

WHITE TERN

Gygis alba

Other: Common White-Tern (1998-2000)
Fairy Tern, *Manu-o-ku*

G.a. candida (breeding)
G.a. microrhyncha (vagrant)

breeding visitor, indigenous; vagrant

Three taxonomic groups of White Tern have been recognized, occurring in the tropical s. Atlantic Ocean (*G.a. alba* group), the Marquesas and Kiribati Is (*microrhyncha* group), and throughout the remainder of the tropical Pacific and Indian Oceans, including Micronesia, Wake and Johnston atolls (Amerson and Shelton 1976, Rauzon et al. 2008), and the Hawaiian Islands (*candida* group). Various ornithologists consider these groups to comprise two or three different species (Pratt et al. 1987, AOU 1998) although, based on reported hybridization between *microrhyncha* and *candida* in the Marquesas Is (Holyoak and Thibault 1976), Higgins and Davies (1996) and the AOU (1998) consider these as subspecies groups within a single species. Olson (2005) has recently made a good case for treating *microrhyncha* and *candida* as separate species but molecular evidence suggests they should remain a single species (Yeung et al. 2009). See Niethammer and Patrick (1998) for more information on the natural history and biology of this species in the Hawaiian Islands.

The great majority of White Terns breeding in the Hawaiian Islands are found in the *Northwestern Hawaiian Islands*, where they occur on every island group, and number about 25,000 pairs in total population size ([Table](#)). The largest numbers by far are found on *Midway*, where the maturation of *Casuarina* trees providing nesting sites (*cf.* Fisher and Baldwin 1946, Rauzon and Kenyon 1984, Harrison 1990, Rauzon 2001; *E* 16:28-29) has led to a large population increase, from only a few at the turn of the 20th century (Bryan 1906, Bartsch 1922) to about 3,000 in 1938 (Hadden 1941), to ~20,000 pairs in the mid 2010s. Populations on the other islands are smaller due to the lack of suitable nesting sites, and range from 3,500 pairs on *Nihoa* and 1,000 on *Laysan* to 15-200 on, in descending order, *Gardner Pinacles*, *Necker*, *Kure*, *Lisianski*, *French Frigate*, and *Pearl and Hermes* ([Table](#)). At French Frigate, populations increased from 1980 to 2005, after which they have apparently decline (Hatfield et al. 2011, Reynolds et al. 2013b). White Terns are present at nesting colonies year-round but show a peak in colony attendance and breeding activity in Feb-Aug, which is more pronounced toward the nw. portion of the chain. 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](#)).

It has long puzzled ornithologists why White Terns have not been found in historical times in the *Southeastern Hawaiian Islands*. Through 1960 the only location where they were confirmed as breeding was Kaula Rock sw. of *Ni'ihau*, where A. Wetmore (in Olson 1996b) and Caum (1936) first noted nesting individuals in 1923-1932 and population estimates during the 2000s to mid-2010s were of 10-20 pairs (USNC 2016). Historically, references to "white pigeons" observed during Cook's voyage in 1778 (Cook and King 1784) has led to speculation that White Terns may have bred in the Southeastern Islands at the time (Perkins 1903). A specimen of a "white tern" collected by Portlock (1789) in Hawaii may have been of a [Common Tern](#) and Dole's (1869, 1879)

reference to an egg, based on Cassin (1858), appears to be in error. No evidence of White Terns in Hawaiian midden sites has been found (Ziegler 2002) but the species was considered sacred by native Hawaiians and not killed for food (Munro 1944). At any rate, by 1879 Dole stated that they doubtfully frequented the Southeastern Islands.

On *O'ahu*, a specimen was collected in 1924 (see below) and otherwise the first reports were of singles and pairs observed infrequently along the se. coast from Mokapu Peninsula to the Mokolua Islets in 1948-1958 (Richardson and Fisher 1950; *E* 16:6, 16:52, 19:24, 33:28). A photograph at BPBM of a juvenile White Tern taken in Honolulu in 1953 has caused speculation that they may have bred on O'ahu at the time (e.g., Yeung et al. 2009) but this individual had been transported as a chick from Necker (cf. *E* 15:20-24). On 15 Jul 1961, Ord (1961) observed White Terns near the se. tip of the island and photographed one sitting on an egg on Koko Head. It was speculated that some of these birds had originated from five chicks transported to Hawaii from Tahiti sometime in 1959-1961 and raised and released at SLP, but Ord observed at least 16 individuals and the species does not initiate breeding until 5 years of age (Niethammer and Patrick 1998), so the colonization must have involved other birds. Subsequently, small numbers and occasional breeding by White Terns were observed at Koko Head through the 1960s (e.g., HAS 1967-1971, Berger 1972; *E* 25:3-4; 26:21-22; 28:22-23; 30:18). By 1971 pairs were observed nesting in Kapiolani Park and Fort DeRussy, at either end of Waikiki Beach (HAS 1975-1978; *E* 30:108; 31:19, 30, 48-49, 75, 76, 79); by 1979 a breeding population had developed here and expanded to downtown Honolulu (HAS 1981, Berger 1981; *E* 37:136; 38:63-65, 105; 41:76); by the early 1980s individuals were regularly being seen over Pearl City and Nu'uuanu Valley (Miles 1985, 1986); and by the mid-2010s their breeding range had increased (HAS 1989-2005) and appeared to settle along the se. to sw. portions of the island, from Makapu'u Pt to the Pearl Harbor area including some upslope valleys. VanderWerf (2003) surveyed 250 pairs in urban and suburban settings along the se. portion of the island in 2002; by the mid 2010s the population was estimated at 2,000 birds including 600 breeding pairs (E. VanderWerf pers. comm.). Honolulu [Christmas Bird Count](#) data show populations continuing to generally increase between the 1970s through at least 2014 ([Graph](#)). From the 1980s through the mid-2010s, one to a few White Terns were sporadically reported from the nw., n, and ne. portions of the island (including Makaha Beach, Turtle Bay Resort, the Ki'i unit of JCNWR, Kaneohe MCAS, and Kailua) but, except for a report of a nesting pair in Kaneohe in 2008, there is little evidence of breeding in these areas. In Apr 2007 the White Tern was named the official bird of Honolulu (*E* 67:25-27).

White Terns are fairly commonly recorded *at sea* throughout the Hawaiian region, with little seasonal or distributional patterns (e.g., King 1970, Pitman 1986, Spear et al. 1999, Winship et al. 2016). They are also regularly observed from shore and during one-day trips offshore from the Southeastern Islands (including off Kaua'i and Kona, Hawaii; I); numbers observed during trips off O'ahu increased (to 25-30 per day by the mid-2010s) once breeding populations had been established. Away from O'ahu, records of individuals over Southeastern Islands are few. On *Kaua'i*, White Tern was mentioned as a chance arrival to by Bryan (1958), one was observed flying inland at Poipu 7 Jan 1995, and one was observed at Kilauea Pt NWR 2 Aug 2006. On *Moloka'i*, one was observed flying inland over Papohaku Beach 7 Aug 2011. On *Lana'i*, one was found dead in the Paoma'i district in Jun 1921 (Munro 2007; BPBM 156989), one was observed in the

Kaholo area of n Mar 1976 (*E* 37:11), and four (perhaps two pair) were observed near Manele Bay 12 Jun 2010. On *Maui*, singles were found dead at Puuokali 27 Mar 1993 (BPBM 179049) and Kahalui 16 Oct 2002 (BPBM 184991) and individuals were observed at 1300 m on the E slope of Mt. Haleakala, Maui 11 Feb 1995 and near Olowalu 10 Dec 2015. On *Hawai'i I*, one was sitting in a tree along the Kona Coast in Aug-Sep 1970 (*E* 40:170), a desiccated specimen was found at 2300 m elevation on the E slope of Mauna Loa 24 Aug 1992 (BPBM 178826), and five together flying in courtship manner were photographed between Puanaluu and Kawa beaches 18 Aug 2006 ([HRBP 5534](#)). It seems likely that White Terns will eventually colonize one or more of these outer islands.

The subspecies of White Tern breeding in the Northwestern Hawaiian Islands was long referred to as *G.a. rothschildi*, until this was synonymized in the 1970s with *candida*, the subspecies that occurs throughout most of the Pacific and includes the population on O'ahu (Olson 2005; but see Yeung et al. 2009 concerning the validity of Pacific subspecies). *G.a. kittlitzi* from the Caroline Is has also been used occasionally for Northwestern Hawaiian Island populations but has also been synonymized. There is a single record of the Marquesas and Kiribati Is subspecies *microrhyncha* (see above) from O'ahu, a specimen found dead in a dooryard at Kahuku 21 Apr 1924 and identified based on morphometrics (BPBM 4889; Olson 2005; [HRBP 5207-5208](#) of specimen).

[Acronyms and Abbreviations](#)

[Literature cited](#)

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