HARBOR HERONS NYCBIRDE HARBOR SURVEY

PROTECTING THE CITY'S WATERBIRDS

2024

HARBOR HERONS NESTING SURVEY 2024 REPORT

New York-New Jersey Harbor contains the largest population of colonial nesting wading birds, including herons, egrets, and ibises, in the northeastern United States. The 2024 Harbor Herons Nesting Survey marks the 40th year that NYC Bird Alliance has monitored this regionally significant colony on annual surveys, begun in 1985.¹

Wading bird species are easily observed and are among the most charismatic wild bird species encountered by the public in New York City, creating a powerful connection to the natural world. Because of their important role as top predators, these species also serve as important indicators of environmental health. Through the Harbor Herons project, NYC Bird Alliance works to preserve and protect this important colony and foster an ethic of conservation in New York City.

¹ A previous initial survey took place in 1982.

GOOD NEWS

- Our 2024 survey found the highest total of island-nesting wading birds recorded since 2018: 1,423 pairs.
- **South Brother Island hosted its largest** colony since 2007, including 5 Great Blue Herons pairs, a record for the harbor.
- Jamaica Bay's Elder's Point East Marsh hosted a diverse colony for the fourth straight year, exhibiting continued recovery after we found no birds nesting there in 2019.

CAUSES FOR ALARM

- **Overall, wading bird populations have** declined in the harbor since 2000, at a rate that exceeds average declines across North American birds.
- Black-crowned Night Heron, specifically, may disappear from the harbor by 2035, unless we are able to reverse its critical decline. (See page 4 to learn more.)
- A number of previously productive islands remain abandoned: Jamaica Bay's Subway Island is the most recent site to remain unoccupied more than one year after colony abandonment.



For over 40 years, New York City Bird Alliance (formerly NYC 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 NYC BIRD ALLIANCE the 30,000 acres of wetlands, forests, and grasslands of New York City. Learn more at nycbirdalliance.org.

SUMMARY RESULTS BY ISLAND GROUP

NYC Bird Alliance surveyed 16 harbor islands in 2024, including all islands with known active wader colonies:

- A total of 1,423 pairs of 8 wading bird species nested on 6 islands, within 3 of 4 available island groups.
- 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.

	East River	Jamaica Bay	Lower Harbor and S.I. Area ¹	Long Island Sound ²	Species Total
Black-crowned Night Heron	230	131	216	NA	577
Great Egret	115	95	177	NA	387
Snowy Egret	175	63	80	NA	318
Glossy Ibis	2	107	6	NA	115
Yellow-crowned Night Heron ³	5	0	4	NA	9
Great Blue Heron	0	О	5	NA	5
Green Heron	0	5	0	NA	5
Little Blue Heron	0	2	5	NA	7
Island Group Total	527	403	493	NA	1,423

¹ In the Lower Harbor, our survey of Hoffman Island was incomplete though the island's primary wading bird areas were surveyed. Swinburne Island, which does not host a wader colony, was not surveyed.

² We did not survey the Long Island Sound region, which was last found to host nesting waders in 2016.

³ Totals for Yellow-crowned Night Heron do not include mainland colonies.

EAST RIVER

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

LOWER HARBOR AND STATEN ISLAND AREA

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

CURRENT AND POTENTIAL NESTING ISLANDS



LONG ISLAND SOUND

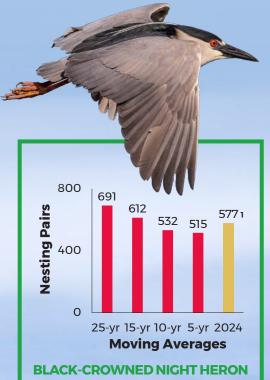
Cat Briar Island Chimney Sweeps Island Davids Island Goose Island Hart Island High Island Hog Island Huckleberry Island Rat Island

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

CONSERVATION PRIORITY: BLACK-CROWNED NIGHT HERON

- Black-crowned Night Heron has long been the most abundant breeding wading bird in both NY-NJ Harbor and the entire Northeast, but statistical analysis of our data has revealed it to be in critical decline. If recent trends continue, this species may be extirpated from the harbor by 2035, just 10 years from now.
- This decline echoes a regional drop in population for this species. Immediate action is needed to slow or reverse the Black-crowned Night Heron's decline and to better understand its causes, which may include chemical pollution, predation, competition with other bird species, declines in prey species, habitat loss, and climate change.
- Despite a slight upswing for both species in 2024, nesting populations of both Black-crowned Night Heron and Clossy Ibis have declined over the past 25 years. While both declines are concerning, the decline of Clossy Ibis, a less abundant species locally, is most likely be a natural contraction of its recently expanded historical range. Populations of Great and Snowy Egret, in contrast, have been stable or slightly increasing.



¹ Nesting wading bird populations vary year to year, and in 2024, our count of Blackcrowned Night Heron pairs was the highest observed since 2018. This increase does not indicate that the prevailing long-term trend seen in our data is broken, however. NYC Bird Alliance will continue its annual monitoring efforts as it works to reverse this species' long-term decline.







FUTURE STEPS AND RECOMMENDATIONS

- NYC Bird Alliance has submitted for publication an analysis of our data set since 2000 (the first year all currently surveyed islands were included in our surveys).
- We are currently advocating for the listing of Black-crowned Night Heron as a Threatened or Endangered species in New York State. This protected status would likely support needed local management efforts:
 - pollutant control
 - habitat protection
 - mammalian predator management

Further research is needed: The loss of the largest remaining population in the Northeast is not likely happening in isolation. The entire northeastern population may be at risk and collaboration between researchers is critical to better understand this decline and find solutions.

LEARN MORE AND GET INVOLVED

- Learn more about NYC Bird Alliance's conservation work, including the Harbor Herons project, at nycbirdalliance.org.
- This project's full research methods may be viewed in our 2022 Full Survey Report at nycbirdalliance.org/harbor-herons.
- For more information or to request access to the Harbor Herons Nesting Survey dataset, send your question or project inquiry to conservation@nycbirdalliance.org.
- Support our work: NYC Bird Alliance is the only organization studying the decline of wading bird species like the Black-crowned Night Heron in NY-NJ Harbor, and using that data to secure greater legal protections.
- Help us protect endangered Black-crowned Night Herons by giving today. Contribute at nycbirdalliance.org/donate or by scanning the QR code at right with your mobile device.



THANK YOU TO OUR SUPPORTERS

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THANK YOU TO OUR SURVEYORS AND PARTNERS

NYC Bird Alliance is grateful to Harbor Herons Nesting Survey Coordinator Shannon Curley, PhD, and to our many skilled volunteers and partners, including American Littoral Society, Hackensack Riverkeeper, New York City Department of Parks & Recreation, and Wild Bird Fund. Permits were issued by New York City Department of Parks & Recreation and National Park Service to conduct surveys on protected islands under city and federal jurisdiction. Boat access was provided by Don Riepe of the American Littoral Society / Jamaica Bay Guardian / NYC Bird Alliance; Michael Abegg and crew of Brooklyn Marine Services; and John Carter of BoatrideNYC.

EDITING AND DESIGN: Tod Winston. PHOTOS: Cover – Black-crowned Night Heron (BCNH) adult and chicks by Rejean Bedard. P.2 – Jamaica Bay colony by Christine Cieslak. P.3 – map courtesy of Google Maps. P.4 – Jamaica Bay marsh by Georgina Cullman; inset photos clockwise from top by Andy Morffew/CC BY 2.0, Isaac Grant, Susan T. Cook/CC BY 2.0, Isaac Grant. P.5 – "mirror pole" with BCNH nest on South Brother Island by Roslyn Rivas. Back cover – Jamaica Bay island by Tod Winston.



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NYC Bird Alliance protects wild birds and habitat in the City's five boroughs, improving the quality of life for all New Yorkers through science research, advocacy initiatives, and free public programs.