

Species Status Assessment

Common Name: Brown Thrasher **Date Updated:** 2024-12-20
Scientific Name: *Toxostoma rufum* **Updated By:** Amanda Dahms
Class: Aves
Family: Mimidae

Species Synopsis

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

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 (BBS) since 1966. The second Breeding Bird Atlas (BBA) 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:** N5 **Candidate:** No
ii. **New York:** Unlisted: protected native

b. Natural Heritage Program

i. **Global:** G5
ii. **New York:** S3S4B **Tracked by NYNHP?** On Watch List

Other Ranks:

- New York 2025 SGCN status: Species of Greatest Conservation Need
- COSEWIC: Not listed in Canada
- IUCN Red List: Least Concern
- Northeast Regional SGCN: Not listed

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.

As of 2016, the brown thrasher is listed as a species of least concern by the International Union for Conservation of Nature. However, BBS data suggests significant declines in New York and all adjacent states and provinces. Close monitoring will be necessary to track species status. Currently, this species is only covered by one monitoring program in Albany County. A 2024 study by a graduate student at Antioch University noted that brown thrashers prefer shrubland within pine barrens as opposed to other shrubland habitat types, suggesting that this is a crucial habitat for this species and may impact distribution (Woolf 2024).

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
North America	Yes	Declining	Unknown	BBS 1966-2022 trend for US		(blank)
Northeastern US	Yes	Declining	Unknown	BBS 1966-2022 trend for US		(blank)
New York	Yes	Declining	Unknown	BBS 1966-2022 trend for US	S3S4B	Yes
Connecticut	Yes	Declining	Unknown	BBS 1966-2022 trend for US	S3B, Special Concern	Yes
Massachusetts	Yes	Declining	Unknown	BBS 1966-2022 trend for US	S4	Yes
New Jersey	Yes	Declining	Unknown	BBS 1966-2022 trend for US	S3B,S4N	Yes
Pennsylvania	Yes	Declining	Unknown	BBS 1966-	S4B,S3N,S5M	Yes

Region	Present?	Abundance	Distribution	Time Frame	Listing status	SGCN?
				2022 trend for US		
Vermont	Yes	Declining	Unknown	BBS 1966-2022 trend for US	S4B	Yes
Ontario	Yes	Declining	Unknown	BBS 1966-2022 trend for US	S4B	(blank)
Quebec	Yes	Declining	Unknown	BBS 1966-2022 trend for US	S4B	(blank)

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

Trends Discussion

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

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%).

Breeding Bird Survey data continue to show a significant decline in New York (-2.1) and surrounding states and provinces, aside from Quebec (-0.3) up to 2022. Declines are present range wide, apart from BBS regions 14, 17, and 32, of which, only region 32 (Gulf Coastal Prairie) had a significant increase of 1.1% per year. Range wide declines are likely a result of loss of preferred habitat through maturation of shrub and forested areas in the East and elimination of fencerows and shelterbelts in the Great Plains. Another possibility is that the changing of land-use practices, particularly in the Great Plains, has reduced reproductive

success by delaying reproduction and increasing the abundance of nest predators, such as brown-headed cow birds (Cavitt 1999).

In northern parts of the range, declines may be partly a result of competition with Northern Mockingbirds (Raynor 1976). Over-wintering range has been gradually expanding Northward, possibly as a result of general warming or the availability of food through feeders (Cavitt 2020).

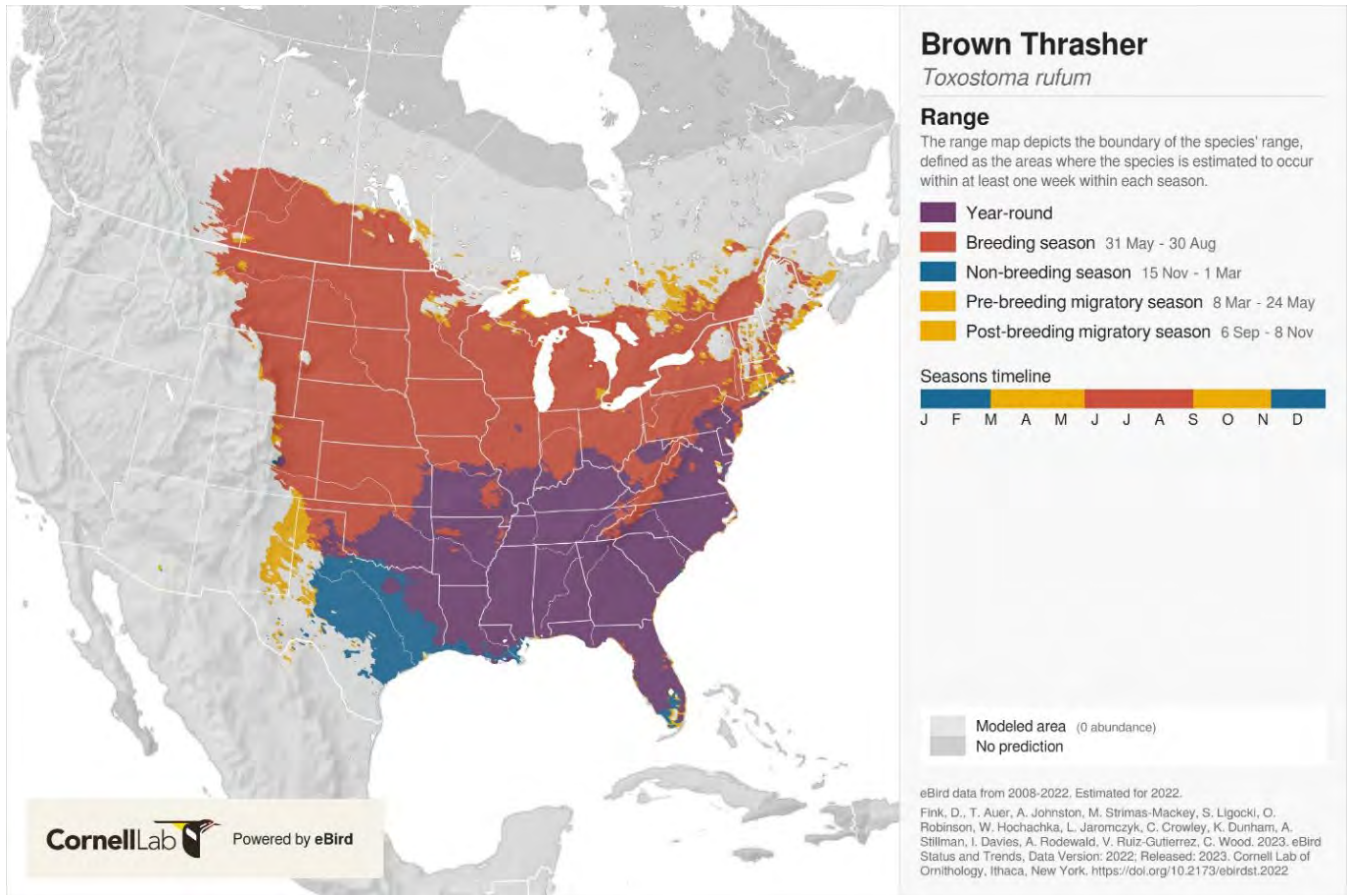


Figure 1. Brown thrasher distribution in North America (eBird 2022)

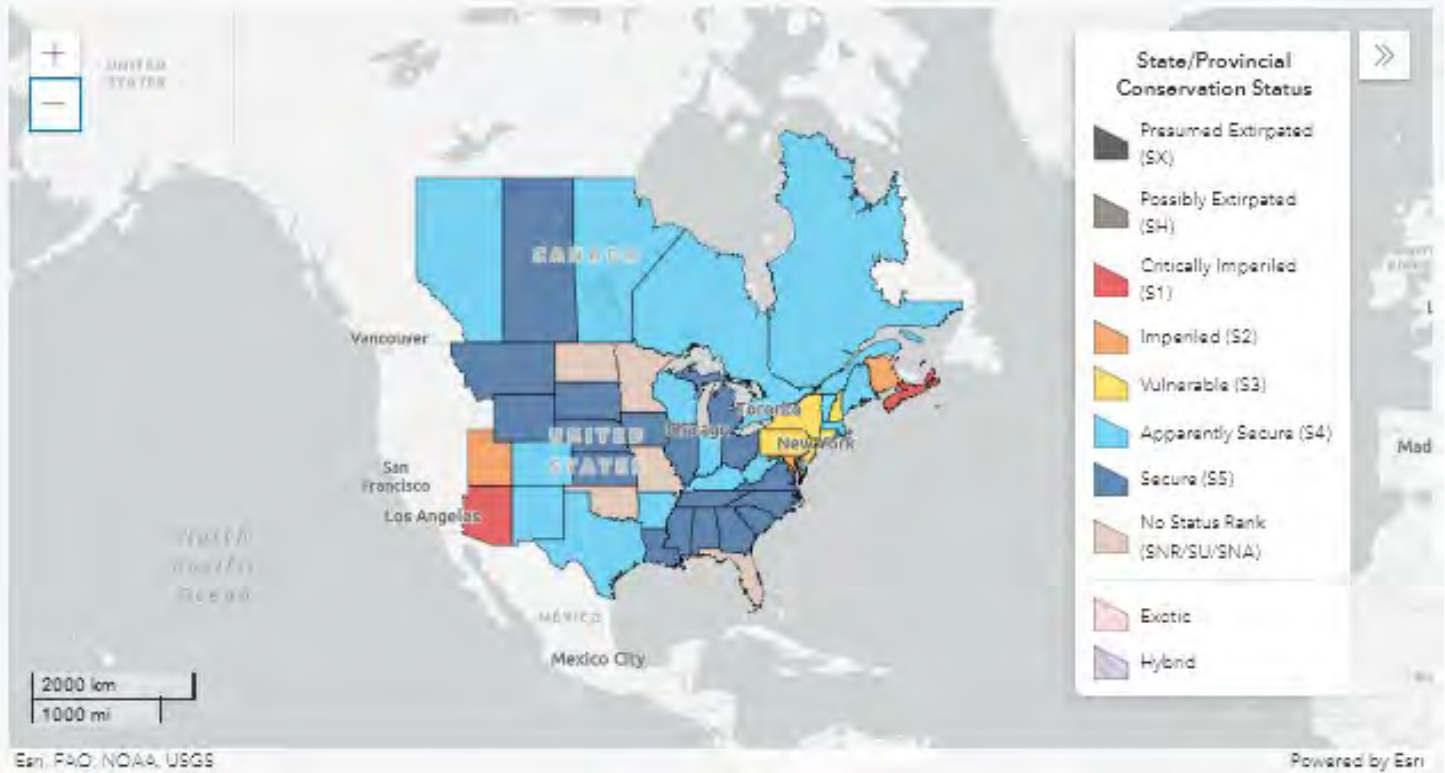


Figure 2. Conservation status of brown thrasher in North America (NatureServe 2023).

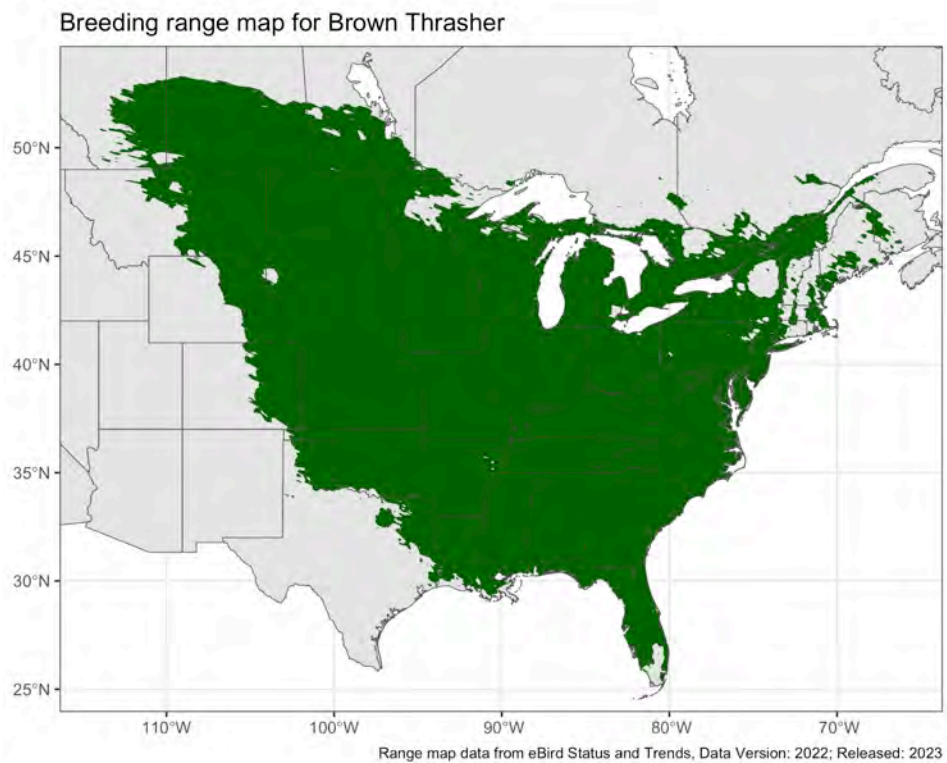
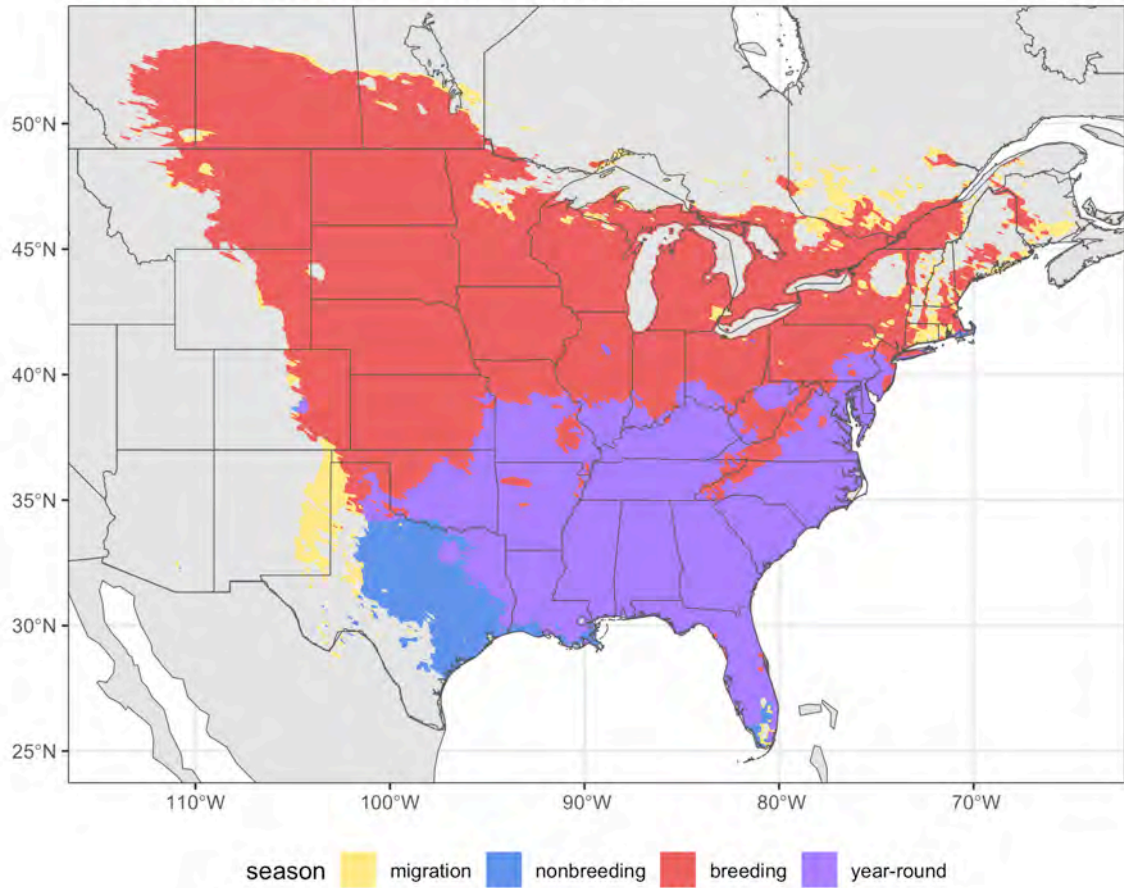


Figure 3. Breeding range for brown thrasher (eBird).

Year-round range map for Brown Thrasher



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

Figure 4. Full (year-round) range for brown thrasher (eBird).

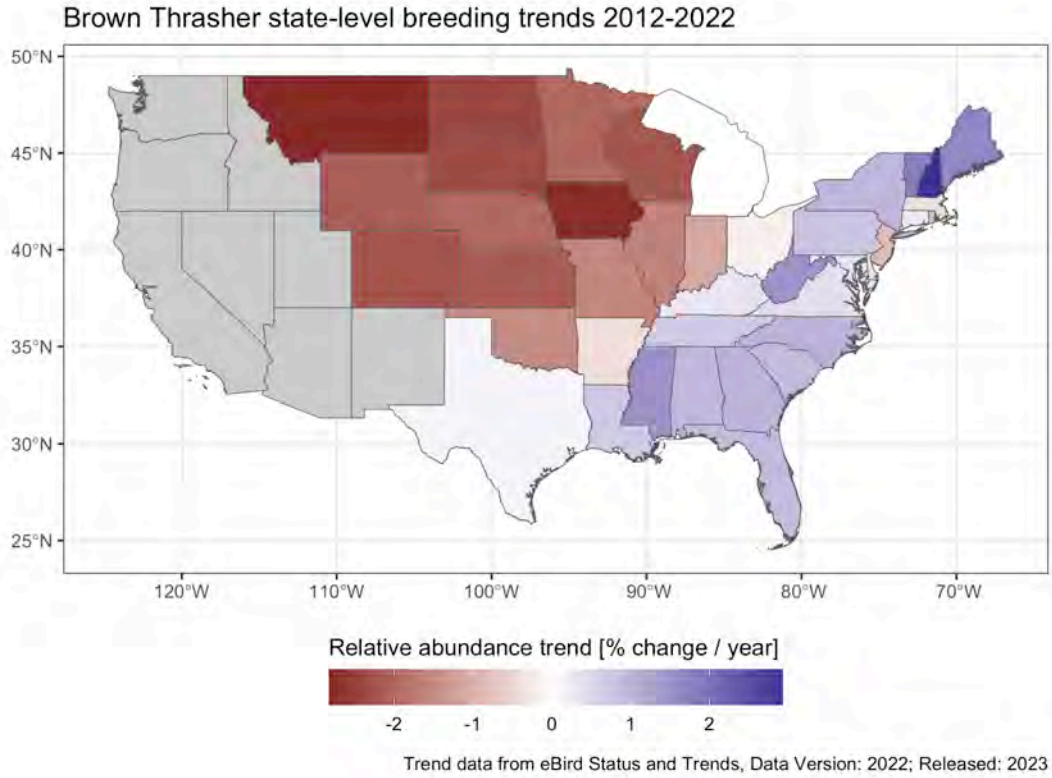


Figure 5. Breeding trends, by state, for brown thrasher (eBird).

III. New York Rarity

(provide map, numbers, and percent of state occupied)

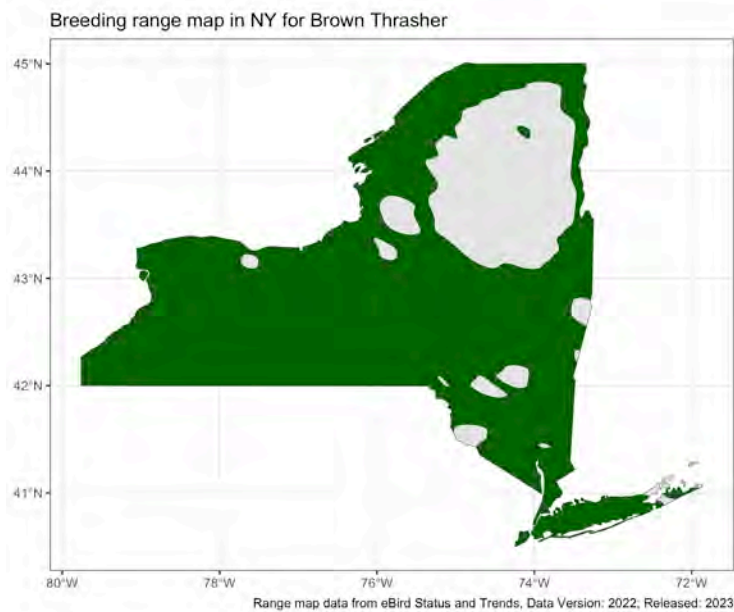


Figure 6. NYS breeding range for brown thrasher (eBird).

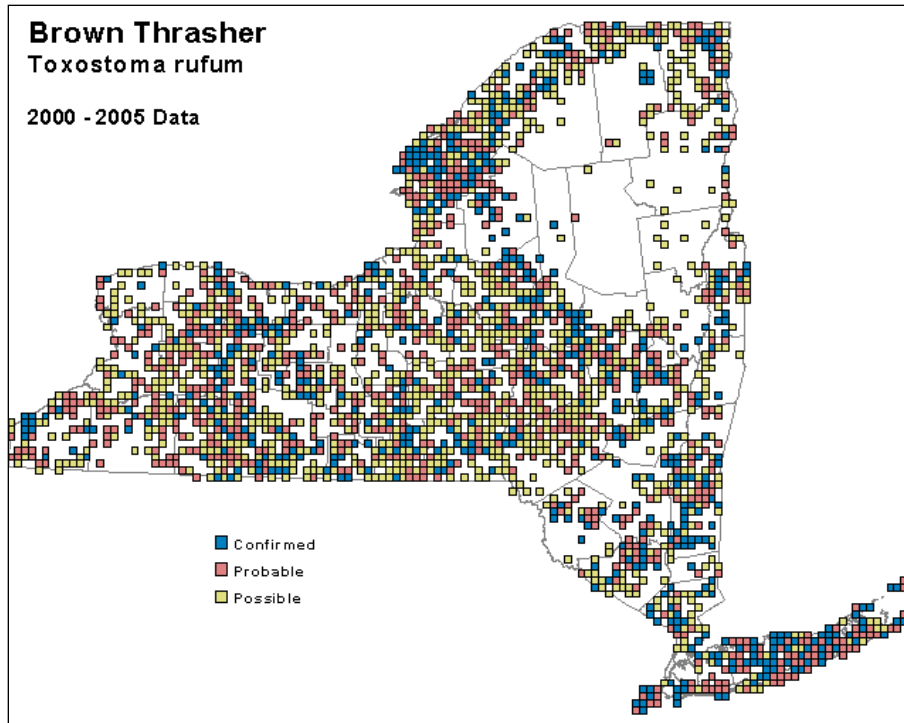


Figure 7. Brown thrasher occurrence in New York during the second Breeding Bird Atlas (McGowan and Corwin 2008)

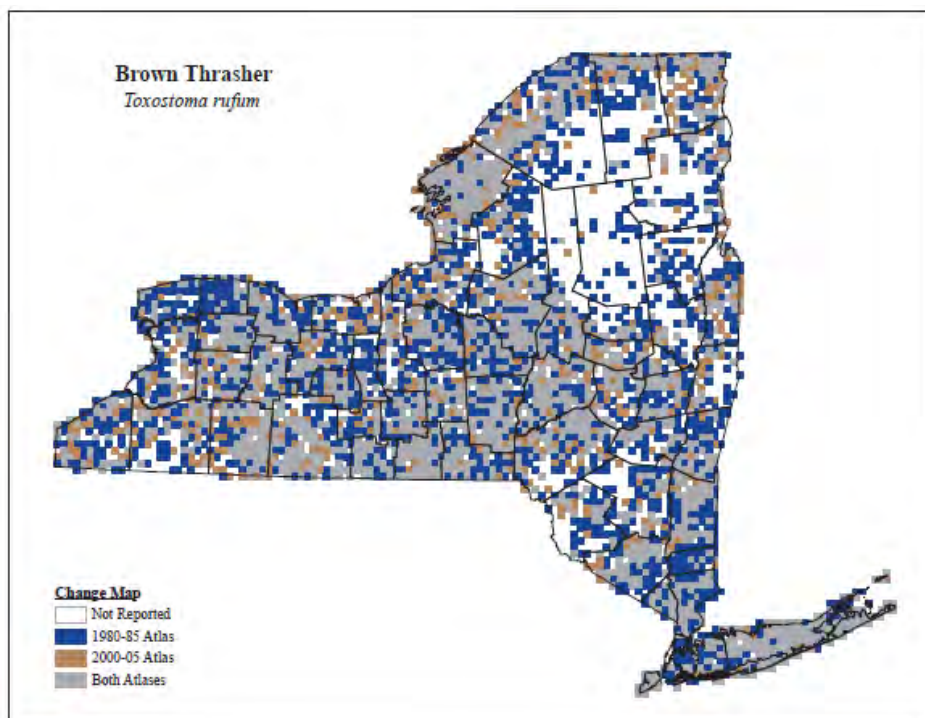


Figure 8. Change in brown thrasher occurrence in New York between the first Breeding Bird Atlas and the second Breeding Bird Atlas (McGowan and Corwin 2008)

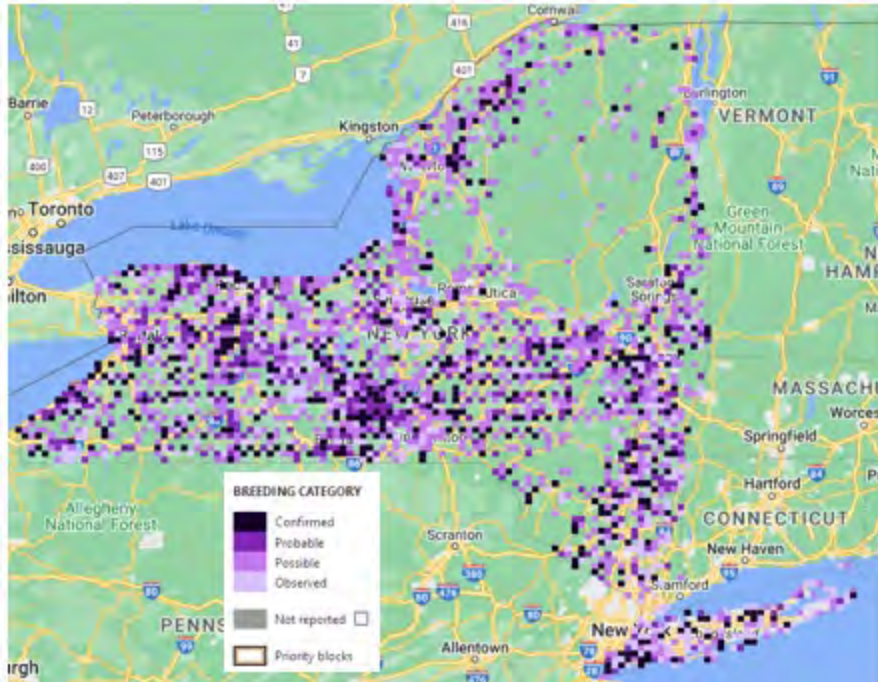


Figure 9. Records of brown thrasher in New York (NYS BBA III Map, 2023)

Details of historic and current occurrence:

The first Breeding Bird Atlas (BBA) (1980-85) documented occupancy in 3341 blocks, 62.6% of the survey blocks statewide (Andrle and Carroll 1988). The second BBA (2000-05) documented occupancy in 2337 blocks, 43.8% 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, brown thrasher has been documented in 2,149 priority blocks, 62% of all priority blocks statewide during the third BBA (NY BBA III Overview, 2024).

New York’s Contribution to Species North American Range:

Based on eBird data, 1.14 percent of the population breeds in New York, while 0.01 percent of the non-breeding population occurs in New York. Among all states with breeding populations, New York ranks 29 of 39.

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

IV. Primary Habitat or Community Type

(from NY crosswalk of NE Aquatic, Marine, or Terrestrial Habitat Classification Systems):

NatureServe broad habitat types: Shrubland/chaparral, Woodland - Hardwood, Old field, Suburban/orchard, Riparian

Habitat or Community Type Trend in New York

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

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:

Dry, open country, esp. thickets and scrubby fields, suburban yards, old pastures and orchards, esp. with hawthorns. Usually nests in thorny situations. Of 12 nests, 5 in viburnum, 4 in hawthorn, 2 in Smilax (B74BUL01NY).

Thickets and bushy areas in deciduous forest clearings and forest edge, shrubby areas and gardens; in migration and winter also in scrub (AOU 1983). BREEDING: Nests on ground under small bush or as high as about 4 m in tree, shrub, vine.

V. Species Demographics and Life History

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

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):

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. Nest predation accounted for 54% of nest failures in Kansas (Murphy and Fleischer 1986).

VI. Threats

Threat Level 1	Threat Level 2	Threat Level 3	Spatial Extent	Severity	Immediacy	Trend	Certainty
1. Residential and Commercial	1.1 Housing & Urban Areas	Choose an item. (habitat loss to development)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
2. Agriculture & Aquaculture	2.1 Annual & Perennial Non-Timber Crops	Choose an item. (habitat loss to development)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
3. Energy Production & Mining	3.3 Renewable Energy	3.3.2 Wind farms (collisions with communications towers similar to wind turbines)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
4. Transportation & Service Corridors	4.1 Roads & Railroads	4.1.1 Roads (roadkill and fragmentation)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
7. Natural System Modifications	7.3 Other Ecosystem Modifications	7.3.2 Vegetation succession	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.1 Invasive Non-Native Plants & Animals	Choose an item.	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	Choose an item. (cowbird parasitism)	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	Choose an item. (competition with mockingbirds)	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	Choose an item. (increased predation from urbanization)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 1. Threats to brown thrasher

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).

Range wide 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?

Yes: ✓ **No:** **Unknown:**

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

This species is included in the Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712) and is protected as a native species under the NYS Environmental Conservation Law.

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

Action Category	Action	Description
A.1 Direct Habitat Management	A.1.0.0.0 Direct habitat management	Site/Area management
A.1 Direct Habitat Management	A.1.1.0.0 Manage plants, animals, fungi, or bacteria	Invasive/Problematic species control

Action Category	Action	Description
B.3 Outreach	B.3.1.4.0 Public outreach and information	Awareness & Communications
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
C.7 Legislative and Regulatory Framework or Tools	C.7.1.3.0 Create, amend, or influence regulation	
C.7 Legislative and Regulatory Framework or Tools	C.7.2.1.0 Create or amend policies	
C.9 Education and Training	C.9.2.0.0 Training and individual skill development	Training

Table 2. Recommended conservation actions for brown thrasher.

VII. References

This SSA drew heavily from these resources:

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<https://doi.org/10.2173/bow.brnthr.01>
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