## KAUA'I NUKUPU'U

# Hemignathus hanapepe

Other: Nukupu'u (< 2015) monotypic

## native resident, extinct

The nukupu'us collectively consist of three taxa, on Kaua'i, O'ahu, and Maui, that have largely been considered subspecies, until 2015 when, following Pratt (2005, 2014), they were split into three species by the AOU (2015). See O'ahu Nukupu'u for more information. On Kaua'i, Wilson (1889b) collected five Kaua'i Nukupu'us near the Kaholuamanu House (Evenhuis 2007:225) at about 1100 m elevation in Waimea Canyon, and considered it a separate species from the O'ahu Nukupu'u (described in 1837), naming the Kaua'i bird H. hanapepe. At the same time Stejneger (1889), based on earlier specimens collected by the Knudsens, was struggling with whether or not the Kaua'i Nukupu'u and Kaua'i 'Akialoa were different species or different sexes of the same species, and missed his chance to name the nukupu'u. Wilson (1890a) and the other early collectors (Wilson and Evans 1899; Rothschild 1900; Perkins 1903, in Evenhuis 2007:286; Munro 1944; see Banko 1984c) considered Kaua'i Nukupu'u rare to uncommon and primarily restricted to higher elevations in the west-central portion of the island, but occasionally as low as 600 m elevation (Perkins 1903, in Evenhuis 2007:346); the last two specimens were secured by Munro near Makaweli on 6 May 1899.

Bryan and Seale (1901), Munro (1944), and others (e.g., E 27:45, 47) failed to locate the Kaua'i Nukupu'u despite extensive searches. Beginning with a "fleeting glimpse" of two birds on 16 Aug 1960 (Richardson and Bowles 1964), there have been at least 26 sight records of Kaua'i Nukupu'u in the upland forests of Kaua'i through Jan 1996 (e.g., E 22:3, 26:29, 29:20, 37:107; Conant et al. 1998), although Sincock et al. (USFWS 1983c) did not record any confirmed observations in over 500 days of extensive fieldwork in 1968-1975. We follow Pratt and Pyle (2000) in considering these unsubstantiated, and we presume it went extinct in the early 20th century. Confusion with the similar 'amakihis, which can sometimes have abnormal bills, seems to be the primary source of misidentifications of nukupu'us on both Kaua'i and Maui (Pratt and Pyle 2000; also, cf. Olson and James 1994b regarding the interpretations of Cassin). Based on Poisson analyses of persistence probabilities using confirmed and unconfirmed records, Elphick et al. (2009) estimated that the Kaua'i and/or Maui nukupu'us went extinct in 1901, with an upper limit of 1906; see also Scott et al. (2008) and Roberts et al. (2010). Although proclaimed "extinct" by the USFWS in 1966 (Banko 1968), the Kaua'i Nukupu'u was subsequently listed as endangered by the USFWS in 1967 and by the State of Hawaii in 1982, and it continues to be so listed in the extremely remote chance that it is extant (USFWS 1983c, 1984d, 2006).

#### 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) <a href="http://hbs.bishopmuseum.org/birds/rlp-monograph/">http://hbs.bishopmuseum.org/birds/rlp-monograph/</a>