Little Blue Heron

Egretta caerulea

Photo credits: *Lawrence Korhnak*

Scientific Name *Egretta caerulea* (Linnaeus, 1758)

Family Name Ardeidae
Herons, Bitterns, and Egrets

Did you know?
Immature little blue herons are white.

Summary

Protection Protected Bird in New York State, protected federally.

This level of state protection means: Defined as a Protected Bird by New York State law. This species may not be hunted or taken at any time in New York.

Rarity G5, S2

A global rarity rank of G5 means: Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
A state rarity rank of S2 means: Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably make it very vulnerable in New York State.

Conservation Status in New York

New York is near the northern limit of the little blue heron's breeding range. They are restricted to the non-barrier salt marsh islands of southern Long Island.

Short-term Trends

Breeding populations of little blue herons have been on a steady decline in New York. The 2007 Long Island Colonial Waterbird survey showed an average of less than 20 breeding pairs of herons at five of the 23 known colonies (McGowan and Corwin 2008; New York Natural Heritage Program 2009).

Long-term Trends

Accurate and historical survey data on little blue herons is lacking, partly due to their dark appearance making surveying difficult. Populations have been slowly declining throughout its range due to habitat loss. The little blue heron was an occasional visitor to New York during the late 1800s. They were first reported as breeding in the state during the late 1950s, on a salt marsh island in Jamaica Bay, Nassau County. By 1985, there were 68 breeding pairs in eight colonies. Confirmed breeding was recorded in 11 Breeding Bird Atlas blocks between 2000 and 2005 (McGowan and Corwin 2008).
This species is protected under the Migratory Bird Treaty Act. The Migratory Bird Treaty Act implements various treaties and conventions between the U. S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Under this Act, taking, killing, or possessing migratory birds, including nests or eggs, is unlawful unless specifically permitted by other regulations.

Conservation and Management

Threats

Degradation of breeding and foraging habitat is the greatest threat to little blue herons (McCrimmon 2006). Other threats include flooding, development, disturbance of nesting areas by human activity such as boating, fishing, dredge spoil deposition, and predation primarily by gulls, fox, and raccoons (Rodgers and Smith 1995; New York Natural Heritage Program 2009).

Conservation Strategies and Management Practices

Continue to develop and conduct management and habitat restoration plans along with with state, local, and federal partners. Continue to monitor populations and discuss ways to improve survey methods. Compare state population trends against regional trends to determine population dynamics across various geographic areas and time periods. Consider developing and initiating a banding program to get a better handle on breeding populations and migratory patterns (Rodgers and Smith 1995; McCrimmon 2006).

Research Needs

More information is needed regarding life history and behavior in order to better protect this species. Research and identify key habitat characteristics necessary for breeding, foraging, and wintering areas. Identify all potential threats including those created by human disturbance as well as predators, pathogens, and invasive species, and seek ways to diminish their impact (McCrimmon 2006).

Habitat

Little blue herons inhabit a variety of aquatic habitats, including lakes, ponds, rivers, and both salt and fresh water marshes. On the coast preferred habitats are salt marshes, ponds and mud flats. Wooded swamps, ponds and streams are utilized in inland situations. In New York, they utilize coastal salt marsh scrub/shrub islands; nesting in dense thickets or in trees. They forage in the estuaries surrounding these islands (Rodgers and Smith 1995; McCrimmon 2006; New York Natural Heritage Program 2009).

Associated Ecological Communities

High Salt Marsh
A coastal marsh community that occurs in sheltered areas of the seacoast, in a zone extending from mean high tide up to the limit of spring tides. It is periodically flooded by spring tides and flood tides. High salt marshes typically consist of a mosaic of patches that are mostly dominated by a single graminoid species.

Low Salt Marsh
A coastal marsh community that occurs in sheltered areas of the seacoast, in a zone extending from mean high tide down to mean sea level or to about 2 m (6 ft) below mean high tide. It is regularly flooded by semidiurnal tides. The mean tidal range of low salt marshes on Long Island is about 80 cm, and they often form in basins with a depth of 1.6 m or greater.

Salt Panne
A shallow depression in a salt marsh where the marsh is poorly drained. Pannes occur in both low and high salt marshes. Pannes in low salt marshes usually lack vegetation, and the substrate is a soft, silty mud. Pannes in a high salt marsh are irregularly flooded by spring tides or flood tides, but the water does not drain into tidal creeks. After a panne has been flooded the standing water evaporates and the salinity of the soil water is raised well above the salinity of sea-water.

Associated Species

Great Egret (*Ardea alba*)
Cattle Egret (*Bubulcus ibis*)
Snowy Egret (*Egretta thula*)
Tricolored Heron (*Egretta tricolor*)
Yellow-Crowned Night-Heron (*Nyctanassa violacea*)
Glossy Ibis (*Plegadis falcinellus*)

Identification Comments

Identifying Characteristics

The little blue heron is a small to medium-sized heron; about 60 cm in length with a wingspan of about 100 cm. Adults are slate blue in color. Legs are dark green and bill is pale with a black tip. During the breeding season, the head and neck turn a deep reddish-brown (Peterson 1980; National Geographic Society 1999). The birds nest in colonies with other species of herons. Nests are platform in shape, about 40 cm wide and 25 cm deep, and are constructed from dead twigs and sticks and lined with vegetation. They are formed in trees or shrubs 1-4 m from the ground. Four to five eggs are typically laid. The eggs are oval in shape, have a smooth shell, and are pale blue-green in color. The average size of the eggs is 44 mm x 44 mm (Bent 1926). Young are born pure white

and resemble snowy egrets. They remain white typically until their first spring and gradually change over to blue (Peterson 1980; National Geographic Society 1999). The sub-adults with both white and blue plumage are often classified as calico or piebald (Rodgers and Smith 1995). Little blue herons have several different types of vocalizations. Nestlings and fledglings emit a food begging call that sounds like "hee-hee-hee". Typical adult vocalizations include those made breeding/greeting, that sounds like "Unh" and "Eh-oo-ah-eh-eh". When the birds are disturbed or show aggression, they make a "Sken" sound. They also produce nonvocal sounds such as bill nibbling which sounds like a rattle during courtship and bill snapping while exhibiting a stretch display (Rodgers and Smith 1995).

Characteristics Most Useful for Identification

The slate blue plumage and reddish-brown neck of the adults during breeding season are the most useful characteristics for identifying little blue herons.

Best Life Stage for Identifying This Species

Adults in breeding plumage are the best stage for identifying this species

Behavior

Little blue herons arrive at their breeding grounds in early spring, and courtship, which is initiated by the males, begins soon after. Male birds walk throughout the colony, strutting, stretching, and snapping their bills. They establish their core territory which eventually becomes the nest site. Little Blue Herons are colonial nesters and often nest with other species of herons. Both the male and female aid in nest building, with the male gathering nest materials and the female doing most of the construction. Eggs are laid soon after the nest is constructed. The incubation period lasts around 22 days, with the male and female taking turns incubating. Hatching is asynchronous and occasionally results in mortality of younger chicks.

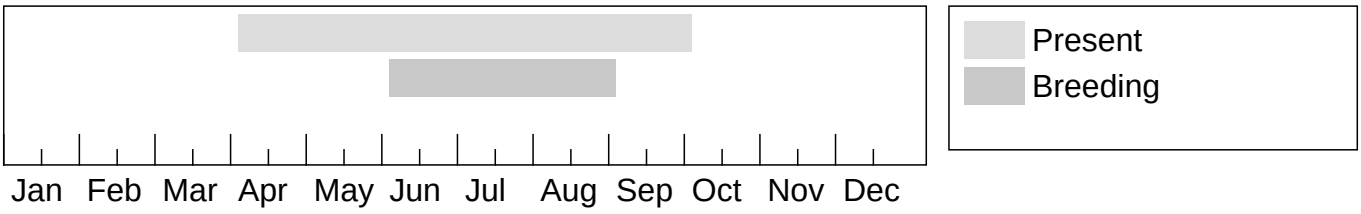
The Little Blue Heron forages during the day in shallow water by wading very slowly and peering into the water, with the bill close to the surface. When prey is spotted, the head often sways in a semi-circle around the bill at the point of contact with the water just before striking (Willard 1977; Rodgers and Smith 1995).

Diet

Little blue herons forage in coastal marshes and estuaries for various types of fish, crustaceans, and other small invertebrates. The birds feed on regional species including minnows, anchovies, killifish, and darters, to name a few (Bent 1926; Rodgers and Smith 1995).

The Best Time to See

Little blue herons can be found breeding on the non-barrier islands of Long Island from late May to August (Rodgers and Smith 1995).



The time of year you would expect to find Little Blue Heron in New York.

Similar Species

Snowy Egret(Egretta thula): Young and immature Little Blue Herons are frequently confused with immature Snowy Egrets. The immature herons have a pale bill with a dark tip and dark feet while the egrets have a dark bill and yellow feet (National Geographic Society 1999).

Taxonomy

Kingdom Animalia
└─ **Phylum** Craniata
└─ **Class** Birds (Aves)
└─ **Order** herons, egrets, ibises, storks and spoonbills (Ciconiiformes)
└─ **Family** Ardeidae (Herons, Bitterns, and Egrets)

Additional Resources

Links

Google Images
http://images.google.com/images?q=EGRETTA+CAERULEA
NatureServe Explorer
http://natureserve.org/explorer/servlet/NatureServe?searchName=EGRETTA+CAERULEA

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