BACKGROUND

Lake Sturgeon were once abundant throughout the Great Lakes basin as a key component of the native fish community. Historically the Finger Lakes had sturgeon. Cayuga Lake was one of the sturgeon waters of New York, however no adult sturgeon reports had been confirmed after 1961. Successful management of threatened species requires an extensive assessment and the evaluation of the availability and quality of physical and biotic habitats for all life stages of the species.

METHODS

Lake sturgeon were reared in the New York State DEC Oncella Hatchery. Sturgeon Assessment: We conducted systematic gill setting using experimental nets with 5 25’ panels of 1/2” to 3” bar mesh.

RESULTS: Sturgeon are present in the Cayuga Outlet!!

Sturgeon Assessment:

Environmental Measures

Water flow, depth, temperature, and substrate characteristics were recorded at sturgeon capture sites.

Lake Sturgeon were captured by systematic gill netting using experimental nets with 5 25’ panels of 1/2” to 3” bar mesh.

Lake Sturgeon at release

Cayuga Lake Stocking:


Lake Sturgeon is a primitive, long-lived, late-maturing, bottom feeding fish species. Lake sturgeon is a river and nearshore warm water species that prefers waters above 10°C and 5 to 10 meters depth. Adult lake sturgeon can average 75 to 198 cm in length and grow up to an average of 45 kg. The maximum recorded size was 274 cm and 125 kg. Females mature between 14 and 33 years, males between 8 and 12 years. Spawning is in stream rapids in the spring, with each female spawning at 4 to 9 year intervals and males every 2 to 7 years. The diet of lake sturgeon consists of invertebrates (aquatic insect larvae and mollusks) and some fish. This species is a classic case for an easily threatened species, vulnerable to over fishing, habitat fragmentation, and compromises in spawning and feeding habitat quality and access.

Lake Sturgeon at release

Figure 1. The local range of lake sturgeon was in the Finger Lakes and Oneida Lake.

Figure 2. Historic sturgeon records in the Eastern Finger Lakes and Oneida Lake.

Figure 3. Local stocking sites.

Schmabel population estimate:

August 2006: Cayuga Outlet

Schnabel population estimate:

1995 Stocked Ripe Male!! May 06 042

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Figure 4. Sturgeon Capture Sites after the start of the NYS-DEC restoration program.

Lake Sturgeon at release

Captured sturgeon were marked with a yellow numbered floy tag for a mark – recapture study. Cross sections of fins were used for ageing.

First adult size lake sturgeon caught in the Cayuga outlet in 45 years. Caught on Aug 24, 2006, it was 1.5 m (59 inches) long and 25 kg (55 lb). Fin Ray count gives an age of 11 to 12 years.

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