TRISTRAM'S STORM-PETREL

Other: Sooty Storm-Petrel (<1992)

monotypic

breeding visitor, indigenous

Tristram's Storm-Petrels breed on islands off Japan and in the Northwestern Hawaiian Islands. They disperse at sea generally in the vicinities of breeding colonies (Harrison 1983, AOU 1998), as far S as the Marshall I (beach-cast specimen; BPBM 185080) and Kosrae (Hayes et al. 2015), and W to California (Warzybok et al. 2009, Howell 2012); Spear and Ainley (2007) recorded none during extensive coverage of the e. tropical Pacific including waters S of Hawaii. Early ornithologists visiting Northwestern Hawaiian Island breeding colonies in the summer and fall (e.g., Shaunisland 1899, Fisher 1903a, Dill and Bryan 1912) considered this species to be rare there, until Willett (1919) found substantial numbers breeding during winter on Laysan. Most birds arrive to colonies in late Oct-Nov and chicks fledge primarily in late Mar-mid May (McClelland et al. 2008). 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 et al. (1985), Marks and Leisure (1992), Rauzon (2001), Slotterback (2002), USFWS (2005b), and McClelland et al. (2008) for additional information.

In the 2000s-mid 2010s the population of Tristram's Storm-Petrels in the Northwestern Hawaiian Islands was estimated at about 6,000 breeding pairs (Table), with most of the population occurring on Nihoa, Laysan and Pearl and Hermes, and *French Frigate*, and smaller but increasing totals occurring on *Midway* and *Kure*. It is also probable that they breed on *Lisianski*, where mummified corpses have been found (Rauzon et al. 1985), and on Necker, where it is rare (Evenhuis and Eldredge 2001), but confirmation of breeding at these locations is needed. Kure and Midway likely hosted larger historical colonies which were since decimated by human activities and introduced rats. Increasing records on Midway from 1997 (when rats were removed) through the mid-2010s of carcasses, strandings, birds observed going into burrows, and birds in breeding condition caught in mist nets (Grant 1982a, Baker et al. 1997; USNM 577154, 598525; <u>HRBP</u> 1087-1088) were precursors to the discovery of three fledglings on Midway (both Sand and Eastern islands) in March 2016 (HRBP 6723-6724). Discovery of a fledgling on Kure 14 Jul 2006 (Vanderlip 2006) likewise confirmed breeding here, where rats were removed in 1994; three more were audio-taped on Kure 3 Nov 2011, and one was found dead 12 Nov 2012 (HRBP 6275-6276). During the winter of 2013-2014 over 70 Tristram's Storm-Petrels were found predated on Kure by 1-2 Short-eared Owls and at least 14 were predated by an owl during the following winter, indicating setbacks in what otherwise appeared to be a strong recovery.

In the *Southeastern Hawaiian Islands*, records of Tristram's Storm-Petrels are limited to a fledgling found on O'ahu and a few seen during one-day trips near Kaua'i. The fledgling was found at Kualoa Beach Park, e. *O'ahu*, on 8 Apr 2010 (<u>HRBP</u> 6273-6274; VanderWerf et al. 2011a). As it was very young, with some downy-tipped feathers remaining, it is possible that it fledged locally, perhaps from Moku Manu I, 13 km S of

Kualoa Beach Park, although we do not assume breeding in the Southeastern Islands based on this one record. It was rehabilitated and released into a rocky crevice at Black Point, O'ahu 15 April 2010, where it was gone on the 16th but had returned on the 17th, possibly imprinting to this crevice as a natal site (VanderWerf et al. 2011a). Off *Kaua'i*, two Tristram's Strom-Petrels were photographed foraging over a slick from a dead Humpback Whale about 30 km N of Princeville, Kaua'i 16 Feb 2015 (HRBP 6277-6286) and another was photographed in the Kaulakahi Channel 3 Apr 2016 (HRBP 6287-6289). These records lend some credence to a second-hand report of two observed in the Kaulakahi Channel 26 Dec 2001 (AB 56:237) and other reports of singles S of Kaua'i 20 Sep 2010, between Kaua'i and Ni'ihau 15 Jun 2011, and off O'ahu 28 Jun 2004, although we consider the need for photographs to confirm summer sightings in Hawaiian waters. G. C. Munro reported that he had examined specimens of Tristram's Storm-Petrels from Kaumalapau Harbor, Kaua'i, and Kahalepalaoa, Lana'i, along with several wings "most likely" of this species (Munro 1960), but Bryan (1958) questioned these identifications and the whereabouts of these specimens for verification are unknown. Gon et al. (1992) list this species from Kaho'olawe, apparently in error. Finally, a storm-petrel found alive in Hilo, Hawai'i, 9 Nov 1989, and turned into a rehabilitation station (where it died) was identified as a Tristram's Storm-Petrel (AB 44:166) but the specimen (BPBM 178294) is of a Leach Storm-Petrel with a soiled rump.

At-sea observations occur primarily in the vicinity of the breeding islands in Nov-Apr; e.g., 13 in 33 hours of observation between Midway and French Frigate in Nov 1984 (Pyle and Eilerts 1986), 43 during 7-17 Nov 1996 between Lisianski and Necker (Bailey 1996), 24 near Laysan 24 Apr 1988, 14 near Necker on 23-27 Dec 1998, and 60 near Nihoa on 4 Apr 1986. There are no reports for May-Sep, but observations off the Southeastern Islands in Jun (see above) could indicate that a few occur at this time of year. During the **HICEAS** surveys in Aug-Nov 2002 only17 Tristram's Storm-Petrels were recorded on 5 of 72 days in Northwestern Hawaiian Island waters (2 near Midway and 15 between French Frigate and Necker, 19 Oct-12 Nov), but during the HICEAS survey in 2010, >445 were recorded, including a raft of 225 sitting birds observed N of FFS 19 Oct 2010 (HRBP 6314). King (1970) and Spear et al. (1999) recorded none S and E of the Southeastern Islands, indicating that the primary at-sea dispersal of this species may be to the W and N (similar to that of Bonin Petrel). The only at-sea report closer to the Southeastern than Northwestern Hawaiian Islands is of one that landed on a ship 370 km W of O'ahu 1 Feb 1955 (E 20:75; BPBM 6659). Crossin (1974) reports observations of > 5 birds near Ni'ihau and O'ahu and several other observations of fewer individuals near the Southeastern Islands during the POBSP in the 1960's (dates not given) but no descriptions are provided to distinguish these from Bulwer Petrels, much more likely at these locales.

Acronyms and Abbreviations

Literature cited

Citation: Pyle, R.L., and P. Pyle. 2009. The Birds of the Hawaiian Islands: Occurrence, History, Distribution, and Status. B.P. Bishop Museum, Honolulu, HI, U.S.A. Version 1 (31 December 2009) http://hbs.bishopmuseum.org/birds/rlp-monograph/