KAMA'O

Other: Hawaiian Thrush (1983-1985), Large Kaua'i Thrush

monotypic

native resident, endemic, endangered, presumed extinct

Thrushes appear to have colonized the Hawaiian Islands based on one or two invasions of solitaires (*Myadestes*) from N America (Stejneger 1887a, 1889; Amadon 1942, 1950; Pratt 1982; Fleisher and McIntosh 2001). The taxonomy of the thrushes within Hawaii is currently clouded by the paucity of specimens of some forms and divergent views on what level of distinction each taxon should be recognized (Wakelee and Fancy 1999). Along with placing these species in *Myadestes*, the AOU (1985) followed Pratt (1982) in splitting the single species *Phaeornis obscurus* (Oma'o) into five species, one of which (Oloma'o) is polytypic, but confirmation of this based on genetic analysis is needed. Four of these species, comprising the "Hawaiian-Thrush group", are more closely related and considered variously conspecific by some authors (see <u>Synonymies</u>). *Kaua'i* is the only island that hosts two species of native thrushes, the Kama'o, of the Hawaiian-Thrush group, and the relatively distinct <u>Puaiohi</u>.

A Kama'o was first collected by Townsend (1839) in 1835 (Banko 1979; cf. Olson and James 1994a), but Cassin (1858) considered it to be a female Oma'o from Hawai'i I, and it was thus left to Stejneger (1887a, 1889) to describe the Kama'o as a new species, the "Flycatching Thrush", based on additional specimens secured by the Knudsens. Early naturalists (Perkins 1903 and Munro 1944, in particular) considered the Kama'o to be very common and widespread during the 1890s, perhaps the most common landbird on Kaua'i (Denny 1999), but as with so many other species of Hawaiian passerines, populations appeared to plummet during the first two decades of the 1900s. Bryan and Seale (1915) collected just two during a three-week trip and Munro (1944; E: 8:6-7, 24:29) found none at low elevations during several trips in 1928-1931. By this time the species had apparently withdrawn to the Alaka'i Swamp region above 1200 m elevation, where small to moderate numbers persisted through the 1950s (e.g., E 2:52, 6:10, 8:17, 21:8-9, 26:29-31; Munro 1944; Banko 1980d). Although the HAS (1959) presumed it extinct, Richardson and Bowles (1964) found them and estimated the population to number "at least some hundreds, if not a few thousands" during the summer of 1960. But despite its entire range being protected and little obvious changes to the habitat within its range (Scott and Kepler 1985, Scott et al. 1985), the Kamao populations continued to plummet. By 1968-1973 Sincock et al. (USFWS 1983c) estimated only 337 (292 of which were in the se. portion of the Alaka'i Swamp), and by the HFBS in 1981 Scott et al. (1986) estimated only 24 birds in an area in which Sincock had estimated 173. The Kama'o was listed as endangered by the USFWS in 1970 and by the State of Hawaii in 1982 (USFWS 2006). A few were observed through the early 1980s in the Alaka'i Swamp (E 46:136, 47:94), and through the summer of 1987, when a single male was tape recorded on several occasions through 27 Jun 1987 and three were observed. We consider subsequent reports through 1995 (cf. USFWS 2006; HWN 4[2]:10) as unsubstantiated. Extensive searches for endangered species in the Alaka'i Swamp in the 1990s failed to turn up any Kama'o (E 53:49; HFW 7[3]:1, 8[1]:12; Wakelee and Fancy 1999, Reynolds et al. 1997b; Reynolds and Snetsinger 2001, Foster et al. 2004, USFWS 2006) and we

presume that the Kama'o is now extinct. Based on Poisson analyses of persistence probabilities using confirmed and unconfirmed records, Elphick et al. (2009) estimated that the Kama'o went extinct in 1991-1999, with upper limits of 1999-2030.

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/