

# Species Status Assessment

**Common Name:** Yellow-crowned night heron **Date Updated:** March 12, 2025

**Scientific Name:** *Nyctanassa violacea* **Updated By:** M. Oberkircher

**Class:** Aves

**Family:** Ardeidae

**Species Synopsis** (a short paragraph which describes species taxonomy, distribution, recent trends, and habitat in New York):

There are six subspecies of yellow-crowned night heron, five of which are tropical. The North American subspecies, *N. v. violacea*, occurs in the southeastern United States and northward along the Atlantic Coast. In New York—where it occurs primarily on the Coastal Lowlands—it is very near the northern extent of its range. Populations declined range-wide with the millenary trade in the late 1800s and early 1900s. After protection by the Migratory Bird Treaty Act of 1918, populations rebounded, increasing dramatically through the 1960s.

The North American Waterbird Conservation Plan assessed the yellow-crowned night heron population as essentially stable across its range and classified it in a “moderate risk” category. In New York, this night-heron occurs in small populations scattered on the north and south shores of Long Island and in the New York City harbor. The population in New York appears to be stable; local fluctuations occur as a result of food and habitat availability (McCrimmon 2008).

## I. Status

### a. Current legal protected Status

i. **Federal:** Not Listed **Candidate:** No

ii. **New York:** Not Listed

### b. Natural Heritage Program

i. **Global:** G5

ii. **New York:** S2 **Tracked by NYNHP?:** Yes

### Other Ranks:

-NYS 2025 SGCN Status: Species of Greatest Conservation Need

-IUCN Red List: Least Concern

-Partners in Flight: 12 out of 20

### Status Discussion:

Yellow-crowned night herons are common in many portions of their range, but trends are unknown for many regions. New York is at or near the northern limit of their range and breeding is restricted mainly to Long Island and some areas of NYC. This species depends almost entirely on crustaceans for food and could rapidly disappear if food sources become scarce. Increasing coastal development, habitat degradation, and human disturbance are significantly threatening nesting and foraging habitat. (Andrle and Carroll 1988, Watts 1995).

## II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Unknown	Unknown			-
Northeastern US	Yes	Unknown	Unknown			No
New York	Yes	Stable	Stable	2013-2022		Yes
Connecticut	Yes	Stable	Stable		Special Concern	Yes
Massachusetts	Yes	Unknown	Unknown			No
New Jersey	Yes	Stable	Stable	2013-2021	Threatened	Yes
Pennsylvania	Yes	Stable	Declining	1990-2021	Endangered	Yes
Vermont	No	-	-			No
Ontario	No	-	-			No
Quebec	No	-	-			No

### Column options

**Present?:** Yes; No; Unknown; No data; (blank) or Choose an Item

**Abundance and Distribution:** Declining; Increasing; Stable; Unknown; Extirpated; N/A; (blank) or Choose an item

**SGCN?:** Yes; No; Unknown; (blank) or Choose an item

### Monitoring in New York *(specify any monitoring activities or regular surveys that are conducted in New York):*

NYSDEC conducts surveys for night herons every three years as part of the Colonial Waterbird Survey.

New York City Audubon has conducted Harbor Herons Nesting Survey in the Greater New York/New Jersey Harbor annually since 1985; the surveys target long-legged wading birds including yellow-crowned night heron (Harbor Herons Subcommittee 2010, Craig 2011, Craig 2012).

### Trends Discussion *(insert map of North American/regional distribution and status):*

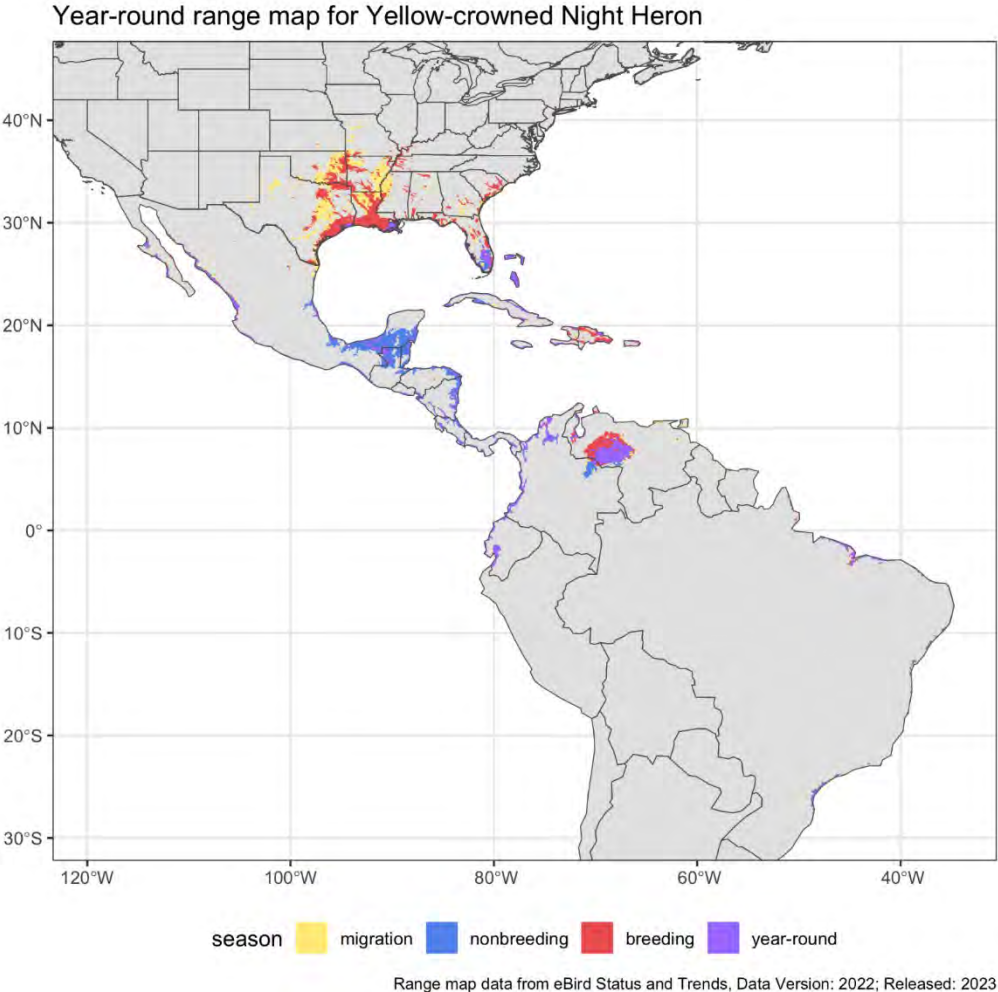
There is no definitive information currently on yellow-crowned night heron trends. Because this bird is dark-bodied and nests under canopy in forested areas, aerial surveys are ineffective in determining population status. Also, because colonies are small and scattered, ground surveys are economically unfeasible over large areas.

The North American population expanded northward dramatically from 1925 to 1960. The first recorded breeding in New York occurred in 1938 at Massapequa in Nassau County (Cruickshank 1942). In 1953, a pair was found nesting at Jamaica Bay Refuge, two pairs nested at Pelham Park in Bronx County in 1962, and breeding pairs were found nesting on three islands in Richmond County in 1988. The Long Island population grew in the following decades and in the 1960s, 13 breeding sites were known (Bull 1964). A decline was detected during the 1990s and through about 2005, the average number of pairs was around 18 annually but populations have remained stable in recent years. New nesting locations west of Staten Island and further inland along the Hudson River between Rockland and Westchester Counties were also reported during the second atlas. (McCrimmon 2006). The Long Island Colonial Waterbird Survey in 2010 detected 31

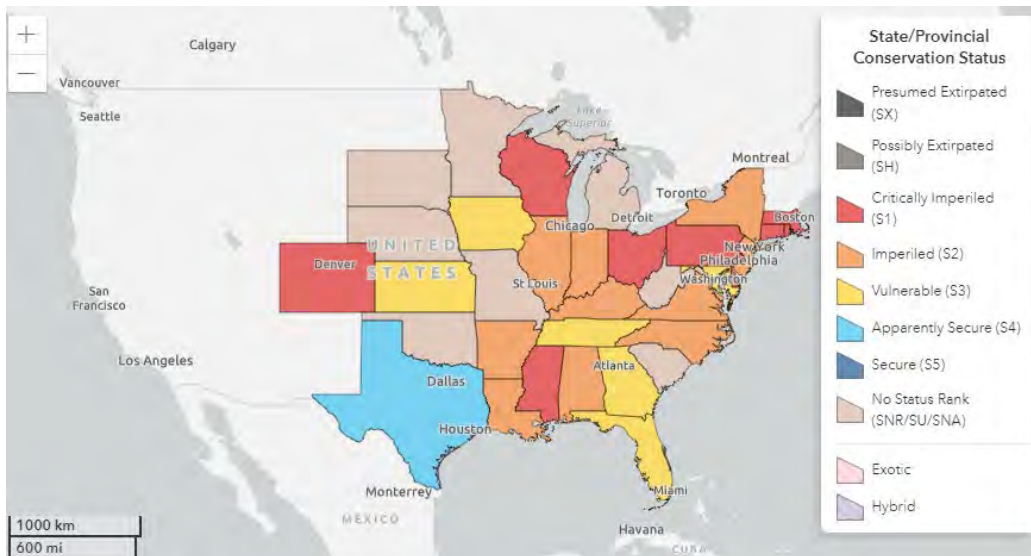
breeding pairs at 6 active sites. In 2022, the survey found 41 pairs nesting at 3 locations. One pair successfully raised young at a location in Dutchess County in 2023.

Breeding Bird Atlas data for New York show a decline of -28% from 1980-85 to 2000-05. This is primarily a result of the change in Possible records. The change in the number of Confirmed records—which is perhaps a more accurate indicator for this colonial breeder—shows an increase of 27%. The New York City Harbor Herons nesting survey showed an increase in yellow-crowned night heron from 2007 to 2012 (Craig 2012).

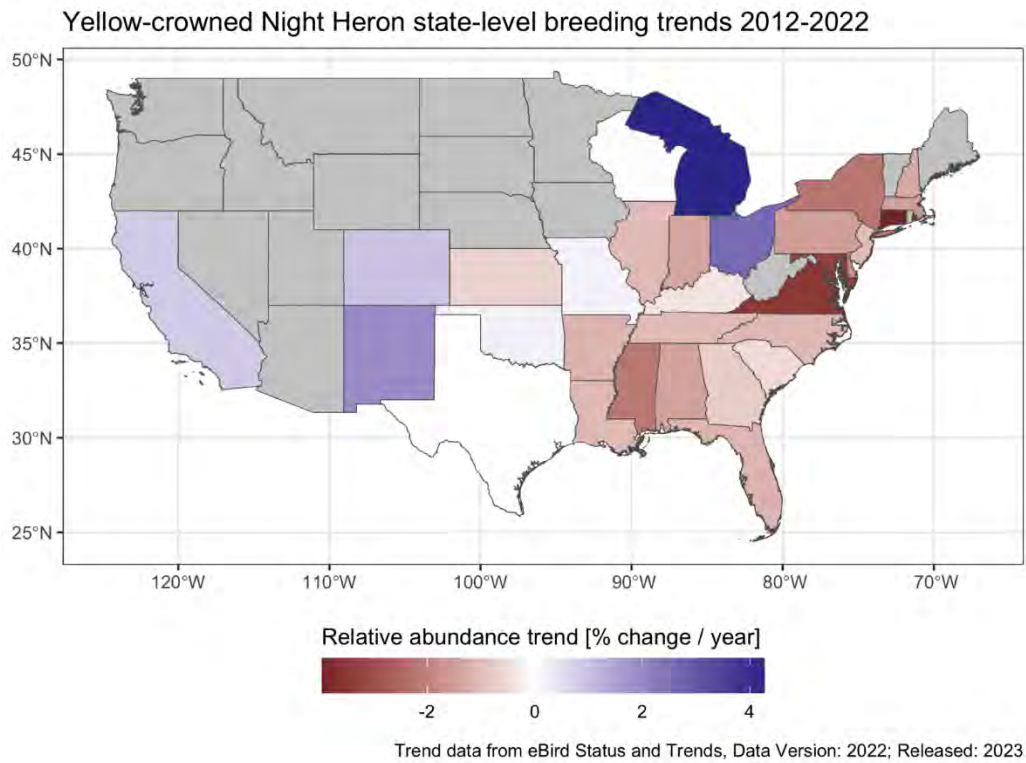
The USGS Breeding Bird Survey shows a slight negative trend of -0.2 from 1993-2021. The Christmas Bird Count also has a slightly negative trend of -0.41 during the same time period. The eBird trends map shows a -18.8% trend for breeding yellow-crowned night herons with an upper confidence interval of 11% and a lower one of -32% from 2012-2022.



**Figure 1.** Full (year-round) range for yellow-crowned night heron (eBird).

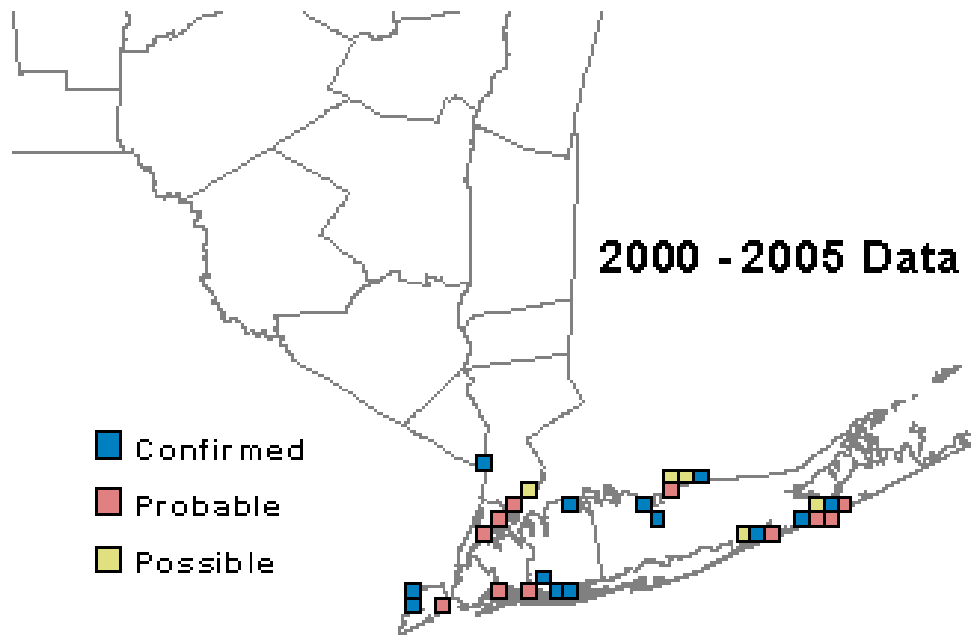


**Figure 2.** Conservation status of yellow-crowned night-heron in North America (NatureServe)

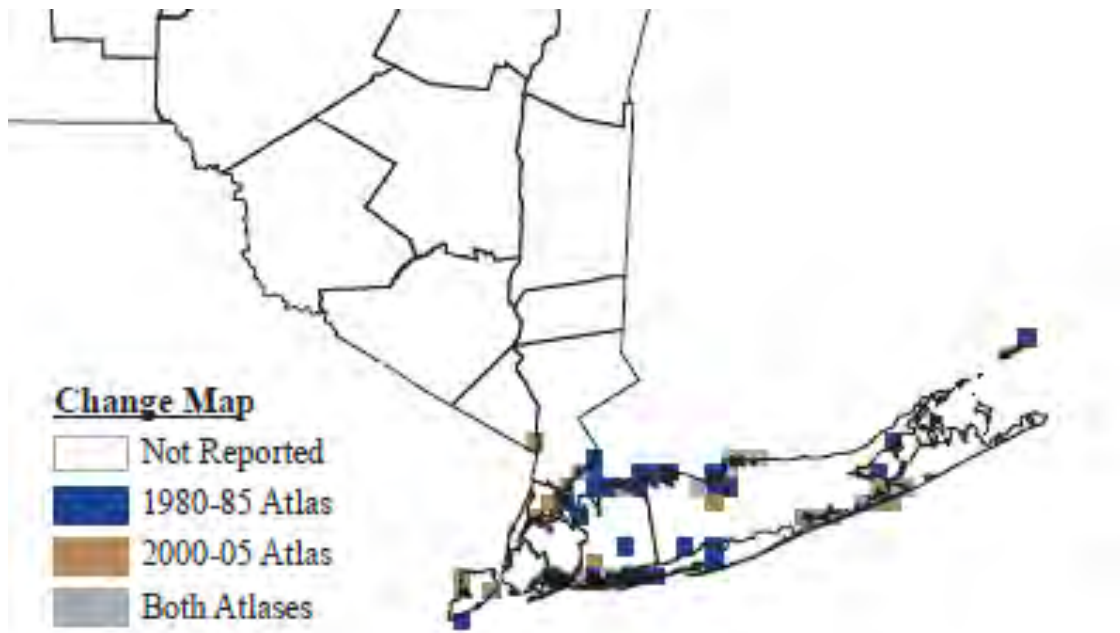


**Figure 3.** Trends, by state, for yellow-crowned night heron (eBird).

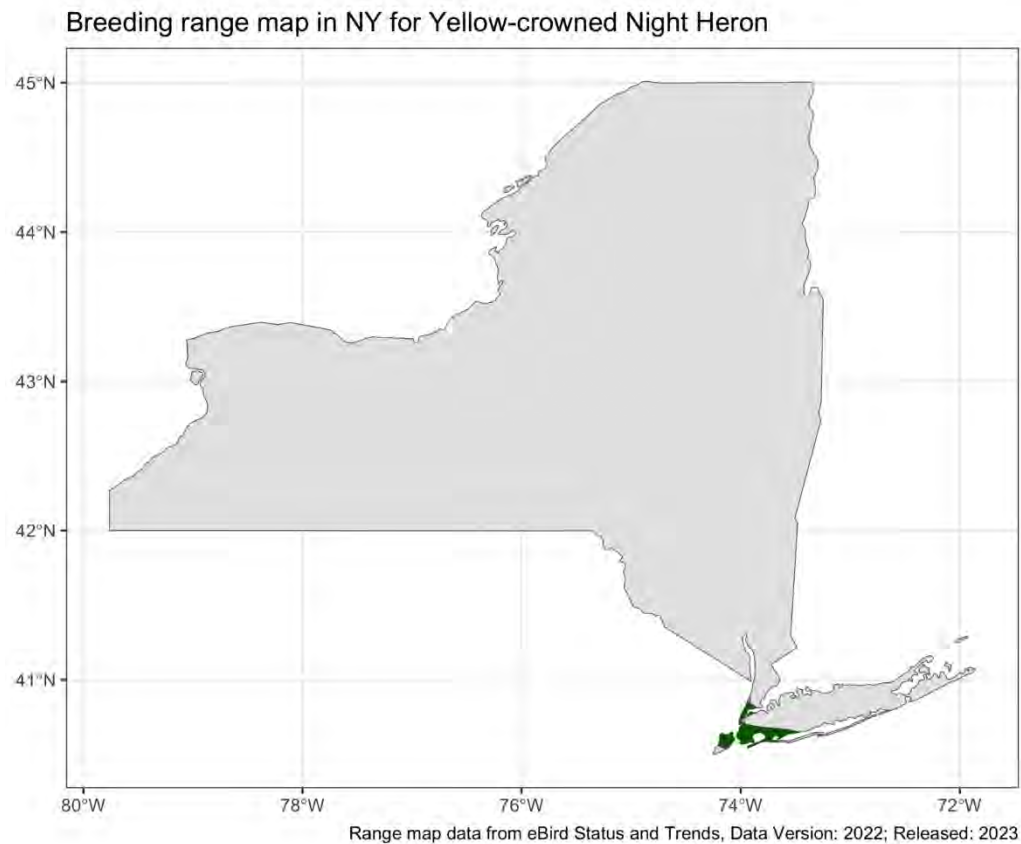
**III. New York Rarity** (provide map, numbers, and percent of state occupied)



**Figure 3.** Yellow-crowned night heron occurrence in New York State during the second Breeding Bird Atlas (McGowan and Corwin 2008).



**Figure 4.** Change in yellow-crowned night heron occurrence in New York State between the first Breeding Bird Atlas and the second Breeding Bird Atlas (McGowan and Corwin 2008).



**Figure 5.** NYS breeding range for yellow-crowned night heron (eBird).

**Details of historic and current occurrence:**

The first Breeding Bird Atlas (BBA) (1980-85) documented occupancy in 40 blocks, 0.7% of the survey blocks statewide (Andrle and Carroll 1988). The second BBA (2000-05) documented occupancy in 29 blocks, 0.5% of the survey blocks statewide (McGowan and Corwin 2008).

The third BBA (2020-25) is currently underway and utilizes a different number and layout of survey blocks across New York, making direct comparison with the first two Atlases difficult. There were 5,333 blocks in the first and second BBAs, and there are 5,710 blocks in the current BBA, of which 1,815 are considered priority blocks. To date, yellow-crowned night heron has been documented in 42 priority blocks, 0.7% of all priority blocks statewide during the third BBA (NY BBA III Overview, 2024).

**New York’s Contribution to Species North American Range:**

Based on eBird data, 0.2 percent of the population breeds in New York, while 0 percent of the non-breeding population occurs in New York. Among all states with breeding populations, New York ranks 11 of 22.

Percent of North American Range in NY	Classification of NY Range	Distance to core population, if not in NY
1-25%	Peripheral	

*Column options*

**Percent of North American Range in NY:** 100% (endemic); 76-99%; 51-75%; 26-50%; 1-25%; 0%; Choose an item

**Classification of NY Range:** Core; Peripheral; Disjunct; (blank) or Choose an item

**IV. Primary Habitat or Community Type** (from NY crosswalk of NE Aquatic, Marine, or Terrestrial Habitat Classification Systems):

1. Freshwater Marsh
2. Estuarine, Freshwater Intertidal, Tidal Wetland, Freshwater Tidal Swamp
3. Estuarine, Freshwater Intertidal, Tidal Wetland, Freshwater Tidal Marsh
4. Lake and River Shore/Beach
5. Marine Cultural, Marine Dredge Spoil Shore
6. Estuarine Intertidal, Salt Scrub

**Habitat or Community Type Trend in New York**

Habitat Specialist?	Indicator Species?	Habitat/Community Trend	Time frame of Decline/Increase
No	No	Declining	

Column options

**Habitat Specialist and Indicator Species:** Yes; No; Unknown; (blank) or Choose an item

**Habitat/Community Trend:** Declining; Stable; Increasing; Unknown; (blank) or Choose an item

**Habitat Discussion:**

Yellow-crowned night-herons are colonial nesters, often nesting with black-crowned night-herons and other heron species. They can be found in marshes, swamps, lakes, lagoons, and mangrove swamps, depending on geographical location. In New York, yellow-crowned night-herons nest and feed in low, coastal shrubland, dredge spoil, on salt marsh islands, and in woodlands near swamps, rivers, and harbors in the lower Hudson and Long Island Bays (Peterson 1988, Watts 2011). They are tolerant of human habitation and have nested recently in densely populated residential areas in Staten Island, Far Rockaway, and various locations in Nassau County (McCrimmon 2008).

**V. Species Demographic, and Life History:**

Breeder in NY?	Non-breeder in NY?	Migratory Only?	Summer Resident?	Winter Resident?	Anadromous/Catadromous?
Yes	Yes	No	Yes	No	Choose an item.

Column options

**First 5 fields:** Yes; No; Unknown; (blank) or Choose an item

**Anadromous/Catadromous:** Anadromous; Catadromous; (blank) or Choose an item

**Species Demographics and Life History Discussion** (include information about species life span, reproductive longevity, reproductive capacity, age to maturity, and ability to disperse and colonize):

Yellow-crowned night herons typically breed at 2 years of age when adult plumage is acquired (Wingate 1982), and then annually. One clutch of 2-6 eggs is produced each season. Pairs will relay following complete brood loss, however, depending on time in season (Watts 1987). Annual reproductive success seems to depend not only on the extent of predation or other sources of loss but also on timing of the losses. Significant losses early in the breeding season may have no impact on average productivity, but losses late in the season have a greater effect because most females will not reneest (Watts 1987). In Virginia in 1992, at least 1 young fledged from 63.5% of

nests. This value may underestimate success per female because no birds were marked and because females will occasionally relocate to renest following nest failure. Lifetime reproductive success is unknown.

Fidelity to breeding site is believed to be high. No definitive information on dispersal distance. As with most ardeids, however, post-breeding dispersal is far-reaching. Most extralimital records involve young of the year in late summer or early fall.

Predation, prey availability, and nesting substrate availability may individually or in concert limit populations in local areas. Yellow-crowned Night-Heron is a dietary specialist on crustaceans.

## **VI. Threats** (*from NY 2015 SWAP or newly described*):

Currently, the greatest threat to yellow-crowned night heron is habitat loss and degradation together with disturbance of nesting colonies (Watts 1987, McCrimmon 2008), many of which are in urban areas. Specific threats include flooding, development, disturbance of nesting areas by human activity such as boating, fishing, dredge spoil deposition, and predation primarily by gulls, fox, crows, and raccoons (Harbor Herons 2010). Small numbers of breeding pairs in few colonies make the species susceptible to stochastic events such as storms.

Asian long-horned beetle (ALB, *Anoplophora glabripennis*) was discovered on Prall's Island in the Arthur Kill in 2001. Efforts to eradicate this invasive insect failed (Harbor Herons 2010). Non-native invasive plants also create an interesting issue for nesting herons. Although some species including bittersweet, porcelain berry, and kudzu provide attractive nesting structure for herons, their presence degrades the overall quality of the nesting habitat.

A rise in sea level resulting from predicted climate change will reduce the marsh habitat needed for breeding and foraging. Shifts in temperature can also have negative effects on the heron's main food source, crustaceans, because the emergence of crustaceans is typically temperature-dependent (Watts 1995).

Avian predators have the potential to severely affect the nesting success of yellow-crowned night herons. In 2010, red-tailed hawks nearly destroyed the colony at Redfern Houses (Craig 2011).

<b>Threat Level 1</b>	<b>Threat Level 2</b>	<b>Threat Level 3</b>	<b>Spatial Extent</b>	<b>Severity</b>	<b>Immediacy</b>	<b>Trend</b>	<b>Certainty</b>
1. Residential and Commercial	1.1 Housing & Urban Areas	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
6. Human Intrusions & Disturbance	-	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
7. Natural System Modifications	7.3 Other Ecosystem Modifications	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	-	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	-	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

**Table 1.** Threats to yellow-crowned night heron

**Are there regulatory mechanisms that protect the species or its habitat in New York?**

Yes: ✓

No:

Unknown:

**If yes, describe mechanism and whether adequate to protect species/habitat:**

Yellow-crowned night heron is protected under the Migratory Bird Treaty Act of 1918. The Freshwater Wetlands Act provides protection under Article 24 of the NYS Conservation Law. The Tidal Wetlands Act provides protection for all tidal wetlands under Article 25 of the NYS Conservation Law.

**Describe knowledge of management/conservation actions that are needed for recovery/conservation, or to eliminate, minimize, or compensate for the identified threats:**

In order to maintain good-quality nesting and foraging habitat for yellow-crowned night herons, habitat management and restoration projects, along with a management plan for colonial-nesting herons, is needed (McCrimmon 2006). More research is needed on the general biology, ecology, and distribution of yellow-crowned night herons, especially juveniles. Investigation of how their food source being temperature-dependent affects the heron's breeding and distribution is also needed (Harbor Herons Subcommittee 2010, Watts 2011).

When nesting in residential areas, birds frequently position nests over houses, roads, and driveways. When population density is high, this may lead to chronic conflicts with residents and intentional disturbance of nesting pairs. Education programs may reduce conflicts between humans and breeding herons in areas where this occurs.

Action Category	Action	Description
A.1 Direct Habitat Management	A.1.1 Direct habitat management	A.1.1.1 Mechanical management – plants A.1.1.4 Mechanical management - animals
A.1 Direct Habitat Management	A.1.2 Manage non-living habitat components	A.1.2.1 Manage hydrological regimes A.1.2.4 Manage erosion and sedimentation
A.1 Direct Habitat Management	A.1.3 Mitigate human environmental impact	A.1.3.1 Manage access
B.3 Outreach	B.3.1 Outreach, communication, and distribution	B.3.1.4 Public outreach and information
C.6 Design and Plan Conservation	C.6.2 Conserve specific land or seascapes	

Action Category	Action	Description
C.6 Design and Plan Conservation	C.6.5 Conservation planning	C.6.5.1 Plan the management of protected areas or sites
C.8 Research and Monitoring	C.8.1 Basic research and monitoring	C.8.1.1 Field research

**Table 2.** Recommended conservation actions for yellow-crowned night-heron

## VII. References

- Andrle, Robert F. and Janet R. Carroll, editors. 1988. The atlas of breeding birds in New York State. Cornell University Press. 551 pp.
- BirdLife International. 2018. *Nyctanassa violacea*. *The IUCN Red List of Threatened Species 2018*: e.T22697203A132067766. <https://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22697203A132067766.en>. Accessed on 03 January 2024.
- Corwin, K. 2012. NYSDEC SWAP 2015 Species Status Assessment for yellow-crowned night heron. Prepared on August 24, 2012. Revised December 2014.
- Craig, E. 2011. New York City Audubon’s Harbor Herons Project: 2012 interim nesting survey report. New York City Audubon, New York, NY.
- Craig, E. 2012. New York City Audubon’s Harbor Herons Project: 2012 interim nesting survey report. New York City Audubon, New York, NY.
- Curley, S.R., 2022. New York City Audubon’s Harbor Herons Project: 2022 Nesting Survey Report. New York City Audubon, New York, NY.
- eBird data from 2008-2022. Estimated for 2022. Fink, D., T. Auer, A. Johnston, M. Strimas-Mackey, S. Ligocki, O. Robinson, W. Hochachka, L. Jaromczyk, C. Crowley, K. Dunham, A. Stillman, I. Davies, A. Rodewald, V. Ruiz-Gutierrez, C. Wood. 2023. eBird Status and Trends, Data Version: 2022; Released: 2023. Cornell Lab of Ornithology, Ithaca, New York. <https://doi.org/10.2173/ebirdst.2022>
- Harbor Herons Subcommittee. S. B. Elbin and N.K. Tsipoura (Editors). 2010. Harbor Herons Conservation Plan- NY/NJ Harbor Region. NY-NJ Harbor Estuary Program.
- McCrimmon, D.A. 2006. Species group report for colonial nesting herons. Pages 33-42 of Appendix A1, Species group reports for birds in: New York State comprehensive wildlife conservation strategy. New York Department of Environmental Conservation. Albany, NY.
- McCrimmon, D.A. 2008. Yellow-crowned night heron, *Nyctanassa violacea*. Pages 176-77 in The Second Atlas of Breeding Birds in New York State (K.J. McGowan and K. Corwin, eds.). Cornell University Press, Ithaca, NY.

NatureServe. 2023. NatureServe Explorer. Page last published 12/1/2023.  
[https://explorer.natureserve.org/Taxon/ELEMENT\\_GLOBAL.2.106355/Nyctanassa\\_violacea](https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.106355/Nyctanassa_violacea).  
 Accessed 1/3/2024.

New York Natural Heritage Program. 2024. Online Conservation Guide for *Nyctanassa violacea*.  
 Available from: <https://guides.nynhp.org/yellow-crowned-night-heron/>. Accessed January 2,  
 2024.

New York State Breeding Bird Atlas III Overview (NYS BBA III Overview). 2023. New York Checklist  
 Overview. <https://ebird.org/atlasny/state/US-NY>. Accessed 1/2/2024.

Peterson, D. M. 1988. Yellow-crowned night heron, *Nyctanassa violacea*. Pages 52-53 in The Atlas of  
 Breeding Birds in New York State (R. F. Andrie and J. R. Carroll, eds.). Cornell University  
 Press, Ithaca, NY.

Watts, B. D. 1987. The effects of mortality and time constraints on productivity in Yellow-crowned Night  
 Herons (*Nycticorax violaceus*). Master's Thesis. College of William and Mary, Williamsburg, VA.

Watts, B.D. 1995. Yellow-crowned night-heron (*Nyctanassa violacea*). In Birds of North America,  
 Number 161 (A. Poole and F. Gill, editors). The Academy of Natural Sciences, Philadelphia, and  
 the American Ornithologists' Union, Washington, D.C.

Watts, B. D. 2011. Yellow-crowned Night-Heron (*Nyctanassa violacea*), The Birds of North America  
 Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North  
 America Online: <http://bna.birds.cornell.edu/bna/species/161> [doi:10.2173/bna.161](https://doi.org/10.2173/bna.161)

Wingate, D. B. 1982. Successful reintroduction of the Yellow-crowned Night Heron as a nesting  
 resident in Bermuda. *Colon. Waterbirds* 5:104-115.

<b>Originally prepared by</b>	Kimberley Corwin
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