

## Species Status Assessment

**Class:** Birds  
**Family:** Caprimulgidae  
**Scientific Name:** *Caprimulgus vociferus*  
**Common Name:** Whip-poor-will

### Species synopsis:

In July 2010, the whip-poor-will was separated into two distinct species: Eastern whip-poor-will and Mexican whip-poor-will. Nesting occurs in early- to mid-successional forests and open forested habitats adjacent to clearings. Significant declines have been noted for whip-poor-will since the 1980s in the Northeast primarily, but also across the eastern part of the range (which is now known to include only Eastern whip-poor-will). While neither Breeding Bird Survey nor Breeding Bird Atlas protocol document this nocturnal species well, both show significant and notable declines. BBS data for the New York and five adjacent states show a combined declining trend of 3.58% per year for 1966-2007. In the northern New York populations in Clinton and Jefferson counties, however, whip-poor-will populations are large.

The causes of the rangewide decline in whip-poor-wills are poorly understood; it may be a combination of loss and fragmentation of scrubby woodlands, increased predation on eggs and young by mammalian predators (including cats), and increased road mortality due to paving of dirt roads.

### I. Status

#### a. Current and 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** S3B **Tracked by NYNHP?** Yes

### Other Rank:

COSEWIC – Threatened

Species of Northeast Regional Conservation Concern (Therres 1999)

**Status Discussion:**

Whip-poor-will are found sparsely across the state but are locally common in a few areas. They are most numerous on eastern Long Island, in northern Jefferson County, Clinton County, and in the Shawangunk Ridge area of southeastern Sullivan County/Ulster County, and rare to absent in western and central New York and in the higher parts of the Adirondacks, Catskills, and Tug Hill region. It is a regular nocturnal migrant. Within the Northeast, densities are highest in the coastal plain from Cape Cod south, and in areas of northern New York and western Maryland (Hunt 2008).

**II. Abundance and Distribution Trends**

**a. North America**

**i. Abundance**

  X   declining    \_\_\_increasing       \_\_\_stable       \_\_\_unknown

**ii. Distribution:**

  X   declining    \_\_\_increasing       \_\_\_stable       \_\_\_unknown

**Time frame considered:** 1966-2010

**b. Regional**

**i. Abundance**

  X   declining    \_\_\_increasing       \_\_\_stable       \_\_\_unknown

**ii. Distribution:**

  X   declining    \_\_\_increasing       \_\_\_stable       \_\_\_unknown

**Regional Unit Considered:** Severe Decline shown in Eastern BBS

**Time Frame Considered:** 1966-2010

**c. Adjacent States and Provinces**

**CONNECTICUT**                      **Not Present** \_\_\_\_\_                      **No data** \_\_\_\_\_

**i. Abundance**

  X   declining    \_\_\_ increasing                      \_\_\_ stable                      \_\_\_ unknown

**ii. Distribution:**

  X   declining    \_\_\_ increasing                      \_\_\_ stable                      \_\_\_ unknown

Time frame considered:   Not Specified  

Listing Status: \_\_\_\_\_   Special Concern                        SGCN?   Yes  

**MASSACHUSETTS**                      **Not Present** \_\_\_\_\_                      **No data** \_\_\_\_\_

**i. Abundance**

  X   declining    \_\_\_ increasing                      \_\_\_ stable                      \_\_\_ unknown

**ii. Distribution:**

  X   declining    \_\_\_ increasing                      \_\_\_ stable                      \_\_\_ unknown

Time frame considered:   1966-2010; 1974-79 to 2007-11  

Listing Status: \_\_\_\_\_   Special Concern (proposed)                        SGCN?   Yes  

**NEW JERSEY**                      **Not Present** \_\_\_\_\_                      **No data** \_\_\_\_\_

**i. Abundance**

  X   declining    \_\_\_ increasing                      \_\_\_ stable                      \_\_\_ unknown

**ii. Distribution:**

  X   declining    \_\_\_ increasing                      \_\_\_ stable                      \_\_\_ unknown

Time frame considered:   1966-2010  

Listing Status: \_\_\_\_\_   Special Concern                        SGCN?   Yes

**ONTARIO**                              **Not Present** \_\_\_\_\_                              **No data** \_\_\_\_\_

**i. Abundance**

  X   declining    \_\_\_increasing            \_\_\_stable            \_\_\_unknown

**ii. Distribution:**

  X   declining    \_\_\_increasing            \_\_\_stable            \_\_\_unknown

Time frame considered:   Severe Decline from 1981-85 to 2001-05  

Listing Status:                     Threatened                    

**PENNSYLVANIA**                              **Not Present** \_\_\_\_\_                              **No data** \_\_\_\_\_

**i. Abundance**

  X   declining    \_\_\_increasing            \_\_\_stable            \_\_\_unknown

**ii. Distribution:**

  X   declining    \_\_\_increasing            \_\_\_stable            \_\_\_unknown

Time frame considered:   Severe Decline from 1966-2010  

Listing Status:                     Not Listed                          SGCN?   Yes  

**QUEBEC**                                      **Not Present** \_\_\_\_\_                              **No data** \_\_\_\_\_

**i. Abundance**

  X   declining    \_\_\_increasing            \_\_\_stable            \_\_\_unknown

**ii. Distribution:**

  X   declining    \_\_\_increasing            \_\_\_stable            \_\_\_unknown

Time frame considered:   1966-2010  

Listing Status:           Threatened nationally, not listed provincially

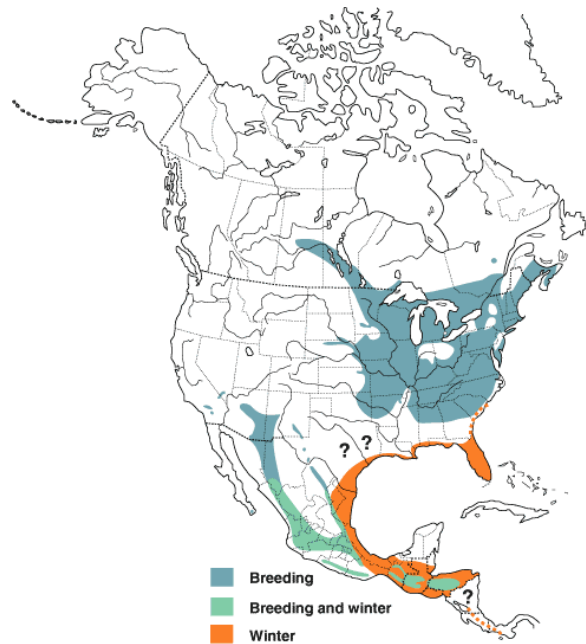


### Trends Discussion:

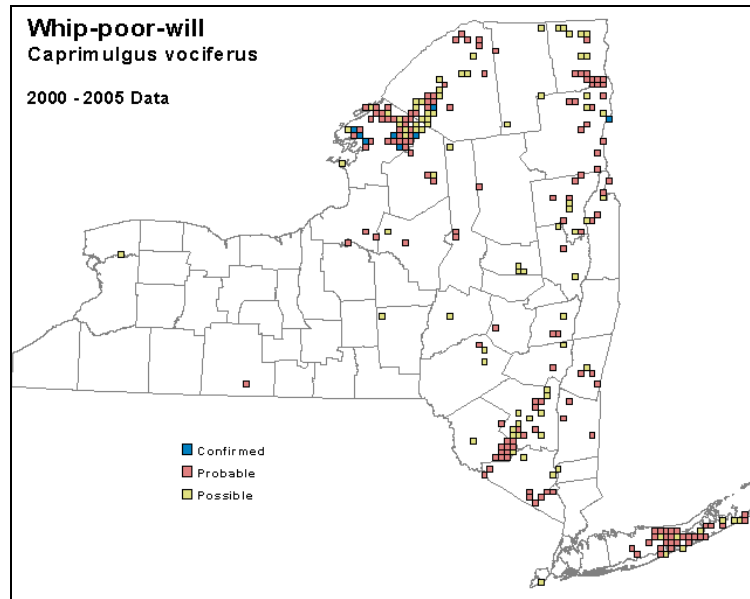
Because it is largely nocturnal, the whip-poor-will is not well censused by standard monitoring programs.

Though relative abundance on Breeding Bird Survey routes is very low, results are still significant for several areas and trends are declining in most areas. For Eastern BBS routes, long-term trends are -3.4% per year for 1966-2010 and short-term trends are -3.2% per year; both trends are significant. Trends are also declining on BBS routes in New York routes, but relative abundance is very low and caution regarding use of the data is advised. Combined routes in Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, and Maryland show a significant declining trend of -3.58% per year for 1966-2007.

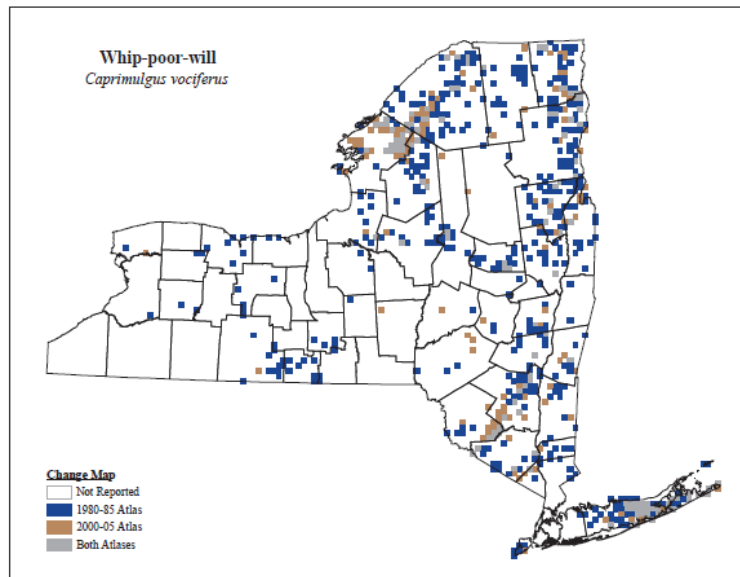
Data collected in five second-round Breeding Bird Atlases suggest that the number of atlas blocks occupied by the whip-poor-will has declined by roughly 50% in the last twenty years in the following states or provinces: Ontario, New York, Vermont, Pennsylvania, and Maryland (Hunt 2008).



**Figure 1.** Range of the whip-poor-will in North America (Birds of North America Online 2013).



**Figure 2.** Whip-poor-will occurrence in New York State during the second Breeding Bird Atlas (McGowan and Corwin 2008).



**Figure 3.** Change in whip-poor-will occurrence in New York State between the first Breeding Bird Atlas and the second Breeding Bird Atlas (McGowan and Corwin 2008).

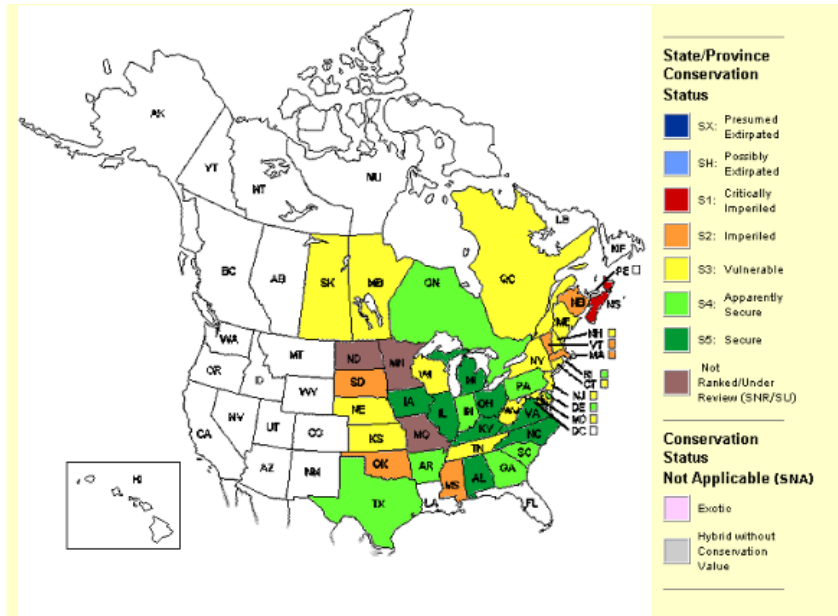


Figure 4. Conservation status of the whip-poor-will in North America (NatureServe 2012).



**III. New York Rarity, if known:**

<b>Historic</b>	<b><u># of Animals</u></b>	<b><u># of Locations</u></b>	<b><u>% of State</u></b>
<b>prior to 1970</b>	_____	_____	_____
<b>prior to 1980</b>	_____	_____	_____
<b>prior to 1990</b>	_____	_____	<u>11%</u>

**Details of historic occurrence:**

The first Breeding Bird Atlas (1980-85) documented occupancy in 564 survey blocks statewide.

<b>Current</b>	<b><u># of Animals</u></b>	<b><u># of Locations</u></b>	<b><u>% of State</u></b>
	_____	_____	<u>5%</u>

**Details of current occurrence:**

The second Breeding Bird Atlas (2000-05) documented occupancy in 241 blocks statewide, a decline of 57%. The number of blocks with confirmed breeding declined by 50%. Areas that appear to have been lost during the years between the two Atlas projects include virtually all of western New York including the southern Lake Ontario Plain and the southern tier, and northern New York areas peripheral to the Adirondacks.

Surveys conducted in 2007 by NYSOA’s monitoring program identified areas of concentration: Connetquot River State Park (Suffolk County), Fort Drum (Jefferson County), Gadway Sandstone Pavement Barrens (Clinton County), Jefferson County Alvar Communities (Jefferson County), Rocky Point NRMA (Suffolk County), and the Shawangunk Ridge (Ulster/Orange/Sullivan County). Preliminary results from NYSDEC’s 2013 monitoring confirmed continued concentrations at: Connetquot River State Park, Gadway Sandstone Pavement Barrens, Jefferson County Alvar Communities, Rocky Point NRMA, and the Shawangunk Ridge. The Fort Drum are in Jefferson County was not monitored in 2013.

**New York’s Contribution to Species North American Range:**

<b>% of NA Range in New York</b>	<b>Classification of New York Range</b>
<u>   </u> 0-5%	<u>  X  </u> Core
<u>   </u> 6-10%	<u>   </u> Peripheral
<u>  X  </u> 11-25%	<u>   </u> Disjunct
<u>   </u> 26-50%	<b>Distance to core population:</b>
<u>   </u> >50%	_____

**IV. Primary Habitat or Community Type:**

1. Oak-Pine Forest
2. Oak Forest
3. Pine Barrens
4. Coastal Coniferous Barrens
5. Native Barrens and Savanna
6. Mixed Northern Hardwoods

**Habitat or Community Type Trend in New York:**

Declining       Stable       Increasing       Unknown

**Time frame of decline/increase:** \_\_\_\_\_

**Habitat Specialist?**                       Yes       No

**Indicator Species?**                       Yes       No

**Habitat Discussion:**

Whip-poor-wills are present in a variety of habitats but are absent from extensively forested areas. Occupied areas provide both open habitats for aerial foraging and protected areas for nesting and roosting. In New York, whip-poor-will is most abundant in barrens communities (Medler 2008). Lower densities occur where open areas are found adjacent to second-growth forests, such as along power line cuts, quarries, and fields (Medler 2008).

**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:**

Much of the biology of the whip-poor-will remains unstudied, largely due to its nocturnal activity and cryptic behavior and plumage. No information is available on the species' age at first breeding and there are no estimates of lifetime reproductive success. About 60% of 20 pairs in a Kansas population reared two broods/season. This compares with 20% ( $n = 5$  pairs) in an Ontario population (Mills 1985). This difference may be a reflection of the smaller sample size in the Ontario study, but more likely occurs because of shorter breeding season at higher latitudes. One banded male was recaptured 15 years later (Cink 2002).

Most predation is of eggs and young. As a ground-nesting species, this species especially vulnerable to nest predators.

## VI. Threats:

Most ornithologists agree that less of the available breeding range of the species is occupied now than previously. Habitat loss to agriculture, closing of forest openings due to growth and succession of trees seem to be causes in some areas. Urbanization, along with resulting increases in predation and loss of feeding habitat, thought to be responsible for loss of this bird in southeastern Pennsylvania (Santner 1992).

Because this species flies low to the ground while foraging along roads, it is vulnerable to road mortality. It has been suggested that the paving of formerly-dirt country roads has increased mortality because vehicles can travel faster on paved roads (Cink 2002).

Untested speculations include decreases in populations of giant silkworm moth (Saturniidae) which was at least formerly an important food resource, industrial pollution, and pesticide use (Eastman 1991). Reasons for population declines should be studied, including the effects of pesticide use for gypsy moth eradication (Cink 2002).

General threats to the early successional forest/shrubland bird suite in New York include reversion of shrublands to forest; loss of small dairy farms; fire suppression; more intensive agriculture that results in loss of hedgerows, shrubs, and shrub wetlands; reversion of young forest habitat to mature forest; inadequate amounts of forest management that includes even aged and heavy partial removal; and the erroneous public perception that forest management is harmful to birds (NYSDEC 2005).

In an assessment of vulnerability to predicted climate change conducted by the New York Natural Heritage Program, whip-poor-will was identified as a second-priority species whose sensitivity should be assessed in the future (Schlesinger et al. 2011).

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

No       Unknown

Yes

Whip-poor-will is protected under the Migratory Bird Treaty Act of 1918. It is listed as a Species of Special Concern.

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

Maintain a mosaic of open and mid-successional habitats. A better understanding of characteristics of forest stands utilized may provide information that would facilitate forest management beneficial to whip-poor-will. Conservation actions following IUCN taxonomy are categorized in the table below.

<b>Conservation Actions</b>	
<b>Action Category</b>	<b>Action</b>
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 and Natural Process Restoration
Education and Awareness	Training
Education and Awareness	Awareness & Communications
Law and Policy	Policies and Regulations

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for early-successional forest/shrubland birds, which includes whip-poor-will.

**Curriculum development:**

- \_\_\_ Educate public to the benefits and need for early successional habitat including even-aged management.

**Easement acquisition:**

- \_\_\_ Implement a Landowner Incentive Project for early successional birds that will direct \$600,000 per year at conserving and creating habitat for early successional forest/shrub birds.

**Habitat management:**

- \_\_\_ Work with Utilities to manage ROWs in a manner that will provide for maximum benefit to early successional species.
- \_\_\_ Double the amount of early successional forest and shrub habitat on public and private land through sound planned management.
- \_\_\_ Increase early successional management on public and private lands.
- \_\_\_ Maintain, restore, and enhance fire adapted ecosystems. Increase use of prescribed fire in fire adapted ecosystems.
- \_\_\_ Promote management of Utility ROWs that will provide the maximum benefit to shrub bird species.

**Habitat monitoring:**

- \_\_\_ Precisely monitor trends of all species, in particular those that are not currently adequately monitored.
- \_\_\_ Complete an inventory and analysis for high priority focus species that identifies core habitats (highest abundance) and geographic areas (where appropriate).

**Habitat research:**

— Determine effects of viburnum leaf beetle on early successional forest/shrub habitats and species utilizing them.

**Population monitoring:**

— Encourage full completion of BBS routes.

**Statewide management plan:**

— Develop a management plan that provides guidance on maintaining, enhancing and restoring early successional forest/shrub bird species.

**Other actions:**

— Develop better mechanisms for directing federal (NRCS and USFWS) funding programs into early successional forest/shrub habitats.

— Develop BMPs for forest management in riparian areas that recognize the critical need maintain, enhance and restore early successional forest/shrub habitat in these areas.

## VII. References

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