

## GRAY-BACKED TERN

*Onychoprion lunatus*

Other: *Pakalakala*

monotypic

### breeding visitor, indigenous

The Gray-backed Tern breeds in small, scattered colonies throughout the tropical Pacific Ocean, from the Tuamotu, Samoan, and Mariana Is to Johnston and Wake atolls (Amerson and Shelton 1976, Clapp and Hatch 1986, Rauzon et al. 2008) and in the Hawaiian Islands (King 1967, Harrison 1983, Mostello et al. 2000). Northern populations (at least) are migratory, e.g., occurring in the Hawaiian Island region primarily during the breeding season in Feb-Oct. Nesting sites are usually peripheral to those of the much more numerous [Sooty Tern](#), although at certain colonies (e.g., Gardner Pinnacles; Clapp 1972) Gray-backed Terns predominate. When not at breeding colonies Gray-backed Terns disperse widely throughout the tropical and subtropical Pacific, as far E as Clipperton Atoll where there is a record of two roosting individuals. Gray-backed Tern was combined along with other terns in the genus *Sterna* (as *lunata*) until tern genera were split by the AOU (2006). See Mostello et al. (2000) for more information on the natural history and biology of this species in the Pacific.

Gray-backed Terns in the region breed almost exclusively on the *Northwestern Hawaiian Islands*, with a total population size of about 44,000 pairs ([Table](#)). The largest breeding colonies are found on *Lisianski* (estimated 17,500 pairs), followed by *Nihoa* (10,000), *Laysan* (7,500), *Necker* (4,000), *Gardner Pinnacles* (2,000 pairs), and *Midway* and *French Frigate* (1,000 each), with smaller colonies (25-700 pairs) on *Pearl and Hermes* and *Kure* ([Table](#)). Populations on Midway were eradicated by the introduction of black rats in 1945 (Fisher and Baldwin 1946) but had recovered (to ~1000 pairs) by the mid-2010s, similar to population sizes in 1938 (Hadden 1941), after the elimination of rats in 1997. Colonies on Lisianski and Laysan were reduced during years of de-vegetation by rabbits, around the turn of the 19th century, but appear to have recovered to historical levels at both colonies (Ely and Clapp 1973, Clapp and Wirtz 1975). Populations on French Frigate increased during the 1980s-1990s, but showed a decline during the 2000s (Mostello et al. 2000, Hatfield et al. 2011, Reynolds et al. 2013b); but variation in counts may relate to inter-annual variation in breeding timing and effort and the difficulty of estimating numbers within dense colonies of this species (Fefer et al. 1987); a careful nest count in 2011 yielded 1,088 breeding pairs (Hartzell et al. 2012). 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](#)).

In the *Southeastern Hawaiian Islands*, small breeding colonies of Gray-backed Terns occur only on Kaula Rock off *Ni'ihau*, where up to 2000 pairs have been estimated breeding (Caum 1936), although recent numbers recorded there are lower (USNC 2016), and Mokumanu Islet off *O'ahu*, where 10-30 pairs breeding annually ([Table](#)). One observed on Lehua Islet off Ni'ihau 7 Jul 2002 may indicate prospective breeding at this seabird colony, although the presence of rats there may deter this (see also Richardson and Bowles 1964). At Mokumanu up to 30 individuals and 4-5 nests were reported during trips to the island in the 1940s (*E* 4:30, 8:53; Richardson and Fisher 1950), and the

persistence of this colony through the 2000s has subsequently been confirmed by occasional trips (e.g. HDFS 2006) along with observations from Mokapu Peninsula (e.g., *E* 23:22, 26:109, 29:49, 39:25, 41:75). Several hundred birds seen flying by the colony on 25 May 1985 is the only count above 50, and it may have included non-breeding individuals. Richardson and Fisher (1950) also noted non-breeding birds at the seabird colony at Manana islet. A tern photographed in a breeding colony on Eastern I, Midway Atoll 5 Jun 2008 ([HRBP](#) 5496-5497 published *NAB* 62:632) shows characters suggesting a hybrid of a [Sooty Tern](#) with either [Bridled Tern](#) (as suggested somewhat by the bird's appearance) or Gray-backed Tern (more likely in this mixed colony) but its identification remains unconfirmed (it may also be just an aberrant Sooty Tern).

Gray-backed Terns are regularly observed in Apr-Aug from O'ahu or during one-day pelagic trips, primarily in the vicinity of the Mokumanu colony but also scattered elsewhere around the island, in particular from La'ie Pt and the Makapu'u-Sandy Beach area, where up to 6-8 have been observed from each location. One found stranded at Makaha, O'ahu 26 May 1998, which died the next day (BPBM 184163), is the only land-bound record we could locate from O'ahu proper. They have also been seen from *Kaua'i* during the summer months (e.g., *E* 8:15, 26:29), one was observed from near Kahanu Gardens, *Maui* 19 Jul 2013, and singles were photographed off Kona, *Hawai'i I* 9 Oct 2014 and 4 Sep 2015 ([CRC data](#)). Specimens reportedly collected by the Knudsens on Kaua'i in the late 1800s (Stejneger 1889) may have come from Ni'ihau or offshore islets. A weak first-fall tern sitting in Kanaha Pond, Maui 27 Sep 1993 was only tentatively identified as a Gray-backed Tern, and we consider this record unsubstantiated, as with a report of a storm-driven bird at Hawaii Volcanoes NP in 1959 (Dunmire 1961). Vagrant [Common](#) and other terns in Hawaii are sometimes initially reported as Gray-backed Terns. Otherwise, there are no records of this species observed on or from any of the other Southeastern Islands. *At sea*, Gray-backed Terns are also only seen occasionally and usually in the vicinity of breeding colonies. Rowlett (2002; [HICEAS data](#)) observed them on only 11 days between 25 Aug and 16 Sep during daily censuses in Aug-Nov 2002; most of these were in the vicinity of Nihoa. King (1970) and Spear et al. (1999) did not record any in their survey areas primarily to the S and E of the Southeastern Islands.

The only records from the Hawaiian region between mid-Nov and mid-Jan involved reports from Laysan 22 Dec 1913 (Bailey 1956; Ely and Clapp 1973), 28 Dec 2000 (*E* 61:81), 19 Dec 2003 (*E* 64:65), and 5 Dec 2012. We consider three reported on the Waimea, Kaua'i Christmas Count 18 Dec 2003 (*E* 64:63) as unsubstantiated.

### [Acronyms and Abbreviations](#)

### [Literature cited](#)

Citation: Pyle, R.L., and P. Pyle. 2017. The Birds of the Hawaiian Islands: Occurrence, History, Distribution, and Status. B.P. Bishop Museum, Honolulu, HI, U.S.A. Version 2 (1 January 2017) <http://hbs.bishopmuseum.org/birds/rlp-monograph/>