## non-breeding visitor, vagrant, bred temporarily

P.p. podiceps

Pied-billed Grebes breed throughout the Americas from SE Alaska to Argentina, with northern populations migratory (AOU 1998); vagrants have reached Europe (Cramp and Simmons 1977). The only records from the Pacific area are for the *Southeastern Hawaiian Islands*, where it has occurred relatively recently as a vagrant; a small breeding colony became temporarily established on Hawai'i I in 1985-1993 (HAS 1998-2005).

The earliest record for the Hawaiian Islands is of one bird on Morita Reservoir 4 km se. of Kilauea, *Kaua'i* 14 Dec 1974-7 Feb 1975 (E 35:119-120). It was observed molting from basic to alternate plumage by the last observed date. One on the Lumahai River estuary 14 km w. of Kilauea 17 Nov 1975-14 Apr 1976 (E 36:115; 37:63) and one near Lihue 8 Nov 1977 (E 38:101) may have been the same individual from Morita Reservoir. One observed off and on at Hanalei NWR 21 Mar 1996 to 20 Jan 1999 appeared to be a similar case of a single individual eluding detection for extended periods. On *O'ahu* 1-2 birds were at Ki'i Ponds 19 Dec 1978-20 Mar 1979 (E 40:13) and singles were observed at Kailua 1-19 Jan 1996, the Honouliuli Unit of PHNWR 6 Nov 2011-14 Mar 2012, and at Laie 13-29 Feb 2016 (HRBP 6033). On *Moloka'i* one was at Ohiapilo Pond 10 Mar 2006. On *Maui*, one was at Kealia Pond NWR and Kanaha Pond 24 Feb-12 Mar 1988; two were at Nuu Pond 29 Jul 1993; one, first recorded at Reservoir 40 near Pukalani 28 Jan 1997, appeared to stay for over 6 years, being observed off and on through 20 Aug 2003; and one was at Kanaha Pond 24 Jan-24 Feb 2010 (HRBP 6032; published NAB 64:342). On Hawai'i I, 1-2 birds were at Waiakea and Loko Waka Ponds, Hilo 19 Nov 1978-30 Mar 1979 (E 40:13, 45:71), one was at Waiakea Pond 11 Dec 2005; one was at Whittington SP 23 Oct 2011-13 Feb 2012; and 1-2 were at Waikea Pond 10 Oct 2015-19 Feb 2016, at least one remaining through 2016 (HRBP 6290).

On the west coast of Hawai'i a small breeding colony was established but extinguished during the 1980-1990s. After one was recorded at Makalawena Pond 12 Sep 1981, two were at Aimakapa Pond Oct 1983 - 7 Apr 1984 (HRBP 0332-0333, 0351-0352) and (presumably the same individuals) 7 Oct 1984 through the following winter. On 31 Mar 1985 a young juvenile was observed swimming with one adult while the other adult tended a nest with 3 eggs. The juvenile (HRBP 0455-0456) successfully fledged by late May but no other young birds were reported (AB 39:351). Presumably this same pair continued to breed actively through 1985, producing a 4-5 day old chick 27 Jul 1985, two more chicks (observed hatching but not thereafter) in mid-October 1985, and tending another nest with one egg 14 Dec 1985; yet another nesting attempt may have gone undetected in late spring or early summer 1985 (AB 40:161). An adult on a nest with 3 eggs 15 Feb 1986 had 2 immatures of different ages nearby, and other immatures could well have been hidden in the ample cover around the pond (AB 40:337, E 46:135). The population had grown to 5 birds by Feb 1987 (E 47:68), 8 plus a nest with 3 eggs 2 Apr 1987 (E 47:93), and at least 10 birds and 3 active nests in late Nov 1987 (E 48:21). Nesting continued actively but the population appeared to stabilize: 11 adults and 3 active nests were observed on 29 Jul 1988 (E 48:114) and counts of 12, 13, and 12 birds were recorded during the North Kona Christmas Counts of 1988, 1989, and 1991. An egg was found outside of a nest on 15 May 1992 (BPBM 179046) and two birds were seen on

nests 20 Nov 1993. But thereafter the numbers dropped steadily, an outbreak of botulism at Aimakapa Pond beginning in January 1994 (Morin 1994) likely being a factor. Three to 4 birds remained on Aimakapa and nearby ponds in 1999, but no more were observed thereafter and through the mid-2010s. The Pied-billed Grebe's venture into a breeding regime exemplifies how chance vagrants long ago could have colonized the Hawaiian Islands. However, earlier colonizers did not have to contend with the human-caused factors of habitat restriction, introduced predators, and disease, that helped return the Pied-billed Grebe to non-breeding visitor status after a decade of successful breeding.

The appearance of these and other Pied-billed Grebes recorded from Hawaii are consistent with the expected migratory nominate North American subspecies. Two other subspecies occur in the Caribbean and South America.

## 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/