Other: Hawaiian Thrush (1983-1985) monotypic

## native resident, endemic

The O'mao is endemic to upper-elevation forests of *Hawai'i I*, where it remained fairly common in 2016; it is probably the last extant member of what was long considered a single species, the "Hawaiian Thrush" (see 'Amaui, Kama'o, and 'Olomao). It was first mentioned by C. Clerke (*in* King 1779), first collected near Kealakekua Bay by Banks during Cook's third voyage (Stresemann 1950, Medway 1981), and was eventually named by Latham (1783), Gmelin (1789), and Sclater (1859) as *Phaeornis obscura*, by which it was known for nearly 200 years (see Synonymies). Pratt (1982) augmented previous studies (Stejneger 1887a, 1889; Amadon 1942, 1950) suggesting a close relationship between *Phaeornis* and *Myadestes*, the solitaires of N America, and merged the two genera, an opinion followed by the AOU (1985, 1998) and supported by subsequent taxonomic work (James and Olson 1991, Fleisher and McIntosh 2001).

Sclater (1881) reports on five specimens of Oma'o collected in Hilo in 1875, suggesting that they were at the time found to sea level or close to it. Collectors near the turn of the 19th century (Wilson and Evans 1899, Rothschild 1900, Henshaw 1902a, Perkins 1903) reported them to be common and ubiquitous throughout the island of Hawai'i, generally between 300 and 2000 m elevation. Individuals more recently found in alpine scrub at elevations of 2000-3000 m elevation on Mauna Loa (Dunmire 1961, van Riper and Scott 1979, Conant 1976, 1981) may represent a distinct population, although Perkins (in Evenhuis 2007:277) speculated that they might have undergone some altitudinal movements. Banko (1979, 1980d) summarizes early records and information, including those pertaining to 180 specimens known in collections.

As with other native landbirds, populations of O'mao declined and became more restricted throughout the 20th century (van Riper and Scott 1979, Scott and Kepler 1985), although not as severely as occurred with other native thrushes. It was collected and observed in the Kohala Mts in the late 1800s (Wilson and Evans 1899, Rothschild 1900, Perkins 1903) but they were not recorded there in the 20th century and are presumed extirpated in this are of the range (van Riper 1982a, 1982b; Scott et al. 1986). O'mao were observed commonly near Kona in the late 1800s (e.g., Perkins 1893) but, aside from occasional short-distance dispersants from nearby Ka'u populations (Scott et al. 1986), they were not recorded on the w. slopes of Mauna Loa until a population was discovered in 2010 in the high-elevation Northwest Kahuku and Papa tracts on the SW slopes of Mauna Loa (Camp et al. 2012). Elsewhere on Hawai'i, populations stabilized during the 20th century at elevations above 700 m (e.g., Baldwin 1941; Munro 1944; Berger 1969, 1972, 1981; Pratt et al. 1977; Banko 1980d, Scott et al. 1985; E 11:62-64, 28:107, 35:137-138, 36:62), with some observations as low as 300-500 m elevation (Reynolds et al. 2003). During the HFBS in 1977-1979, Scott et al. (1986) estimated a population of 169,000 O'mao in two or three disjunct populations along the e. slopes of Mauna Loa and Mauna Kea, with highest densities recorded in the Ka'u district (see also Ralph and Fancy 1994a). Through the mid-2010s the population continued to be relatively stable (Ralph and Fancy 1994a; Wakelee and Fancy 1999; Camp et al. 2009, 2010a; Gorresen et al.

2009), although declining in grazed areas above Hawaii Volcanoes NP (Camp et al. 2010b) and in the Volcano area during 1971-2014 according to Christmas Bird Count data (Graph). Declines are perhaps related to the removal of understory food plants from these regions (Ralph and Fancy 1994a); however, some detected resistance to diseases such as malaria (Atkinson et al. 2001) may be a sign of hope for this species in the future. During 2010-2016 small to moderate single-day counts (usually < 10 but sometimes up to 20 or more) were being observed in most high-elevation cloud forest areas, with high counts of 41 in Hakalau Forest NWR on 4 Aug 2015 and 45 in kipukas in the Hilo and Upper Waiakea Forest Reserves, off Saddle Road, on 24 Apr 2011.

## **Acronyms and Abbreviations**

## Literature cited

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