The New York State Department of Environmental Conservation (NYS-DEC) and partner agencies are collecting biotic and abiotic data on extant lake sturgeon in the Niagara River, other major tributaries to Lake Ontario, and the St. Lawrence River. In addition the NYS-DEC has been using artificial propagation of this species to begin the reestablishment of populations in selected tributaries of Lake Ontario and the St. Lawrence River, including the Genesee River, Oswegatchie River, Black Lake, Raquette River, St. Regis River, Oneida Lake and Cayuga Lake.

**New York Lake Sturgeon Projects**

**Niagara River: Extant Population**

From July 1995 through August 2000, 67 lake sturgeon were captured in the lower Niagara. Ages of captured lake sturgeon ranged from 1 to 23 years. Of the 67 aged fish, 47 were older than age 10.  A marked and radio tagged. The lake sturgeon population in the lower Niagara River is probably small relative to its historic abundance.

**Genesee River: Experimental Stocking**

The source population for propagation was from the St. Lawrence River downstream of the Moses-Saunders Dam.

**Genesee River Sturgeon Stocking:** 900 in 2003 1,000 in 2004

Dawn Dittman, USGS

**Sturgeon Assessment:** Systematic gill netting using experimental nets.

**Summary:** Successful. The stocked sturgeon are using the Genesee River habitat and growing well.

609 Total Floy Tagged as of October 2006

Estimate of the # in Genesee River August 2005: 03YC 417 mm & 338 g May 2006: 489 mm & 513 g October 2006: 527 mm & 657 g

Largest 04YC: 589 mm & 1,250 g

**Current and Continuing Research**

Continuation of the routine (3 times a year) evaluation of habitat use by stocked juvenile lake sturgeon, including growth patterns and diet evaluations.

**Future Research Possibilities**

- Attempt to identify spawning areas if spawning is taking place.
- Initiate some sort of larval sampling if spawning can be confirmed.
- Develop a proposal for large scale telemetry program designed to: a) let fish show where they might think they will try and spawn, b) fine tune habitat selection information, c) quantify migration rates 150-200 fish tagged.
- Ongoing research - have double tagged fish (danglers and PIT) hope to learn something about tag retention.
- Try to use portion of targeted sampling data to do a modified mark-recapture estimate to take a crack at determining survival of stocked fish.

**Cayuga Lake / Seneca Cayuga Canal: Restoration Stocking**

Dawn Dittman USGS

**Population estimate:**

August 2006: Cayuga Outlet: 20 to 40

1995 Year Class Ripe Male!!! May 06 2006

Largest 04YC: 1.12m 8.38kg

**Current Research**

- Attempt monitoring catch rates, growth, etc.
- Further evaluate movement to spawning areas if spawning is taking place.
- Initiate some sort of larval sampling if spawning can be confirmed.
- Develop a proposal for large scale telemetry program designed to: a) let fish show where they might think they will try and spawn, b) fine tune habitat selection information, c) quantify migration rates 150-200 fish tagged.
- Ongoing research - have double tagged fish (danglers and PIT) hope to learn something about tag retention.
- Evaluate use portion of targeted sampling data to do a modified mark-recapture estimate to take a crack at determining survival of stocked fish.

**Future Research Possibilities**

- Continue monitoring catch rates, growth, etc.
- Attempt to identify spawning areas if spawning is taking place.
- Initiate some sort of larval sampling if spawning can be confirmed.
- Develop a proposal for large scale telemetry program designed to: a) let fish show where they might think they will try and spawn, b) fine tune habitat selection information, c) quantify migration rates 150-200 fish tagged.
- Ongoing research - have double tagged fish (danglers and PIT) hope to learn something about tag retention.
- Try to use portion of targeted sampling data to do a modified mark-recapture estimate to take a crack at determining survival of stocked fish.

**St Lawrence River: Extant Population**

Jennifer Hayes  SUNY College of Environmental Science and Forestry

This project involved identification of spawning sites below the FDR Power Project and sturgeon distribution, movements and habitat preference in that area and into Lake St. Francis. These fish continue to be the egg source for the NYS-DEC restoration efforts.

**Future Research Possibilities**

- Continue monitoring catch rates, growth, etc.
- Attempt to identify spawning areas if spawning is taking place.
- Initiate some sort of larval sampling if spawning can be confirmed.
- Develop a proposal for large scale telemetry program designed to: a) let fish show where they might think they will try and spawn, b) fine tune habitat selection information, c) quantify migration rates 150-200 fish tagged.
- Ongoing research - have double tagged fish (danglers and PIT) hope to learn something about tag retention.
- Try to use portion of targeted sampling data to do a modified mark-recapture estimate to take a crack at determining survival of stocked fish.

**Future Research Possibilities**

- Continue monitoring catch rates, growth, etc.
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