



STATE OF THE HARBOR HERONS

PROTECTING THE CITY'S WATERBIRDS



2023

NEW YORK CITY'S HARBOR HERONS

THE LARGEST BREEDING POPULATION IN THE NORTHEAST

The Harbor Herons include 10 species of herons, egrets, and ibis, or “wading birds,” that nest on wild islands in New York City. NYC Audubon’s annual Harbor Herons Nesting Survey has monitored and protected these birds since 1982.

- The Harbor Herons are important indicators of the health of our harbor, due to their role as top predators that feed on fish, crabs, and other invertebrates.
- The Harbor Herons engage people. These large, beautiful birds can be seen foraging in waterways across the City, bringing people to birding and conservation.
- We marshal our 40 years of data to demand protection for these vulnerable species, endangered by development, pollution, and sea-level rise. Our work has helped preserve the Bronx’s Brother Islands and islands around Staten Island.



EAST RIVER AND UPPER HARBOR

Governors Island
Mill Rock
North Brother Island
South Brother Island
U-Thant Island

LONG ISLAND SOUND

Cat Briar Island
Chimney Sweeps Island
Davids Island
Goose Island
Hart Island
High Island
Hog Island
Huckleberry Island
Rat Island

LOWER HARBOR AND STATEN ISLAND AREA

Hoffman Island
Isle of Meadows
Prall’s Island
Shooters Island
Swinburne Island

CURRENT AND POTENTIAL NESTING ISLANDS

JAMAICA BAY

Black Wall Marsh
Broad Creek Marsh
Canarsie Pol
Duck Point Marsh
East High Marsh
Elders Marsh East and West
Joco Marsh
Little Egg Marsh Island
Ruffle Bar
Silver Hole Marsh
Stony Point Marsh
Subway Island
Yellow Bar Hassock



For over 40 years, New York City Audubon has championed nature in the City’s five boroughs through a combination of engaging and entertaining programs and innovative conservation campaigns. Through these efforts, we protect the more than 300 species of birds living in the 30,000 acres of wetlands, forests, and grasslands of New York City. Learn more at nycaudubon.org.

2023 POPULATIONS AT A GLANCE

NYC Audubon surveyed 19 harbor islands in 2023. Principal findings:

- 1,398 pairs of 7 wading bird species nested on 6 islands across New York Harbor.
- Black-crowned Night Heron was the most abundant of these, followed by Great Egret, Snowy Egret, and Glossy Ibis, in addition to small numbers of several other species.



LITTLE BLUE HERON
5 PAIRS



GLOSSY IBIS
150 PAIRS
DECLINING



SNOWY EGRET
268 PAIRS



YELLOW-CROWNED NIGHT-HERON
2 PAIRS



GREAT BLUE HERON
2 PAIRS



GREAT EGRET
398 PAIRS



BLACK-CROWNED NIGHT-HERON
572 PAIRS
DECLINING

Survey Coordinator Shannon Curley, PhD, counts nesting Great and Snowy Egrets on an island in the lower harbor.

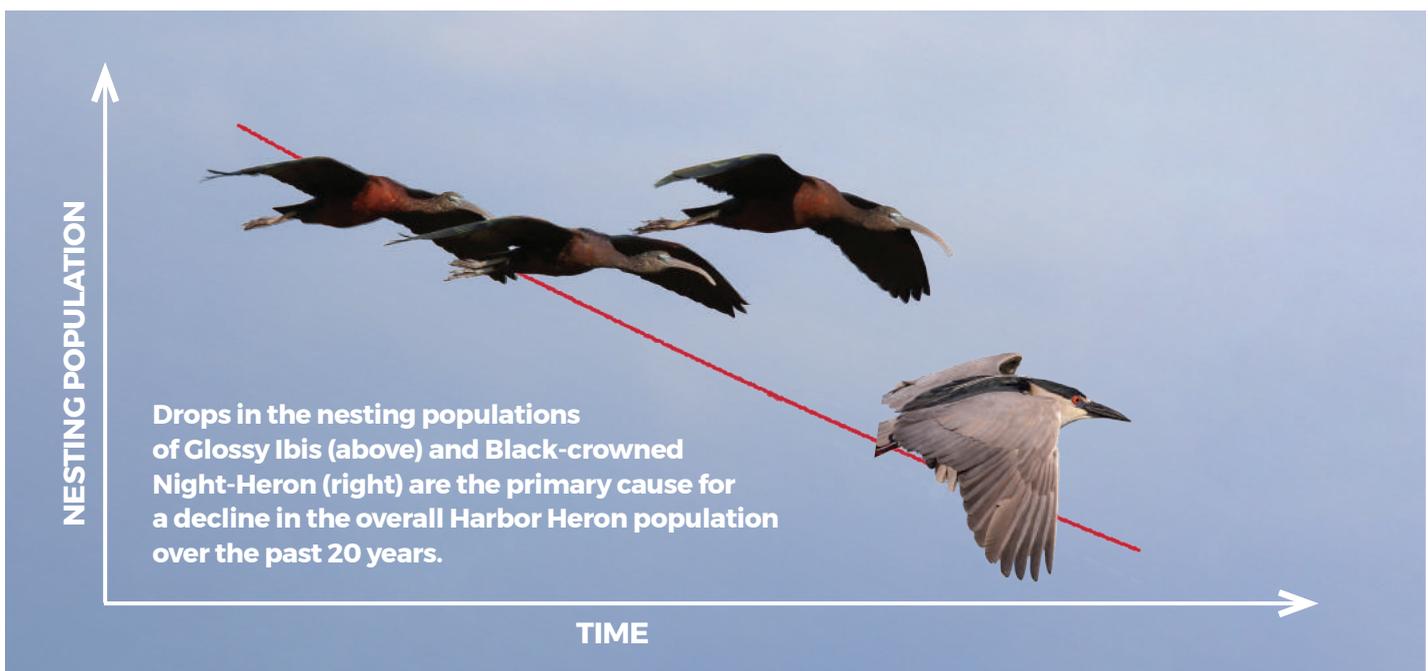
GOOD NEWS

- While several Jamaica Bay island colonies have been abandoned in recent years, **in 2023 breeding wading birds shifted to other islands** in the Bay, **demonstrating resilience in the face of disturbance and rising sea levels.**
- **Great Blue Herons nested in Manhattan, a first in modern times!** This largest of the City's wading bird species, which typically nests in quiet and remote areas, has also nested recently on mainland Staten Island and on islands in the Bronx.



CAUSES FOR ALARM

- **The Harbor Heron nesting population has declined since 2000**, a trend driven primarily by **declines in two species: Black-crowned Night-Heron and Glossy Ibis.**
- **Local reductions in these species parallel a fall in regional populations** found by other researchers along the East Coast.
- **NYC Audubon's definitive findings will be published in 2024.**



WHY ARE THE HARBOR HERONS IN TROUBLE?

A number of factors at both a global and local scale endanger the welfare of New York City's Harbor Heron colonies.



HUMAN DISTURBANCE: Often unknowingly, New Yorkers visit the birds' breeding colonies during nesting season, causing parents to abandon their young.



PREDATORS: Food items discarded by residents support an artificially dense population of mammals like raccoons in New York City. When such "subsidized" predators access an island, nesting birds may abandon it for decades.



POLLUTION: The health of our harbor has improved in recent decades, but plastics and other chemical contaminants may affect wading birds' breeding productivity in ways we don't yet understand.



CLIMATE CHANGE: The low-lying Harbor Heron Islands are vulnerable to flooding from sea-level rise and increased high-intensity storms. Changes in seasonal timing are also likely impacting the birds' populations.

HOW CAN I HELP?

- **Protect the islands** by helping us to minimize disturbance from both humans and subsidized predators.
 - **Improve water quality** by supporting sound stormwater policy and the creation of more green infrastructure in the City.
 - **Share your love of the Harbor Herons** by talking to your family, friends and local representatives about the importance of protecting New York City's waterbirds. Learn more at nycaudubon.org/harbor-herons.
 - **Support our work:** NYC Audubon is the only organization studying the decline of wading bird species like the Black-crowned Night-Heron in New York Harbor, and using that data to secure greater state and federal protections.
- You can help protect these endangered birds by giving to NYC Audubon today.** Contribute online by visiting nycaudubon.org/donate or by scanning the QR code at right with your mobile device.



The rich blue eggs of Glossy Ibis are particularly vulnerable because the birds nest just inches from the ground.



THANK YOU TO OUR SUPPORTERS

New York City Audubon's 2023 Harbor Herons research was made possible through funding from the Hudson River Foundation, the Sarah K. de Coizart Article TENTH Perpetual Charitable Trust, and Elizabeth Woods and Charles Denholm. Critical support is also provided by the generous annual contributions of our members and donors.



NYC Audubon is also grateful for the guidance of Harbor Herons Nesting Survey Coordinator Shannon Curley, PhD, for the expertise of our surveyors, and for the assistance of American Littoral Society, Huckleberry Indians, Inc., National Park Service, NYC Parks, USDA/APHIS, and Wild Bird Fund.

REPORT GRAPHICS: Cover – photo by Diana Robinson/CC BY-NC-ND 2.0. P.1 - photo by Chris Girgenti; map courtesy of Google Maps. P.2 – background photo by Dustin Partridge, PhD. Others clockwise by Veit Irtenkauf/CC BY-ND 2.0; D. Bruce Yolton; Dave Ostapiuk; Lloyd Spitalnik; Don Miller/CC BY 2.0; Matthew Paulson/CC BY-NC-ND 2.0; Rejean Bedard. P.3 – top by Dave Ostapiuk; bottom by Isaac Grant (ibis), Andy Morffew/CC BY 2.0 (night-heron). P.4 – photo by Dustin Partridge, PhD. Back cover – both photos by Don Riepe.



71 WEST 23RD STREET, SUITE 1523
NEW YORK, NY 10010
212.691.7483
NYCAUDUBON.ORG

@NYCAUDUBON    

NYC Audubon is a grassroots community that works for the protection of wild birds and habitat in the five boroughs, improving the quality of life for all New Yorkers.