

HAWAIIAN HAWK

Buteo solitarius

Other: 'Io

monotypic

native resident, endemic, endangered

The Hawaiian Hawk is endemic to the *Southeastern Hawaiian Islands*, currently breeding only on Hawai'i I (AOU 1998, Clarkson and Laniawe 2000, Klavitter 2009), although the subfossil and fossil records also indicate prehistoric occurrence of Hawaiian Hawk on at least Kaua'i and Moloka'i (Olson and James 1982b, 1996; Burney et al. 2001), with another species of *Buteo* occurring on O'ahu (James 1987, Olson and James 1991, 1996). The Hawaiian Hawk is thought to be most closely related to Short-tailed Hawk (*B. brachyurus*), both being part of a clade of several American species including Swainson Hawk (*B. brachyurus*; Griffin 1985, Clarkson and Laniawe 2000, Fleisher and McIntosh 2001, Riesing et al. 2003). Swainson Hawk was thought the closest relative by earlier naturalists (Bryan 1940).

Hawaiian Hawk on Hawai'i I was first acknowledged, collected, and described by Peale (1848), who noted that it appeared to show all the characteristics of *Buteo*. Cassin (1858), however, "through some strange misconception" (Sclater 1879), assigned it to *Pandion* ([Ospreys](#); see also Sclater 1871) and likened it to sea-eagles of Asia (now *Ichthyophaga*), but it was later re-assigned to *Buteo* (details in Sclater 1878, 1881; see also [Synonymies](#)). What is now considered the type specimen was collected by the missionary Cochran Forbes at Kealakekua Bay in the 1830s and brought back by Townsend (ANSP 2304; [HRBP](#) 5637-5639 of specimen), to replace those lost by Peale when the vessel *Peacock* returning with most of Peale's notes and specimens, sank at the mouth of the Columbia River. The type specimen is a pale-morph bird prepared with erected crest feathers, perhaps leading Cassin to his misidentification of it as *Pandion*. Wilson and Evans (1899) provide further details on the early history, Henshaw (1902b) and Banko (1980c) summarized historical accounts and natural history, and Clarkson and Laniawe (2000) summarized the biology and conservation of the Hawaiian Hawk. Banko (1979) summarizes 99 specimens of Hawaiian Hawk known from collections at the time.

On *Hawai'i I*, Hawaiian Hawks are found throughout the island, particularly along the Hamakua coast from Hilo to the Kau Desert, and in sw. portions, with higher densities in upland forested areas and lower densities in grasslands and sugar cane fields (Griffin 1980; Morrison 1969; Berger 1972, 1981; Scott et al. 1986; Klavitter et al. 2003, Klavitter 2009; *FN* 52:505). They have been observed above tree line to elevations >2740 m on the e. slopes of Mauna Kea (*E* 40:15). They are usually found in singles or pairs, with family groups of up to 6 occasionally reported (see Baldwin 1969a). Munro (1944) inferred that numbers had declined between the 1890s and 1940s, Baldwin (1969a) felt the population had increased between 1949 and 1968, at least in Hawaii Volcanoes NP, Scott et al. (1985) considered the population "healthy", Hall et al. (1997) thought the population had remained stable during the 1980s and early 1990s, and [Christmas Bird Count](#) data from the Volcano area indicates a non-significant increase in populations between 1972 and 2007 ([Graph](#)). More-recent population estimates include 1400-2500 (USFWS 1984), 2700 (Griffin 1989), 1600 (Hall *et al.* 1997), 1233 (USFWS 1998), 1450 in 1998 (Klavitter et al. 2003) reanalyzed to 3239 by Gorresen et al. (2008), and 3085 in 2007 (Gorresen et al. 2008); all agree that populations are stable (BLI 2009, Klavitter 2009). It was listed as a Federally Endangered Species in 1967 (USFWS 1984) but was

unsuccessfully proposed for down-grading to Threatened from this list in 1993 and proposed for removal in 2008 (Klavitter et al. 2003, USFWS 2008b, Klavitter 2009).

Although they must have survived historically preying upon native birds (perhaps largely rails and other flightless species), they currently prey primarily on non-native birds, mammals, crayfish, and insects (Tomich 1971a, Griffin et al. 1998, Clarkson and Laniawe 2000). Perhaps reflecting ancestral foraging habits, they have preyed upon fledgling [Hawaiian Crows](#), hampering restoration efforts for that species (Banko 2009). During the [HBFS](#), Scott et al. (1986) found that dark-morph individuals outnumbered light-morph individuals throughout Hawai'i I by approximately 2:1.

A number of reports of Hawaiian Hawk exist for the other Southeastern Hawaiian Islands. Many were not adequately described and some involved observers that lacked previous experience with the species and may have mistaken [Short-eared Owls](#) for hawks (*cf. E* 36:22-23). Some were of well-observed and well-described birds but were reported provisionally. None of the descriptions completely eliminated other migratory species of hawks that might occur in the Hawaiian Islands and, without specimen or photographic evidence, all reports away from Hawai'i I are considered unsubstantiated here.

See Banko (1980c) and Medway (1981) for accounts of Hawaiian Hawk by early naturalists from Kaua'i and Maui during the 1700-1800s, including two "large brown hawks or kites" reported from Waimea, Kaua'i in Jan or Feb 1778 by W. Anderson on Cook's third voyage (in Cook and King 1784:227), none of which has validity as Hawaiian Hawks (Rothschild 1900). More-recent reports exist for all other populated Southeastern Islands: Kaua'i at Waimea Canyon 22 Jan 1962 (*E* 22:83) and 27 Apr 1989, along the nw. coast 25 May 1974 (*E* 35:139-140), and near Pakala 13 Jan 1987; O'ahu over the Waiawa Unit of PHNWR 28 Sep 1977 (provisional but possibly valid as aided by favorable winds and smoke from a volcanic eruption on Hawai'i; *E* 38:67, *AB* 32:265, Berger 1981); Moloka'i near Kawela 10-15 Oct 1997 and over Kaunakakai 9 Nov 2004; Lana'i at Lana'i Hale about 1 Feb 1985 and in the central portion of the island 20 Apr 1992; and Maui near Hana in 1956-1957 (2 birds), between Kaupo and Kanaio 10 Apr 1968 (*E* 28:109), in the Kaupo Gap in Haleakala NP 2 June 1971, flying from Hana toward Hawai'i I 1 Feb 1977 (*E* 37:138), at Olinda 14 Oct 1988, at Ma'alaea 28 Feb 1993, at Hosmer Grove in Haleakala NP 10 Jul 1994, at Ulupalakua 11 May 1997, and in Kipihulu Valley Sep 2004-7 Mar 2005. That Hawaiian Hawks are relatively frequently reported from islands closer to Hawai'i suggests that some of these records may be correct; the Olinda and Ulupalakua, Maui, birds were both reported by experienced observers familiar with Hawaiian Hawk. A report from Midway sometime in 1928-1931 probably referred to another raptor.

Henshaw (1901c, 1902c) reported incidences of hawks that he inferred were Hawaiian Hawk landing on ships 350-700 km E of Hawai'i I, one of which preyed on seabirds until reaching the California coast. This was used as evidence that the species could reach California, where one was supposedly collected and described as a new genus and species, "*Onychotes gruberi*" by Ridgway (1875; see [Synonymies](#)). But it is much more likely that the birds described by Henshaw were [Peregrine Falcons](#). Olson (1990) provides further information discrediting the report from California, which had continued to persist in the literature (e.g., Grinnell and Miller 1944).

[Acronyms and Abbreviations](#)

[Literature cited](#)