

Species Status Assessment

Common Name: Long-eared owl

Date Updated: 3/14/2025

Scientific Name: *Asio otus*

Updated By: Nicole Campbell

Class: Aves

Family: Strigidae

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

The long-eared owl breeds and winters in the central United States and into southern Canada. In New York it is considered a rare and local breeder, though it has been reported in almost every county. Long-eared owls are secretive birds that typically nest in dense forested areas and are best detected through targeted surveys, thus population trends are generally lacking. The population is thought to be stable in most of North America over the last 40 years, but declines have been noted in some areas, including New York. The second Breeding Bird Atlas (2000-05) documented a 41% decline in occupancy since the first Atlas in 1980-85.

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:** S2S3B, SNRN **Tracked by NYNHP?:** No

Other Ranks:

- NYS 2025 SGCN Status: Species of Greatest Conservation Need
- NY Natural Heritage Program Watch List
- Species of Northeast Regional Conservation Concern (Therres 1999)
- IUCN Red List: Least Concern

Status Discussion:

This species is a rare and local breeder in New York, undoubtedly overlooked, especially in more remote regions. It is an uncommon to locally common winter visitant.

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Declining	Unknown	Since 1970s		-
Northeastern US	Yes	Unknown	Unknown	2000-2010		-
New York	Yes	Declining	Declining	Since 1980s		Yes
Connecticut	No data	-	-			Yes
Massachusetts	No data	-	-	Last nested in 1985	Special Concern	Yes
New Jersey	No data	-	-	Known pairs extremely low since 1960s	Threatened	Yes
Pennsylvania	Yes	Stable	Stable	1984-89 to 2004-08		Yes
Vermont	No	-	-		Last confirmed breeding in 1981	Yes
Ontario	No data	Stable	Unknown	1981-85 to 2001-05		-
Quebec	Yes	Increasing	Increasing	1984-89 to 2012		-

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*):

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

Trends are difficult to determine because of possible food-based nomadism and need for targeted surveys. Long-term fall banding in Duluth, MN (1976–1993) suggests steady decline in numbers migrating south from Canada (Marks et al. 1994).

The second Breeding Bird Atlas documented a -41% change in occupancy from 1980-85 to 2000-05. Medler (2008) notes that 11 of the Possible records in the second Atlas may represent wintering birds or migrants, but the declines in survey blocks with Probable or Confirmed records were 50% and 53% respectively.

Year-round range map for Long-eared Owl

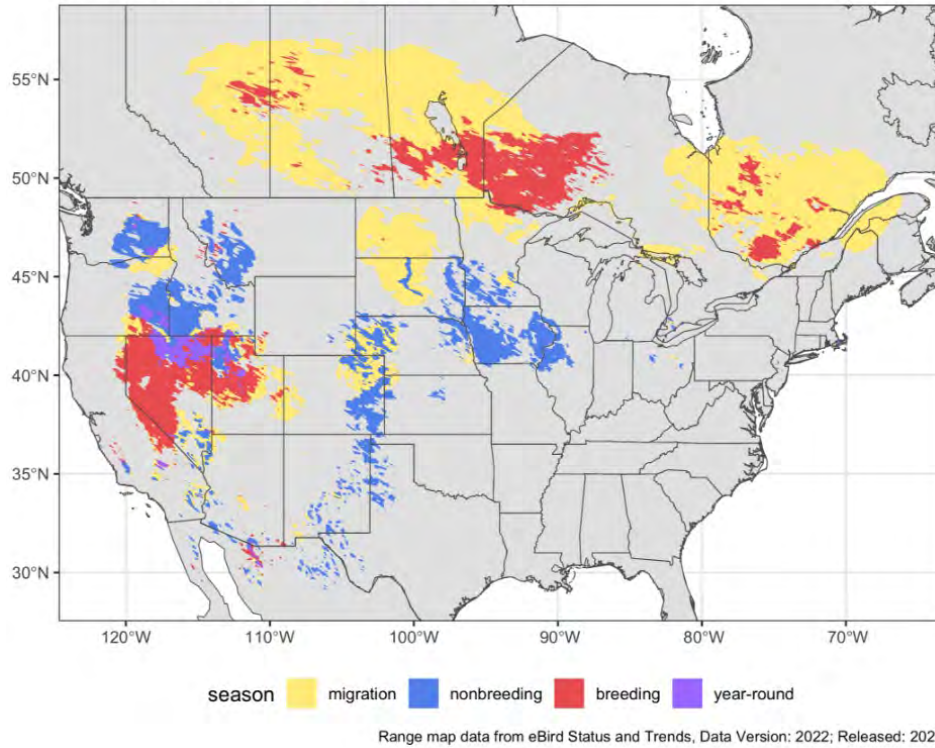


Figure 1. Distribution of long-eared owl in North America (eBird 2023)

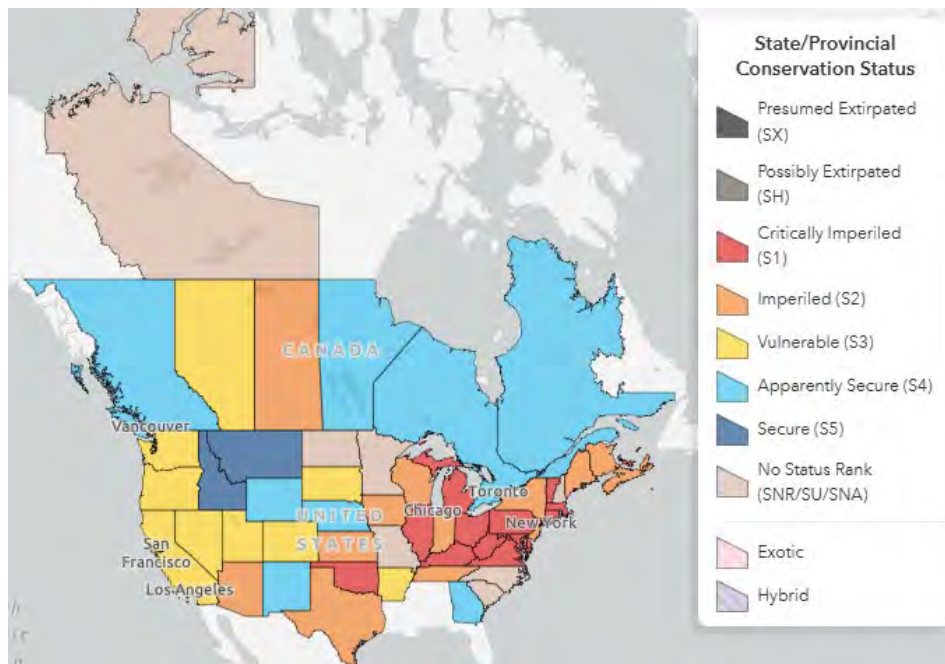


Figure 2. Conservation status of the long-eared owl in North America (NatureServe 2024).

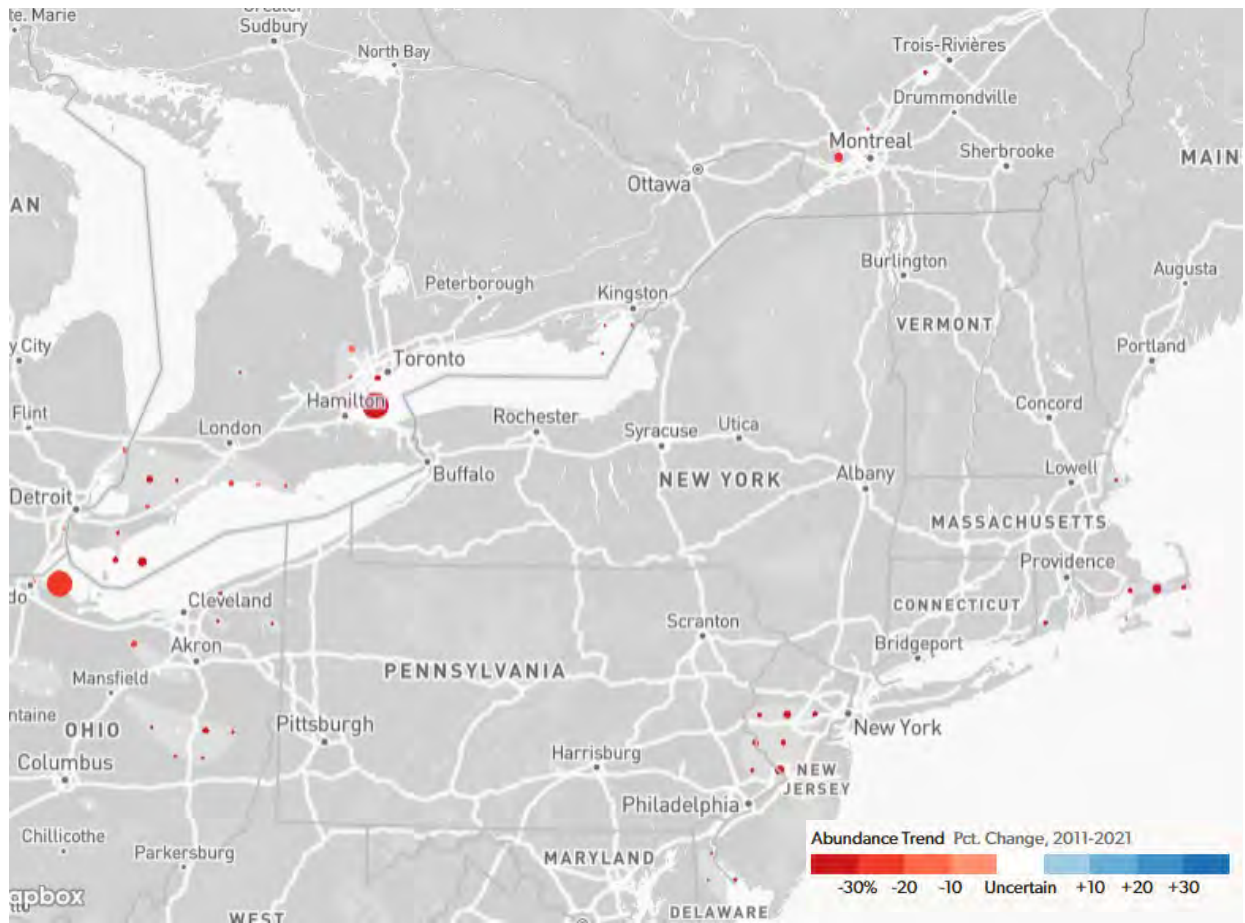


Figure 3. Non-breeding trends for long-eared owl in the Northeast United States 2011-2021 (eBird 2023)

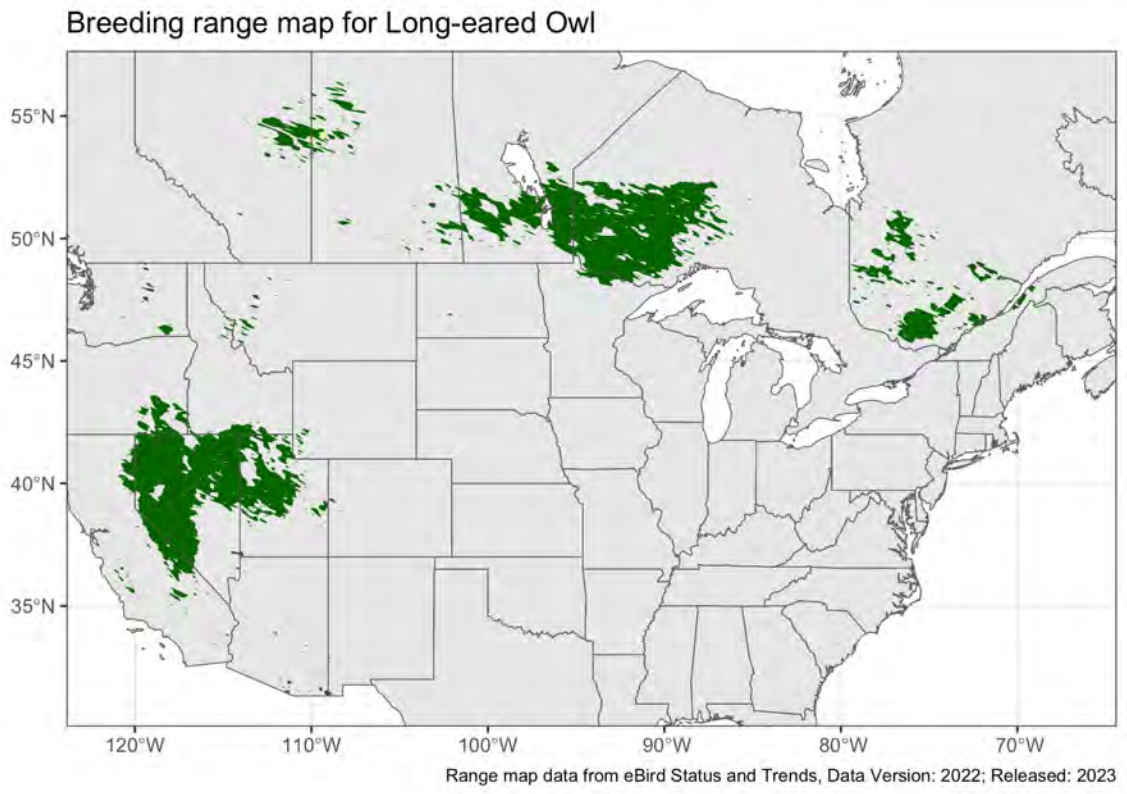


Figure 4. Breeding range of long-eared owl (eBird).

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

Long-eared Owl

Asio otus

1980 - 1985 Data

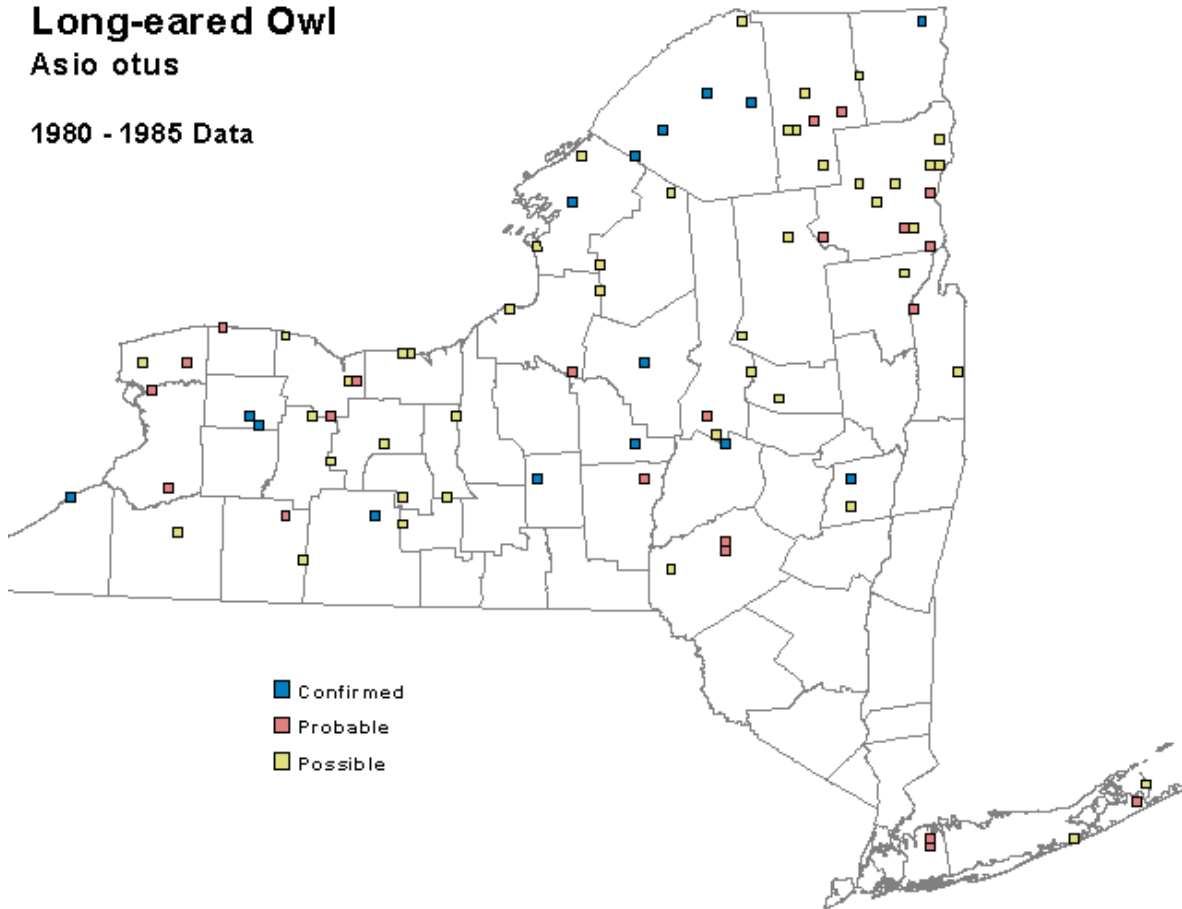


Figure 4. Records of long-eared owl in New York (NYS BBA I)

Long-eared Owl

Asio otus

2000 - 2005 Data

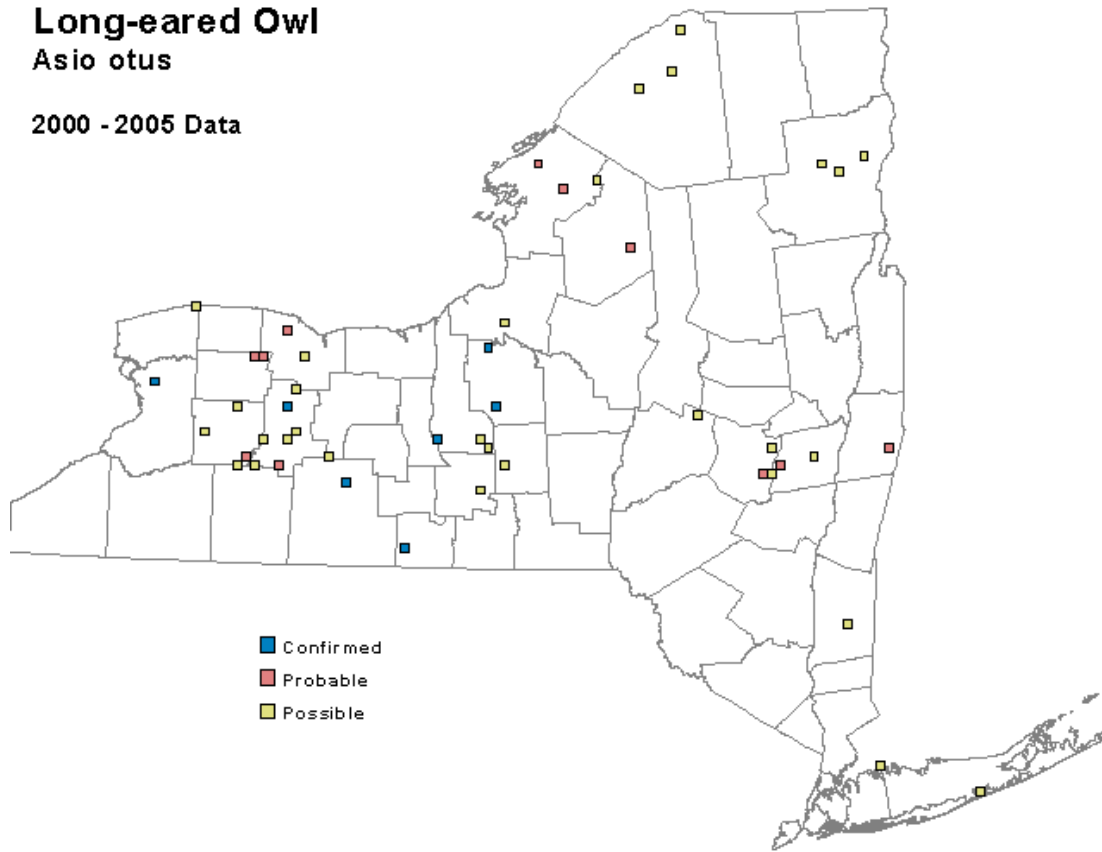


Figure 5. Records of long-eared owl in New York (NYS BBA II Map)

Details of historic and current occurrence:

The first Breeding Bird Atlas (BBA) (1980-85) documented occupancy in 81 blocks, 1.5% of the survey blocks statewide (Andrle and Carroll 1988). The second BBA (2000-05) documented occupancy in 48 blocks, 0.9% 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, long-eared owl has been documented in 14 priority blocks, 0.3% of all priority blocks statewide during the third BBA (NY BBA III Overview, 2024).

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%	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):

- a. Plantation and Disturbed Land Pioneer Forests
- b. Old Field Managed Grasslands
- c. Native Barrens and Savanna

Habitat or Community Type Trend in New York

Habitat Specialist?	Indicator Species?	Habitat/Community Trend	Time frame of Decline/Increase
No	No	Declining	Since 1950's

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:

Long-eared owls require a mosaic of wooded and open habitat for breeding. Coniferous forest is preferred—both ornamental and natural—but deciduous forest is also used. Dense tangles of vegetation are necessary to provide cover. Foraging occurs in both wetlands and grasslands. In New York, a nest was found on Staten Island, and one in an apple tree in an abandoned Niagara County orchard, evidence that this is not exclusively a forest species (Bull 1974).

V. Species Demographic, and Life History:

Breeder in NY?	Non-breeder in NY?	Migratory Only?	Summer Resident?	Winter Resident?	Anadromous/Catadromous?
Yes	Yes	-	Yes	Yes	-

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):

Males banded as nestlings bred successfully as yearlings in Idaho (Marks 1985) and Montana (Marks et al. 1994). Females probably breed at 1 year, but data from banded birds lacking. Bull (1974) reports an adult banded in eastern New York was taken in Connecticut 15 years later. No information is available on annual survivorship of adults in North America. Survival data is difficult to obtain because of problems in distinguishing mortality from dispersal. No information is available on lifetime reproductive success.

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

Threat Level 1	Threat Level 2	Threat Level	Spatial Extent	Severity	Immediacy	Trend	Certainty
1. Residential and Commercial	1.1 Housing & Urban Areas	Destruction of habitat	Restricted	Slight	Choose an item.	Choose an item.	High
7. Natural System Modifications	7.3 Other Ecosystem Modifications	7.3.2 Vegetation succession	Large	Moderate	Choose an item.	Choose an item.	Moderate
8. Invasive & Other Problematic Species	8.2 Problematic Native Plants & Animals	Competition from other owls	Large	Serious	Choose an item.	Choose an item.	High
9. Pollution	9.6 Excess Energy	9.6.3 Noise pollution	Small	Slight	Choose an item.	Choose an item.	High

Table 2. Threats to long-eared owl.

Loss of riparian woodlands and isolated tree groves is highly detrimental to long-eared owls in western North America. In New Jersey, loss of open habitats to urbanization and forest succession was thought to limit numbers (Bosakowski et al. 1989). Noise pollution from nearby roads and industrial buildings, and new housing developments, are also a threat.

An increase in populations of barred owls, which are “ferociously territorial,” could be problematic, though barred owls are more likely to occur in large forest tracts. Great horned owls, also territorial, provide competition and are widespread in New York.

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:

Long-eared owls 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:

Conservation and management actions needed for long-eared owl in New York State have been defined in the 2005 Comprehensive Wildlife Conservation Strategy (NYSDEC 2005). Actions recommended include targeted surveys to determine the population status of long-eared owls in the Lake Champlain Basin, experimental timber management techniques to determine compatibility with the owls, acquisition of critical habitats, promotion of buffer areas around agricultural fields, and assess impacts on long-eared owls from wind farms.

Action Category	Action	Description
A.1 Direct Habitat Management		Site/area management
C.6 Design and Plan Conservation	C.6.5.0.0 Conservation Planning	Site/area protection
C.6 Design and Plan Conservation	C.6.5.0.0 Conservation Planning	Resource/habitat protection
C.6 Design and Plan Conservation	C.6.5.1.3 Develop a conservation, management, or restoration plan for protected private lands	Habitat & natural process restoration

Table 3. Recommended conservation actions for long-eared owl.

VII. References

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