

## HAWAIIAN COOT

*Fulica alai*

Other: American Coot (<1993) '*Alae ke'oke'o*, monotypic  
'*Alae kea* (adult, with white shield), '*Alai awi* (juvenile, with dark shield)

### **native resident, endemic, endangered**

The Hawaiian Coot was given full species status by the AOU (1993) following the recommendations of Pratt (1987). This endemic species has been recorded on all *Southeastern Hawaiian Islands* except Kaho'olawe, and has occurred sporadically as a vagrant to the Northwestern Hawaiian Islands, as far west as Kure. Coots in Hawaii were first noted by C. Clerke (in King 1779) as "the common water or darker hen", and also by de Freycinet (1819). Bloxam (1827a, 1827b) may have collected a specimen in Pearl Harbor in May 1825 (Banko 1979 but see Olson 1996a); Bloxam considered it a "Common bald-coot" (Eurasian Coot, *F. atra*), and did not save a specimen. The Hawaiian taxon was thus not described until Peale (1848) distinguished and named it "*F. alai*" "with some doubt" based on four specimens collected in 1840-1841 during the U.S. Exploring Expedition. It was recognized by early naturalists as a species, but was considered a subspecies of American Coot by Bryan and Greenway (1944) and subsequent authors through 1987 (see [Synonymies](#)). Two morphs have been identified in Hawaii based on shield color (Pratt 1987; [HRBP](#) 0299-0300, 0334), and these were recognized by the early Hawaiians, who gave them different names (Perkins 1903; see above). A species of *Fulica*, perhaps not Hawaiian Coot, in the fossil record of O'ahu, dates back 120,000 years (H. James 1987, Hearty et al. 2005).

As with the [Hawaiian Moorhen](#), the Hawaiian Coot is most common on Kaua'i and O'ahu, where it is found in wetlands throughout the islands (Schwartz and Schwartz 1949, 1952; Berger 1972, 1981; Shallenberger 1977a; Banko 1987c, Taylor 1998; Pratt and Brisbin 2002). Richardson and Bowles (1964) recorded one along a stream at 1,000 m elevation on Kaua'i. [DOFAW Waterbird Surveys](#) have tallied as many as 4,466 birds in 1983 (Pratt 1987, USFWS 2005) during an irruption of the population (Engilis and Pratt 1993), but most counts have estimated 2,000-2,500 individuals in the 1970s-1980s (Berger 1972, 1981; HAS 1978-1989; USFWS 1978; Banko 1987c) and 1,500-3,000 through the mid-2010s (e.g., USFWS 2005, 2011). Wide inter-annual and inter-seasonal fluctuation in counts relates to occasional years of high reproductive success and, to a lesser degree, inter-island movements responding to seasonal fluctuation in habitat availability (Udvardy 1960a; Byrd et al. 1985; Pratt 1987; Griffin et al. 1989; Engilis and Pratt 1993; USFWS 2005, 2011). Most breeding occurs in spring and summer, although downy young have occasionally been noted during winter months as well. Time-series analyses by Reed et al. (2007, 2011) indicated that Hawaiian Coot populations increased between 1957 and 2004, with the primary increasing trend beginning in 1975, shortly after it was afforded Endangered-Species status (USFWS 1978, 2005, 2011), but that numbers were still lower than those estimated during the first half of the 19th century (VanderWerf 2013a).

High counts on *Kaua'i* include 500-600 noted on a lagoon near Lihue in 1891 (Munro 1944), 1,100 at Waikita Reservoir in Jan-Feb 1977 (*AB* 31:376), up to 1,700 at

Hanale'i NWR during the late 1990s, although populations appear to be declining in this area ([Graph](#)), with high counts not exceeding 150 during the late 200s and early-to-mid 2010s. [DOFAW Survey](#) estimates in the 2000s fluctuated between 200 and 700 individuals island-wide. These population fluctuations on Kaua'i may be accounted for by dispersal to seasonal wetlands on *Ni'ihau* (*AB* 31:376), where coots are sparse when dry (*E* 1[2]:4, Fisher 1951) but abundant when wet (Munro 1944). Counts during aerial [DOFAW Surveys](#) there have ranged from 4 (in 1978) to 692 (1982) during summer counts and 1 (1979) to 949 (1986) during winter counts (see also Engilis and Pratt 1993; USFWS 2005, 2011). On *O'ahu* (see [HRBP](#) 5708), single-location counts formerly exceeded 1,000 individuals; e.g., >1,000 at Kaelepulu Pond near Kailua in Jan-Apr 1947 before it was developed in 1959 (becoming "Enchanted Lake"; see [Graph](#)) and 2,000 at Salt Lake, Moanalua in Dec 1958 (*E* 7:55, 7:59, 19:47; Udvardy 1960a). More recent high counts have included 672 at Amorient Aquafarm NW of Kahuku on 12 Jun 1985 and 525 at Kuilima on 22 Feb 1998; during the early-to-mid 2010s high counts were lower, reaching 122 at Kuilima in Oct 2012, 154 at the Ki'i Unit of JCNWR in Oct 2015, and 227 at the Honouliuli Unit of PHNWR in Apr 2013; [DOFAW Surveys](#) tallied 500-1,000 birds island-wide during the 2000s. They appear to have increased between 1974 and 2014 in the Pearl Harbor vicinity, as reflected by data from the Waipi'o [Christmas Bird Count](#) ([Graph](#)).

Hawaiian Coots become less common on islands to the SE of O'ahu, where wetland habitats are increasingly restricted. Recent high counts have included 321 on *Moloka'i* statewide ([DOFAW Survey](#), Aug 1983) and 121 at the Kaunakakai STP in Jul 2012 (see also Dibben-Young 2015); 701 on *Maui* (Kealia NWR, 1 May 2008; see also [HRBP](#) 5821) and with counts there up to 320 (in Dec 2015) during the early-to-mid 2010s, and 196 on *Hawai'i* ([DOFAW Survey](#), Jan 1998); also 196 on Aimakapa Pond in Sep 1985 (Paton et al. 1985) and 128 at the Kona STP in Sep 2011. Monthly counts on Maui indicate winter influxes from other island populations (USFWS 2005, 2011), presumably mostly from Moloka'i and O'ahu. An early account on Hawai'i I was that of E.J. Stimson of the U.S. Expedition, who found it "in considerable numbers tending their young at a fresh water pond near Hilo" in Mar 1856 (Cassin 1862). Munro (2007) failed to see a coot in 18 years (1911-1929) on *Lana'i*, but creation of the WTP in Lana'i City in 1989 provided new habitat, which was quickly colonized by coots; up to 74 individuals were recorded on island-wide on a [DOFAW Survey](#) in Jan 1996, 68 were counted there in Nov 2010, and breeding was confirmed there in Apr 2005 and Jul 2014. There have been no verified reports of Hawaiian Coots from Kaho'olawe. Occasional outbreaks of botulism result in the deaths of up to 100 Hawaiian Coots (e.g., Kona STP, Hawai'i, in 1997; Kanaha Pond, Maui in 1999; and Kealia Pond, Maui, in 2000; *E* 60:81, 78:58-59; *HFW* 9[1]:7) but they appear to recover from these epidemics fairly quickly.

There are at least 16 records of up to 21 coots in the *Northwestern Hawaiian Islands*, many of which have been critically identified as Hawaiian Coots and none of which have been suspected or confirmed as Eurasian or American coots. On *Kure*, one was present from at least Feb-Sep 1983 ([HRBP](#) 0357, 1403; showing bill and plumage indicating a Hawaiian Coot; Pyle 1984); on *Midway* one was caught in 1928, 2-3 were present 6-14 Jul 1983, one was present 26 Aug - 26 Sep 1996, and one arrived in Jul 2011 ([HRBP](#) 6373-6374); on *Pearl and Hermes* one was reported in Jun 1983; on *Laysan*

individuals were present in Jun-Aug 1983 (3; [HRBP 0297-0300](#)), Sep 1988 - Nov 1990 (up to 3; [HRBP 0823-0827, 0921-0923](#)), Aug-Sep 1996, Sep 2006 ([HRBP 5314-5315, 5551](#), published *NAB* 61:164), and 16-21 Sep 2011 (present upon arrival on the 16th; Rutt in press; [HRBP 6375-6376](#)); and at *French Frigate* one was reportedly collected 11 Aug 1965 (USNM 503194, specimen not found in 2004; Clapp and Woodward 1968) and individuals were present Jun 1983 - Mar 1984 ([HRBP 0986](#)), 11-30 Aug 1988 ([HRBP 0877](#); found dead on last date), and 21 Jan-2 Feb 1989. Examination of photographs, the Jun-Aug arrival dates for many of these records (prior to southbound migration in American and Eurasian coots), and the coincidence of records with irruptions of Hawaiian Coots in 1983, 1988-1990, 1996, and 2011 indicate that these birds originated primarily if not entirely from the Southeastern Hawaiian Islands.

#### [Acronyms and Abbreviations](#)

#### [Literature cited](#)

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