

Species Status Assessment

Class: Birds
Family: Mimidae
Scientific Name: *Toxostoma rufum*
Common Name: Brown thrasher

Species synopsis:

Brown thrashers breed across the eastern two-thirds of the United States. They can be found in brushy open country, forest clearings, thickets, shelter belts, riparian areas, and suburbs. In New York, they occur statewide with the exception of the Adirondack Mountains, where records are sparse. Breeding occurs in thickets, hedgerows and open countryside; this is an early-successional species. Significant declines have been noted in New York by the Breeding Bird Survey since 1966. The second Breeding Bird Atlas in New York documented a decline in occupancy of 30% since the 1980s. Declines have been documented in all adjacent states and in the Eastern BBS Region.

I. Status

a. Current Legal Protected Status

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

b. Natural Heritage Program Rank

- i. **Global** G5
- ii. **New York** S3S4B **Tracked by NYNHP?** No

Other Rank:

New York Natural Heritage Program Watch List
Partners in Flight – Continental Stewardship Species

Status Discussion:

Brown thrasher is a widespread and fairly common breeder in New York except at higher elevations. It is ranked as Vulnerable in New York and New Jersey. Other surrounding states and provinces rank brown thrasher as Secure or Apparently Secure.

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: 1999-2009

b. Regional

i. Abundance

 X declining ___increasing ___stable ___unknown

ii. Distribution:

 X declining ___increasing ___stable ___unknown

Regional Unit Considered: Eastern BBS

Time frame considered: 1999-2009

c. Adjacent States and Provinces

CONNECTICUT Not Present _____ No data _____

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: 1999-2009

Listing Status: _____ Special Concern _____ SGCN? Yes

MASSACHUSETTS Not Present _____ No data _____

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: 1999-2009

Listing Status: _____ Not Listed _____ SGCN? Yes

NEW JERSEY Not Present _____ No data _____

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: 1999-2009

Listing Status: _____ Not Listed _____ SGCN? Yes

Monitoring in New York.

The Albany Pine Bush Preserve (Albany County) conducts regular, shrubland/early successional bird species monitoring (Bried et al. in press).

Trends Discussion:

The second Breeding Bird Atlas in New York showed a 30% decline in occupancy from 1980-85 and 2000-05. Losses were documented in all areas of the state, but were particularly notable in the Adirondack Mountains, where the loss was 60%. BBS data for New York show a significant decline of 4.7% annually for the period 1966-2009 and a significant decline of 3.9% for the period 1999-2009. BBS data show significant declines for the period 1999-2009 in surrounding states: Massachusetts (-9.1%), Connecticut (-9.9%), New Jersey (-5.1%), Vermont (-4.4%).

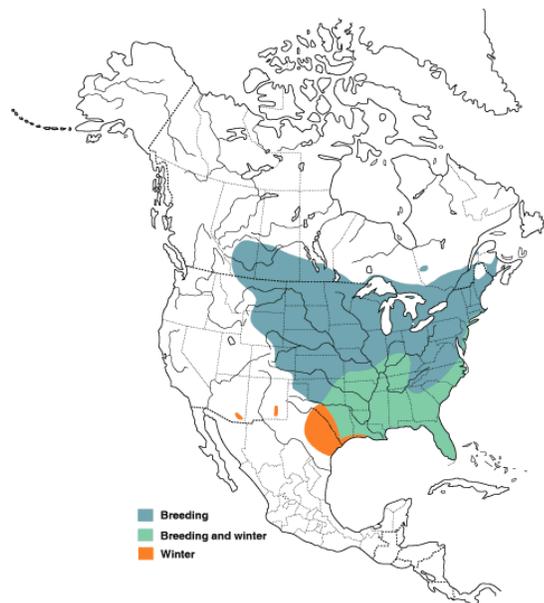


Figure 1. Range of the brown thrasher in North America (Birds of North America Online 2013).

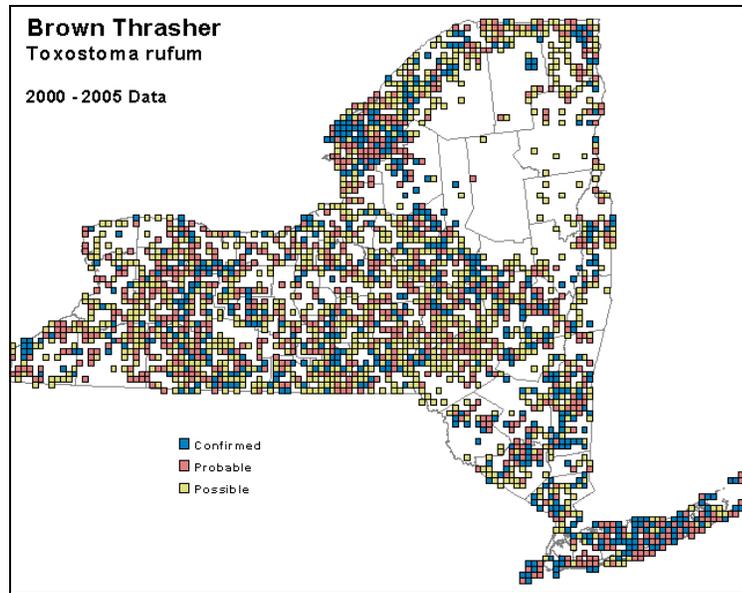


Figure 2. Brown thrasher occurrence in New York State during the second Breeding Bird Atlas (McGowan and Corwin 2008).

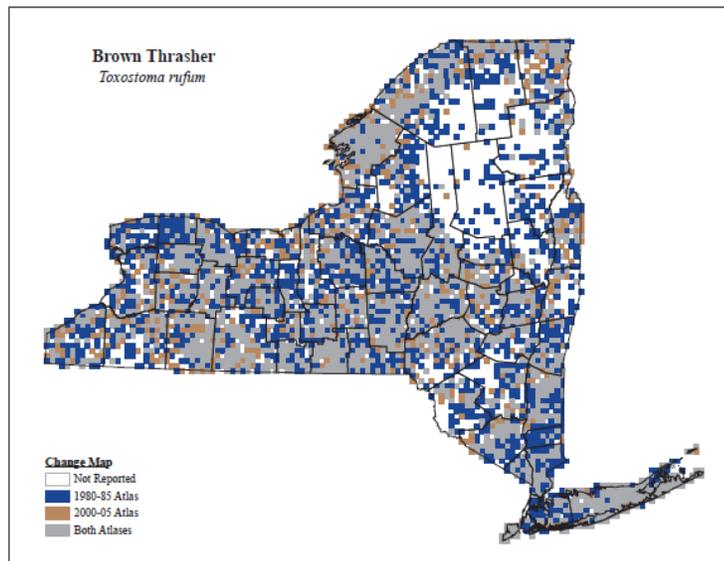


Figure 3. Change in brown thrasher occurrence in New York State between the first Breeding Bird Atlas and the second Breeding Bird Atlas (McGowan and Corwin 2008).

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	_____	_____	_____
prior to 1990	_____	<u>3,341 blocks</u>	<u>63%</u>

Details of historic occurrence:

The first Breeding Bird Atlas (1980-85) documented occupancy in 63% of the survey blocks statewide (Andrle and Carroll 1988).

Current	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
	_____	<u>2,337 blocks</u>	<u>44%</u>

Details of current occurrence:

The second Breeding Bird Atlas (2000-05) documented occupancy in 44% of the survey blocks statewide, a decline of 30% since the first atlas (McGowan and Corwin 2008).

New York's Contribution to Species North American Range:

Distribution (percent of NY where species occurs)

- 0-5%
- 6-10%
- 11-25%
- 26-50%
- >50%

Abundance (within NY distribution)

- abundant
- common
- fairly common
- uncommon
- rare

NY's Contribution to North American range

- 0-5%
- 6-10%
- 11-25%
- 26-50%

___ >50%

Classification of New York Range

Core

___ **Peripheral**

___ **Disjunct**

Distance to core population:

IV. Primary Habitat or Community Type:

1. Non-Native Shrublands
2. Powerline
3. Old Field Managed Grasslands
4. Native Barrens and Savanna
5. Pine Barrens
6. Coastal Coniferous Barrens

Habitat or Community Type Trend in New York:

Declining ___ **Stable** ___ **Increasing** ___ **Unknown**

Time frame of decline/increase: Since 1950s

Habitat Specialist? ___ **Yes** **No**

Indicator Species? ___ **Yes** **No**

Habitat Discussion:

Brown thrashers breed in thickets and bushy areas in deciduous forest clearings and forest edge, in shrubby areas and gardens, as well as overgrown pastures, hedgerows, and barren habitats. During migration and winter they also use scrub habitats. Cade (1986) summarized the literature reporting thrasher density in several habitats and found highest densities in Illinois hedgerows and North

Dakota woody draws, and lowest density in Iowa herbaceous fields, Michigan coniferous/deciduous forest, and North Dakota floodplain forest.

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:

Brown thrashers breed in the first spring after hatching year (age 8–10 mo). Pairs re-nest throughout a season (up to 4 times) if earlier attempts fail (Erwin 1935, Murphy and Fleischer 1986, Cavitt and Haas 2000). Survivorship from fledging to reproductive age is not known from comprehensive studies. Banding returns of adults suggest year-to-year survival appears to be age-dependent over most of life span; survival rate is approximately 35% between the first and second year, 50% between the second and third years, and 75% between third and fourth years. Fledgling brown thrashers appear to remain near the natal site, even up to 45 days after fledging (Haas 1990, 1995). The oldest record is 12 years and 10 months from a bird banded and recovered in North Carolina (Klimkiewicz et al. 1983). Brown thrashers are the largest common host of brown-headed cowbirds (*Molothrus ater*), although they often reject the eggs of this parasite.

VI. Threats:

Brown thrashers may be sensitive to habitat fragmentation (Forman et al. 1976). Species apparently declined with habitat degradation of New Jersey pine barrens. Degraded barrens are

those that have been fragmented by development or roads, reduced in size, and subjected to fire suppression (Kerlinger and Doremus 1981).

Rangewide declines are likely the result of maturation of shrub and forested areas in the East and elimination of fencerows and shelterbelts in the Great Plains. Shrubby, edge habitats used by this species are uncommon and declining throughout East as forests mature and farms clear for mechanization (Graber et al. 1970, Askins 1993). Brown thrashers may increase in shrubby habitat created along power-line corridors (Anderson 1979).

Brown thrashers are one of eight most common bird species hit by cars around Peoria, IL (Starrett 1938), and the fifth most frequently hit songbird near Urbana, IL (Flint 1934). Migrants routinely found dead after collisions with television towers (Brewer and Ellis 1958, Crawford 1981).

The decline observed in the northern part of range may be partly a result of competition with northern mockingbird (Raynor 1976).

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).

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

No Unknown

Yes

Brown thrashers are protected under 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 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 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/shrubland birds, which includes brown thrasher.

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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