



Photo: Richard Palmer

## Waterbirds

# 'Auku'u or Black-crowned Night Heron

*Nycticorax nycticorax hoactli*

### SPECIES STATUS:

State recognized as Indigenous

**SPECIES INFORMATION:** The 'auku'u or black-crowned night heron (Family: Ardeidae) is a stocky cosmopolitan species that breeds on every continent except for Australia and Antarctica. Four subspecies are recognized and *N. n. hoactli* occurs in Hawai'i, as well as across North America and most of South America. Adult males and females have a black crown and upper back, with a white throat, cheeks, and a narrow band above the bill that extends over the eyes, gray wings, and whitish underparts; males are larger than females. Juveniles are overall brown with light spots. The species' stout bill is black; legs and feet are yellow, and the eyes are red. 'Auku'u (black-crowned night heron) are gregarious and unlike continental birds, those in Hawai'i are diurnal. The species uses a variety of shallow wetlands for foraging and employs various techniques to capture a diversity of prey including insects, fish, frogs, mice, and the young of other native waterbirds. Information on breeding in Hawai'i is limited, but the species is a colonial nester, and in North America breeding occurs from December to August. Eggs are laid in a bulky stick nest usually placed low in vegetation.

**DISTRIBUTION:** 'Auku'u (black-crowned night heron) is widely distributed throughout the MHI.

**ABUNDANCE:** Island-wide population numbers, based on semi-annual waterbird counts conducted by DOFAW, indicate that the population is variable, but appears stable. Between 1983 and 2003 the average number of 'auku'u (black-crowned night heron) counted has been just over 400 individuals. This number is certainly an under-estimate as all stream habitats are not surveyed.

**LOCATION AND CONDITION OF KEY HABITAT:** 'Auku'u (black-crowned night heron) occur in a wide-range of aquatic habitats including mountain streams, lowland ponds and estuaries (wetlands and open water), aquaculture farms, and suburban/urban waterways (e.g., golf course ponds, concrete channels).

**THREATS:** Similar to the rest of Hawaiian native waterbirds, 'auku'u (black-crowned night heron) are threatened by:

- **Habitat loss.** In the last 110 years, approximately 31 percent of coastal plain wetlands have been lost. A shift in wetland agriculture to other agriculture crops also has reduced the amount of wetland habitats.

- Introduced predators. Dogs (*Canis domesticus*), rats (*Rattus* spp.), feral cats (*Felis silvestris*), the small Indian mongoose (*Herpestes auro-punctatus*), cattle egrets (*Bulbulcus ibis*), and barn owls (*Tyto alba*) all potentially prey on adult or young 'auku'u (black crowned night heron).
- Non-native invasive plants. Several species of invasive plants, including pickleweed (*Batis maritima*), water hyacinth (*Eichornia crassipes*), and mangrove (*Rhizophora mangle*) reduce open water, mudflats, or shallows.
- Avian diseases. The most important disease affecting Hawaiian waterbirds is botulism (*Clostridium botulinum*).
- Environmental contaminants. Fuel and oil spills are the most important contaminant threat to Hawaiian waterbirds.

**CONSERVATION ACTIONS:** The goals of conservation actions are not only to protect current populations and key breeding habitats, but also to establish additional populations, thereby reducing the risk of extinction. The State of Hawai'i and the USFWS have protected 23 percent of the State's remaining coastal plain wetlands. In 1997, Ducks Unlimited developed a comprehensive, cooperative plan to protect and restore wetlands used by native waterbirds. Currently there are no conservation actions specifically directed at 'auku'u (black-crowned night heron); however, the species certainly benefits from actions taken for the protection of Hawaii's endangered waterbirds including wetland protection and predator control efforts. In addition to common statewide and island conservation actions, specific actions directed at 'auku'u (black-crowned night heron) should include:

- Continue protection and management of wildlife sanctuaries and refuges.

**MONITORING:** Continue waterbird surveys and habitat monitoring on all islands. This information is needed to identify significant population declines.

**RESEARCH PRIORITIES:**

- Conduct studies to determine the effects on endangered waterbird populations by 'auku'u (black-crowned night heron) predation on the young of these species.
- Conduct life history studies to quantify the population structure, dispersal patterns, survivorship, nesting phenology and success of this poorly known species.

**References:**

Berger AJ. 1981. Hawaiian birdlife. Honolulu: University of Hawai'i Press. 260 pp.

Davis WE. 1993. Black-crowned night-heron (*Nycticorax nycticorax*). In *The Birds of North America*, No. 74 (Poole A, Gill F, editors.). Philadelphia (PA): The Academy of Natural Sciences; and Washington, D.C.: The American Ornithologists' Union.

Pratt DH, Bruner PL, Berrett DG. 1987. Field guide to the birds of Hawai'i and the tropical Pacific. Princeton, (NJ): Princeton University Press.