## **BLACK-CROWNED NIGHT-HERON**

Other: 'Auku'u, 'Auku'u kohili (kahili)

N.n. nyctircorax

## native resident, indigenous

A worldwide species, Black-crowned Night-Herons live in the Americas from southern Canada to southern Chile and in Eurasia and Africa east to the Philippines, E Indies, and the Hawaiian Islands (Dement'ev and Gladkov 1951a, Cramp and Simmons 1977, AOU 1998). Vagrants have reached Clipperton I (Howell et al. 1993) and Micronesia E to Pohnpei (Wiles 2005, VanderWerf et al. 2006a, Pratt et al. 2010). Up to four subspecies have been described; the Hawaiian population has been referred to the N America subspecies "N. n. hoactli" (cf. Rothschild 1900; AOU1975; Berger 1972, 1981), although this subspecies is doubtfully distinct from the nominate subspecies of Eurasia (Pyle 2008) and we consider these synonymous. Black-crowned Night-Heron is thus the only resident species in Hawaii that is not endemic to the archipelago at the subspecies level at least, suggesting very recent colonization or continued genetic infusion based on the arrival of migrants. Cook (1784:228; cf. Wilson 1977) was the first to note this species on Kaua'i in Jan 1778, and Stejneger (1887a) was the first to correctly identify it in Hawaii; it had been previously assigned to Ardea sacra and/or Ardea exilis by Peale (1848), Cassin (1858), Gray (1859), Dole (1869, 1879), Finsch (1880), and others, including confusion about "white forms" and juveniles (perhaps other species of egrets), and including the naming of adults and first-year birds as different species (see also Snowy Egret, Least Bittern, Pacific Reef-Heron, and Green Heron).

In the *Southeastern Hawaiian Islands* this ubiquitous heron, locally known as 'Auku'u, forages along edges of suitable ponds, canals, ditches, shorelines, marshy wetlands and, on streams in the mountains, where they have been noted breeding up to 300 m elevation (Perkins 1903, Shallenberger 1977b). They usually appear singly, sometimes several at a favored wetland, and occasionally many more concentrated around ponds with abundant prey. Control programs have occasionally been instigated at aquafarms and fish hatcheries around the state. They are also frequently seen and occasionally nest on offshore islets with seabird colonies (e.g., E 41:64, 44:45, 50:77, 52:38; VanderWerf et al. 2007), where they prey upon shearwater and tern chicks and are consequently mobbed by adults of these species.

Black-crowned Night-Herons are observed commonly on *Kaua'i*, *O'ahu*, *Moloka'i*, *Maui*, and *Hawai'i* and reported sparingly (when observers are present) on *Ni'ihau*, *Lana'i*, and *Kaho'olawe*. The earliest known specimen is a male taken on Kaua'i 24 Mar 1895 (BPBM 66), relatively recently for a resident bird. Hanalei NWR on Kaua'i, an aquafarm near Kahuku, O'ahu, and Kealia Pond NWR, Maui, have been favored localities, with <u>DOFAW Waterbird Survey</u> counts of over 100 recorded at each location during 1980-2007. Other high counts for Kealia, and the largest single-locality counts for Hawaii, include 343 on 16 Mar 1977 (*E* 38:57) and 378 on 1 Jun 1998. Islandwide high counts on DOFAW surveys include 150 on Kaua'i (Aug 1995 and Jan 2004), 515 on O'ahu (Aug 1989), 92 on Moloka'i (Jan 1993), 42 on Lana'i (Aug 2007), 390 on Maui (Jan 2005), and 57 on Hawai'i I (Aug 2006) where wetland habitats are sparser than on the other older islands. Shallenberger (1977a) noted that populations had declined statewide through the first half of the 20th century and Engilis and Pratt (1993) recorded an increasing population trend from 1978-1985 but a decreasing trend from 1985-1988. <u>Christmas Bird Count</u> data indicate a moderate but significant increase from 1948 to 2014 at Honolulu (<u>Graph</u>) but no trends on Kaua'i or at Waipi'o, O'ahu (<u>Table</u>). <u>DOFAW</u> <u>Waterbird Surveys</u> indicate cyclic patterns statewide, with counts in the 300s during the early 1980s, a high count of 740 in Aug 1989, a low of 280 in Jan 1997, and another peak of 660 in Aug 2005.

Night-herons are not common on Ni'ihau, Munro stating during a visit in Nov 1939 that they seldom visit the island (E 1[2]:2-4). Fisher (1951) found only one individual during a visit 12-16 Aug 1947, commenting that the absence of streams and permanent water on the island makes it almost uninhabitable for this species and that the Apana Reservoir (where formerly there had been a colony) was dry; only four have been recorded during aerial DOFAW Waterbird Surveys there, on 5 Aug 1976, 14 Jan 1977, and 1 Aug 1979 (2 birds). They are also recorded occasionally in small numbers on Lehua Islet. Prior to the 1940s night-herons were rarely seen on Lana'i (Munro 1944, 2007) where natural streams and wetlands were absent from most of the island, but in 1977-1984 they were reported commonly along the remote NE coast near Keomuku and the SE coast near Naha. Installation of water treatment ponds near Lanai City in 1989 has provided some additional habitat for this species, resulting in a gradual increase in numbers according to DOFAW surveys and a high count of 45 there 22 Nov 2010. A night-heron flew from Maui toward Lana'i 27 Feb 1979 (E 40:14), indicating inter-island movement. Kaho'olawe lacks natural wetlands and has few visiting observers but has hosted at least 7 records of night-herons at beaches on the NW and SE coasts in Aug and Nov 1978 (Environment Impact Study Corp 1979), Apr 1980 (E 59:22), Jan and Sep 1988, and Mar 1992 (Gon et al. 1992), where they were likely feeding in the intertidal zone. On Hawai'i, an unusual observation was of night-herons perched on ohia trees near Kilauea Volcano (1200-1400 m elevation) in May and Oct 1978 (E 40:14).

Black-crowned Night-Herons have reached the *Northwestern Hawaiian Islands* only as vagrants. At *Kure* a partially decomposed specimen (USNM 496776) was picked up 3 Jun 1966 on Green I (Clapp and Woodward 1968). An adult male in breeding plumage was found dead at *Midway* in May 1931 (BPBM 7383), and a first-fall bird appeared at Tern I., *French Frigate* 10-19 Aug 1988. It is unknown if these birds originated from continental or Hawaiian colonies

## Acronyms and Abbreviations

## Literature cited

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