

Species Status Assessment

Class: Osteichthyes (bony fishes)
Family: Catostomidae (sucker)
Scientific Name: *Catostomus utawana*
Common Name: Summer sucker

Species synopsis:

Summer sucker lives in small headwater lakes and streams of the Adirondack Mountains and is native to 6 of 18 watersheds. Of the 6, it is extirpated from the Champlain and St. Lawrence watersheds. In the Black, Oswegatchie, Raquette and Upper Hudson it currently is known from nine areas. Summer sucker is the only endemic fish species in the state, and its range is restricted and poorly defined.

Summer sucker has only recently been re-described as a species (Morse and Daniels 2007); it was previously considered a subspecies.

I. Status

a. Current and Legal Protected Status

- i. **Federal** Not Listed **Candidate:** No
- ii. **New York** Not listed as SGCN

b. Natural Heritage Program Rank

- i. **Global** G2
- ii. **New York** S2 **Tracked by NYNHP?** No

Other Rank:

Summer sucker is listed as threatened by the American Fisheries Society (2008).

Status Discussion:

The summer sucker has both global and New York ranking of "Imperiled." This species has a small range in lakes and tributary streams in the Adirondack Mountains of New York. Within its range it is common but declining (NatureServe 2012).

II. Abundance and Distribution Trends

a. North America

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Time frame considered: last 50 yrs, or since 1930s

b. Regional

i. Abundance

declining increasing stable unknown

ii. Distribution:

declining increasing stable unknown

Regional Unit Considered: _____

Time Frame Considered: _____

c. Adjacent States and Provinces: only found in NYS

CONNECTICUT	Not Present <u> X </u>	No data _____
MASSACHUSETTS	Not Present <u> X </u>	No data _____
NEW JERSEY	Not Present <u> X </u>	No data _____
ONTARIO	Not Present <u> X </u>	No data _____
PENNSYLVANIA	Not Present <u> X </u>	No data _____
QUEBEC	Not Present <u> X </u>	No data _____
VERMONT	Not Present <u> X </u>	No data _____

d. NEW YORK

No data _____

i. Abundance

___ declining ___ increasing ___ stable X unknown

ii. Distribution:

 X declining ___ increasing ___ stable ___ unknown

Monitoring in New York.

Monitoring programs are carried out by the NYSDEC Rare Fish Unit, 2003-2012.

Trends Discussion:

Summer sucker is endemic to the Adirondack region of New York and it is not found elsewhere (Figure 1). They have been found in 6 watersheds and are apparently now absent from two of them (Champlain and St. Lawrence). Abundance trends are unknown although they are easily caught, at times, in the very few waters where they remain.

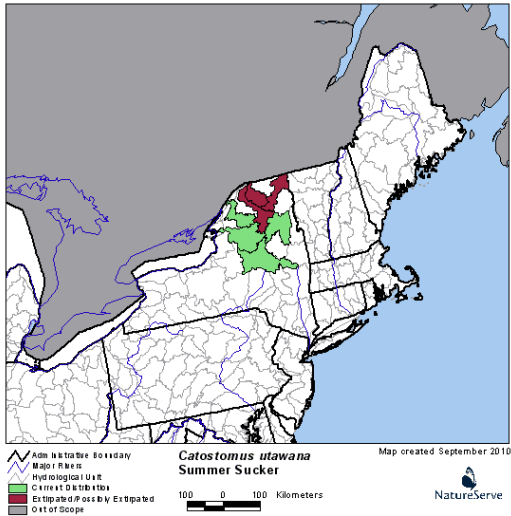


Figure 1. U.S. Distribution of summer sucker by watershed. (NatureServe 2012).

The distribution of this species within the 6 watersheds has changed with decreases, as they are now known in only four. Overall there are records from 16 of the subbasins (HUC 10) units for all time periods and from 7 fewer units in the recent period (9). Statewide, the number of individual site records for this species has been 43 for all time periods, 26 in the last 30 years, and 25 since 1993.

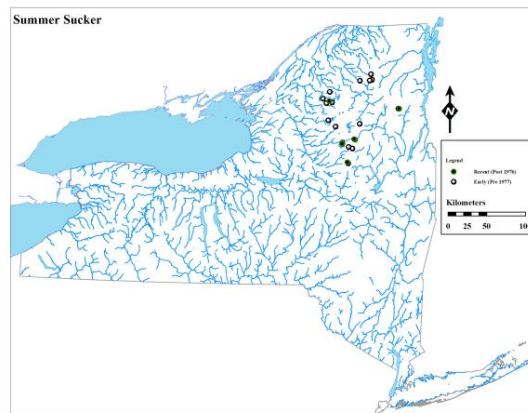
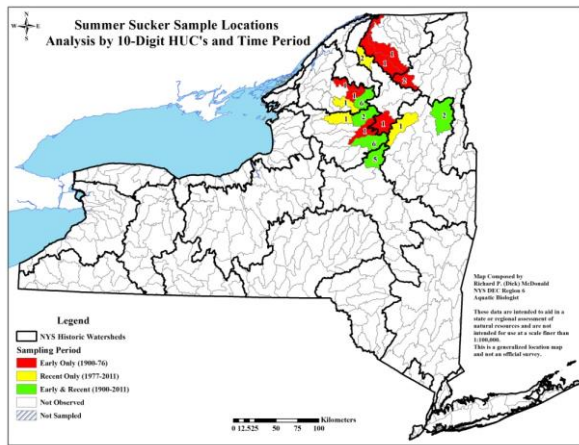


Figure 2. Summer sucker distribution in New York, depicting fish sampled before 1977 and from 1977 to current time, is shown the corresponding HUC-10 units where they were found, along with the number of records.

Figure 3. New York range map of summer sucker.

Table 1. Records of rare fish species in hydrological units (HUC-10) are shown according to their watersheds in early and recent time periods (before and after 1977) to consider loss and gains. Further explanations of details are found in Carlson (2012).

Watershed name	Total # HUC10	Early only	Recent only	both	Watershed status
Black	4	1	1	2	
Champlain	1	1	0	0	loss
Mohawk	1	0	0	1	
Oswegatchie	4	2	1	1	
Raquette	2	1	1	0	
St. Law&SLC	2	2	0	0	loss
sum	14	7	3	4	

III. New York Rarity, if known:

Historic	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
prior to 1977	_____	<u>17 individual site records</u>	<u>6/18 watersheds</u>
prior to 1980	_____	_____	_____
prior to 1990	_____	_____	_____

Details of historic occurrence:

Summer sucker was historically found in the Black, Champlain, Mohawk, Oswegatchie, Raquette, and St. Lawrence watersheds. Based on present knowledge, the distribution of this species is in 21 waters of the Adirondacks, all at higher elevations (Figures 2&3). The longest list of potential waters with summer sucker, 30, was that of Webster 1973a, but several were later shown to be inhabited by only white sucker. Morse examined specimens from the biosurvey of the 1930's to extend the knowledge beyond his list of confirmed ones of 12, to get 13, with the additional water of Beaver River's Stillwater Res. (Specimens from Stillwater Reservoir as described by Greeley (1932) were insufficient to be recognized as this species but others from a later date (Morse 2007) had the spawning characteristics that were diagnostic).

Current	<u># of Animals</u>	<u># of Locations</u>	<u>% of State</u>
(since 1977)	_____	<u>26 individual site records</u>	<u>4/18 watersheds</u>

Details of current occurrence:

Summer sucker is currently found in the Black, Mohawk, Oswegatchie, and Raquette watersheds. Summer sucker are still reported in at least 9 of their historic 21 waters.

New York's Contribution to Species North American Range:

% of NA Range in New York	Classification of New York Range
<input checked="" type="checkbox"/> 100 (endemic)	<input checked="" type="checkbox"/> Core
<input type="checkbox"/> 76-99	<input type="checkbox"/> Peripheral
<input type="checkbox"/> 51-75	<input type="checkbox"/> Disjunct
<input type="checkbox"/> 26-50	Distance to core population: <u>1-25</u>

IV. Primary Habitat or Community Type:

1. Headwater/Creek, Low-Moderate Gradient, Low Buffered, Acidic, Transitional Cool
2. Oligotrophic Dimictic Lake
3. Small River, Low-Moderate Gradient, Low Buffered

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:

Lakes, creeks, and small rivers with rocky pools and runs are preferred habitat and large rivers are avoided. Spawning has been documented in ephemeral streams in Squaw Lake (Morse 2007) and in other small tributaries to lakes (Kendall and Dence 1929, Greeley and Greene 1931). Mather (1886) describes summertime habitat (post spawning) as deeper waters of lakes.

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:

The summer sucker has an adult life span of typically 3-8 years (Morse 2007). It spawns from early June to early August (NatureServe 2012).

VI. Threats:

Predation and competition by invasive species like largemouth bass, smallmouth bass and yellow perch are likely causes of species loss or decline. Acidification has probably affected a few also. Many of the larger lakes formerly occupied by this species underwent major changes in the fish assemblages decades ago. Only three (or four or five) lakes in more remote areas still sustain summer sucker.

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

- No** **Unknown**
- Yes**

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

VII. References

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Morse, R.S. and R.A. Daniels. 2009 . A Redescription of *Catostomus utawana* Mather (Cypriniformes: Catostomidae). *Copeia* 2009 (2):214-220

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