

Species Status Assessment

Class: Birds
Family: Tyrannidae
Scientific Name: *Contopus cooperi*
Common Name: Olive-sided flycatcher

Species synopsis:

Olive-sided flycatcher occurs across northern North America, breeding in high elevation spruce-fir northern hardwood forest, typically near standing water. Formerly known as *C. borealis*, this species is characteristic of a lowland boreal forest. In New York, where the population reaches the southeastern edge of the range, this flycatcher is restricted to the Adirondack Mountains, the Tug Hill Plateau, and the Catskill Mountains. Wintering occurs in the northwestern portion of South America.

The Breeding Bird Atlas in New York documented a 34% change in occupancy between 1980-85 and 2000-05. Both long-term (1966-2010) and short-term (2000-2010) trends documented by the Breeding Bird Survey are significantly negative in New York, in the Eastern region, and across the range. Glennon (2010) notes that olive-sided flycatcher is of significant conservation concern in the Adirondacks due to its low occupancy rates and relatively high rates of local extinction.

I. Status

a. Current and Legal Protected Status

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

b. Natural Heritage Program Rank

- i. **Global** G4
- ii. **New York** S3 **Tracked by NYNHP?** No

Other Rank:

New York Natural Heritage Program – Watch List
Partners in Flight Priority I
USFWS – Species of Conservation Concern

SARA (Species at Risk Act) – Threatened

COSEWIC (Committee on the Status of Endangered Wildlife in Canada) - Threatened

Status Discussion:

Olive-sided flycatcher is an uncommon to rare breeder across the Adirondacks and Tug Hill Plateau, rare and local, primarily at high elevations, in the Catskills and Rensselaer Hills. As a migrant, it is rare to uncommon.

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: 2000-2010

b. Regional

i. Abundance

 X declining ___increasing ___stable ___unknown

ii. Distribution:

 X declining ___increasing ___stable ___unknown

Regional Unit Considered: Eastern BBS

Time Frame Considered: 2000-2010

c. Adjacent States and Provinces

CONNECTICUT Not Present _____ No data X

i. Abundance

____ declining ____ increasing ____ stable X unknown

ii. Distribution:

____ declining ____ increasing ____ stable X unknown

Time frame considered: Uncommon migrant

Listing Status: _____ Not Listed _____ SGCN? Yes

MASSACHUSETTS Not Present _____ No data _____

i. Abundance

 X declining ____ increasing ____ stable ____ unknown

ii. Distribution:

 X declining ____ increasing ____ stable ____ unknown

Time frame considered: 2000-2010

Listing Status: _____ Not Listed _____ SGCN? No

NEW JERSEY Not Present X No data _____

ONTARIO Not Present _____ No data _____

i. Abundance

 X declining ____ increasing ____ stable ____ unknown

ii. Distribution:

 X declining ____ increasing ____ stable ____ unknown

Time frame considered: 1981-85 to 2001-05

Listing Status: Special Concern provincially; Threatened nationally

PENNSYLVANIA Not Present _____ No data _____

i. Abundance

____ declining ____ increasing ____ stable X unknown

ii. Distribution:

____ declining ____ increasing ____ stable X unknown

Time frame considered: _____

Listing Status: Extirpated as breeder SGCN? Yes

QUEBEC Not Present _____ No data _____

i. Abundance

 X declining ____ increasing ____ stable ____ unknown

ii. Distribution:

 X declining ____ increasing ____ stable ____ unknown

Time frame considered: 2000-2010

Listing Status: Threatened nationally

VERMONT Not Present _____ No data _____

i. Abundance

 X declining ____ increasing ____ stable ____ unknown

ii. Distribution:

 X declining ____ increasing ____ stable ____ unknown

Time frame considered: 1976-81 to 2003-07

Listing Status: Not Listed SGCN? Yes

d. NEW YORK

No data _____

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: 2000-2010

Monitoring in New York.

A State Wildlife Grants project was completed in 2009 to quantify the status and habitat requirements of low elevation and high elevation boreal forest birds (Glennon 2010). The olive-sided flycatcher was one of 12 focus species during this project, which began in 2003.

Trends Discussion:

Breeding Bird Survey data for the United States show a significant long-term declining trend of 2.6% per year for 1966-2010 and a significant short-term declining trend of 1.8% per year for 2000-2010. The long-term and short-term trends in New York are each 8.0% per year, indicating a 97% loss from 1966 to 2010, although caution is advised due to low sample sizes (Sauer et al. 2011). The second Breeding Bird Atlas documented a decline in occupancy of 34% from 1980-85 to 2000-05. The number of blocks with confirmed breeding records dropped from 33 blocks during the first Atlas to 16 blocks during the second Atlas, a change of 52%. Losses in the Catskill Mountains were severe, with the species now absent from Greene County and the Delaware Hills of Sullivan County (Peterson 2008).

The Wildlife Conservation Society conducted point counts for 12 boreal species at 59 sites in the Adirondack Park from 2007-2011. Occupancy modeling showed a consistent pattern of decline for olive-sided flycatcher. This species had an occupancy rate of 41% and a local extinction rate of 30%. Occupancy rates continued to decline through 2011 (M. Glennon, pers. comm.).

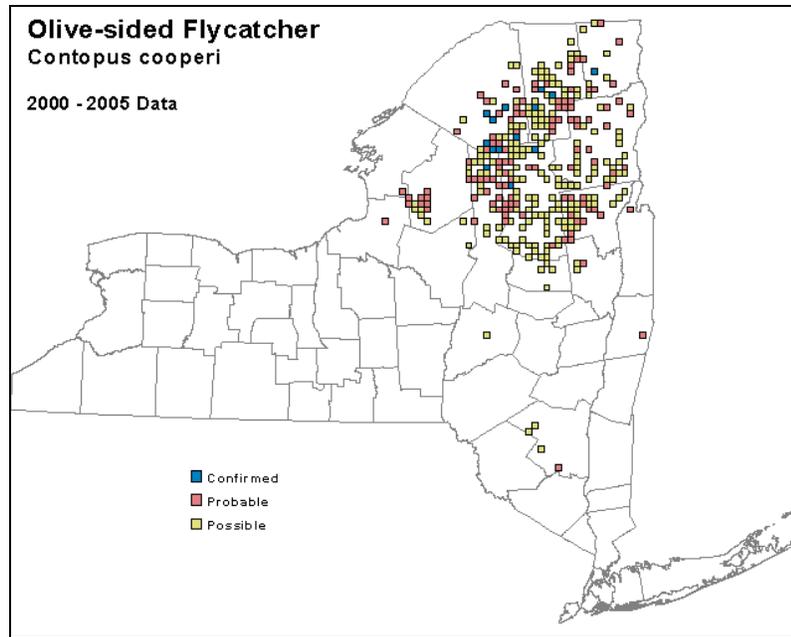


Figure 2. Olive-sided flycatcher occurrence in New York State during the second Breeding Bird Atlas (McGowan and Corwin 2008).

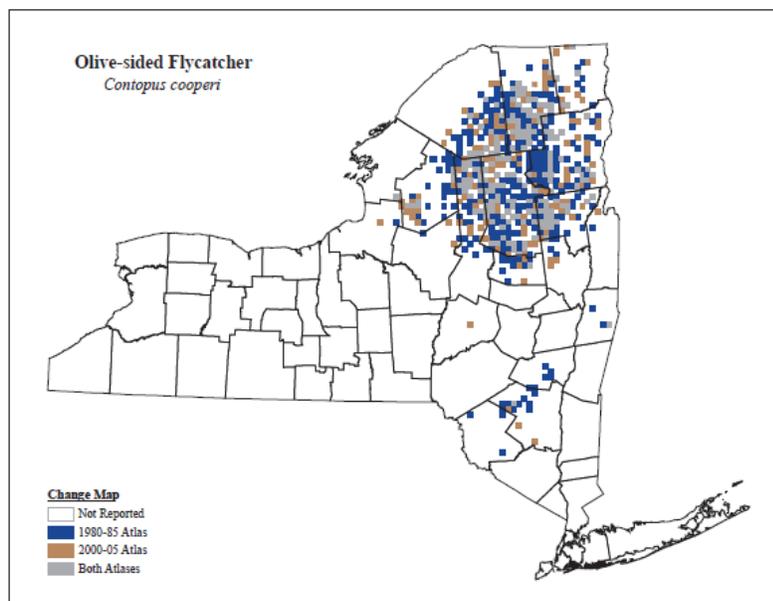


Figure 3. Change in olive-sided flycatcher occurrence in New York State between the first Breeding Bird Atlas and the second Breeding Bird Atlas (McGowan and Corwin 2008).



Figure 3: Range of olive-sided flycatcher (www.borealbirds.org)

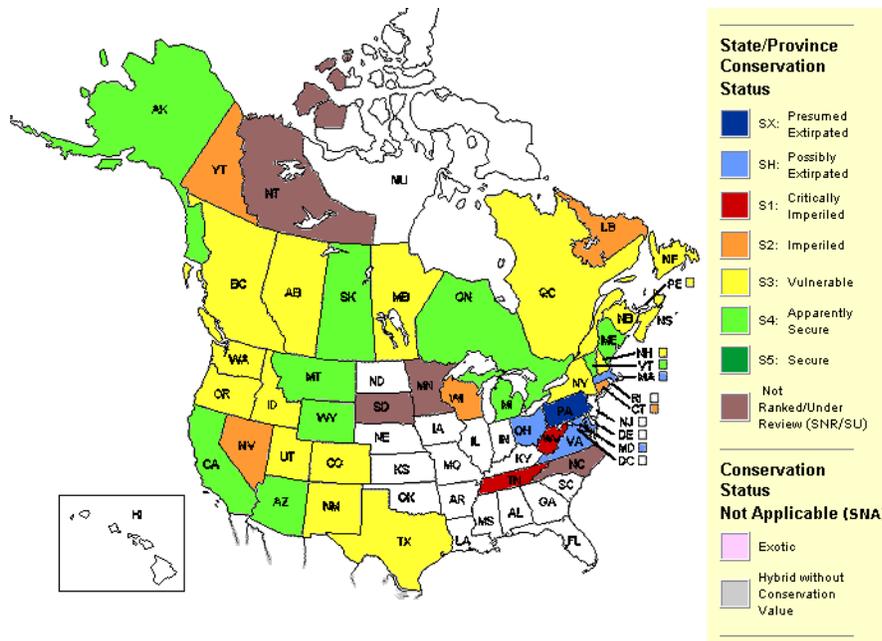


Figure 3: Conservation status of olive-sided flycatcher in North America (NatureServe 2013)

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	_____	_____	9

Details of historic occurrence:

The first Breeding Bird Atlas (1980-85) documented occupancy in 479 survey blocks statewide.

Current	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
	_____	_____	6

Details of current occurrence:

The second Breeding Bird Atlas (2000-05) documented occupancy in 316 survey blocks statewide, a change of 34% in 20 years.

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. Mixed Northern Hardwoods
2. Riparian
3. Conifer Swamp Forest
4. Mixed Hardwood Swamp
5. Spruce-Fir Forest and Flats
6. Mountain Spruce-Fir Forests
7. Boreal Forested Peatland
8. Open Acidic Peatlands
9. Wet Meadow/Shrub Swamp

Habitat or Community Type Trend in New York:

Declining Stable Increasing Unknown

Time frame of decline/increase: last 20 years

Habitat Specialist? Yes No

Indicator Species? Yes No

Habitat Discussion:

Olive-sided flycatcher is a lowland boreal forest bird, breeding in coniferous or mixed deciduous forests, favoring edges and openings created by sphagnum bogs, burned over forest, swampy lake edges, and beaver meadows (Altman and Sallabanks 2000). Glennon (2010) found that olive-sided flycatcher showed a preference for floating bogs primarily, as well as grounded bogs, conifer swamps, and open river corridors. Peterson (2008) describes the favored habitat in New York as mountain tarns and quaking bogs, swampy lake shores, marshy streams, river backwaters, and beaver meadows surrounded by a forest of black or red spruce mixed with balsam fir, tamarack or eastern hemlock. Most records from the Catskills are from above 1500 feet (Peterson 1988). The habitat used by olive-sided flycatcher has remained stable in New York over the past 20 years, perhaps even increasing due to the increase in beaver populations.

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:

From Altman and Sallabanks (2000): Both sexes breed in first breeding season after hatching. One brood is raised per season. Overall annual productivity of this species is among the lowest of any North American songbird. There is no information on lifetime reproductive success.

Few data on adult productivity and survivorship. Recent MAPS (Monitoring Avian Productivity and Survivorship) data from two southwestern U.S. stations estimated survivorship of adult breeders at 0.87 (± 0.088 SE; $n = 55$ individuals captured).

VI. Threats:

Limiting factors for olive-sided flycatcher are conjectural and need study, especially on wintering grounds, and especially in light of significant population declines. Suggested limiting factors on breeding grounds include habitat loss through conversion to nonforest, alteration of habitat from forest management practices (e.g., some types of harvest, fire suppression), reduced availability and acquisition of food resources, and impacts on reproductive success from nest predation (Altman 1997). Maturation of the forest, particularly in areas where forest management is prohibited has probably also led to a loss of suitable habitat because the required openings are no longer present (Post 2006). Limiting factors on breeding grounds are likely exacerbated by the fact that the genus *Contopus* has the lowest reproductive rate of all passerine genera in North America. Thus, high

survivorship is essential to maintain stable populations, but concern about habitat loss on wintering grounds makes high survivorship problematic.

Osborne et al. (2011) showed that the effects of mercury can be exacerbated in boreal species that use high-acid habitats such as peatlands.

At sites in the Adirondack Park, olive-sided flycatchers are more likely to colonize larger, more connected wetlands at higher latitudes, and more likely to disappear from smaller, more isolated wetlands at more southern locations (M. Glennon, pers. comm.).

Olive-sided flycatchers may have evolved to depend on natural disturbances, particularly forest fires, that create forest openings and naturally patchy habitat with abundant edge. Thus, fire suppression policies of last 50–100 yr may have reduced suitable habitat, especially for breeding (Hutto 1995).

Another potential limiting factor is availability of prey. This flycatcher shows high degree of specialization for flying insects, particularly hymenopterans. As a long-distance neotropical migrant, olive-sided flycatcher is vulnerable to climatic and environmental changes during migration. On breeding grounds, extreme weather (rain, snow, cold temperatures) that depresses activity, or reduces availability, of flying insects could delay reproductive activities or affect nestling survival. Overall, declining bee populations are a threat to this species as well as other insectivorous birds.

As a boreal species, olive-sided flycatcher is susceptible to habitat shifts due to climate change (Field et al. 2007, Jenkins 2010) long-lived boreal ecosystems in the eastern U.S. will be among the most vulnerable to predicted changes in climate (Field et al. 2007). Olive-sided flycatcher was classified as “moderately vulnerable” to predicted climate change in an assessment of vulnerability conducted by the New York Natural Heritage Program (Schlesinger et al. 2011). Spraying of pesticides has been suggested, but not documented, as a potential threat on breeding grounds because it is detrimental to the food supply (Finch 1992).

Habitat loss or alteration on wintering grounds is suspected as one potential factor limiting populations (Altman 1997). Forests in foothills of the Andes Mountains have been extensively deforested (Robbins et al. 1992); 85% of Andean montane forests have been altered (Orejuela 1985).

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

No Unknown

Yes

Olive-sided flycatcher is protected under the Migratory Bird Treaty Act of 1918. Most habitat is protected from development within forest areas of the Adirondack and Catskill Forest Preserves.

The Freshwater Wetlands Act provides protection for wetlands greater than 12.4 acres in size under Article 24 of the NYS Conservation Law. The Adirondack Park Agency has authority to regulate smaller wetlands within the Adirondack Park.

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

Forest harvest practices that retain snags and live trees (potential nest trees) help provide suitable habitat. In some areas, creation of forest openings could provide or improve habitat where such openings have become uncommon due to suppression of forest fires and maturation of the forest.

Ownership of lands in the “boreal core” of the Adirondacks—the northwest portion—falls into a large and diverse group of categories, ranging from parcels that are specifically protected to those that are undergoing active forestry. The effect of logging on olive-sided flycatcher and other boreal birds is unknown, making land protection opportunities of this region of the Adirondacks a priority (Glennon 2010).

The NY Comprehensive Wildlife Conservation Strategy (CWCS; NYSDEC 2005) states the need for a management plan for high-altitude conifer forest birds that incorporates the results of the 2004 State Wildlife Grant study on boreal forest birds (Glennon 2010). Conservation actions following IUCN taxonomy are categorized in the table below.

Conservation Actions	
Action Category	Action
Land/Water Protection	Resource & Habitat Protection
Land/Water Management	Site/Area Management
External Capacity Building	Alliance & Partnership Development

The CWCS also includes recommendations for the following actions for boreal forest birds, which includes olive-sided flycatcher (NYSDEC 2005).

Habitat management:

___ Cooperate with private landowners to encourage land management strategies that favor spruce grouse, olive-sided flycatcher and other species dependent on early successional boreal forests.

Habitat monitoring:

___ Conduct field studies to determine causes for declines of species known to be declining.

Habitat research:

___ Complete an inventory and analysis of the distribution and abundance of boreal species.

Population monitoring:

___ Develop a long term monitoring program to determine population trends of boreal forest birds.

State land unit management plan:

___ Review Department wildfire management for Forest Preserve lands.

VII. References

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