Species Status Assessment

Common Name:	Yellow-breasted Chat	**Date Updated:**	2024-12-20
Scientific Name:	*Icteria virens*	**Updated By:**	tgh
Class:	Aves		
Family:	Icteriidae		

Species Synopsis

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

Yellow-breasted chat is a neotropical migrant that breeds most abundantly in southern states and is near its northern extent in New York. As the largest member of the family Parulidae, the yellow-breasted chat's classification has been examined due to its size, unusual vocal repertoire, and atypical physical attributes. Its breeding preference includes a variety of open-canopy habitats with shrubby, second-growth vegetation and thickets. This early-successional habitat is declining in New York.

Across its distribution, Breeding Bird Survey data show slight but significant declining population trends of -0.62% per year since 1966 and -0.78% per year since 2005. Both long- and short-term trends show significant declines in the Eastern BBS, Appalachian Mountain, and New England/Mid-Atlantic Coast regions (Sauer et al. 2017). It is likely that yellow-breasted chat was always uncommon in New York (McGowan 2008). Records scattered sparsely across the Appalachian Plateau, Coastal Lowlands, and lower Hudson Valley during the first Breeding Bird Atlas went missing during the second Atlas; occupancy declined by 78%. To date, the third BBA (2020-2025) has recorded breeding behavior in 23 priority blocks (NY BBA III Overview, 2024).

I. Status

a. Current legal protected Status

i. Federal: Not Listed **Candidate:**

ii. New York Special Concern

b. Natural Heritage Program

i. Global: G5

ii. New York: S2?B **Tracked by NYNHP?** On Active Tracking List

Other Ranks:

NYS 2025 SGCN status: High Priority Species of Greatest Conservation Need
COSEWIC: Not listed in Canada
IUCN Red List: Least Concern
Northeast Regional SGCN: Watchlist [Assessment Priority]

Status Discussion:

Yellow-breasted chat is an uncommon and local breeder in southern New York. It is rare as a migrant and wintering bird. It is ranked as Vulnerable in New Jersey, Imperiled in New York, and Critically Imperiled in Ontario, Massachusetts, and Connecticut. The IUCN Red List status is Least Concern and global population trend considered stable (Birdlife International 2018).

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	Declining	Unknown	BBS 1966-2022 trend		Watchlist [Assessment Priority]
New York	Yes	Unknown	Unknown	BBS 1966-2022 not credible trend	SC;	Yes
Connecticut	Yes	Unknown	Unknown	BBS 1966-2022 not credible trend	E; S1B	Yes
Massachusetts	Yes	Unknown	Unknown	Unknown	S1B,S1N	No
New Jersey	Yes	Declining	Unknown	BBS 1966-2022 trend	SC; S3B,S4N	Yes

Region	Present?	Abundance	Distribution	Time Frame	Listing status or S-Rank	SGCN?
Pennsylvania	Yes	Declining	Unknown	BBS 1966-2022 trend	S2B,S4M	Yes
Vermont	No	Unknown	-	Unknown		No
Ontario	Yes	Unknown	Unknown	BBS 1966-2022 not credible trend	E; S1B	
Quebec	No	Unknown	-	Unknown		

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):

No targeted monitoring occurs for this species.

Trends Discussion

Yellow-breasted chat populations appear to be declining in the northeastern part of the range and increasing in the western part. Throughout its range, the species has declined by 11% (Partners In Flight).

Survey-wide, Breeding Bird Survey data show slight but significant declines of -0.62% per year for 1966-2015 and -0.78% per year for 2005-2015. In the Eastern BBS region, the long-term trend is -1.02% per year and the short-term trend is -1.24% per year (Sauer et al. 2017). Breeding Bird Survey data for New York, New Jersey, Connecticut, Pennsylvania, and Ontario all have deficiencies due to low relative abundance, but trends and Breeding Bird Atlas data (where available) for each show declines and range retractions during the past 20 years.

Numbers of birds caught in the fall at both Manomet Bird Observatory in eastern Massachusetts and at Powdermill Nature Reserve in western Pennsylvania from 1970 to 1988 both declined, albeit not significantly (Hagan et al. 1992), mirroring declines reported by BBS for similar time periods.

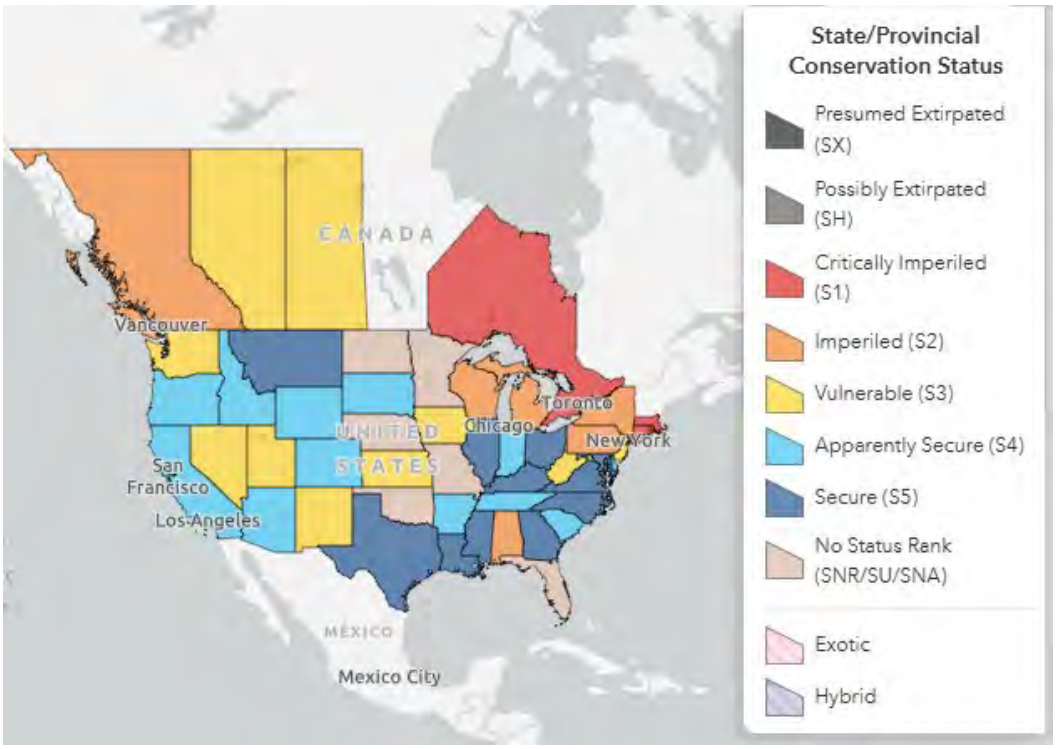

Figure 1. Conservation status of yellow-breasted chat in North America (NatureServe 2025).

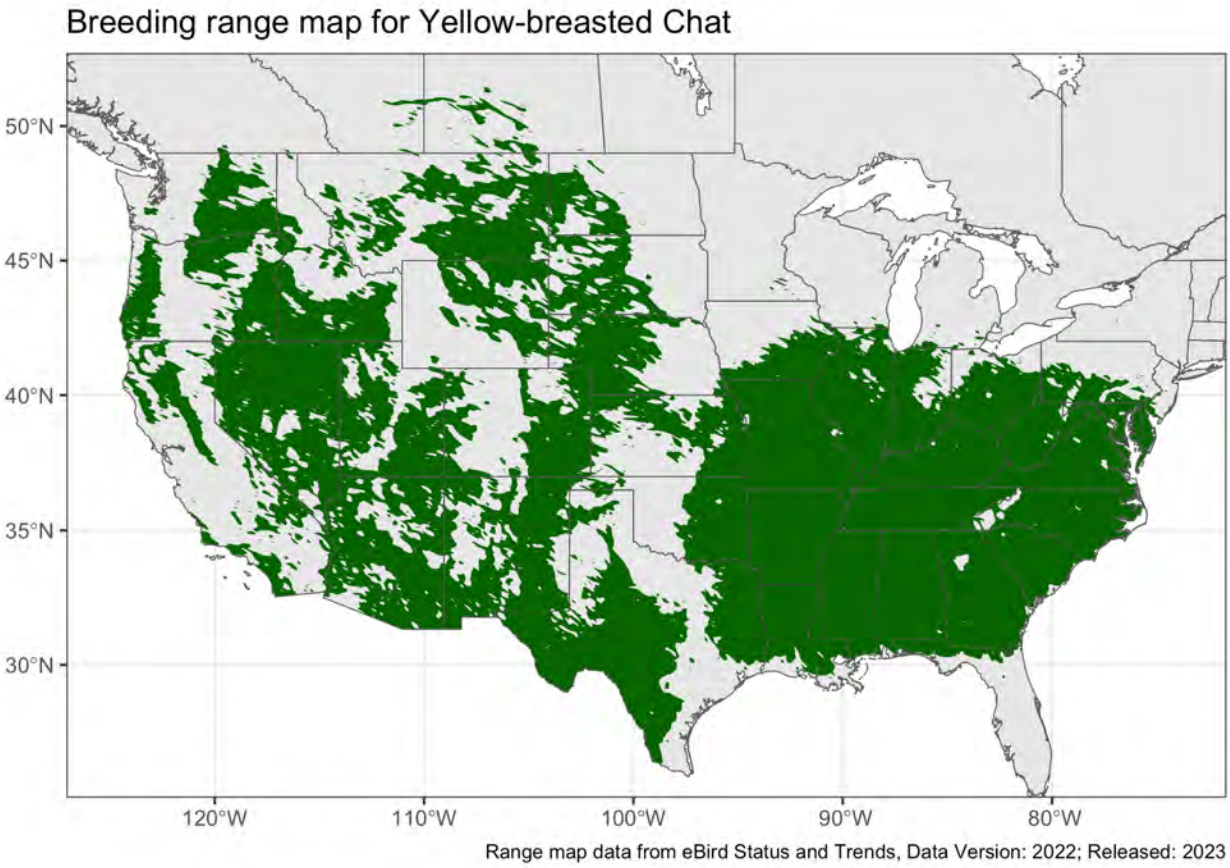

Figure 2: Breeding range for yellow-breasted chat. Data source is eBird.

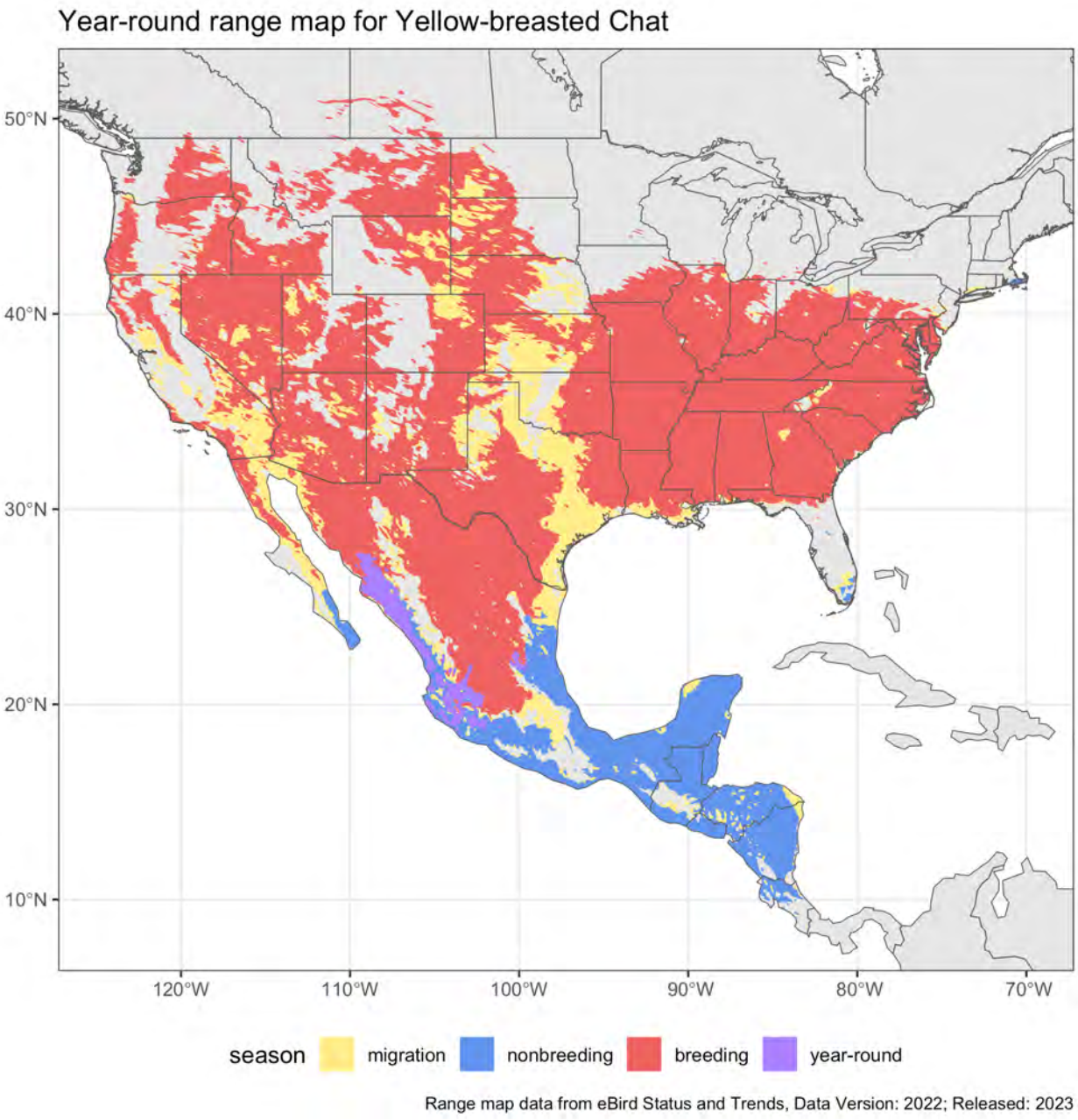

Figure 3: Full (year-round) range for yellow-breasted chat. Data source is eBird.

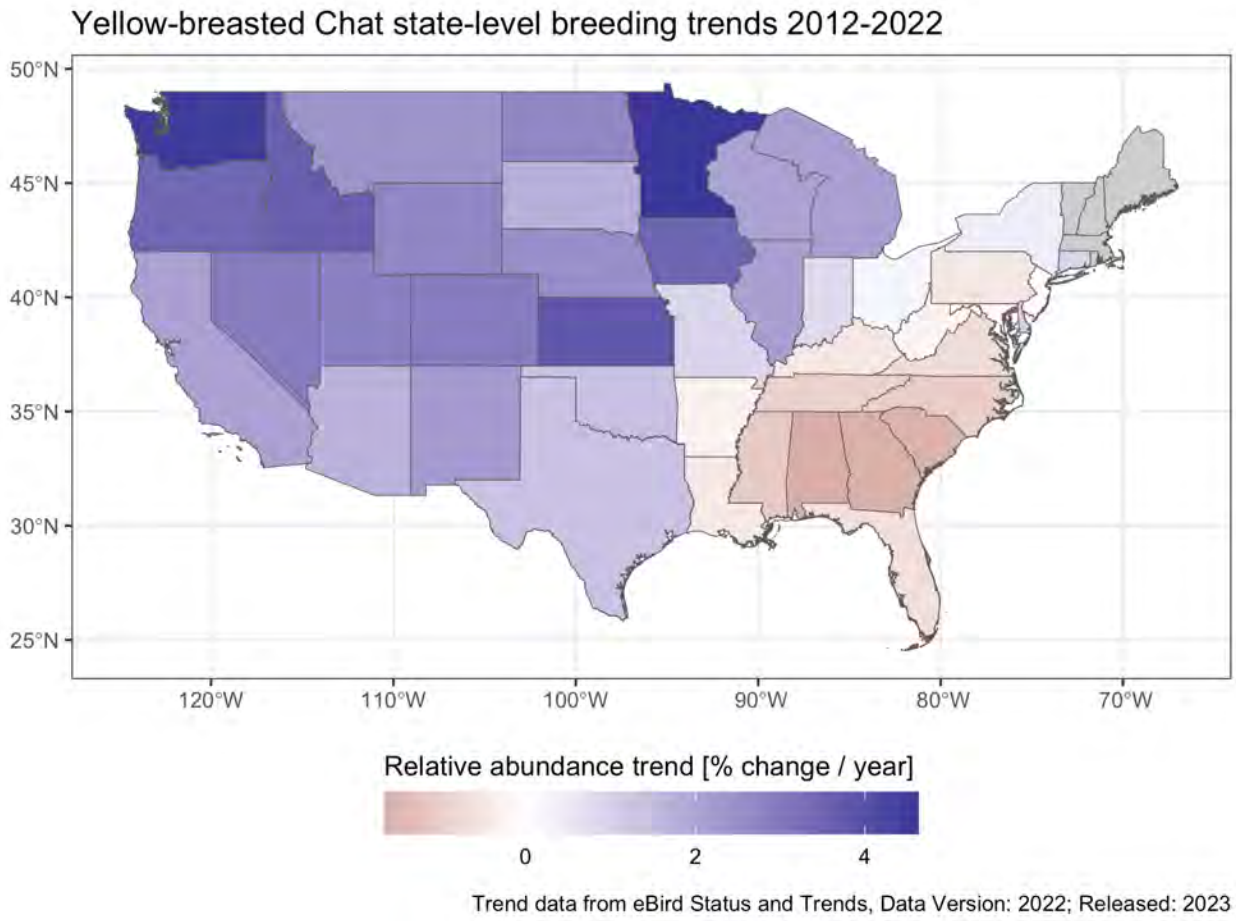

Figure 4: Trends, by state, for yellow-breasted chat. Data source is eBird.

III. New York Rarity

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

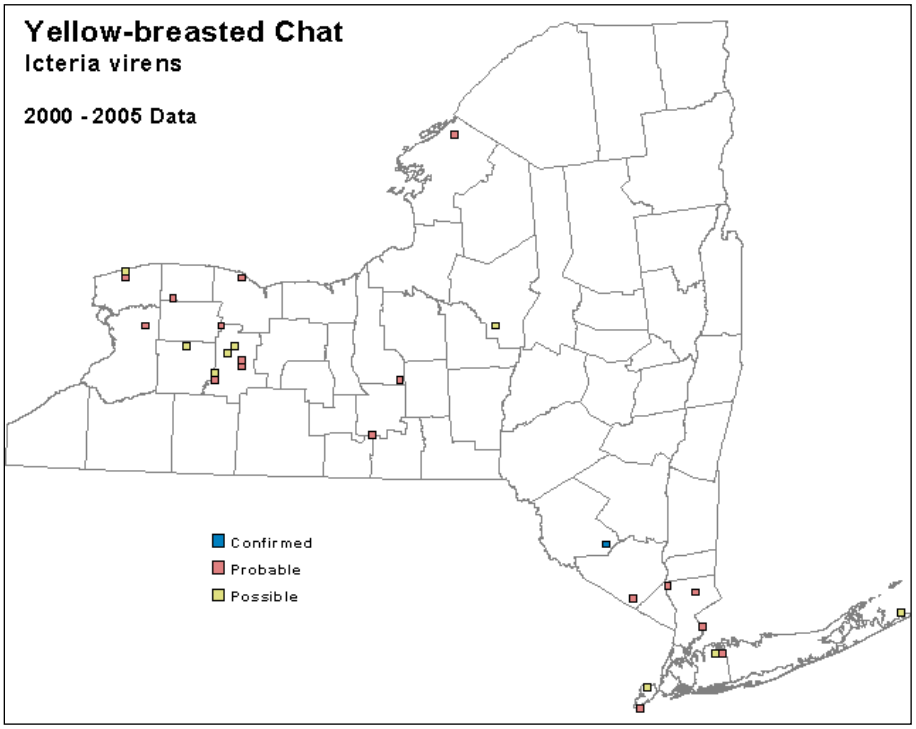

Figure 5. Yellow-breasted chat occurrence in New York State during the second Breeding Bird Atlas (McGowan and Corwin 2008)

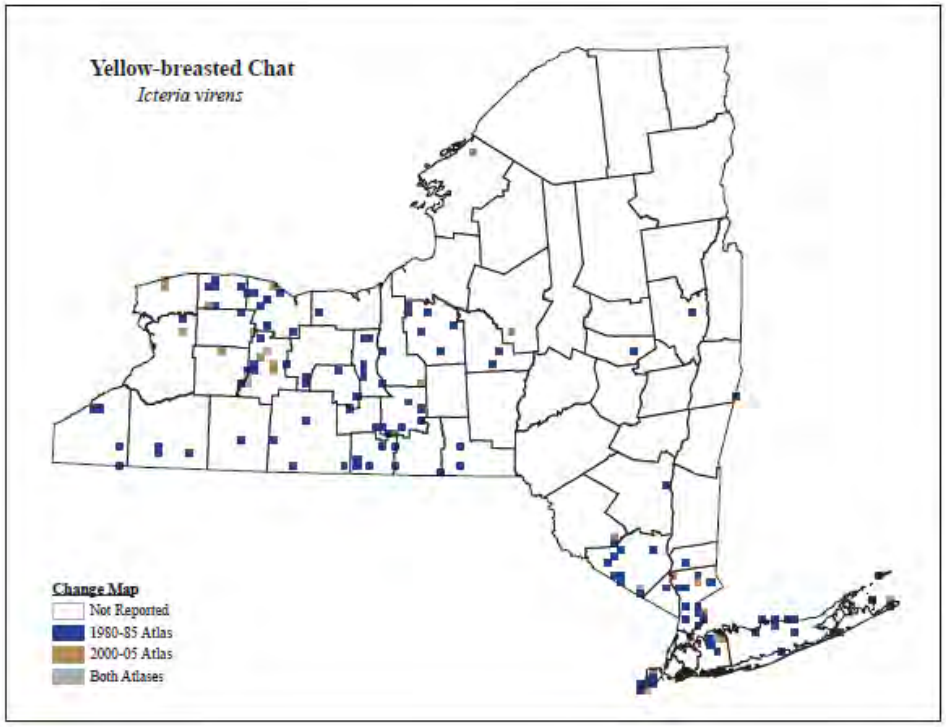

Figure 6. Change in yellow-breasted chat occurrence in New York State between the first Breeding Birds Atlas and the second Breeding Bird Atlas (McGowan and Corwin 2008)

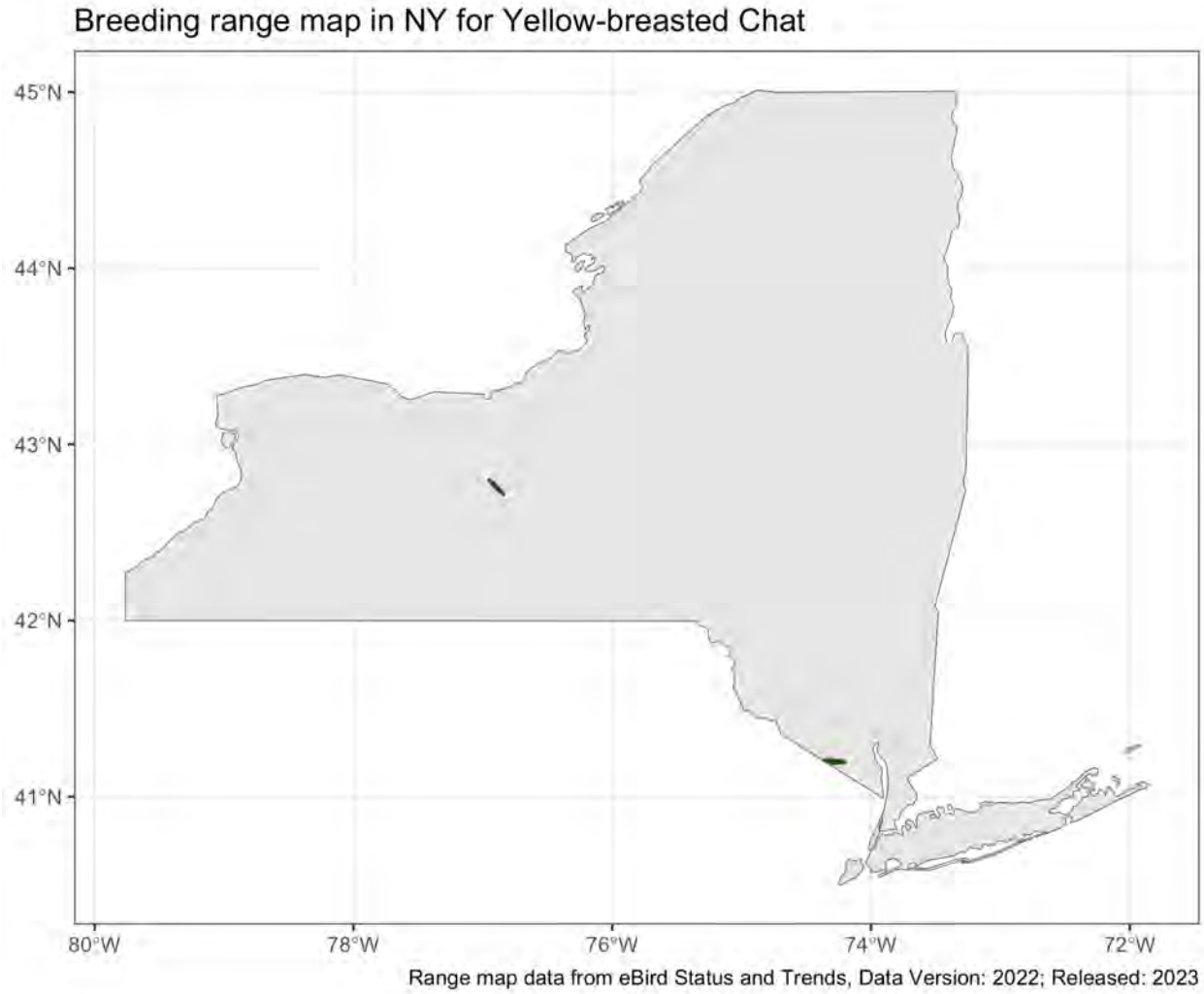

Figure 7: NYS breeding range for yellow-breasted chat based on eBird data.

Details of historic and current occurrence:

The first Breeding Bird Atlas (BBA) (1980-85) documented occupancy in 122 blocks, 2.3% of the survey blocks statewide (Andrle and Carroll 1988). The second BBA (2000-05) documented occupancy in 27 blocks, 0.5% of the survey blocks statewide (McGowan and Corwin 2008). Most of the records in the second Breeding Bird Atlas were distributed across the Great Lakes Plain. The single confirmed breeding record was in the Shawangunk Hills (McGowan 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, yellow-breasted chat has been documented in 23 priority blocks, 0.6% 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: Woodland - Hardwood, Shrubland/chaparral, FORESTED WETLAND, Riparian

Old field and managed grassland; native barrens and savanna; plantation and disturbed land pioneer forests.

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:

Chat breed in dense shrubby habitats, such as old pastures, thickets, regenerating logged forest, and fencerows (NatureServe 2019, McGowan and Corwin 2008). They also utilize habitat along wet areas such as streams, ponds, and swamps. Chats nest in dense vegetation, generally less than 2 meters above the grounds, such as bushes, vines, and low trees (NatureServe 2019, Bull 1964). Ricketts and Ritchison (2000) found that chats at their study site in Kentucky were more likely to fledge young in nesting sites with an open overstory and dense understory with brushy cover below one meter.

BREEDING: Second growth, shrubby old pastures, thickets, bushy areas, scrub, woodland undergrowth, and fence rows, including low wet places near streams, pond edges, or swamps; thickets with few tall trees; early successional stages of forest regeneration; commonly in sites close to human habitation. Nests in bushes, brier tangles, vines, and low trees, generally in dense vegetation less than 2 m above ground. NON-BREEDING: In winter, establishes territories in young second-growth forest and scrub (Dennis 1958, Thompson and Nolan 1973, Morse 1989).

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):

Breeding occurs during the second year and annually thereafter. On a southern Indiana study area over a 5-year period, 28% of eggs laid survived to hatch and nest success averaged 22%. A single brood is typically produced, though broods may be replaced after depredation (Eckerle and Thompson 2001). Apparent annual survival of adult male chats in British Columbia was 65% during a 7-year banding study (McKibbin and Bishop, 2012). The maximum age of a banded and recaptured bird was 11 years, 11 months (BBL 2020). Nest site fidelity appears to be extremely low, suggesting frequent movement to new breeding sites, at least in one studied population in southern Indiana. In British Columbia, roughly 30% males and 10% of females showed fidelity to the site they were banded as an adult, and 10% of banded nestlings returned to their natal site (McKibbin and Bishop 2012). Further, McKibbbin and Bishop (2012) documented adult male dispersal ranging from 6.4-42.9 km and natal dispersal ranging from 2.5-15.6 km for males and 2.3-2.6 km for females. Movement during breeding season is extensive, at least in some populations, with new males and females appearing throughout this period (Thompson and Nolan 1973). Males and females that settled in both naturally and experimentally created vacancies in breeding populations were mostly birds moving after nest failure elsewhere (Thompson 1977).

Nests parasitized by brown-headed cowbirds in small habitat patches were more likely to suffer depredation than unparasitized nests in large patches; nest-depredation rates were lower in large rather than small habitat patches, but nests in large patches were more likely than those in small patches to be parasitized (Burhans and Thompson 1999).

Yellow-breasted chats are easy to detect during the breeding season but become quiet outside of this period. Detection may be difficult due to its dense habitat and skulking nature.

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.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
2. Agriculture & Aquaculture	2.1 Annual & Perennial Non-Timber Crops	(habitat loss)	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
7. Natural System Modifications	7.3 Other Ecosystem Modifications	(forest maturation)	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	8.1.1 Terrestrial animals (domestic cats)	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	8.1.2 Terrestrial plants (bush honeysuckle, autumn olive, multiflora rose)	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	8.2.5 Increased predation by mesopredators (increased from urbanization; racoons, foxes)	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	(brown-headed cowbird nest parasitism)	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 yellow-breasted chat.

Habitat loss due to succession is the primary issue for yellow-breasted chats. Although this warbler tolerates open, grassy areas (Johnston and Odum 1956), any activity, such as grazing, that leads to disappearance of dense, shrubby areas will be detrimental. Local breeding populations decline if secondary succession is not set back before the canopy closes in regenerating forest (Eckerle and Thompson 2001). 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 even-aged forest management or uneven-aged management with low residual basal area; and the erroneous public perception that forest management is harmful to birds (NYSDEC 2005).

Several studies indicate that small numbers of yellow-breasted chats are killed during both spring and autumn migration as a result of collisions with stationary objects (Eckerle and Thompson 2001). Loss et al. (2014) estimated that 365 to 988 million birds are killed by building/glass collisions in the U.S. each year, with warblers being among the most vulnerable taxa. They also noted that buildings collisions are the second leading source of direct mortality of migratory birds, following predation by feral and outdoor pet cats. Longcore (2013) similarly found that nearly 60% of avian mortality from collisions with communication towers and guy wires are warblers; chats had an estimated annual mortality <1% of estimated population size from mortality at communication towers.

Neotropical migrants face additional threats on wintering grounds and during migration including loss and degradation of wintering habitat, exposure to unregulated contaminants, and collision with various structures such as powerlines, towers, and turbines. In some areas, hunting remains a problem (Eckerle and Thompson 2001).
Brood parasitism by brown-headed cowbirds may affect chats less than other songbirds. However, research in habitat restoration areas found that chat reproductive success was influenced by cowbirds more so than any vegetation characteristics (Forrester et al. 2020).

Nonnative, invasive plants negatively affect yellow-breasted chats. Ripple (2020) documented that prevalence of multiflora rose negatively affected chat site occupancy; increasing amounts of honeysuckle were related to lower diet quality (lower concentrations of triglycerides and β-hydroxybutyrate); high amounts of autumn olive and honeysuckle increased stress (corticosterone levels); while increasing amounts of native plants positively influenced chat immune function (bacteria killing ability).

The National Audubon Society's climate vulnerability assessment found that, under the +3.0 °C scenario, the yellow-breasted chat had an overall species vulnerability status of "stable" with range gained in New York. Climate-related threats include habitat loss from wildfire and urbanization as well as decreased nesting success due to spring heat waves (National Audubon Society 2019). Climate change-related increases in the frequency and intensity of extreme weather events may adversely affect annual survival of chats but more study is needed (Huang et al. 2017).

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. It also receives additional protections as a species listed as Special Concern in New York State.

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

Yellow-breasted chat may benefit from the creation and maintenance of early-successional habitat, especially in areas where breeding occurred historically. Chat density is positively associated with habitat created by silvicultural treatments (Twedt and Wilson 2017, Kendrick et al. 2015) including clearcuts (George et al. 2019), thinning and prescribed fire (Roach et al. 2019). The suitability of habitat structure for chats depends on successional stage. Morris et al. (2013) found that chat density increased after both even-aged and uneven-aged silvicultural treatments but that chats were absent from these areas by 14 years after harvest. Chats are area sensitive and require patch sizes of at least 2.3 ha in the eastern U.S. (Shake et al. 2012).

DEC's Young Forest Initiative began in 2015 to increase the amount of young forest habitat on state-owned Wildlife Management Areas. The program may provide early successional habitat suitable for chats on protected, managed public lands. The program is still in the early stages but, to date, our survey and monitoring efforts have not detected chats using these areas.

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
B.3 Outreach	B.3.1.4.0 Public outreach and information	Awareness and Communications
C.6 Design and Plan Conservation	C.6.0.0.0 Design and Plan Conservation	Site/Area Protection

Action Category	Action	Description
C.6 Design and Plan Conservation	C.6.0.0.0 Design and Plan Conservation	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 and Natural Process Restoration
C.9 Education and Training	C.9.2.0.0 Training and individual skill development	Training
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	

Table 2. Recommended conservation actions for *yellow-breasted chat*

The Comprehensive Wildlife Conservation Strategy (NYSDEC 2005) includes recommendations for early-successional forest/shrubland birds, which includes yellow-breasted chat.

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

This SSA drew heavily from these resources:

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