles* ([Table](#)). The population on Midway 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 mid-2010s 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); however, populations at the latter locale showed a peak in 1995 followed by a steady decline through at least 2010 (Hatfield et al. 2011, Reynolds et al. 2013b). On Laysan, decimation of vegetation 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 to about 2,000 pairs by the 2010s following 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) and Rauzon (2001).

In the *Southeastern Hawaiian Islands* an estimated 1,025 pairs of Red-tailed Tropicbirds bred in the 1980-2010s ([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. During the mid-2010s the largest colonies occurred on and on islets near *Ni'ihau* ([Table](#)), where 250-400 pairs bred on Kaula Rock, 100-200 pairs bred on Lehua Islet (Richardson 1963, VanderWerf et al. 2007, USNC 2016), and an undetermined number bred on the main island (Wilson and Evans 1899, Fisher 1951). In descending order of estimated population size ([Table](#)), they also bred on *Kaua'i* (primarily at and near Kilauea Point NWR, where they are increasing; Zaun et al. 2008), *O'ahu* (about 65 pairs along the se. coast in 2016 and on Manana and perhaps other islets; cf. 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. At least 21 Red-tailed Tropicbirds were found stranded on O'ahu in 1990-2003 and turned into the SLP rehabilitation facility, and 13 were turned into the [SOS](#) program on Kaua'i in 2008-2015. On Moloka'i a report from a helicopter of 250+ unidentified tropicbirds over Mokapa Islet 14 Jul 2005 may have represented an unusual incursion of this species, and there were several observations in the 2010s of up to 7 birds at various locations along the N coast. There are < 5 reports of Red-tailed Tropicbirds 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 were noted from 1994 to the mid-2010s courting along cliffs just W of Pololu Valley and at Upolu Airport near Hawi and at least two were seen entering breeding crevices in Apr 2010. There are also 10-15 observations of single birds at widely scattered locales, including one found dead in a macadamia nut orchard in Keaau 7 Jun 1984 (BPBM 161229).

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, to an estimated 150-250 pairs in the early-to-mid 2010s (USFWS 2016). During 1999-2004, 45-65 nests were found and monitored by USFWS personnel (Zaun 2005). A similar increase occurred on Manana I., from a single nest documented in 1967 (*E* 28:34) to 10-12 nests in 1983 (Swenson 1985) and 15 by 2016. 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; [HICEAS data](#)), 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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