

Species Status Assessment

Class: Birds
Family: Laridae
Scientific Name: *Rynchops niger*
Common Name: Black skimmer

Species synopsis:

The black skimmer is coastal species, occurring from Massachusetts southward along the Atlantic and Gulf coasts to Mexico. It breeds on sparsely-vegetated sandy beaches and—with more frequency since the early 1990s—in salt marshes. Sandy beach habitat has been compromised in many places by increased development and recreation. Since 2000, the number of black skimmer colonies has ranged from 6 to 15, but in 2010 and 2011, skimmers bred in only two locations: Breezy Point in Queens County and Nickerson Beach in Nassau County. In the same period, the number of breeding pairs has increased overall.

I. Status

a. Current Legal Protected Status

- i. **Federal** Not Listed **Candidate:** No
- ii. **New York** Special Concern; SGCN

b. Natural Heritage Program Rank

- i. **Global** G5
- ii. **New York** S2 **Tracked by NYNHP?** Yes

Other Rank:

Audubon Watch List: yellow

Status Discussion:

Black Skimmer breeds in only two locations on the south shore of Long Island, and is virtually absent elsewhere in the state. Populations in Connecticut, Massachusetts, and New Jersey are all stable, though the breeding population in New Jersey is listed as endangered.

II. Abundance and Distribution Trends

a. North America

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: 1999-2009

b. Regional

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Regional Unit Considered: Eastern U.S.

Time frame considered: 1999-2009

c. Adjacent States and Provinces

CONNECTICUT Not Present _____ No data _____

i. Abundance

___ declining ___ increasing X stable ___ unknown

ii. Distribution:

___ declining ___ increasing X stable ___ unknown

Time frame considered: First colony (still present) established in 1998

Listing Status: _____ Not Listed _____ SGCN? Yes

MASSACHUSETTS Not Present _____ No data _____

i. Abundance

___ declining ___ increasing X stable ___ unknown

ii. Distribution:

___ declining ___ increasing X stable ___ unknown

Time frame considered: Averaged 4 pairs over last 20 years

Listing Status: _____ Not Listed _____ SGCN? No

NEW JERSEY Not Present _____ No data _____

i. Abundance

___ declining ___ increasing X stable ___ unknown

ii. Distribution:

___ declining ___ increasing X stable ___ unknown

Time frame considered: 1993-2005

Listing Status: Endangered (breeding); Threatened (non-br.) SGCN? Yes

ONTARIO	Not Present <u> X </u>	No data _____
PENNSYLVANIA	Not Present <u> X </u>	No data _____
QUEBEC	Not Present <u> X </u>	No data _____
VERMONT	Not Present <u> X </u>	No data _____

d. New York No data _____

i. Abundance

 declining increasing X stable unknown

ii. Distribution:

 X declining increasing stable unknown

Time frame considered: 1980-85 to 2000-05

Monitoring in New York.

Long Island Colonial Waterbird surveys are conducted annually for black skimmers.

Trends Discussion:

Most U.S. trend data are from the late 1970s, with irregular surveys since then. In the 1970s, the black skimmer was considered a vulnerable and declining species (Downing 1973), but recent evidence suggests that its population has stabilized in many states, albeit at lower levels than in the early 1960s. As of the early 1980s, the eastern U.S. population was stable or perhaps increasing in some areas (Buckley and Buckley 1984). Population trends in the southeastern U.S. are unknown (Clapp and Buckley 1984).

Black skimmers have been known in New York since the mid 1800s (Gochfeld and Burger 1994). They were first discovered breeding on Long Island in 1934 at Gilgo State Park (Vogt 1934). Skimmers were common breeders on Long Island throughout the middle of the 20th century, with an average of over 400 pairs at 10-13 colonies reported during surveys conducted from 1974-1978 (Buckley and Buckley 1980).

Long Island Colonial Waterbird surveys since 2001 documented a low of 265 pairs in 2004 with a generally increasing trend since then; 589 pairs were documented in 2010. However, there has been a decline in the number of locations where breeding is attempted. The number of colonies decreased from fifteen (15) in 2008, to nine (9) in 2009, and only two (2) in both 2010 and 2011 (Nickerson Beach and Breezy Point). Tables 1 and 2 show the number of colonies and nesting pairs from 1985 to 2011 (NYSDEC 2012).

TABLE 1: THE NUMBER OF BLACK SKIMMER COLONIES RECORDED DURING THE LICWPP. THE AVERAGE NUMBER OF COLONIES PER YEAR IS ELEVEN (11).

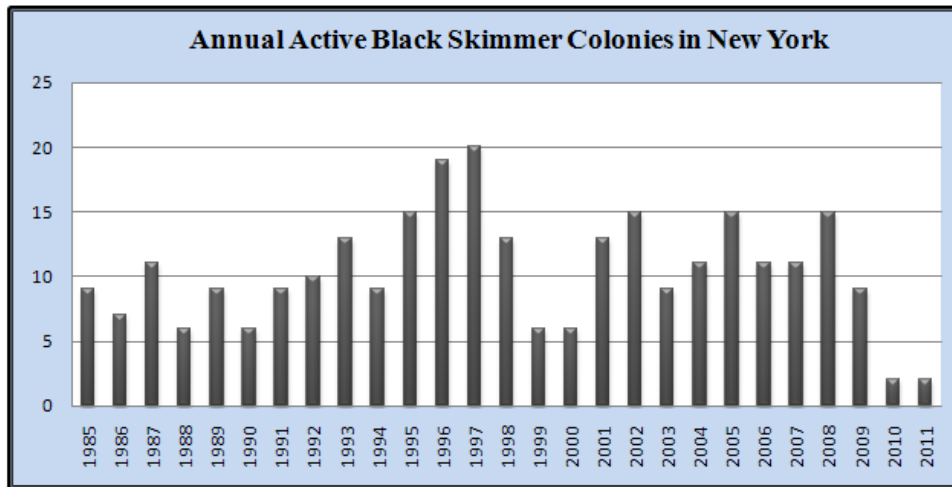


TABLE 2: THE NUMBER OF ANNUAL BREEDING PAIRS OF BLACK SKIMMER AS RECORDED DURING THE LICWPP. THE ANNUAL AVERAGE NUMBER OF BREEDING PAIRS IS APPROXIMATELY 495.

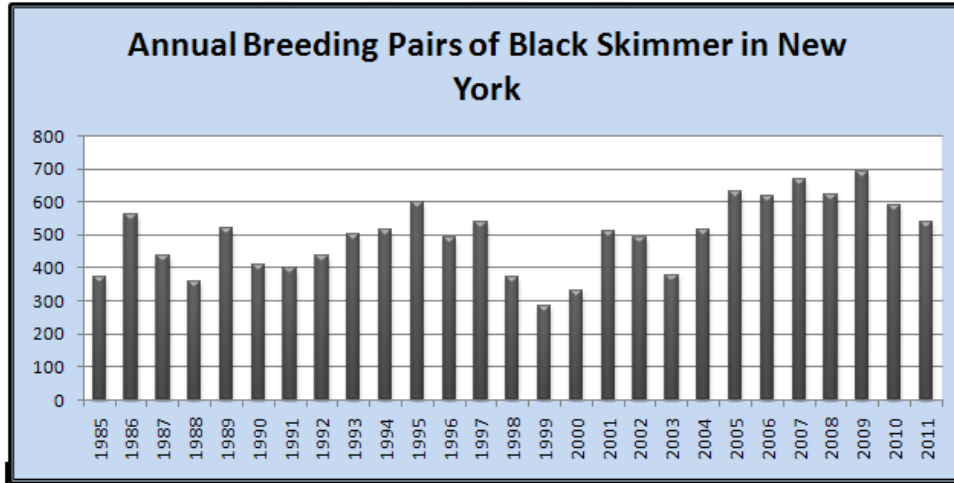


Figure 1: Range of black skimmer in North and Central America (Birds of North America Online).

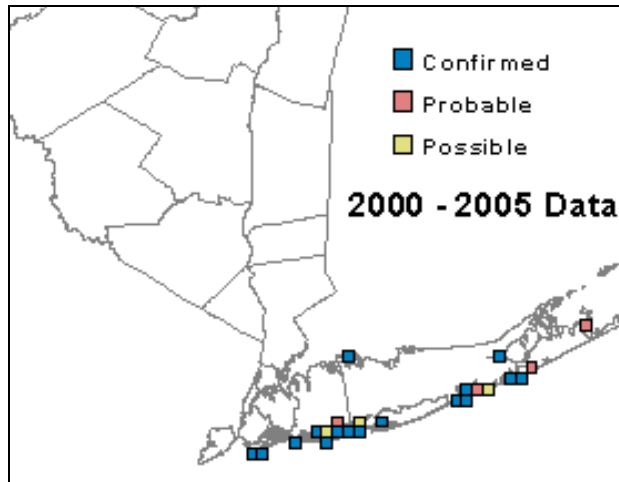


Figure 2: Occurrence of black skimmers in New York during the second Breeding Bird Atlas (McGowan and Corwin 2008).

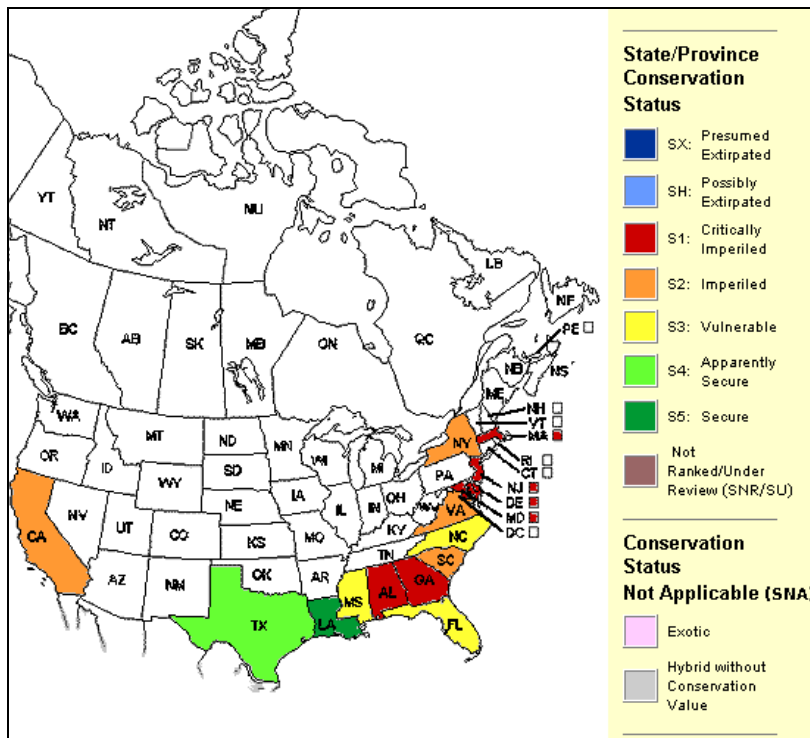


Figure 3: Conservation status of black skimmers in the United States (NatureServe 2013).

III. New York Rarity, if known:

Historic	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
prior to 1970	_____	_____	_____
prior to 1980	<u>400 prs</u>	<u>10-13</u>	_____
prior to 1990	_____	_____	_____

Details of historic occurrence:

Buckley and Buckley (1980) reported an average of more than 400 pairs at 10-13 colonies during surveys on Long Island from 1974 to 1978. The first breeding bird atlas (1980-85) documented occurrence in 37 survey blocks, less than 1% of the state but 14% of the survey blocks on Long Island (Andrle and Carroll 1988).

Current	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
	<u>589 prs</u>	<u>2</u>	_____

Details of current occurrence:

On average, about 495 black skimmer pairs nest annually in New York. The Long Island Colonial Waterbird survey documented 589 pairs at two active sites in 2010. The Nickerson Beach nesting site averages between 150 and 200 pair annually with much higher counts in recent years. Nickerson’s highest survey count occurred in 2009 with 467 pair. The Breezy Point nesting site averages approximately 150 pair with a high survey count of 353 pair in 2001.

The second breeding bird atlas (2000-05) documented occurrence in 25 survey blocks, less than 1% of the state but 9% of the survey blocks on Long Island (McGowan and Corwin 2008).

New York’s Contribution to Species North American Range:

Classification of New York Range

- Core
- Peripheral
- Disjunct

Distance to core population:

Distribution (percent of NY where species occurs)

Abundance (within NY distribution)

<input checked="" type="checkbox"/> 0-5%	<input type="checkbox"/> abundant
<input type="checkbox"/> 6-10%	<input type="checkbox"/> common
<input type="checkbox"/> 11-25%	<input checked="" type="checkbox"/> fairly common
<input type="checkbox"/> 26-50%	<input type="checkbox"/> uncommon
<input type="checkbox"/> >50%	<input type="checkbox"/> rare

NY's Contribution to North American range

0-5%

6-10%

11-25%

26-50%

>50%

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

1. Maritime Intertidal Gravel/Sand Beach
2. Estuarine, Brackish Intertidal, Tidal Wetland, High Marsh
3. Maritime Dunes
4. Marine Dredge Spoil Shore

Habitat or Community Type Trend in New York:

Declining Stable Increasing Unknown

Time frame of decline/increase: Since 1970s

Habitat Specialist? Yes No

Indicator Species? Yes No

Habitat Discussion:

Black skimmer is a coastal breeder, nesting on sparsely-vegetated sandy beaches, dredge spoil islands, and in salt marshes. In New York, the species has recently begun using salt marshes more frequently, likely a response to increased development and recreation pressures on Long Island's sandy beaches. On the south shore of Long Island, skimmers nest near bay inlets. Sandy beach habitats are often shared with nesting least terns. Black skimmers and terns have been using rooftops as alternate nesting locations along the coast in Florida where beach habitat has become severely limited (Langridge and Hunter 1986).

Foraging habitat, which may be a considerable distance away from nesting areas, includes shallow and tidal waters of bays, inlets, marshes, estuaries, and salt marsh pools (Arthur 1921, Tompkins 1951).

V. New York Species Demographics and Life History

- Breeder in New York**
 - Summer Resident**
 - Winter Resident**
 - Anadromous**
- Non-breeder in New York**
 - Summer Resident**
 - Winter Resident**
 - Catadromous**
- Migratory only**
- Unknown**

Species Demographics and Life History Discussion:

From Gochfeld and Burger (1994): Banding recoveries of adults indicate a strong tendency to return to the same colony where they previously bred successfully (76% to same colony), but not necessarily to where they were hatched (35%). Some movement from year to year between beach and marsh habitats have been documented by banding (Burger and Gochfeld 1990). The youngest breeding adult trapped on a nest was 2 years old, but many do not breed before 3 years, and some

males probably not until 4 years. Adults likely breed each year, but in most years only about 50% of pairs raise young to fledging. Two surviving chicks is not unusual; fledging of 3 chicks occurs < 1% of time (on Long Island, NY). Longevity is up to 20 yr (Clapp et al. 1982), but most breeding adults of known age are 5 to 9 years old. A high annual survivorship after the second year is inferred from banding studies, but there are no quantitative data. Flooding, storms, predation, and human disturbance are major causes of colony failure, and contribute to low reproductive success in some areas.

A skimmer productivity estimate of 86% was calculated in 2012 for the Breezy Point colony in Queens (on average, each pair successfully fledged .86 chicks per nest). The estimate was based on the LICWPP count of 137 breeding pairs and a juvenile count of 116 (see NYSDEC 2012). Additionally, research has estimated that annual colony turnover rates are between 25% and 50% (Burger 1982).

VI. Threats:

Threats include habitat loss due to the prevention of storm-induced overwash events, the use of suitable nesting habitats for recreational activities, and development on and adjacent to nesting and foraging habitat. Habitat disturbances including beach-grooming operations, beach driving, boat landing, and flooding prevent the establishment of nests and reduce the viability of established nests.

Rising sea levels are expected to inundate the coastal beaches, barrier islands, and mud flats that provide habitat for shorebirds; storm tides may inundate nests (North American Bird Conservation Initiative 2010). Black skimmer was classified as “moderately vulnerable” to predicted climate change in an assessment of vulnerability conducted by the New York Natural Heritage Program (Schlesinger et al. 2011).

Ghost crabs are suspected of taking eggs and/or chicks. Predators associated with increased human activity include cats, crows, gulls, foxes, and raccoons.

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

No Unknown

Yes

Black skimmers are protected under the Migratory Bird Treaty Act of 1918. 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:

Current conservation efforts that directly address black skimmer biology or ecology in New York are limited. The LICWPP survey counts black skimmer on a yearly basis and provides the best estimate of population and distribution for the state. Local beach maintenance in preparation for summer recreation does occur in black skimmer nesting habitat and is beneficial in keeping the foredune in succession. Fencing placed on the beach to delineate piping plover nesting habitat often encompasses black skimmer and tern nesting locations as well. This helps to provide a buffer between nesting birds and beachgoers (NYSDEC 2012). Conservation actions following IUCN taxonomy are categorized in the table below.

Conservation Actions	
Action Category	Action
Land/Water Protection	Site/Area Protection
Land/Water Protection	Resource & Habitat Protection
Land/Water Management	Site/Area Management
Land/Water Management	Invasive/Problematic Species Control
Land/Water Management	Habitat & Natural Process Restoration
Education & Awareness	Awareness & Communications
External Capacity Building	Alliance & Partnership Development

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for the following actions for beach and island ground-nesting birds, which includes black skimmer.

Easement acquisition:

- ___ Protect nesting and foraging habitat and associated upland buffers through acquisition, easement and through regulatory constraints on development.

Educational signs:

- ___ Post interpretive signage at all public nesting locations.

Fact sheet:

- ___ Update Endangered Species fact sheets to reflect current status of species in New York.

Habitat management:

- ___ Encourage the establishment of nesting and foraging populations by protecting newly created suitable habitat produced as a result of overwash and/or breaches with symbolic fencing and posting.
- ___ Encourage and support a "no net increase" in shoreline armoring along Long Island bays and harbors.
- ___ Encourage compliance with the recommendations for habitat and recreation management contained within Federal and State Recovery Plans for beach-nesting species.
- ___ Encourage landowners to control predators that represent significant threats to the viability of species. Options to be considered include control of predators through contact with a licensed nuisance wildlife control person, allowing hunting and/or trapping during legally

specified seasons and habitat modification to remove roosting or denning sites of nest predators. It is recommended that the mechanism for predator control by landowners be done in consultation with DEC.

- ___ Where possible, protect nesting areas from human disturbance by posting, electric fencing and symbolic fencing. Also, control density and composition of vegetation at breeding sites to maintain suitability for nesting. Accomplish through planting of fresh spoil sites with desired species and grading and/or spoil deposition at sites where vegetation has become too dense.

Habitat research:

- ___ Support and encourage habitat research projects that would help define preferred habitat in order to guide restoration efforts and focus habitat protection efforts.
- ___ Assess beach driving activities, locations and impacts.

Habitat restoration:

- ___ Encourage and support policies that purchase storm-damaged homes within the coastal erosion hazard area for the purposes of beach and dune habitat restoration.
- ___ Where possible, reestablish high quality foraging habitats by either manufacturing sand flats, mudflats or overwash fans or allowing such formations to build naturally. Also, ephemeral pool creation adjacent to beach nesting habitat will be pursued.
- ___ Where possible, nesting habitat will be expanded to create new nesting opportunities for species. This will be accomplished through dredge spoil management, input into beach re-nourishment projects and de-vegetation of formally suitable sites.

Life history research:

- ___ Support research that addresses priorities established in planning documents that have been prepared through interstate and interagency working groups.

Other action:

- ___ Minimize and mitigate habitat impacts from development and public works projects by pursuing a goal of no net loss of habitat at a project location.
- ___ Establish and/or maintain enforcement of no-work windows within breeding habitats during the breeding season (April 1 - September 1 on Long Island).
- ___ Educate the public on the impacts of domestic cats on birds and encourage landowners to keep their cats indoors.
- ___ Secure funding to initiate new beach-dependent species programs.

Population monitoring:

- ___ Annual surveys will track population status at known breeding locations.

Regional management plan:

- ___ Develop a long term management plan that establishes population objectives for all beach-dependent breeding birds and management recommendations to achieve them.

VII. References

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