

Species Status Assessment

Common Name: Common Tern

Date Updated: November 2024

Scientific Name: *Sterna hirundo*

Updated By: John Milo

Class: Aves

Family: Laridae

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

The common tern is a medium sized migratory colonial waterbird within the family Laridae that includes gulls, skimmers, skuas, and kittiwakes (Bird Life Intl. 2019). Compared to its genetic relatives the common tern is a nesting generalist that often nests in any sparsely vegetated loose substrate near water. Nesting colonies are usually observed on shell beaches, rocky shores, and grassy dunes. Exhibiting a circumpolar distribution there are generally four widely recognized subspecies which bare little physical distinction from the North American variant. In New York most common tern colonies exist on Long Island beaches and rocky shores/islands along Lake Champlain and Lake Ontario (Sullivan et. al 2009). Increasing development, human disturbance on beaches, nesting competition with ring-billed gulls, and predation are all factors currently contributing to decline (Nisbet & Ian 2011).

I. Status

a. Current legal protected Status

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

ii. **New York:** Threatened

b. Natural Heritage Program

i. **Global:** G5

ii. **New York:** S3B **Tracked by NYNHP?:** Yes

Other Ranks:

-NYS 2025 SGCN Status: Species of Greatest Conservation Need

-IUCN Red List – Least concern

-Audubon Watch List – Concern score: 12. Not actively on “watch list”.

-Canada – Not a candidate, however considered “below acceptable level” for population decline.

-USFWS – Not a candidate

-Northeast Regional SGCN: RSGCN

Status Discussion:

Common terns exhibit a circumpolar range, nesting in the Northern Hemisphere and migrating to the Southern Hemisphere to overwinter (Sullivan et al. 2009). They represent the most prevalent tern species in the Northeastern United States. Their extensive distribution complicates the evaluation of overall population trends using standard vulnerability indicators. Additionally, when nests fail, common terns frequently opt for different locations in their next nesting attempt or breeding season. – These behaviors make it challenging to measure recruitment on a local level

(Nisbet et.al 1984). Annual assessments carried out by NYSDEC indicate a pattern of population growth and decline, with general population stability observed between 2013 and 2023.

Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Stable	Stable	2010-2023	Not Listed	No
Northeastern US	Yes	Increasing	Increasing	2010-2023	-	Yes
New York	Yes	Stable	Stable	2010-2023	Threatened	Yes
Connecticut	Yes	Declining	Declining	2010-2023	Not listed	No
Massachusetts	Yes	Stable	Increasing	2010-2023	Special Concern	Yes
New Jersey	Yes	Declining	Declining	2010-2023	Special Concern	Yes
Pennsylvania	Yes	Unknown	Declining	2010-2023	Endangere d	Yes
Vermont	Yes	Unknown	Stable	2010-2023	Threatened	Yes
Ontario	Yes	Stable	Unknown	2010-2023	Not listed	No
Quebec	Yes	Declining	Unknown	2010-2023	Not listed	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 New York State Department of Environmental Conservation conducts annual colonial waterbird surveys. These surveys seek to quantify either occupied nests, eggs, or breeding pairs of various colonial waterbird species including the common tern.

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

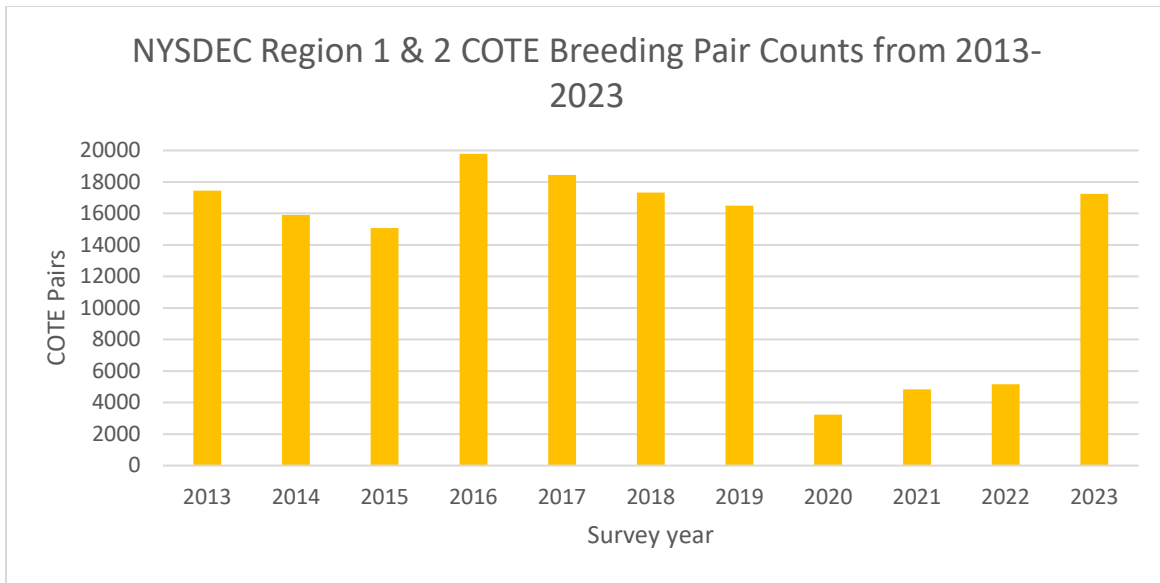


Figure 1. NYSDEC COTE breeding pair counts in Regions 1 & 2 from 2013-2023.

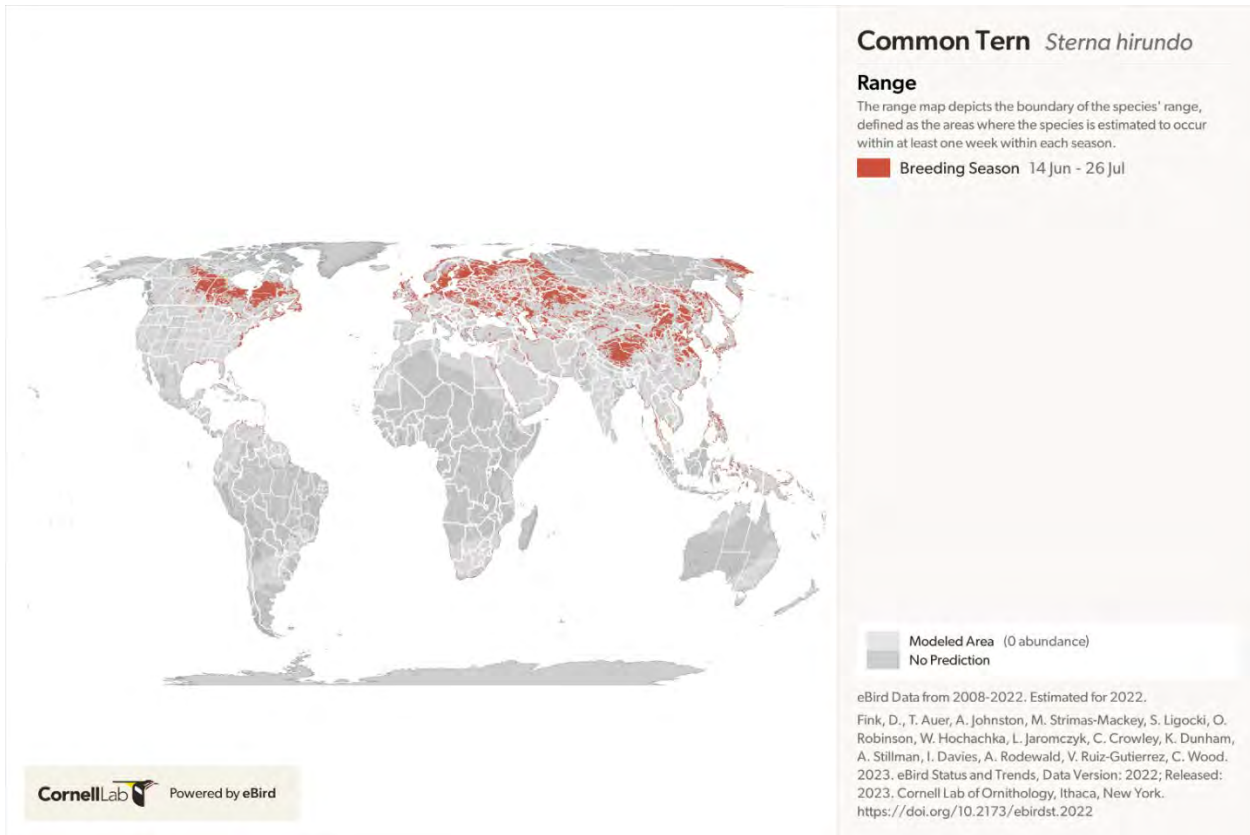


Figure 2. Common tern breeding season range map (North America), (eBird)

Breeding range map for Common Tern

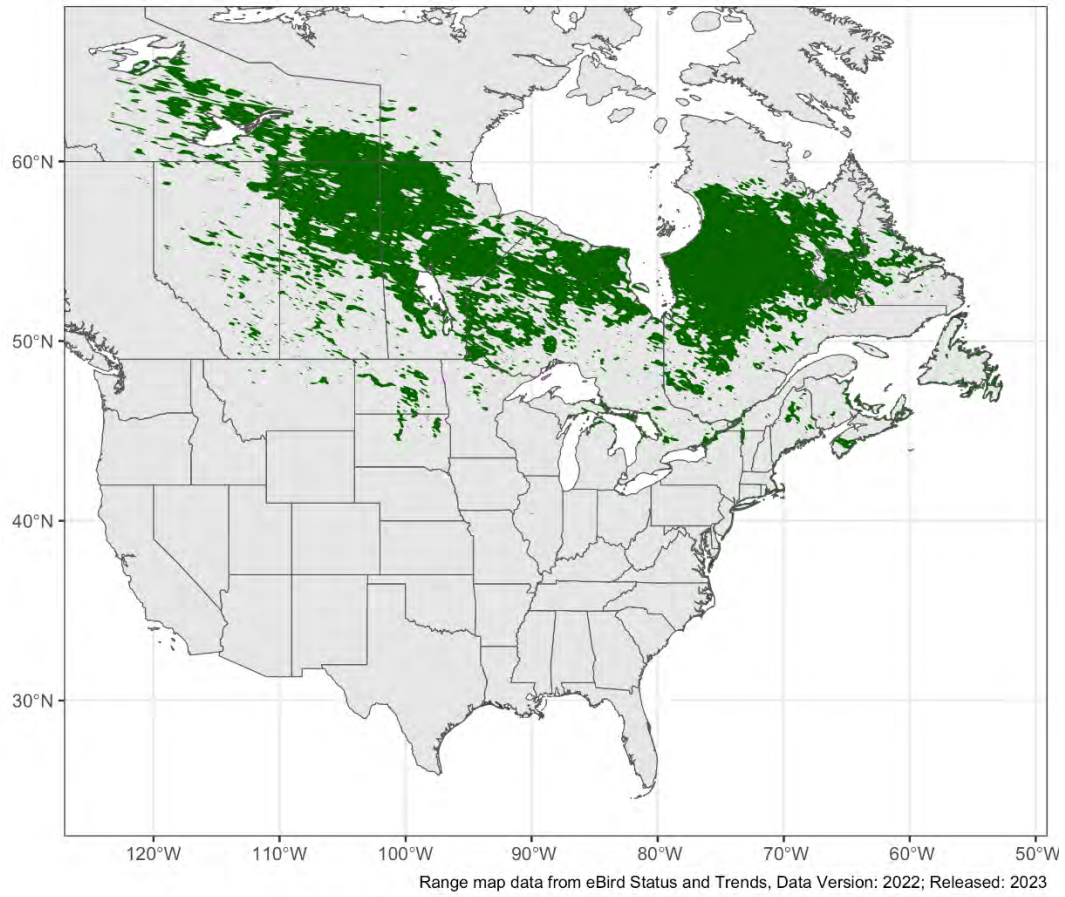
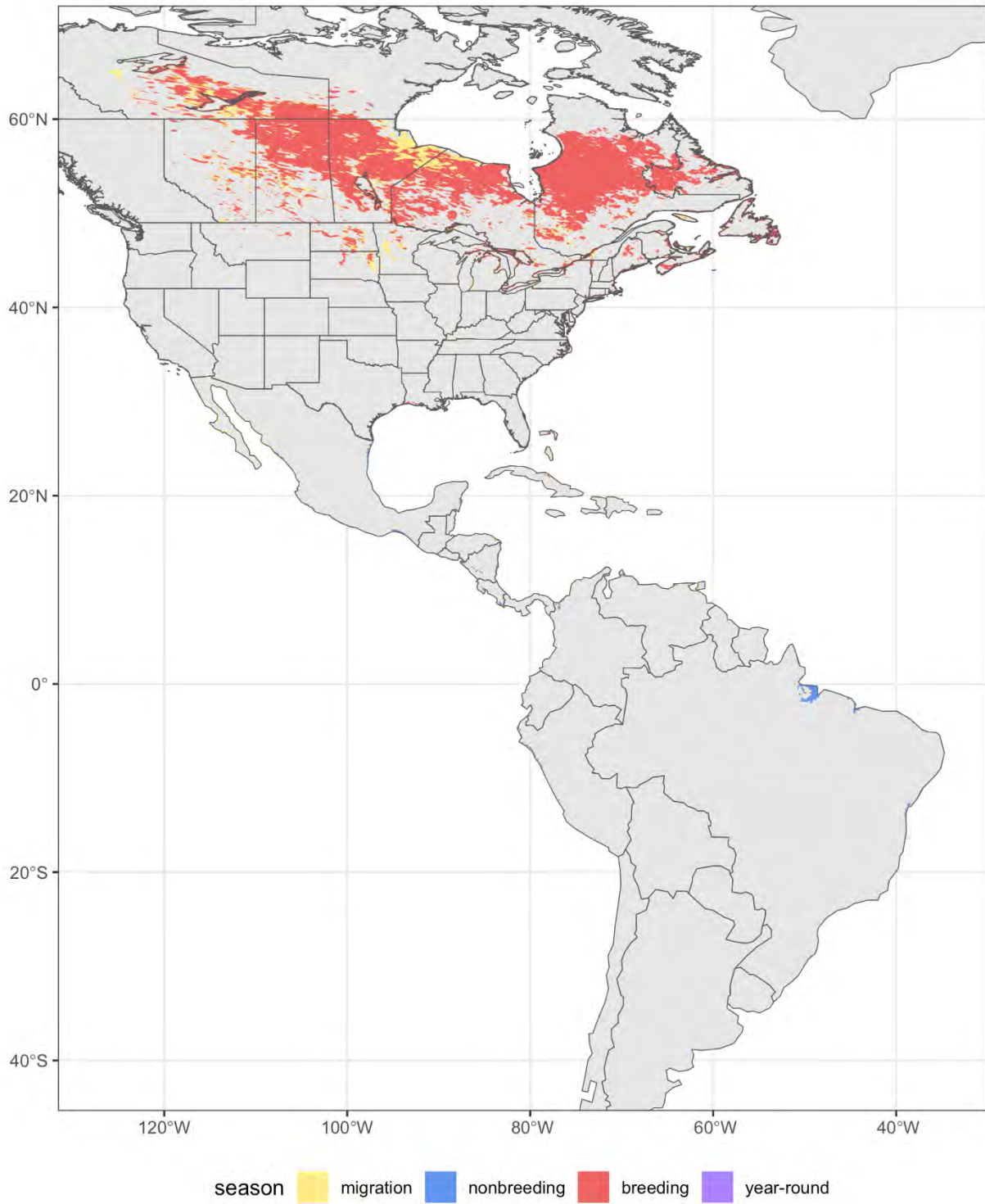


Figure 3. Breeding range of Common Tern in North America (eBird).

Year-round range map for Common Tern



Range map data from eBird Status and Trends, Data Version: 2022; Released: 2023

Figure 4. Year-round range of common tern (eBird).

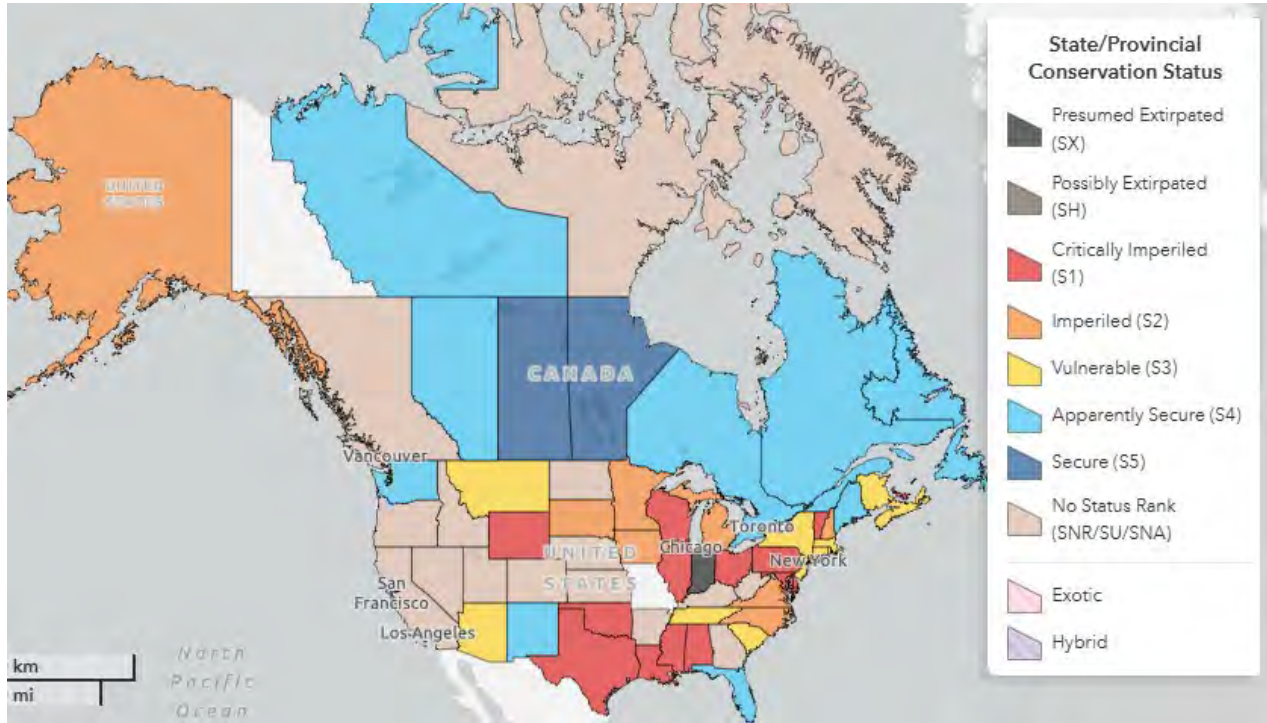


Figure 4. Conservation status of common tern in North America (NatureServe 2024).

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

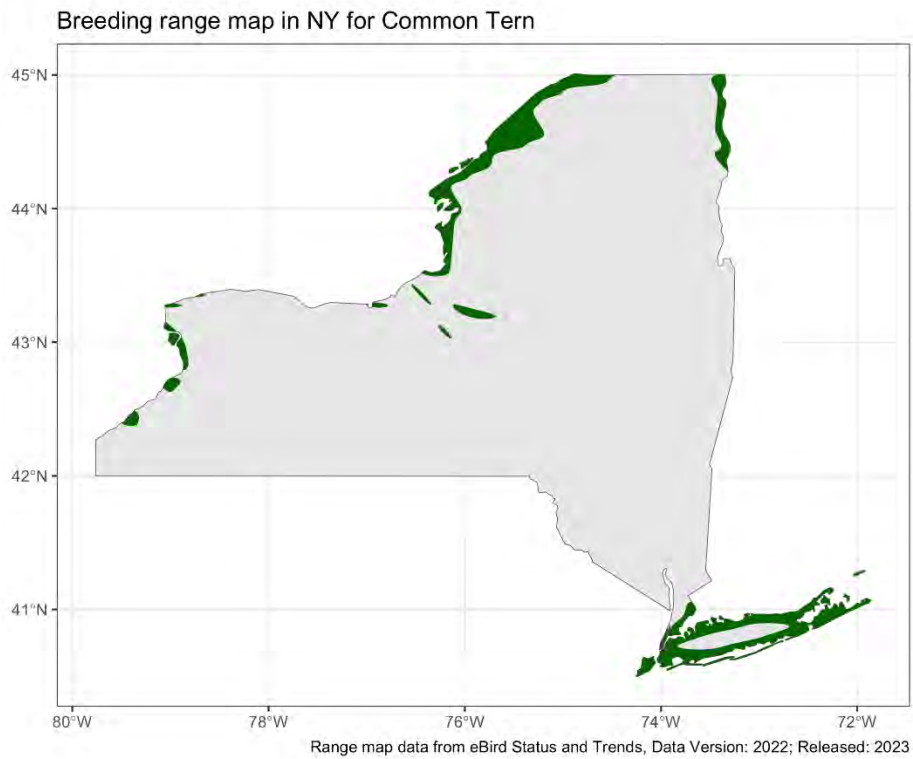


Figure 5. New York breeding range of common tern (eBird).

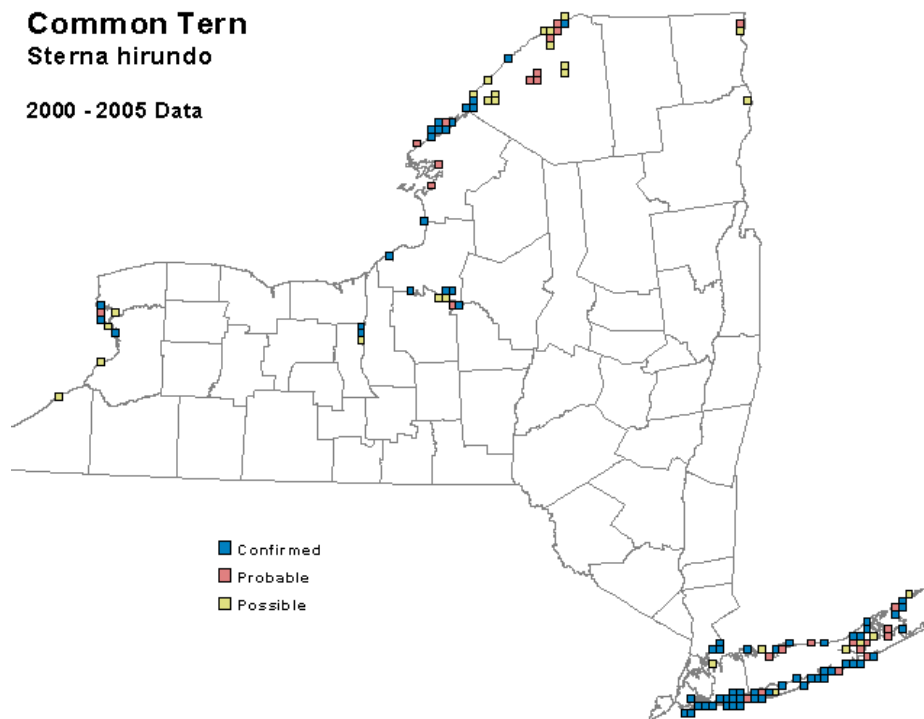


Figure 6. NYS 1980-1985 Common tern species distribution.

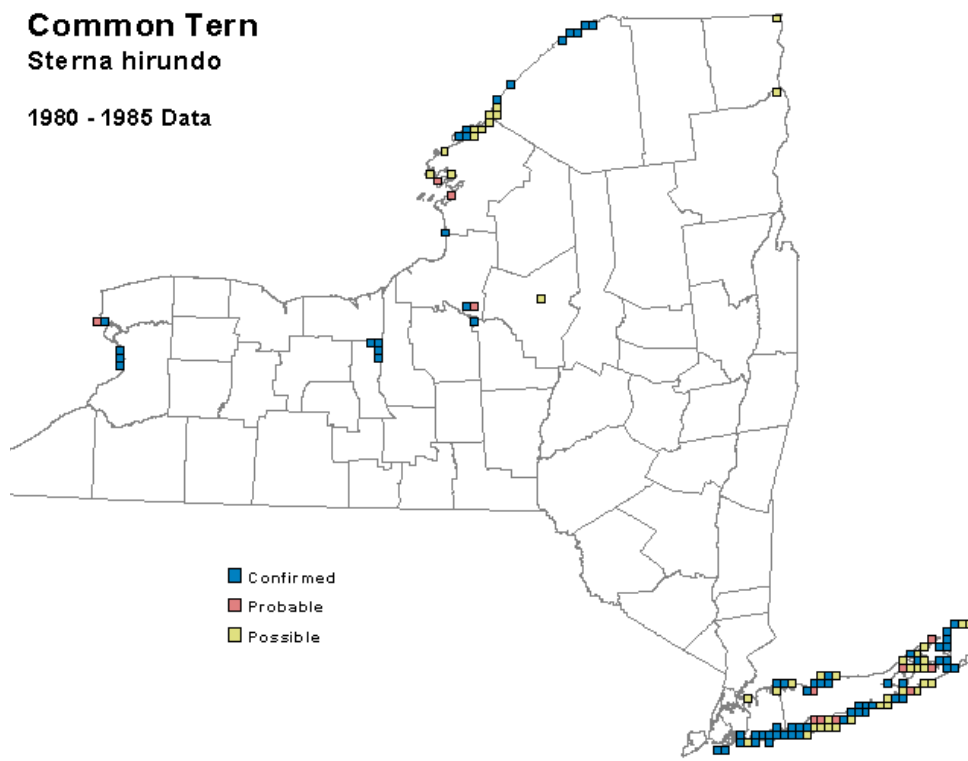


Figure 7. NYS 2000-2005 Common tern species distribution.

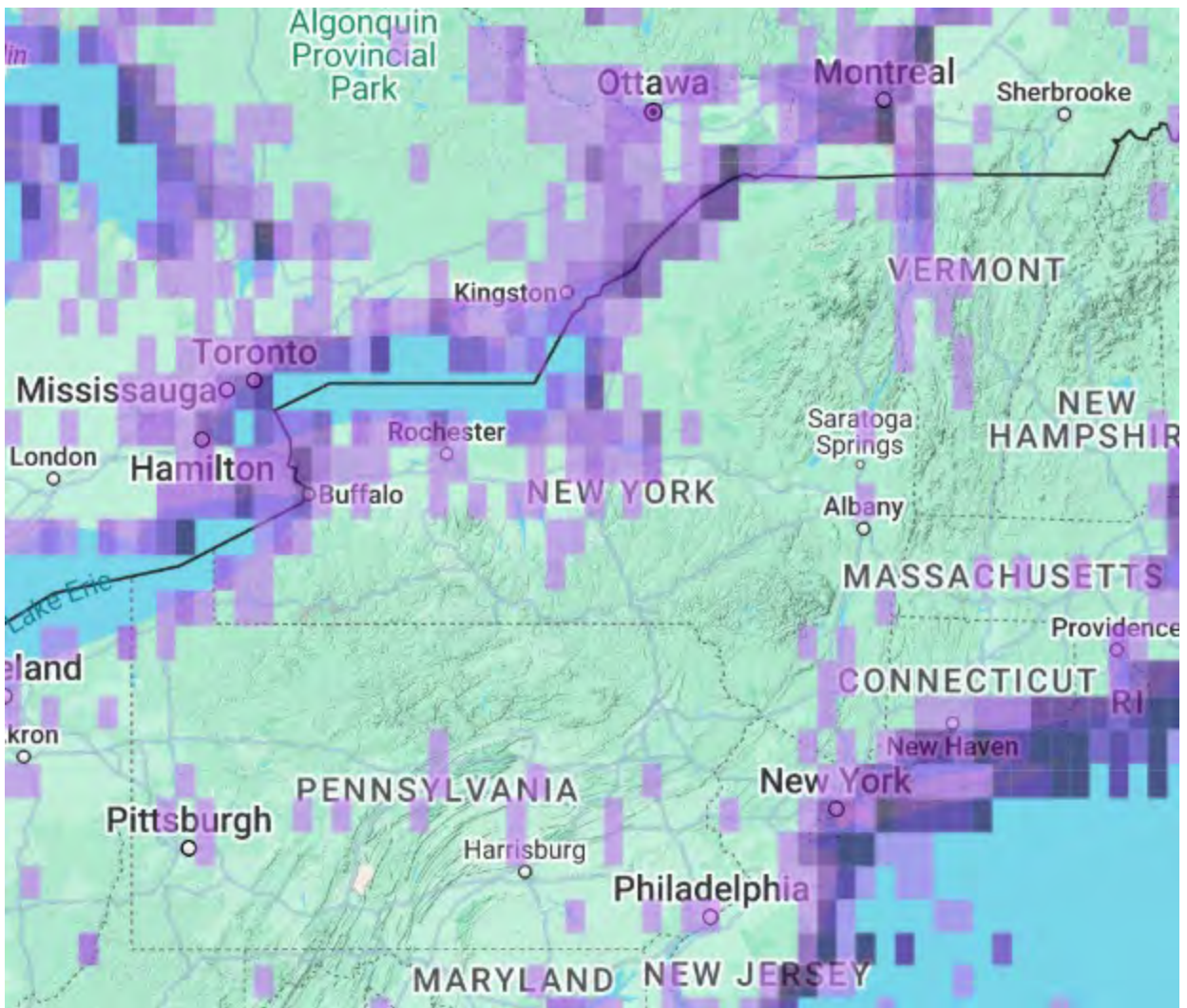


Figure 8. NYS BBA 2020-2024 Common tern observations

Details of historic and current occurrence:

The 1980-1985 NYS Breeding Bird Atlas documented nesting in 68 blocks whereas the 2000-2005 atlas confirmed nesting in 77 blocks (McGowan and Corwin 2008). It appears the concentration of common terns, particularly on the North Shore of Long Island, has decreased while observations along Lake Champlain, the Northeast shores of Lake Ontario, and inland NY have increased. Despite this shift in distribution the overall abundance of observed nesting pairs has increased from 1980-2005 (McGowan and Corwin 2008).

The first Breeding Bird Atlas (BBA) (1980-85) documented occupancy in 122 blocks, 2.29% of the survey blocks statewide (Andrle and Carroll 1988). The second BBA (2000-05) documented occupancy in 121 blocks, 2.27% of the survey blocks (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, common tern has been documented in 52 priority blocks, 2.86% of all priority blocks statewide during the third BBA (NY BBA III Overview, 2024). The third NYS Breeding Bird Atlas is currently ongoing. However, the current results

suggest a decline in confirmed observations on Lake Champlain and NE Lake Ontario, and the Saint Lawrence Valley since 2005. The NYC coastal areas and Long Island appear to have much more overall observations, but the confirmed observations appear similar to the 2000-2005 atlas results.

New York’s Contribution to Species North American Range:

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

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

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

SGCN Category 3

1. Lake & River Beach
2. Great Lakes Dune and Swale
3. Maritime Dunes
4. Freshwater marsh
5. Great lakes freshwater estuary marsh

Habitat or Community Type Trend in New York

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

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:

The Northeastern common tern (*Sterna hirundo hirundo*) breeds along the North American Atlantic coast from Newfoundland to South Carolina and around large inland lakes. Wintering grounds are concentrated along the equator in coastal South America. In New York the common tern arrives between April-May and predominately nest on the Long Island Coast, Lake Ontario, Lake Champlain, and the Saint Lawrence and Niagara rivers (Sullivan 2009). Nest locations include sandy beaches, dunes, rocky shorelines, islands, and artificial islands such as piers.

IV. Species Demographic and Life History:

Breeder in NY?	Non-breeder in NY?	Migratory Only?	Summer Resident?	Winter Resident?	Anadromous/Catadromous?
Yes	No	Yes	Yes	No	(blank)

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):*

Common terns first arrive in their New York breeding grounds as early as mid-April (Sullivan 2009, McGowan and Corwin 2008). This species nests in colonies often comprised of less than 2,000 pairs. They will nest among other colonial waterbirds such as Roseate terns, black skimmers, and various gull species. Following a lengthy courtship ritual including flight displays, ground displays, and food offerings, the male will create a shallow depression in the sand which the female will utilize as a nest (Wittam and Leonard 2000). Often eggs are laid directly on bare gravel or sand and surrounded by fish scales, shells, and aquatic vegetation. Nest scrapes tend to be 4cm deep and 24cm wide. Peak egg laying is reached by Mid-May in which both sexes will incubate for a total of 21-24 days. Precluding predation, flooding, or other factors contributing to nest failure, colonies often exhibit a 94% hatch rate (Belsile 1998). Following incubation, the adults' rear young for 22-28 days until they fledge. It is not uncommon for fledged young to continuously receive supplemental forage from their parents until the fall migration. Following a nest failure common terns will often attempt a second clutch; it is very rare that they may attempt a third. Productivity on islands has been documented to be 1.5-2.0 and inherently lower on main-land breeding sites due to increased predation. Adults reach peak reproductive fitness between 3-5 years and live an average of 12 years, although the oldest banded North American common tern was documented at 23 years.

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

One of the significant threats facing common terns and other piscivorous birds is polluted fisheries. Elevated mercury, lead, PFAS, and other toxicants can result in nervous system issues, thinner eggshells, and atrophy. Rising sea levels and increased flooding events during the breeding period could also lead to higher rates of nest failure. As noted by Lokpoel et al. 1997, ongoing management of ring-billed gull populations was necessary to sustain a restored tern colony. We are currently observing similar competition challenges in New York State. Although, human interference poses the most significant threat to common terns in this region. Urban development restricting habitats, excessive use of natural shorelines, driving on beaches, recreational boat wake, and illegal relocation of nuisance wildlife are compounding issues of the same origin. As suitable nesting areas become more scarce, terns increasingly depend on salt marshes for nesting. The NYS DEC has reported (2023) an island off the coast of Staten Island that has become inundated with illegally relocated meso-carnivores. – This has caused a local extirpation of all ground-nesting colonial waterbirds.

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
1. Residential and Commercial	1.3 Tourism & Recreation Areas	(coastal development)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
6. Human Intrusions & Disturbance	6.1 Recreational Activities	6.1.1 Motor vehicles (beach driving)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
6. Human Intrusions & Disturbance	6.1 Recreational Activities	6.1.4 Recreational boating	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	8.2.5 Increased predation by mesopredators (local residents relocating mesocarnivores to coastal green space)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	9.2 Industrial & Military Effluents	(DDE, DDT, PCB, mercury, lead, selenium, chromium, cadmium, PFAS)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	-	(contamination of local fisheries)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.1 Habitat Shifting & Alteration	(competition with gulls)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.5 Storms & Severe Weather	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 1. Threats to common tern.

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

Yes: ü No: _____ Unknown: _____

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

Common terns are threatened in New York State. They also utilize the same habitat type as several species which are either NYS endangered or federally endangered.

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

Recommended actions on breeding grounds:

- Continue to monitor the population during the breeding season.
- Maintain support for USDA-Aphis gull population control.
- Reduce recreational vehicle use on known nesting sites or high suitability nesting sites.
- Predator control in coastal areas, particularly in region 2 and Western region 1.
- Increase fenced-off/ exclusion zones during the breeding season.
- Bolster flood mitigation infrastructure to reduce nest flooding.

Recommended actions on wintering grounds:

Actions on wintering grounds may prove challenging due to administrative, legal, and language barriers.

- Develop links with equatorial partners.

Action Category	Action	Description
A.1 Direct Habitat Management	A.1.1.4.0 Mechanical management-animals	Reduce feral cat populations
A.1 Direct Habitat Management	A.1.2.1.0 Manage hydrological regimes	Mitigate increased flood prevalence
B.3 Outreach	B.3.1.0.0 Outreach, communication, and distribution	Awareness and Education
C.6 Design and Plan Conservation	C.6.2.0.0 Conserve specific land or seascapes	Reduce coastal development
C.6 Design and Plan Conservation	C.6.2.0.0 Conserve specific land or seascapes	Increase acreage of protected beaches

Table 2. Recommended conservation actions for the common tern.

VI. References

- BirdLife International (2019). "[Sterna hirundo](#)". *IUCN Red List of Threatened Species*. 2019: e.T22694623A155537726. doi:[10.2305/IUCN.UK.2019-3.RLTS.T22694623A155537726.en](#). Retrieved 12 November 2024.
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Originally prepared by	
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