

Species Status Assessment

Class: Birds
Family: Parulidae
Scientific Name: *Icteria virens*
Common Name: Yellow-breasted chat

Species synopsis:

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 this warbler's distribution, Breeding Bird Survey data show a slightly declining population trend since 1966 and a relatively stable trend since 2000. The trend in the Appalachian Mountains shows statistically significant long-term and short-term declines. It is likely that yellow-breasted chat was always be uncommon in New York (McGowan 2008). Records found 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 was found to have declined by 78%.

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** S2?B **Tracked by NYNHP?** Yes

Other Rank:

Partners in Flight – Species of Regional Concern in BCR 28

Status Discussion:

Yellow-breasted chat is an uncommon and local breeder in southwestern New York. It is rare as a migrant and wintering bird. It is ranked as Imperiled in New York and Ontario, and as Critically Imperiled in Massachusetts and Connecticut.

II. Abundance and Distribution Trends

a. North America

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: 1966-2010 and 2000-2010

b. Regional

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Regional Unit Considered: Appalachian Mountains (BCR 28)

Time Frame Considered: 2000-2010

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: 2000-2010

Listing Status: _____ Endangered _____ SGCN? Yes _____

MASSACHUSETTS **Not Present** _____ **No data** _____

i. Abundance

declining **increasing** **stable** **unknown**

ii. Distribution:

declining **increasing** **stable** **unknown**

Time frame considered: 1975-79 to 2007-11

Listing Status: _____ Not Listed _____ SGCN? No _____

NEW JERSEY **Not Present** _____ **No data** _____

i. Abundance

declining **increasing** **stable** **unknown**

ii. Distribution:

declining **increasing** **stable** **unknown**

Time frame considered: 2000-2010

Listing Status: _____ Special Concern _____ SGCN? Yes _____

d. NEW YORK

No data _____

i. Abundance

X declining ___ increasing ___ stable ___ unknown

ii. Distribution:

X declining ___ increasing ___ stable ___ unknown

Time frame considered: 1980-85 to 2000-05

Monitoring in New York.

None.

Trends Discussion:

Yellow-breasted chat populations appear to be declining in the northeastern part of the range and increasing in the western part. Survey-wide, Breeding Bird Survey data show a slight decline of -0.4% per year for 1966-2010 and -0.1% per year for 2000-2010. In the Eastern BBS region, the long-term trend is -0.9% per year and the short-term trend is -0.4% per year. 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.

The second Breeding Bird Atlas in New York documented a -78% decline in occupancy from 1980-85 to 2000-05. Yellow-breasted chats are now documented in less than 1% of survey blocks statewide.

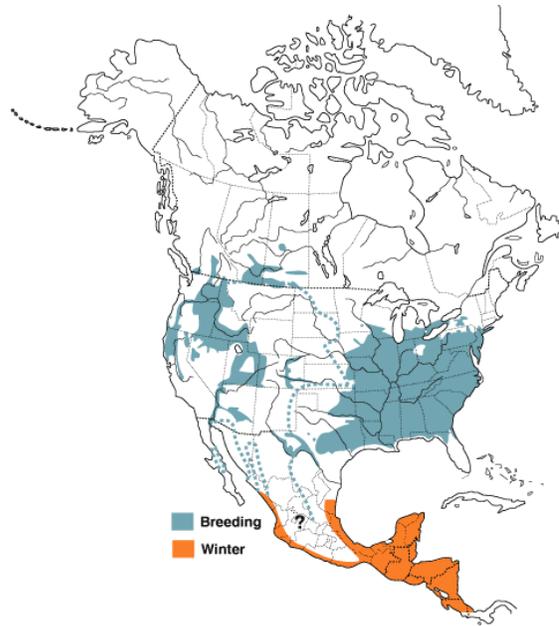


Figure 1. Range of the yellow-breasted chat in North America (Birds of North America Online 2013).

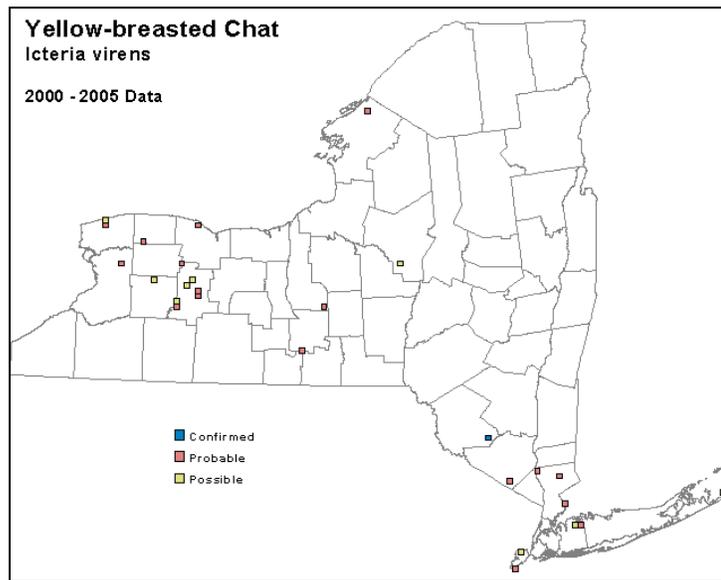


Figure 2. Yellow-breasted chat occurrence in New York State during the second Breeding Bird Atlas (McGowan and Corwin 2008).

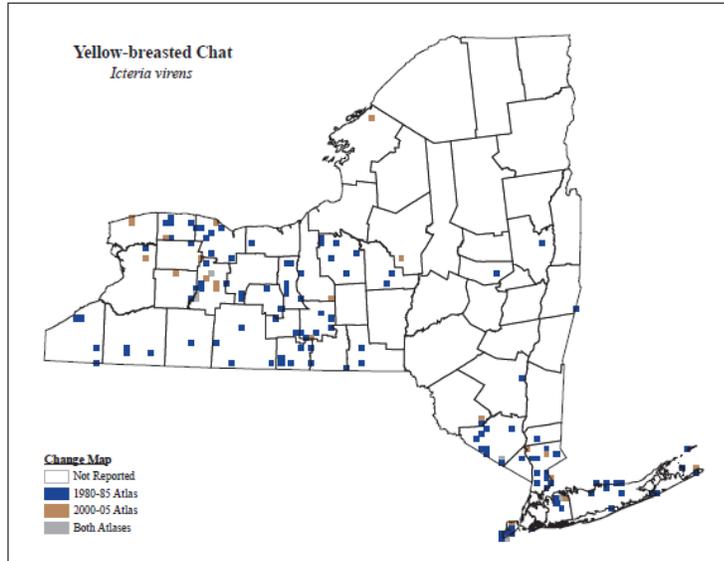


Figure 3. Change in yellow-breasted chat occurrence in New York State between the first Breeding Bird Atlas and the second Breeding Bird Atlas (McGowan and Corwin 2008).

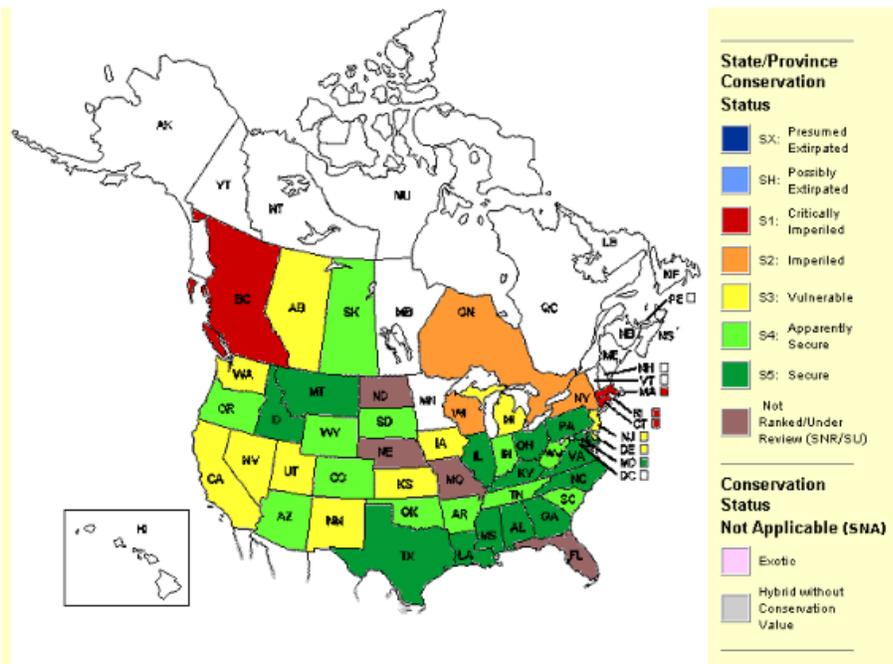


Figure 4. Conservation status of the yellow-breasted chat in North America (NatureServe 2012).

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>2%</u>

Details of historic occurrence:

The first Breeding Bird Atlas (1980-85) documented yellow-breasted chat in 122 survey blocks statewide.

Current	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
	_____	_____	<u><1%</u>

Details of current occurrence:

The second Breeding Bird Atlas (2000-05) documented yellow-breasted chat in 27 survey blocks statewide, a decline of 78%.

New York's Contribution to Species North American Range:

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

IV. Primary Habitat or Community Type:

1. Riparian
2. Non-Native Shrublands
3. Powerline
4. Plantation and Disturbed Land Pioneer Forests
5. Old Field Managed Grasslands
6. Native Barrens and Savanna

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:

The yellow-breasted chat is a shrubland bird. It breeds in open areas with dense, shrubby vegetation and no tree canopy, including the edges of streams, swamps, and ponds as well as forest edges, regenerating burned-over forest, logged areas, fencerows, shrubby old pastures, thickets with few tall trees, and powerline corridors (Eckerle and Thompson 2001).

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:

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. No data is available on annual survivorship (Eckerle and Thompson 2001). The maximum age of banded and recaptured bird was 8 years, 11 months (Klimkiewicz et al. 1983). Nest site fidelity appears to be extremely low, suggesting frequent movement to new breeding sites, at least in one studied population in southern Indiana. Juveniles also move away from natal sites (Thompson and Nolan 1973). 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).

VI. Threats:

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 when secondary succession is not arrested before the canopy closes in regenerating forest (Eckerle and Thompson 2001).

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).

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).

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).

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

No Unknown

Yes

Yellow-breasted chat is protected under the Migratory Bird Treaty Act of 1918.

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. 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 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

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