

Black-crowned Night Heron

Nycticorax nycticorax

Introduction

The Black-crowned Night-Heron is a near-cosmopolitan species, breeding on every continent except Australia and Antarctica. This is a stocky bird that is most active at night. Historical records indicate that nested chiefly in northern and western lowa, but in 1907 it was called a "rather rate summer resident. In 1984 the few colonies that were reported were usually in wetlands in northwest lowa also."

Although widespread and often common at some places within North America, its nocturnal and dawn and dusk feeding habits, render it less obvious than diurnal herons. Black-crowned Night-Heron feed on a wide variety of freshwater organisms, especially on fish. Declines in many of its populations noted in the late 1960s were probably attributable to the use of DDT, a persistent pesticide. Because these birds are high on the food chain, accumulate contaminants, and have a wide geographic distribution, they serve as indicators of environmental quality. In the past, they were shot and trapped as pests at fish hatcheries, but have also been hunted for food.

Black-crowned Night-Heron are colonial breeders and gregarious throughout the year, often associating with other species of herons. They are flexible in their selection of breeding colony sites, but often nest on islands or in swamps, suggesting they gain some protection from predators in doing so. The tendency for their young to disgorge their latest meal when disturbed has made this species a favorite for feeding studies. For naturalists who enjoy wetlands, this heron's distinctive call is a quintessential sound of dusk and night.

Habitat Preferences

Black-crowned Night-Heron are colonial nesters, and at times nests together with other herons and egrets. In lowa and the Midwest they frequently utilize large wetlands with equal proportions of open water and vegetation, but seem to prefer waters lined with trees, shrubs, and tall wetland vegetation.

This species may fly up to 15 miles from the nesting colony to feed. Therefore, where found, they may forage practically in any aquatic habitat. Where water levels vary drastically, Black-crowned Night-Heron usage fluctuates accordingly. Nesting colonies also occur in a wide variety of situations, including willow thickets, dry woods and open wetlands.

Feeding Habits

This is an opportunistic feeder that feeds mostly on small fish, but it also takes a wide variety of other foods including: leeches, earthworms, aquatic and terrestrial insects including moths, crayfish, mussels, amphibians, lizards, snakes, rodents, frogs, tadpoles, birds, eggs, carrion, plant materials, and even garbage and refuse at landfills.

Black-crowned Night-Heron are usually solitary foragers; and they defend feeding territories. They forage mostly by standing still or stalking very slowly at the edge of water bodies, waiting for prey to approach. It sometimes uses "bait," by dropping a feather or small twig on the water surface to lure fish within striking distance.

Feeding takes place mainly from evening to early morning, but also occurs during daylight in times of high food demand such as during breeding season. This species typically leaves roost sites shortly after sunset to feed, and will return about a half-hour before sunrise. Foraging throughout the night is thought to have evolved primarily to avoid competition with daylight

feeding herons, which use the same habitats.

Breeding Biology

Most Black-crowned Night-Heron migrate into Iowa in mid to late April. Shortly after arrival, courtship often occurs at old nest sites, with the males performing a variety of courtship behaviors. These herons are monogamous, and usually breed when two or three years old, but they can also breed at the age of one.

Nest sites vary, and may include trees, shrubs, or tall vegetation such as cattails. Nests are built by both sexes, and are usually loosely constructed platforms of sticks, twigs, or reeds. Old nests are frequently reused, and nests may be at ground level to as much as 150 feet above the ground, but are commonly 10 to 40 feet up and on firm support. At times nests are located with those of other herons and egrets.

Eggs vary from 1 to 7, but average 3 to 4. Incubation takes 21 to 26 days, and is carried out by both parents. Both parents also feed the young, which is done by regurgitating partially digested food items. The young usually remain in the nest for 4 weeks, and fly at about 6 weeks of age. As soon as flight is possible, the young will sometimes follow parents to productive foraging areas and beg to be fed there.

Concerns and Limiting Factors

Since Black-crowned Night-Herons are high on the food chain, cosmopolitan in their distribution, and colonial nesters, they make excellent environmental indicators and are being evaluated as an indicator of chemical contamination in several areas around the nation.

Human disturbance of nesting colonies is a major impact on nest success, and it has been determined that visits to colonies just before or during egg laying causes nest abandonment and increased predation of nests. Disturbances of breeding colonies impeded success of more advanced nesting attempts, and in some situations caused young to die.

Although populations of Black-crowned Night-Herons are apparently stable, or nearly so across the nation; the loss of wetlands is no doubt affecting this species in lowa.

Habitat Management Recommendations

Since many populations of Black-crowned Night-Herons are stable or increasing, management has not been a major focus. But in lowa, little remains of the expansive wetlands that once supported vast numbers of wetlands species like this one. This makes the remaining wetland habitats and associated uplands all the more critical to ongoing conservation efforts. For details about wetland management see that section in Part 3 of this project.