Species Status Assessment

Common Name: Snowy egret **Date Updated:** 3/11/2025

Scientific Name: *Egretta thula* **Updated By:** M. Oberkircher

Class: Aves

Family: Areidae

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

The snowy egret is at the northern edge of its breeding range in New York. It nests colonially with other waterbird species in trees and shrubs, mostly on coastal islands. After heavy persecution during the late 1800s when the species was almost extirpated by plume hunters, breeding resumed in New York in 1949 and the species increased rapidly—even expanding its historic distribution—along the Atlantic Coast through the late 1970s. Declines were noted across the Northeast beginning in the 1980s and populations have fluctuated considerably since then.

The number of breeding pairs on New York's Coastal Lowlands fluctuated from 2010 to 2020 without a notable trend, yet the number of pairs and colonies remain below peak densities from the 1970s. Despite its ability to recolonize areas after extirpation, snowy egrets remain susceptible to habitat loss and human disturbance as well as increased predation from nearby human activity.

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:** S2S3 **Tracked by NYNHP?:** Yes

Other Ranks:

-NYS 2025 SGCN Status: Species of Greatest Conservation Need
-IUCN Red List: Least Concern
-Partners in Flight: 7 out of 20
-Northeast Regional SGCN: Watchlist [Assessment Priority]

Status Discussion:

Snowy egret is a locally common and abundant breeder on Long Island and rare in the winter. Inland, it is rare but regular during any month. One pair has been observed at Motor Island on the Niagara River, but breeding has not been documented.

Snowy egret is ranked as Imperiled in New York and Massachusetts. It is ranked as Critically Imperiled in Connecticut, and as Vulnerable in New Jersey.

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Increasing	Unknown			Choose an item.
Northeastern US	Yes	Declining	Unknown		Watchlist (Assessment Priority)	No
New York	Yes	Stable	Stable	2004-2022		Yes
Connecticut	Yes	Unknown	Unknown		Threatened	Yes
Massachusetts	Yes	Declining	Increasing	1995-2018		Yes
New Jersey	Yes	Stable	Declining	2005-2021	Special Concern	Yes
Pennsylvania	No	Choose an item.	Choose an item.			No
Vermont	No	Choose an item.	Choose an item.			No
Ontario	No	Choose an item.	Choose an item.			No
Quebec	No	Choose an item.	Choose an item.			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):*

The NYSDEC conducts surveys for snowy egrets every three years as part of the Long Island Colonial Waterbird Survey. The NYC Audubon Harbor Heron Nesting Survey project conducts interim surveys every year and full surveys every three years.

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

Breeding Bird Survey data for North America show increasing long-term (1966-2021) and short-term (1992-2021) trends of 1% and 1.2% per year respectively.

“Not abundant but by no means uncommon” is the description provided by Giraud (1844) for snowy egrets, which bred locally on the Coastal Lowlands. The first records of Snowy Egret breeding in New York occurred in the 1880s, in limited numbers, on the coastal islands of Long Island (McGowan and Corwin 2008). The species declined or disappeared as a breeder in many parts of the Northeast and Midwest from the mid-1970s to the 1990s. Breeding was not recorded again until 1949 when two nests were found at Oak Orchard Beach, Suffolk County (Bull 1964). Rapid recolonization followed and the number of breeding pairs peaked in 1977 at 1,401 pairs (see Peterson 1988). By 1985, only 650 pairs nested in 15 colonies (Andrle and Carroll 1988). A similar decline in New Jersey from 3,178 individuals in 27 colonies to 1,343 in 26 colonies has also occurred (Walsh et al. 1999). In 2000, a snowy egret pair was documented at the Motor Island Colony on the Niagara River, though breeding was not confirmed (Watson 2001).

Colonial Waterbird Surveys on Long Island—conducted every three years—show fluctuations in the number of breeding pairs, but no notable increasing or declining trend is apparent from 2000 to 2022. The 2010 survey documented 476 pairs at 12 active sites while the 2022 survey found 487 pairs at 11 sites. The NY/NJ Harbor Herons survey has also seen no real trend in abundance with 308 pairs documented on 4 islands in 2007 and 284 pairs seen on four islands in 2022. South Brother (an island testing high for heavy metal and organic contaminants in herring gull eggs) has declined from 134 pairs in 2007 to 57 pairs in 2022.

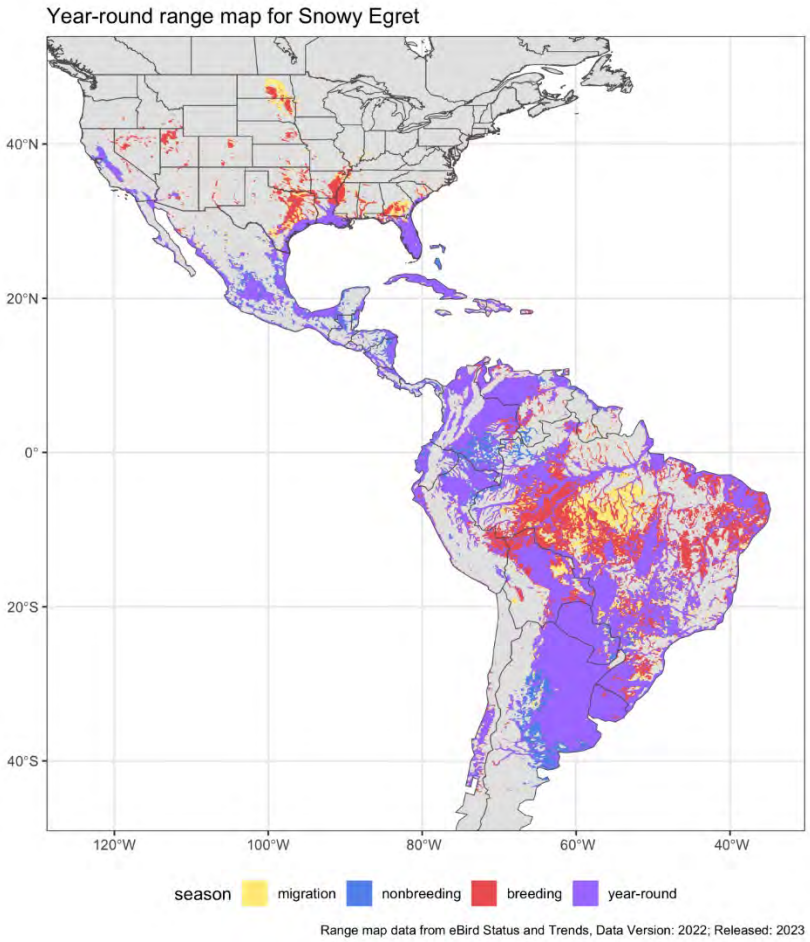

Figure 1. Full (year-round) range for snowy egret (eBird).

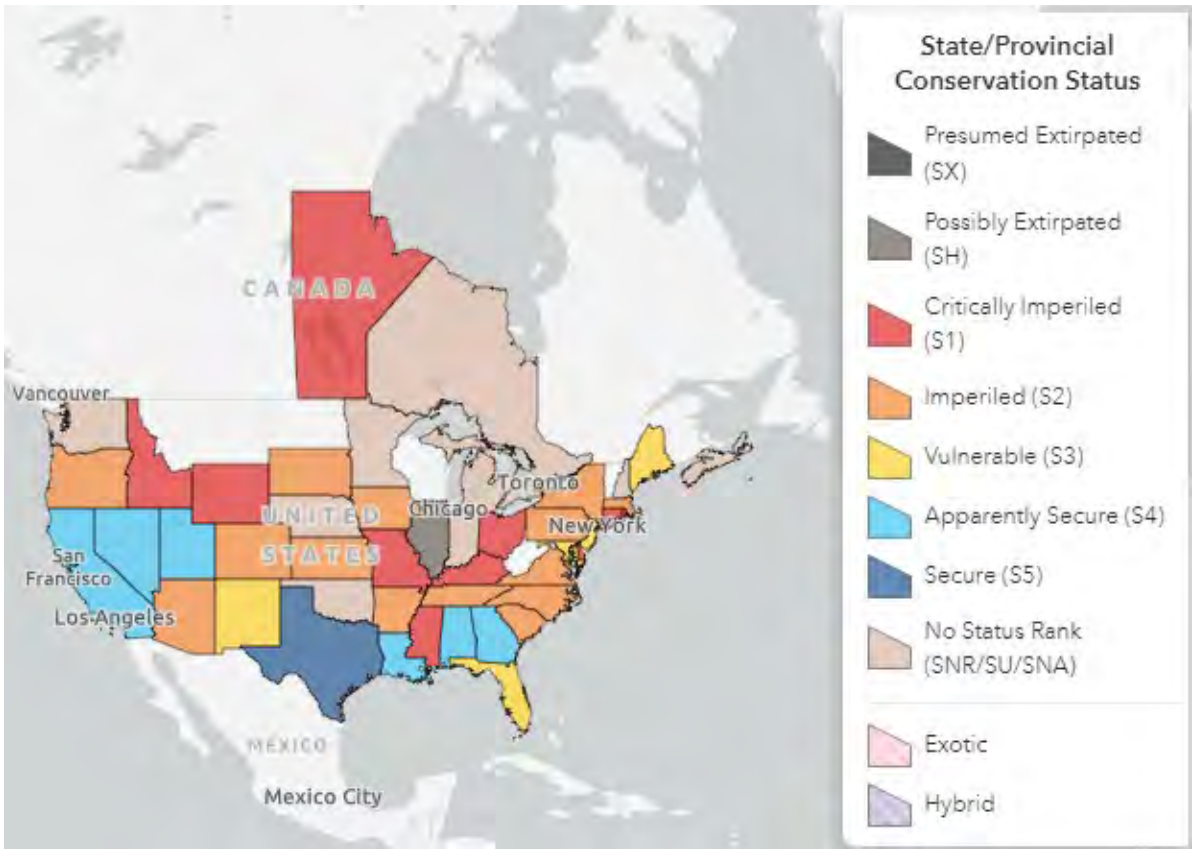

Figure 2. Conservation status of snowy egret in North America (NatureServe)

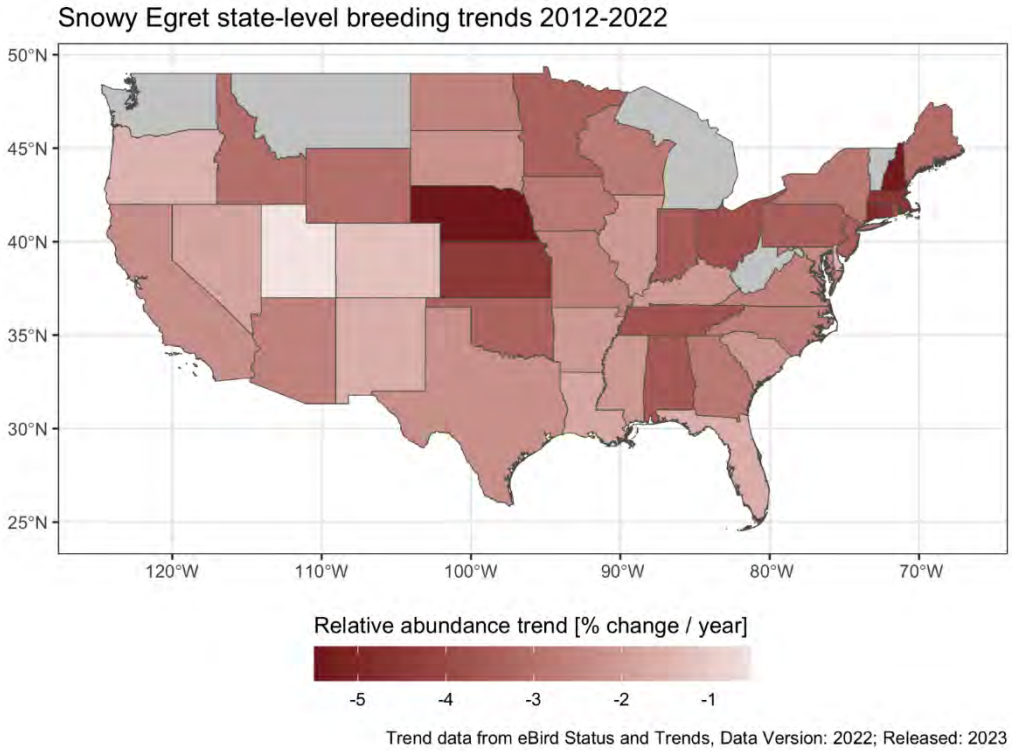

Figure 3. Trends, by state, for snowy egret (eBird).

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

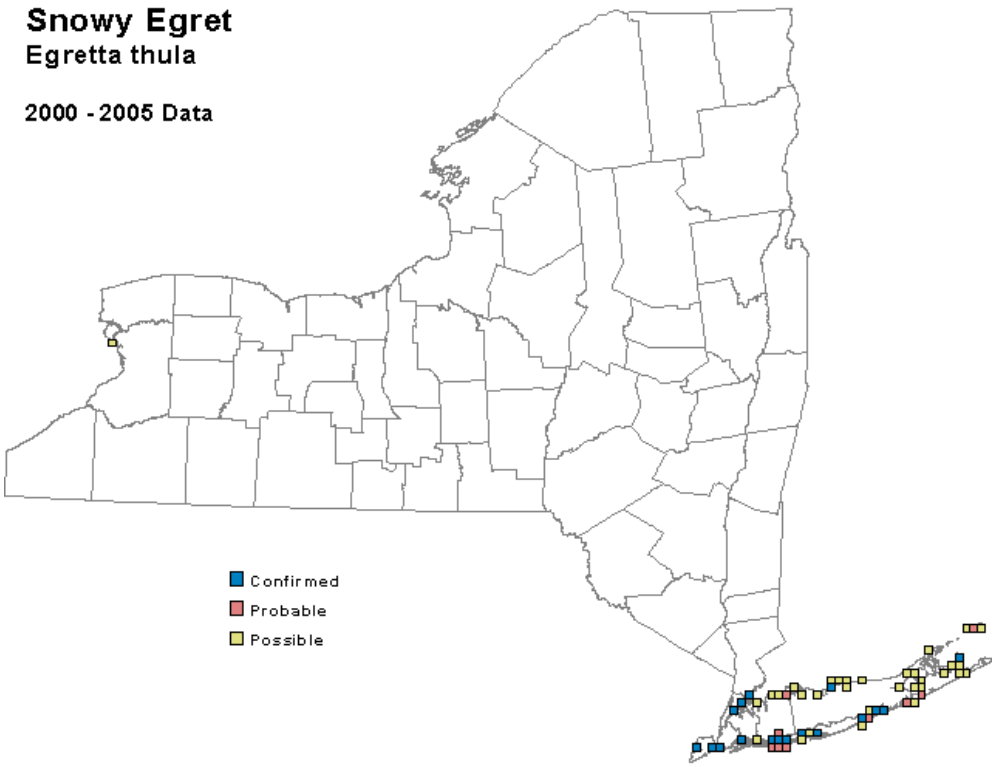

Figure 4. Snowy egret occurrence in New York State during the second Breeding Bird Atlas (McGowan and Corwin 2008).

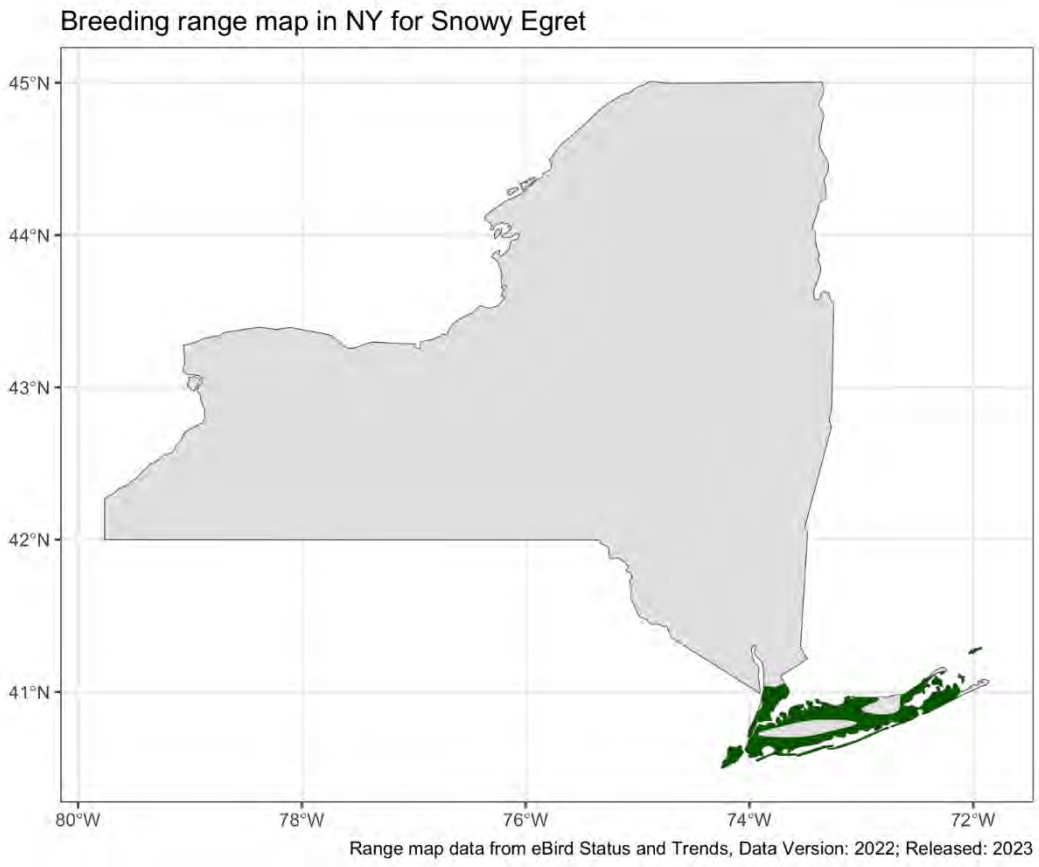

Figure 5. NYS breeding range for snowy egret (eBird).

Details of historic and current occurrence:

The first Breeding Bird Atlas (BBA) (1980-85) documented occupancy in 94 blocks, 1.8% of the survey blocks statewide (Andrle and Carroll 1988). The second BBA (2000-05) documented occupancy in 58 blocks, 1.1% 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, snowy egret has been documented in 42 priority blocks, 0.8% 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, 0.03 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 22 of 32.

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. Marine Intertidal Gravel/Sand Beach
2. Maritime Dunes
3. Riparian
4. Freshwater Marsh
5. Wet Meadow/Shrub Swamp
6. Estuarine, Brackish Intertidal, Tidal Wetland
7. Marine Dredge Spoil Shore
8. Estuarine, Brackish Intertidal, Benthic Geomorphology, Tidal Creek

Habitat or Community Type Trend in New York

Habitat Specialist?	Indicator Species?	Habitat/ Community Trend	Time frame of Decline/Increase
Yes	No	Declining	Long-term decline since early 1900s

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:

Snowy egrets nest colonially with other waterbirds in small trees and shrubs on coastal areas including offshore islands, but also along open areas of rivers, lakes, salt and freshwater marshes, marine intertidal zones, and maritime beaches (Budliger and Kennedy 2005). Snowy Egrets inhabit open edges of rivers, lakes, salt marshes, salt pannes, brackish interdunal swales, marine intertidal zones and maritime beaches and shrubland in New York (Budliger and Kennedy 2005, New York Natural Heritage Program 2007). Birds feed in small salt-marsh pools to large freshwater marshes. The remarkable population expansion in the latter half of the 1900s was largely into estuarine habitats and inland along large river drainages (Peterjohn and Rice 1991).

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):*

While most individuals breed in their second year, some breed in their first year. There are no data for lifetime reproductive success. One brood is raised each season (Parsons and Master 2000). In New York, successful nests produced 1.5 nestlings/nest surviving to age 14 d (St. Clair Raye and Burger 1979). Nestlings 1–5 d old most likely to be eaten by predators in a New York colony.

One banded individual recovered in Utah was 22 yr, 10 mo old (Jackson 1982). Mean annual mortality rate of adults throughout the U.S. is 52.4%, estimated from band recoveries (Ryder 1978). Broken eggs resulting from DDE contamination has been reported (Findholt 1984). Starvation was also the leading cause of death in chicks 8–10 d old in Delaware Bay (Parsons 1985).

Nestlings in Massachusetts are most vulnerable to inclement weather at about 1.3 wk of age (Parsons 1985). Three birds banded as nestlings on Long Island, NY, were recovered as subadults in the West Indies 2,400–3,200 km from natal site (Davis 1968). During average and poor weather years in a Massachusetts colony, species was inferior to black-crowned night-heron in producing fledglings; in years of favorable weather, snowy egrets produced more young than black-crowned night-heron (Parsons 1985).

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

From Parsons and Master (2000):

Habitat loss and degradation is the primary threat for coastal wetland species. Of 127 million acres of wetlands existing in the United States during colonial times, 100 million have been drained as of the late 1970s (Curry-Lindahl 1978). Coastal wetlands are particularly important to snowy egrets in the eastern and southern United States. (Custer and Osborn 1978). Herons that utilize pursuit or chase behaviors, like the snowy egret, are more specialized and selective than searchers (Kushlan 1978). Quality of foraging habitats lowering reproduction rate, wetland degradation from chemical contamination (Parsons 1994a), and nutrient enrichment (Spalding et al. 1993) put species at risk because of diet specificity.

Nest-site competition with cattle egrets (Burger 1978) and with black-crowned night-herons (Parsons and Master 2000) has been linked with snowy egret declines. The night-heron population has risen 78% during the same time span. Since the 1970s, abundance has declined by 25 to 30% in the northeastern United States. Increased predation at semi-isolated nesting sites has largely redistributed birds to true islands, which may be limiting.

In New York Harbor, 10% of 54 nestling regurgitations included inert material such as resin pellets and styrofoam (Parsons and Master 2000). Loss of foraging habitat as a result of oil spills in New York Harbor led to significant nestling mortality from starvation (Parsons 1994). On Long Island, threats include flooding, erosion, human activity, and predation (New York Natural Heritage Program 2007).

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
6. Human Intrusions & Disturbance	Choose an item.	Choose an item.	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.	Choose an item.
8. Invasive & Other Problematic Species	8.2 Problematic Native Plants & Animals	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.4 Changes in Precipitation & Hydrological Regimes	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 1. Threats to Snowy egret

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:

Snowy egrets are protected by the Migratory Bird Treaty Act.

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

Protection of habitat from disturbance and degradation. Limiting predation and human activity using predator exclosures, visitor education, and by posting restricted signs in breeding and foraging areas would also be beneficial. Any habitat restoration efforts should consider increasing the availability of pool and open water habitat, as foraging habitat availability may be a limiting factor for egrets (Trocki and Paton 2006). Another consideration for the management of breeding Snowy Egrets is the use of buffers around colonies to reduce flushing responses to human disturbance (Peters and Otis 2006).

Snowy egrets demonstrated an impressive capacity to expand into recently vacated and entirely new coastal regions after persecution from plume hunters stopped around the turn of the twentieth century (Parsons and Master 2000). Information available at the end of the century suggests nesting sites, while protected from direct human intrusion in most cases, are not safe from human commensals (raccoons, feral cats, etc.) unless located on islands. Therefore, numerous historical nesting sites located on coastal spits and peninsulas increasingly abandoned in favor of more completely isolated sites on islands. Populations may be limited by availability of suitable island nesting sites within feasible commuting distance (<10 km) to adequate foraging wetlands.

Action Category	Action	Description
A.1 Direct Habitat Management	A.1.1 Manage plants, animals, fungi, or bacteria	A.1.1.4 Mechanical management - animals
A.1 Direct Habitat Management	A.1.3 Mitigate human environmental impact	A.1.3.1 Manage access A.1.3.2 Mange litter and waste
A.1 Direct Habitat Management	A.1.2 Manage non-living habitat components	A.1.2.4 Manage erosion and sedimentation
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.6.5 Conservation planning	C.6.5.1 Plan the management of protected areas or sites

Table 2. Recommended conservation actions for snowy egret

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