



Department of
Environmental
Conservation

Least Bittern

Scientific name: *Ixobrychus exilis*

New York Status: **Threatened**

Federal Status: Not Listed

Description

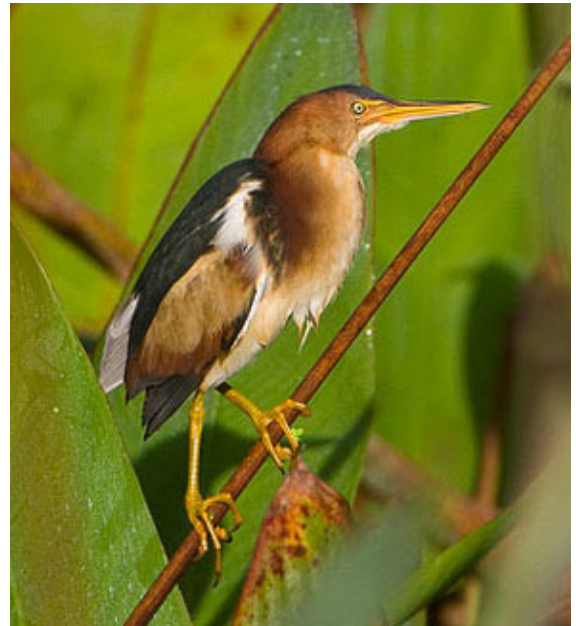
The least bittern is the smallest member of the Ardeidae (heron) family in North America at just 13 inches in length, a wingspan of 17 inches, and an average weight of just three ounces. What the least bittern lacks in size it makes up for in appearance. It is a striking and colorful bird with yellow eyes and a thin yellow bill placed atop a long, chestnut and buff-striped throat. The slightly-crested crown, nape, back, and tail are blackish-green and the neck, sides, and undersides are chestnut and white. The wings are black, chestnut, and buff which when folded against the body appear as light-colored streaks along the back.

In New York, they are most vocal in late May and early June and this is also the best time to catch a glimpse of this extremely secretive bird. The male advertising call is a soft coo-coo-coo; males and females give a harsh contact call to their mate, gack-gack, from the nest; an ank-ank call may be given when the species is flushed from the marsh.

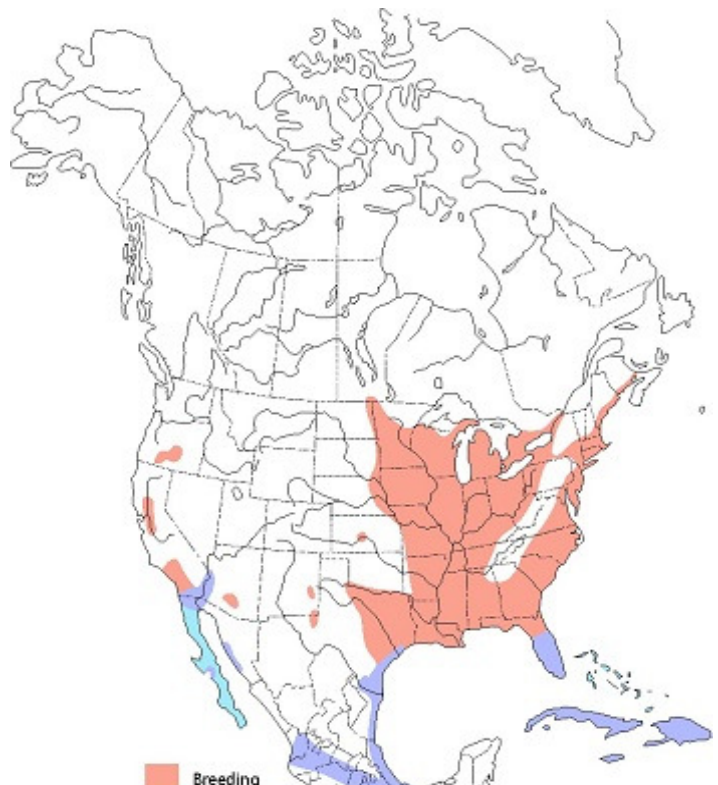
Life History

Least bitterns initiate nesting in New York in late May to early June. In prime marsh habitat, least bitterns may nest in small groups of up to 15 pairs per hectare (\approx 2.5 acres). Nests are usually constructed of cattail leaves and situated over the water in dense, tall stands of the emergent vegetation. The average clutch size is five eggs and the species has been documented to lay up to two clutches in one season. Least bittern chicks leave the nest at five to nine days old and fly when they are approximately one month old.

Least bitterns feed primarily on small fish, such as minnows, sunfish and perch. Additionally, they rely upon insects (such as dragonflies and beetles), snakes, frogs, tadpoles, salamanders, crayfish and some small mammals. Least bitterns find their prey by stalking through the base of dense vegetation or clinging to the vegetation with their long toes and claws, while extend their long necks down to the edge



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of a small pool of open water. This technique allows them to forage in deeper water than their small size would normally allow from the ground. In areas where prey is abundant, least bitterns may construct a "foraging platform" consisting of bent reeds and cattails to support their weight.



Least bittern range map from *Birds of the World*, maintained by Cornell Lab of Ornithology.

Distribution and Habitat

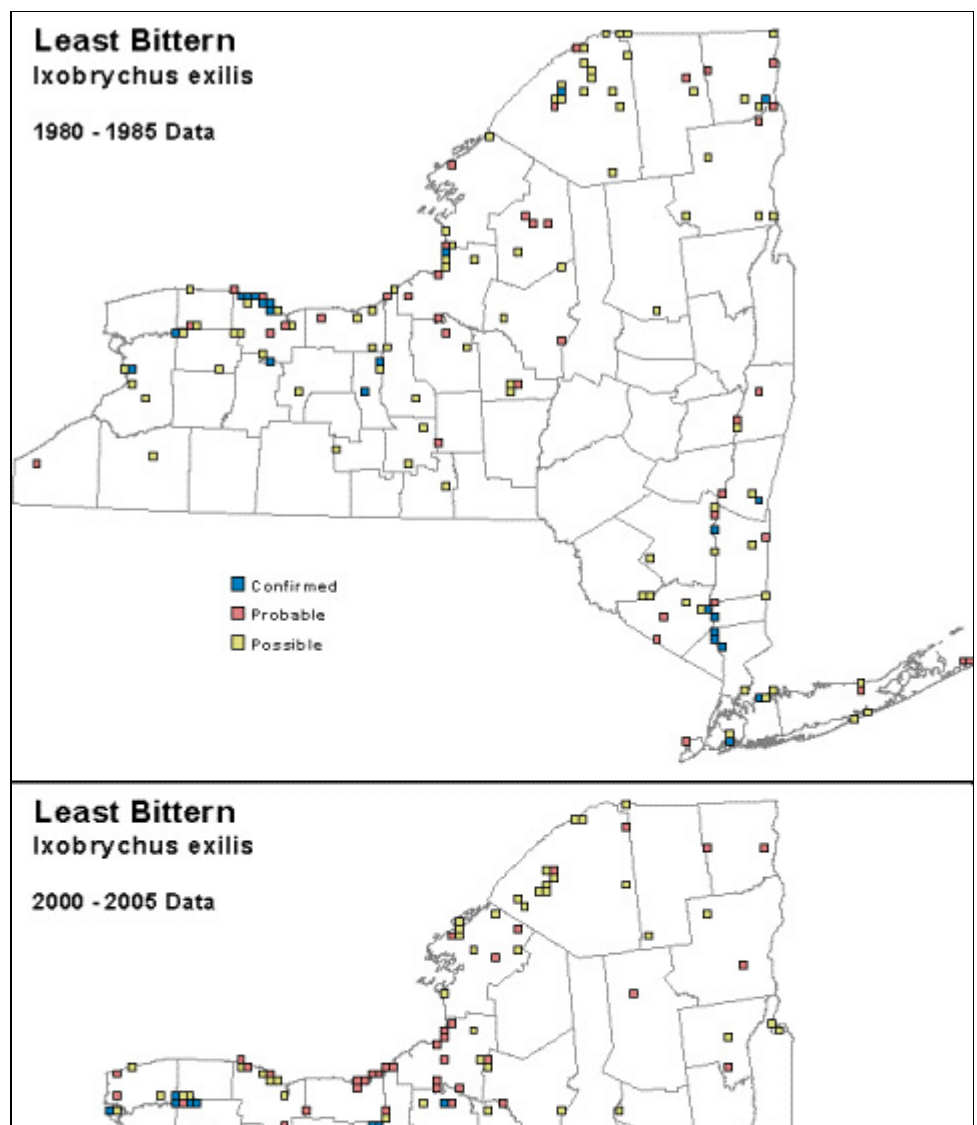
The least bittern range extends from southeastern Canada south through the U.S. and east to the Atlantic Coast, but they are absent along the entire Appalachian Mountain range. In the western U.S., populations are found in the Central Valley and Modoc Plateau of California, Klamath and Malheur Basins in Oregon, and along the Colorado River in southwestern Arizona and southeastern California. Small, discontinuous populations exist from Mexico to Costa Rica and the Caribbean with subspecies extending well into South America.

Least bitterns occur in freshwater and brackish marshes with tall, dense emergent vegetation such as cattails, sedges, and rushes that are interspersed with clumps of woody shrubs and open water. In New York, least bitterns thrive in the large, expansive cattail marshes associated with the Great Lakes, the Finger Lakes, Lake Champlain, and the St. Lawrence and Hudson River Valleys.

Status

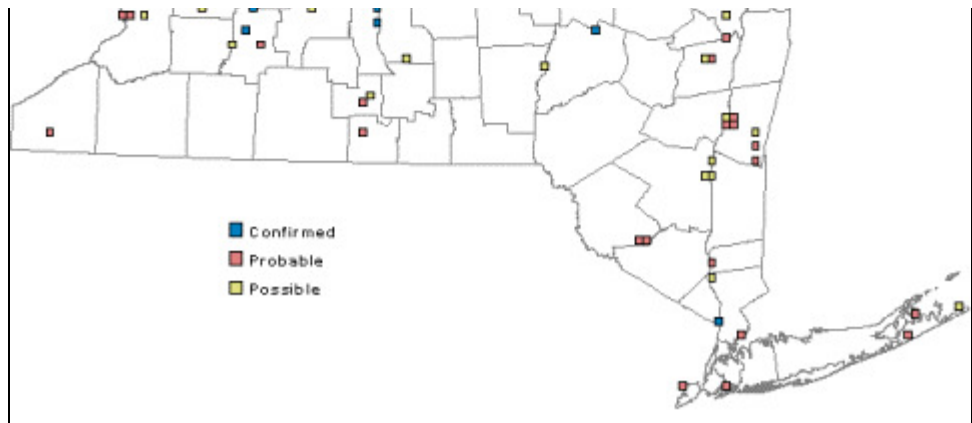
The U.S. Fish and Wildlife Service consider the least bittern to be a "Bird of Conservation Concern" (USFWS 2008) and it is a Threatened species in New York State. Regional declines have been detected over the last 10 years on survey routes across the Great Lakes basin. In New York, declines in the Hudson River have been documented over the last 20 years except at certain sites where management of invasive plants, such as common reed (*Phragmites*) and purple loosestrife, has occurred.

Population trends are difficult to determine because of the secretive nature of least bitterns. They are often missed on large-scale roadside surveys, like the Breeding Bird Survey. A national effort is underway to survey secretive marsh bird species, including least bittern, with a goal to estimate the population status and long term trends.



Management and Research Needs

Monitoring suitable habitat for changes in least bittern occupancy will facilitate a better understanding of their population trends. In addition, maintaining prime habitat through invasive species management and water level manipulation is necessary to prevent further local population declines. Restoration of degraded habitats may support an increase in local populations. Identification, protection, and management of major migratory stopover points and management of wintering grounds are also necessary to prevent further population declines.



Distribution of least bittern in New York from 1st and 2nd NYS Breeding Bird Atlas records.