Species Status Assessment

Common Name:	Evening Grosbeak	**Date Updated:**	2024-12-20
Scientific Name:	*Coccothraustes vespertinus*	**Updated By:**	Tgh V Bonaiuto
Class:	Aves		
Family:	Fringillidae		

Species Synopsis

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

Evening grosbeak, *Coccothraustes vespertinus*, is an irruptive migratory bird that occurs in a wide range of coniferous and mixed coniferous-deciduous woodlands across the United States and into Canada. In New York, this species is primarily found in the Adirondack Mountains. While range-wide this species has been declining in recent decades, causes of this decline are poorly understood. Some potential factors include habitat alteration and control of insect prey (Gillihan and Byers 2001, Bonter and Harvey 2008, Birdlife International 2018).

I. Status

a. Current legal protected Status

i. Federal: Not listed **Candidate:**

ii. New York: Not listed: protected native

b. Natural Heritage Program

i. Global: G5

ii. New York: S5 **Tracked by NYNHP?**

Other Ranks:

New York 2025 SGCN status: Species of Greatest Conservation Need
COSEWIC: Special Concern
IUCN Red List: Vulnerable
Northeast Regional SGCN: Watchlist [Defer to MAFWA/WAFWA]

Status Discussion:

The IUCN describes the population as vulnerable, with significant declines range-wide over the last 40 years (Birdlife International 2018). Local populations of evening grosbeak tend to coincide with spruce budworm outbreaks, increasing with outbreaks, and decreasing with budworm declines.

Additional to the COSEWIC designation as Special Concern, the Canadian Species at Risk Act (SARA) lists evening grosbeak as a Special Concern species.

II. Abundance and Distribution Trends

Region	Present?	Abundance	Distribution	Time Frame	Listing status or S-Rank	SGCN?
North America	Yes	Declining	Unknown	BBS 1966-2022 trend for US		
Northeastern US	Yes	Unknown	Unknown	BBS 1966-2022 not credible trend		Watchlist [Defer to MAFWA/WAFWA]
New York	Yes	Declining	Unknown	BBS 1966-2022 trend		Yes
Connecticut	Yes	Unknown	Unknown	Unknown	SNA	
Massachusetts	Yes	Unknown	Unknown	BBS 1966-2022 not credible trend	S2B,S3N	
New Jersey	Yes	Unknown	Unknown	Unknown	S4N	
Pennsylvania	Yes	Unknown	Unknown	Unknown	S5N	

Region	Present?	Abundance	Distribution	Time Frame	Listing status or S-Rank	SGCN?
Vermont	Yes	Declining	Unknown	BBS 1966-2022 trend	S5B,S4N	
Ontario	Yes	Declining	Unknown	BBS 1966-2022 trend	SC; S4	
Quebec	Yes	Declining	Unknown	BBS 1966-2022 trend	S4	

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):

None.

Trends Discussion

In New York state prior to the 1890s the evening grosbeak was considered to be a vagrant from the west (Bull 1974). The first winter sighting was reported in 1875 in Essex County (Coues 1879). The first summer occurrence in the Adirondack Mountains was in 1942 in Essex and St. Lawrence Counties and breeding was first seen in August 1946 at Bay Pond, Franklin County (Beehler 1978, Peterson 1988) and in 1947 at Saranac Lake (Bull 1974, Shaub 1954). In 1953, breeding expanded to 11 more areas and by 1971 was being reported at 50 sites statewide (Bull 1974).

Evening grosbeak breeding occurrences were mainly restricted to the Adirondacks during the first Atlas with isolated nesting in the Black River Valley, St. Lawrence Transition, Catskills, Central Appalachians, Great Lakes Plain, Allegany Hills, Helderberg Highlands, and Rensselaer Hills. Breeding remained centered on the Adirondacks during the second Atlas with noteworthy increases in the Champlain Valley and Eastern Adirondack Foothills. There were also increases in the St. Lawrence Plains, Central Tug Hill, and the Western Adirondack Foothills.

The eastward expansion is thought to be a result of the establishment of box elder in eastern cities as an ornamental planting, providing an abundant seed supply in the winter. Major outbreaks of spruce budworm in 1945-55 and in 1968-88 may have also played a role (Bolgiano 2004). It is difficult to accurately estimate populations for evening grosbeak due to its nomadic nature.

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

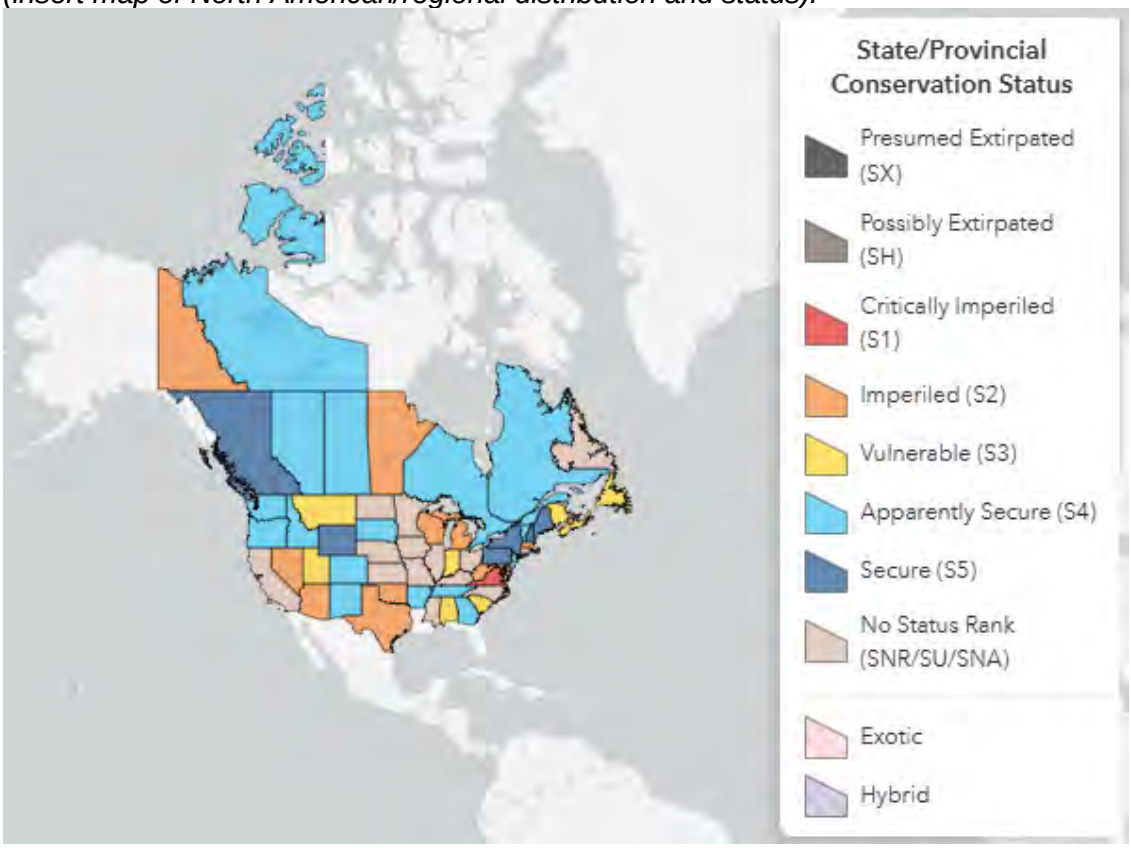

Figure 1. Conservation status of evening grosbeak (NatureServe 2025).

Figure 2. Breeding range of evening grosbeak (eBird).

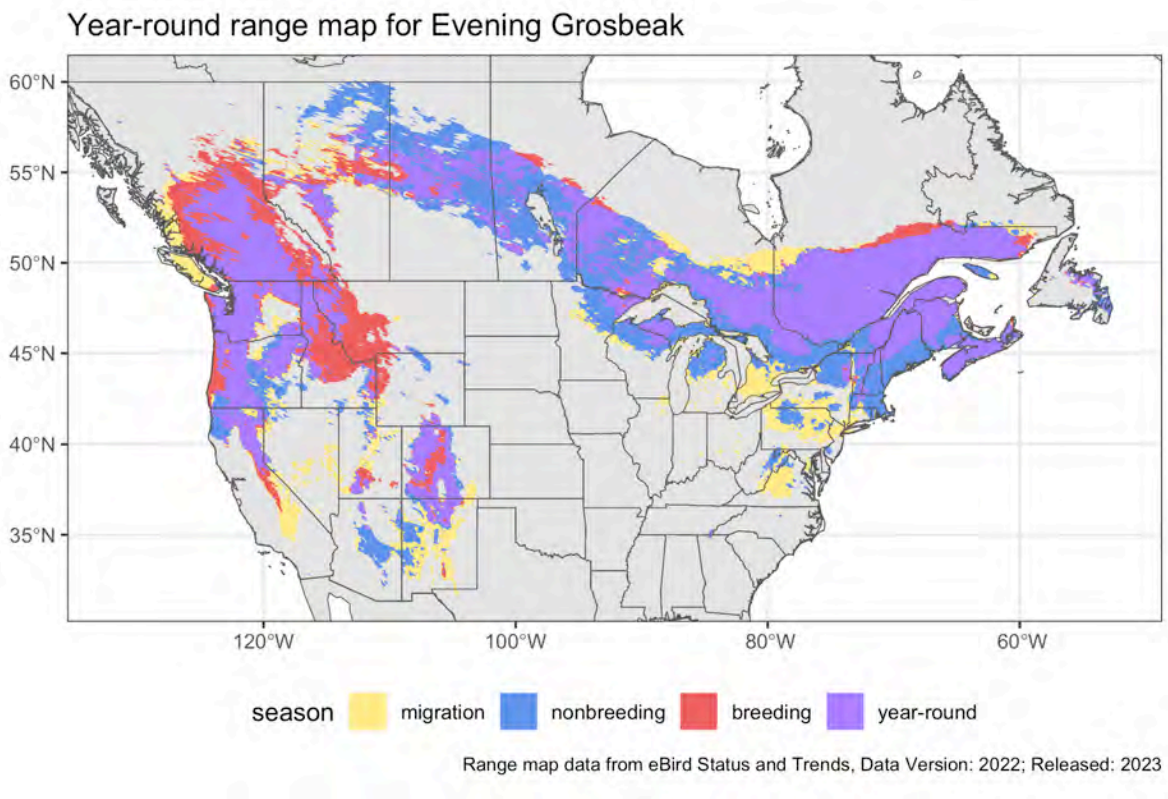

Figure 3. Full (year-round) range of evening grosbeak (eBird).

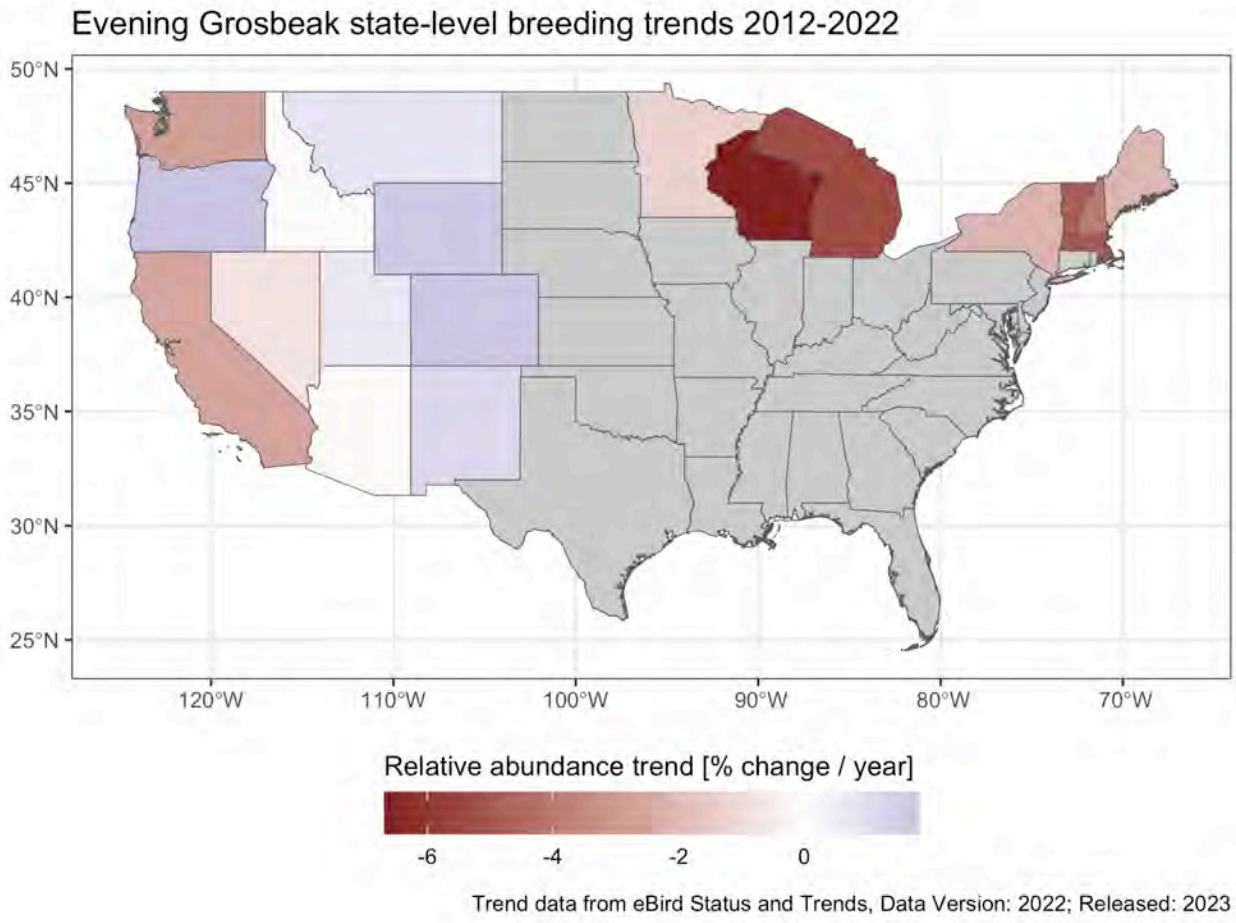

Figure 4. Breeding trends, by state, for evening grosbeak (eBird).

III. New York Rarity

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

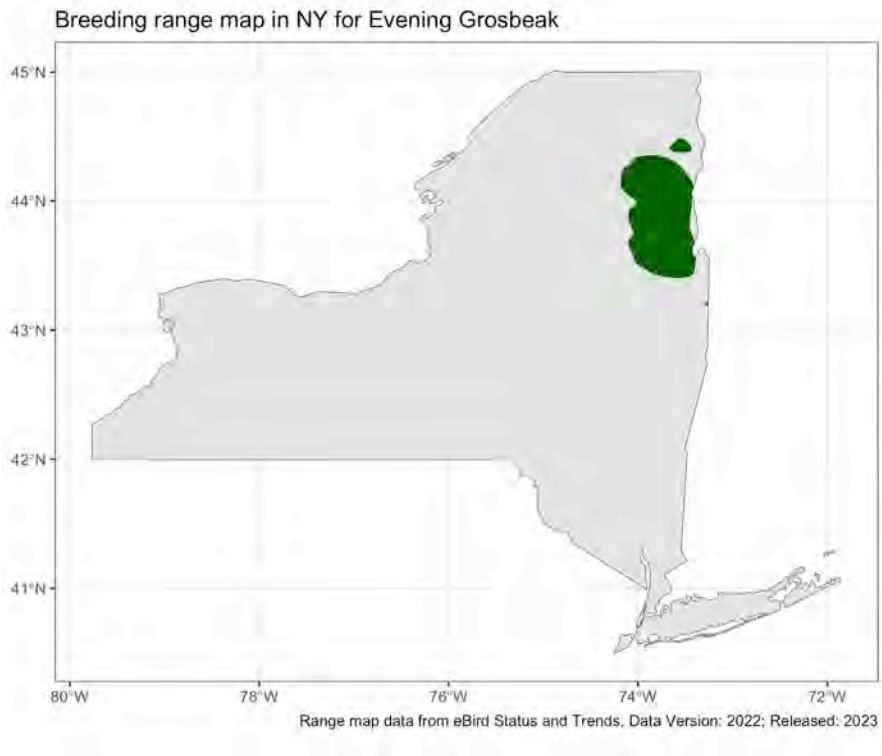

Figure 5. NYS breeding range for evening grosbeak based on eBird data.

Details of historic and current occurrence:

The first Breeding Bird Atlas (BBA) (1980-85) documented occupancy in 250 blocks, 4.7% of the survey blocks statewide (Andrle and Carroll 1988). The second BBA (2000-05) documented occupancy in 360 blocks, 6.8% 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, evening grosbeak has been documented in 66 priority blocks, 1.7% 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):

NatureServe broad habitat types: Suburban/orchard, Forest - Conifer, Woodland - Mixed, Forest - Hardwood, Woodland - Hardwood, Forest - Mixed, Woodland - Conifer

Habitat or Community Type Trend in New York

Habitat Specialist?	Indicator Species?	Habitat/ Community Trend	Time frame of Decline/ Increase
Unknown	Unknown	Unknown	Unknown

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:

As breeder occurs primarily coniferous forest. Of four nests, two were in spruce, one in pine, and one in maple. Nests were usually in dense foliage of deciduous tree or conifer, 2-21 m above ground (Terres 1980). Optimal Evening Grosbeak breeding habitat generally includes open, mature mixed wood forests, where fir species and/or white spruce are dominant, and Spruce Budworm is abundant.

Outside the breeding season, the species seems to depend largely on seed crops from various trees such as firs and spruces in the boreal forest but is also attracted to ornamental trees that produce seeds or fruit, and bird feeders stocked with sunflower seeds.

A 2017 study at Whiteface Mountain found a shift of bird species towards higher elevations, potentially attributed to climate change and human caused habitat changes at lower altitudes (Kirchman and Keuren 2017).

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):

A gregarious species that travels and forages in flocks throughout much of the year. Pairs begin to form three to four weeks before breeding begins (Gillihan and Byers 2020) and arrive on breeding areas as mated pairs (Bekoff et al 1987). Nest substrates in New York includes maple and red spruce trees (Shaub 1954). Clutch size ranges from 2-5 eggs. Females incubate the eggs while males forage for food. Fledglings first leave their nests at 13-14 days old (Gillihan and Byers 2020). A banding study done at Jenny Lake in the Adirondacks found a breeding season return rate of 9-6% between 1970-1998 (Yunick 2001).

Birds in the eastern U.S. show little fidelity to winter sites with a typical band recovery rate of <1%. Local populations of evening grosbeak show marked increases in response to spruce budworm outbreaks. The longevity record is 15 yr, 3 month of a wild, free-ranging individual (Klimkiewicz and Futcher 1987).

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	(building collisions)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
5. Biological Resource Use	5.3 Logging & Wood Harvesting	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
8. Invasive & Other Problematic Species	8.4 Pathogens	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
9. Pollution	9.3 Agricultural & Forestry Effluents	9.3.3 Herbicides & pesticides (reduces insect prey)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
11. Climate Change	11.1 Habitat Shifting & Alteration	-	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.

Table 1. Threats to evening grosbeak

Specific threats attributed to evening grosbeaks decline are not fully identified but some potential contributors are suggested. Known threats to Evening Grosbeak include mortality caused by window strikes while birds are visiting feeders in winter, reduction of mature and old-growth mixed wood forests due to commercial forest management, and mortality due to road collisions when individuals feed on grit and road salt (COSEWIC 2016). Mortality related to ingestion of sodium chloride along roadsides may also be a threat. Pesticide use, including control of prey species such as spruce budworm, pose a threat by reducing foraging success. Collisions with buildings occurs frequently with this species. Evening grosbeak is the tenth-most frequently reported species for building/window collisions (Klem 1989, Gillihan and Byers 2020,Birdlife International 2018).

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
B.3 Outreach	B.3.1 Outreach, communication and distribution	Increase awareness of building collisions
C.7 Legislative and Regulatory Framework or Tools	C.7.2 Create or amend policies, guidelines, or best practices	Encourage reduction in use of pesticides/ herbicides
C.8 Research and Monitoring	C.8.1.1.1 Characterization, demographic study, population, or inventory	Monitor populations

Table 2. Recommended conservation actions for *evening grosbeak*.

VII. References

This SSA drew heavily from these resources:

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