MAUI PARROTBILL

Other: Parrot-billed Koa Finch

monotypic

native resident, endemic, endangered

In the 1990-2000s the Maui Parrotbill was restricted to an estimated 50 km² area between 1,200 and 2,350 m elevation on the N slopes of Haleakala, Maui (USFWS 1984d, 2006; Scott et al. 1986; Simon et al. 1997). They show up in the subfossil record on Moloka'i and both slopes of Mt. Haleakala down to 200 m elevation (Olson and James 1982b, James et al. 1987, James and Olson 1991), suggesting that they may have been widespread on Maui Nui before it submerged into four separate islands. Destruction of koa trees (Henshaw 1902a) and disease may have forced them to higher elevations relatively recently. Early naturalists (Rothschild 1900, Perkins 1903) noted that the parrotbill was close in structure to *Hemignathus* (nukupu'us; see Synonymies) but that it may also have been a transitional taxon between thin-billed and thick-billed Drepanines. Later taxonomists (e.g. Amadon 1950, Raikow 1977) considered them closer to the thickbilled honeycreepers (e.g., *Psittirostra*) but recent analyses suggest that the earlier naturalists were correct, its closest relative possibly being the Akiapola'au (Zusi 1989; Simon et al. 1997; Fleisher et al. 1998; Pratt 2001, 2005; James 2004). Palmer collected the type specimen 1 Aug 1892 and, unique among Drepanines, the original scientific name Pseudonestor xanthophrys (Rothschild 1893e) has been retained by all subsequent taxonomists (see Synonymies).

Early naturalists were fairly consistent in regarding Maui Parrotbill as a rare bird (Perkins 1895, 1903; Henshaw 1902a; *cf.* Banko 1986). Never-the-less, these naturalists collected at least 34 specimens (Banko 1979), primarily if not entirely upslope of Olinda in the Waikamoi watershed, now regarded as the w. end of the species' range. Following these early collections there were no observations of Maui Parrotbills, despite valiant attempts by Munro (1944, *in* Gregory 1929; *E* 2:47-48), until Richards and Baldwin (1953) collected one at 1940 m elevation in the upper Hanawi watershed 4 Dec 1950, near the heart of the parrotbill's range in the 2000s.

Another 27 years would pass before the next observation occurred, by Banko (1968; *E* 29:79-80) in upper Kipahulu Valley 29 Aug 1967, near the e. end of the parrotbill's range. Thereafter Maui Parrotbills were observed in small numbers by most ornithologists visiting the upper N slopes of Haleakala through the mid-2000s (Berger 1972, 1981; Scott and Sincock 1977; Conant and Stemmermann 1980; Carothers et al. 1983; Scott et al. 1986; USFWS 1984d, 2006). Based on HFBS data from 1980, Scott et al. (1986) estimated a total population of about 500 individuals and found highest densities at 1700-2100 m elevations (see also Mountainspring 1987). Simon et al. (2002) and others (USFWS 2006) found similar densities (about 0.4 birds per hectare) within the upper Hanawi watershed in 1992-1997, perhaps indicating a stable population, but numbers at lower elevations within the range have apparently decreased due to malaria, degradation of habitat by ungulates, and other factors (Scott et al. 1985), the population may not be stable (Gorresen et al. 2009), and low reproductive success may cause extinction within 20-40 years if it doesn't improve (*HE* 18[3]:3-4). Predation of a nestling parrotbill by a Short-eared Owl has been observed (Mounce 2008).

Attempts to propagate Maui Parrotbills began with the successful hatching of a chick in captivity in Mar 1999 (E 59:29) and a small captive breeding population was established by 2001 (USFWS 2006, Lieberman and Kuehler 2009). Land has been set aside on the leeward side of Maui for restoration and reintroduction, and translocation of individuals to W Maui and Moloka'i is being considered (HE 18[3]:3-4, Pratt et al. 2009a). The Maui Parrotbill was listed as endangered by the USFWS in 1967 and by the State of Hawaii in 1982 (USFWS 1984d, 2006).

Acronyms and Abbreviations

Literature cited

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