Species Status Assessment

Class: Osteichthyes (bony fishes)
Family: Catastomidae (sucker)
Scientific Name: Catostomus sp.
Common Name: Sucker variant (late spawning sucker of eastern Adirondacks)

Species synopsis:

Elk Lake sucker is another type of late-spawning sucker, like Summer Sucker or Catostomus utawana, that has a slightly different body shape, genetic characteristics that are different from it and from white sucker and therefore appears to be a distinctive species. I’m proposing to call it “Adirondack sucker” but there is no official name yet. It lives in small headwater lakes and streams of the eastern Adirondack Mountains and is known in only 3 ponds, found in 2 of 18 watersheds in NYS. This sucker has similar spawning characteristics to Summer Sucker and when classified as a species, it will be, along with summer sucker, among the only two endemic fish species in the state, and its range is restricted and poorly defined.
I. Status

a. Current and Legal Protected Status
   i. Federal: none Candidate: __ Yes __ No
   ii. New York: none

b. Natural Heritage Program Rank
   i. Global: none
   ii. New York: none Tracked by NYNHP? __ Yes __ No

Other Rank:

Status Discussion:
This taxa has a small range in lakes and tributary streams in the Adirondack Mountains of New York. There is insufficient information about its status or historic range to offer other discussion

II. Abundance and Distribution Trends

a. North America
   i. Abundance
      __ declining __ increasing __ stable  x __ unknown
   ii. Distribution:
      __ declining __ increasing __ stable  x __ unknown

   Time frame considered: ________________________________
b. Regional

i. Abundance

___ declining  ____increasing  ____stable  _x__unknown

ii. Distribution:

___ declining  ____increasing  ____stable  _x__unknown

Regional Unit Considered: _______________________________________

Time Frame Considered: _______________________________________

c. Adjacent States and Provinces

<table>
<thead>
<tr>
<th>State</th>
<th>Presence</th>
<th>Status</th>
<th>Data Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONNECTICUT</td>
<td>Not Present</td>
<td>x</td>
<td>No data</td>
</tr>
<tr>
<td>MASSACHUSETTS</td>
<td>Not Present</td>
<td>x</td>
<td>No data</td>
</tr>
<tr>
<td>NEW JERSEY</td>
<td>Not Present</td>
<td>x</td>
<td>No data</td>
</tr>
<tr>
<td>ONTARIO</td>
<td>Not Present</td>
<td>x</td>
<td>No data</td>
</tr>
<tr>
<td>PENNSYLVANIA</td>
<td>Not Present</td>
<td>x</td>
<td>No data</td>
</tr>
<tr>
<td>QUEBEC</td>
<td>Not Present</td>
<td>x</td>
<td>No data</td>
</tr>
<tr>
<td>VERMONT</td>
<td>Not Present</td>
<td>x</td>
<td>No data</td>
</tr>
</tbody>
</table>
d. **NEW YORK**

   No data ______

   i. **Abundance**
      
      ____ declining  ____increasing  ____stable  ____unknown

   ii. **Distribution:**
      
      ____ declining  ____increasing  ____stable  ____unknown

**Monitoring in New York.**

Monitoring programs were carried out by Cornell University in the 1970s (Webster 1973a, 1973b) in Elk Lake, and they have also been completed here and elsewhere by the NYSDEC Rare Fish Unit, NYS Museum and by Josephson (2010), in 2010-2013.

**Trends Discussion:**

Adirondack region of NY showing ponds inhabited by eastern summer sucker, Elk Lake, Ausable Ponds and Boreas Ponds.

Map source: modified from Carlson and Morse 2012
III. New York Rarity, if known:

<table>
<thead>
<tr>
<th>Historic</th>
<th># of Animals</th>
<th># of Locations</th>
<th>% of State</th>
</tr>
</thead>
<tbody>
<tr>
<td>prior to 1970</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>prior to 1980</td>
<td>150,000</td>
<td>1</td>
<td>_______</td>
</tr>
<tr>
<td>prior to 1990</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

Details of historic occurrence:

Abundance in Elk Lake estimated in 1972 &73, as reported in Webster (1973a), and there are probably similar numbers in the other two lakes.

<table>
<thead>
<tr>
<th>Current State</th>
<th># of Animals</th>
<th># of Locations</th>
<th>% of State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>_______</td>
<td>1</td>
<td>_______</td>
</tr>
</tbody>
</table>

Details of current occurrence:

Abundance is probably similar to previous in the few lakes with surveys.

New York’s Contribution to Species North American Range:

<table>
<thead>
<tr>
<th>% of NA Range in New York</th>
<th>Classification of New York Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>x 100 (endemic)</td>
<td>x Core</td>
</tr>
<tr>
<td>76-99</td>
<td>Peripheral</td>
</tr>
<tr>
<td>51-75</td>
<td>Disjunct</td>
</tr>
<tr>
<td>26-50</td>
<td>Distance to core population:</td>
</tr>
<tr>
<td>1-25</td>
<td><em><strong><strong>endemic</strong></strong></em>_</td>
</tr>
</tbody>
</table>

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?  ____x____ Yes   ____ No

Indicator Species?  ____x____ 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 streams of Elk Lake (Webster 1973a). Mather (1886) describes summertime habitat (post spawning) of late spawning suckers as in deeper waters of lakes.

V. **New York Species Demographics and Life History**

___x__ 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:

This sucker has an adult life span of typically 3-8 years, as considered similar to the summer sucker (Webster 1973a, Morse 2007). It spawns from late May to late June.

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 lakes in more remote areas still sustain this sucker.

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

_____ No _____ Unknown

___x___ 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


Date last revised: November 6, 2013