breeding visitor, indigenous

monotypic

Black-footed Albatross breeds primarily in the Northwestern Hawaiian Islands, with 5% of the population breeding on Kaula Rock and Lehua Islet near Ni'ihau, in the Izu, Bonin, and Senkaku Islands off southern Japan, and occasionally (1-2 pairs) on islands off Mexico (AOU 1998, Flint 2008, Awkerman et al. 2009, ACAP 2010b, BLI 2016). Former breeding occurred on other Pacific islands, including the Mariana Is (Reichel 1991) and Johnston Atoll (where a single egg was noted in 1923; Amerson and Shelton 1976), and they have recently shown interest in recolonizing Wake Atoll (Jones 1995, Rauzon et al. 2008); reports of breeding in the Marshall Is are erroneous (Amerson 1969). They breed in Oct-Jun and are completely absent from colony sites and Hawaiian waters in mid Jul-mid Oct (e.g., Bryan 1906), dispersing primarily to coastal ne. Asian and N American waters (King 1967, Sanger 1974b, Hyrenbach et al. 2002) and as a vagrant to New Zealand (Marchant and Higgins 1990). The three N Pacific albatross species were placed with the other albatrosses in the genus *Diomedea* until the AOU (1997) split them as *Phoebastria*. Confusion about species identification resulted in many records of what were likely Black-footed Albatross in Hawaiian waters being called "Short-tailed Albatross", "D. albatrus", and/or "D. chinensis" (e.g., Peale 1848, Cassin 1858, Dole 1879, Wilson and Evans 1899) until cleared up by Rothschild (1900). Earlier, Isenbeck (in von Kittlitz 1834) noted two species of albatross on Laysan in 1828 but thought the dark one might be a Sooty Albatross (D. fuliginosa). See Bailey (1952, 1956), Cousins and Cooper (2000), Awkerman et al. (2008), Rauzon (2001), ACAP (2010b), and LeBreton and Véran (2013) for general information and recent concerns about the conservation of Black-footed Albatross.

The total breeding population of Black-footed Albatross in the *Northwestern* Hawaiian Islands showed gradually increasing trends during the 1980-mid 2010s to 65-70,000 actively breeding pairs (Fefer et al. 1987, Harrison 1990, McDermond and Morgan 1993, USFWS 2005b, Naughton et al. 2007, Flint 2008, Arata et al. 2009, ACAP 2010b, VanderWerf 2013a, USFWS data; Table), which extrapolates to a total estimated population of 275-300,000 individuals (cf. Cousins and Cooper 2000). During the late 1800s and early 1900s populations were decimated by feather hunters (Bryan 1906, 1911; Munro 1944; E 2:34, 3:12-13, 16) but recovered slowly during the 20th century. On *Midway*, for example, "a few small colonies" were present in 1913 (Bailey 1956) and populations were estimated at 2,000 pairs in 1923 (Rice and Kenyon 1962), 13,000 pairs in 1946 (Fisher and Baldwin 1946, E 6:12), 4,700-8,250 pairs during the late 1950s and early 1960s (Rice and Kenyon 1962, Robbins 1966), and generally increasing populations of 20-28,000 during the 2000-mid 2010s (Table). During the 2000-mid 2010s, atoll-wide censuses of nests by USFWS ranged from a low of 17,617 in 1999-2000 (following a food shortage in 1999) to a high of 28,610 in 2014-2015 (Flint 2008, USFWS data). It is possible that reductions following 1945 were due to culling efforts related to military air strikes (Kenyon et al. 1958, Rice 1959, Robbins 1966). Thousands of chicks and 100s of adults perished during a large tsunami in Mar 2011 (see Laysan Albatross).

Comparable numbers to those on Midway and generally increasing trends were also found on *Laysan*, where USFWS censuses from 1998-2012 ranged from 19,088 (2009) to 24,565 (2012) nests, with a mean of about 22,000 (Flint 2008, USFWS data). In *French Frigate*, censuses from 1980-2011 ranged from a low of 2760 (1996) to a high of

5725 (2008), with most counts being between 3300 and 4944 (Flint 2008, Keller et al. 2009), and with an increasing trend (Hartzell et al. 2012, Reynolds et al. 2013b). On *Kure*, counts of chicks in May-Jun between 1997 and 2011 also showed a generally increasing population, ranging from 775 chicks in 1998 to 2380 in 2009 (VanderWerf and David 2000, Vanderlip 2005, 2006, 2007, 2011; DOFAW 2012; ACAP 2010b); around 3,500 nests were counted during 2011-2016 (Saunter and Worcester 2016). Population estimates from other Northwestern Islands from 1995-2003 (Naughton et al. 2007, Flint 2008, Hartzell 2012) range from 30 on *Nihoa* (although only one chick was noted there in 2007) to 6,100 on *Pearl and Hermes* (Table). There are as yet no records for Gardner Pinnacles. 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). McKee and Pyle (2002) and Rutt (2013) discuss anomalous plumages in Black-footed Albatross and hybridization of Black-footed and Laysan albatrosses (*cf.* HRBP page and Laysan Albatross).

The only breeding among the *Southeastern Hawaiian Islands* occurs on Lehua Islet and Kaula Rock near *Ni'ihau* (Table). On Lehua, Caum (1936) noted them in 1931 and generally increasing populations of up to 39 pairs and 28 chicks were counted there in 2002-2016 (Vanderwerf et al. 2007, USNC 2016, USFWS data). Fefer et al. (1987) noted the Ka'ula populations to consist of about 100 breeding pairs, although Harrison (1990) indicated only 20-70 pairs nested there, only 9 individuals and no eggs were observed there 16-17 Nov 1998 (Flint 2008), and only 3-11 birds were noted there in Jan-Mar of 2013-2016 (USNC 2016).

One or sometimes two or more Black-footed Albatross are observed uncommonly from the shores of the *Southeastern Hawaiian Islands*, primarily from *Kaua'i* and *O'ahu*, usually among <u>Laysan Albatross</u> colonies and from boats offshore. Perkins (1903) mentioned that they were occasionally noticed on the Southeastern Islands but did not mention which ones. During the 1950s through 1980s a few were attracted to a wastewater outfall off Sand Island near Honolulu harbor, O'ahu, where up to 7 Blackfooted Albatross were recorded during <u>Christmas Bird Counts</u> until the outfall was closed in the late 1980s (see <u>Pomarine Jaeger</u>).

Birds are regularly observed off Kilauea Point NWR, Kaua'i, and have landed briefly on Mokuaeae Islet and among Laysan Albatrosses at Kilauea Point (e.g., a pair 29 Apr-1 May 2005 and several individuals through 2011) and at Pacific Missile Range Facility (e.g., Byrd and Zeillemaker 1981; also a banded bird in Feb 2006 that had been recorded at French Frigate the month before, and one observed 12 Apr 2009). An interesting record was of one found along a stream bank dead deep in the Alaka'i Swamp 7 Mar 2012 (HRBP 6045), perhaps blown there by a storm. Another interesting report was of 201 feeding in the slick of a dead Humpback Whale about 30 km N of Princeville, Kaua'i 16 Feb 2015 (CRC data; HRBP 6291-6293). There is a report of one landing on Ni'ihau in 2008 or 2009, where fully expected occasionally among breeding Laysan Albatrosses. On O'ahu, one was reportedly flushed from Mokumanu Islet 3 Jan 1900 (Seale 1900), but this could have referred to a Laysan Albatross. A bird found exhausted on Kailua Beach in April 1946 soon died (BPBM 10005; E 6:79, 7:28), and another was found at Kaneohe 30 Nov 2002, turned into the Sea life Park rehabilitation center and released on 9 Dec. Among the Laysan Albatross breeding at Kaena Point there were 34 observations of Black-footed Albatross between 2006 and 2015 (Young and VanderWerf 2016; HRBP 6042, 6145-6147). Records are from Dec-May (peaking in Feb) and have

increased during this period, especially once a social-attraction program was initiated, with decoys in 2011 and sound broadcasting in 2015 (Young and VanderWerf 2016). On *Moloka'i*, one found dead at Pa'alau SP 28 Dec 2014 had been banded as a chick on Kure Atoll the previous June. Another was found dead at Kihei, *Maui*, on an unknown date prior to 2011 (BPBM 185529) and two were observed near Kanounou Point, Maui 1 Apr 2015. Occasional birds photographed off Kona and Kawaihae, *Hawai'i I*, during cetacean surveys at all times of year during 2008-2015 (CRC data; HRBP 5632, 6043-6044, 6046-6047) include 3-6 together off Kawaihae 5 Mar 2012 (HRBP 6044); one observed off South Point 11 Nov 2011is the southernmost record for Hawaii.

At sea, Black-footed Albatrosses are commonly seen during the breeding season and in northern Hawaiian waters but rarely during times of colony absence or in waters south of O'ahu. During monthly surveys near the Southeastern Hawaiian Islands in Mar 1964-Jun 1965, King (1970) recorded 497 individuals in Nov-May, 3 in Jun, and none in Jul-Oct. During HICEAS surveys in Aug-Dec of 2002 and 2010, none were recorded during 168 days of surveying in Southeastern Hawaiian Island Waters (Rowlett 2002; HICEAS data), and Spear et al. (1999) recorded none during surveys S to SE of Hawai'i I. in spring and fall, 1984-1991.

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/