NEW YORK STATE | Department of Environmental Conservation

Fisheries Management Plan

2025 to 2029

Outline 12/19/2025

Waterbody:	Lake George	Region:	5
FIN:	C-101-P367	Author:	Kyle Jones

Current State of the Fishery

The lake trout fishery in Lake George is characterized as a robust fast-growing population that may have a lack of large adults based on angler feedback. Data indicates a high gill net catch rate of lake trout (Table 1), that exhibit fast growth rates beyond age three (Figure 1) compared to other Adirondack region lake trout waters. In 2024, the predicted weight for a 23" lake trout was 3.84lbs (1741.88 grams). Using the standard weight equation described by Piccolo et al. 1993, the standard weight of a 23" lake trout is 4.40lbs (1994.40 grams), suggesting that lake trout in Lake George may be thin (Table 2). An angler creel survey conducted in 2023 showed that non-charter anglers targeting any salmonid had a catch rate of 0.25 lake trout per hour. (Jones 2025). During the same creel survey, charter anglers targeting any salmonid had a catch rate of 0.68 lake trout per hour which is well above the mean catch rate (0.45 lake trout per hour) derived from 2023 angler diary programs on Canandaigua, Cayuga, Keuka, Owasco, Seneca, and Skaneateles lakes (Austerman 2024, Hammers 2024a, 2024b, NYSDEC unpublished data). Anecdotal reports from anglers indicate a perceived lack of larger lake trout (> 30") in the population. The poor condition observed in larger fish, and perceived lack of large-sized individuals caught by anglers may be attributed to overabundance, resulting in increased competition for food. Lake trout surveys on Lake George historically aimed to track recruitment of juvenile lake trout; therefore, the population characteristics of adult fish are poorly documented. Lake trout are currently managed under a restrictive special regulation which allows anglers to harvest two (2) per day, all year, with a minimum length of 23 inches (~5- to 6-year-old lake trout). The intent of this regulation was to protect juvenile fish from being harvested before they could spawn.

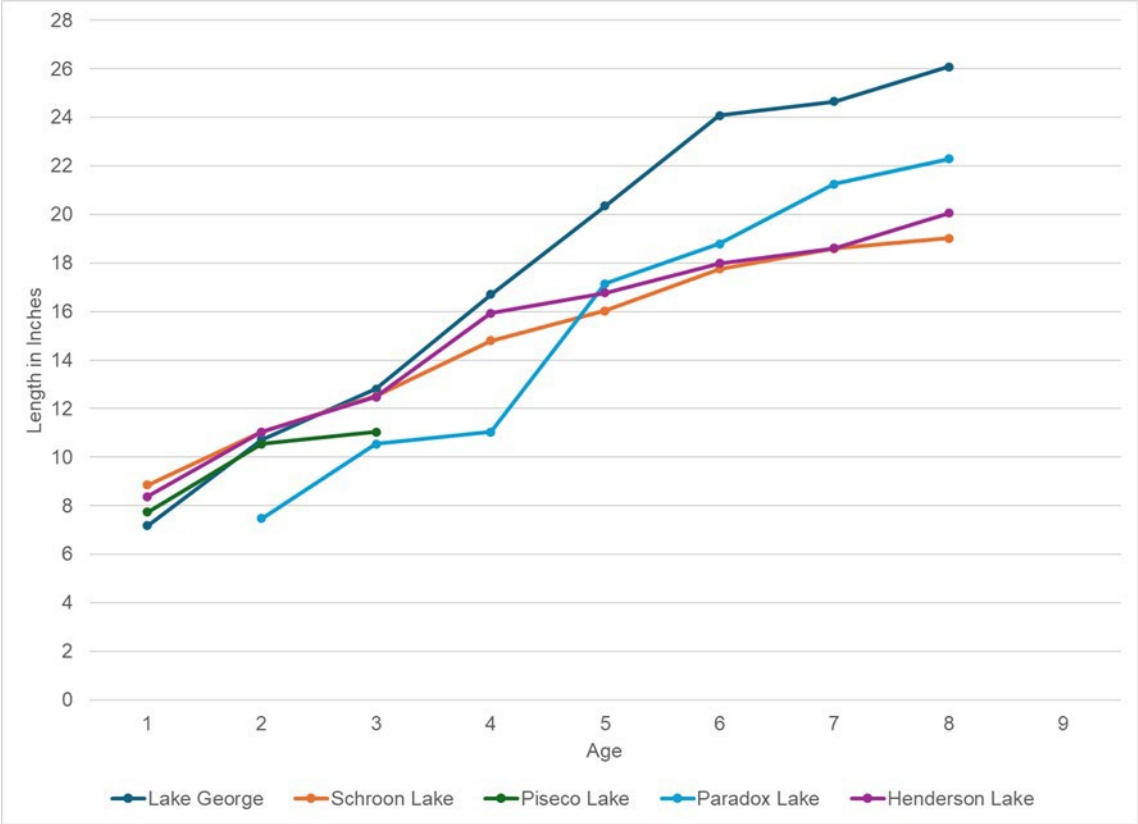
Table 1. Gill net catch rates of lake trout from six recently sampled Adirondack region lakes.

Waterbody	Year of Survey	Lake Trout per Net
Lake George	2024	0.42
Schroon Lake	2014	0.34
Paradox Lake	2014	0.12
Piseco Lake	2014	0.50
Raquette Lake	2020	0.33
Henderson Lake	2019	0.33

Table 2. Predicted weight and Fulton's condition factor (K) of 23-inch lake trout from six recently sampled Adirondack region lakes.

Waterbody	Predicted weight (lbs)	Condition Factor
Lake George	3.84	0.87
Schroon Lake	4.27	0.97
Paradox Lake	4.30	0.98
Piseco Lake	4.50	1.02
Raquette Lake	3.77	0.86
Henderson Lake	3.64	0.83

Figure 1. Mean length at age of lake trout from six recently sampled Adirondack region lakes.



Lake George has received annual stockings of Atlantic salmon since 1966. The stocking of Atlantic salmon has failed to create a viable coldwater fishery. Angler catch rates remain well below desirable levels (0.1 Atlantic salmon/hour), which were established in 1990 (Miller 1991). During the 2023 angler creel survey, non-charter anglers spent 282.75 hours targeting salmonids (lake trout and Atlantic salmon simultaneously) and had a catch rate of only 0.03 Atlantic salmon per hour (Jones 2025). Cayuga Lake, which receives about half as many spring yearling salmon per acre has a mean angler catch rate of 0.10 Atlantic salmon per hour based on angler diary reports (NYSDEC unpublished data). Poor survival of stocked yearling salmon is thought to be responsible for the low catch rates, but the exact cause is unknown. The experimental stocking of fall yearlings since 2011 has not resulted in a noticeable improvement in angler catch rates or satisfaction with the fishery.

The warmwater fishery is dominated by black bass, which were the primary target for 46% of angler trips based on a 2017 angler survey (Duda et al 2019). During the 2023 open water creel survey, anglers spent 2430.72 hours targeting black bass and caught 802 largemouth bass and 1500 smallmouth bass for a combined catch rate of 1.01 fish per hour (Jones 2025). Seventy percent of anglers targeting black bass reported that they were "Satisfied" or "Very Satisfied" with the quality of bass fishing on Lake George (Jones 2025). Yellow perch are another popular target for anglers, especially during the ice fishing season.

Desired State of the Fishery

A two-story fishery that supports high catch rates and desirable size structure for lake trout and black bass. The plan also seeks to gather the information needed to improve the condition of adult lake trout.

Scope

This is a five-year management plan designed to collect information for black bass, lake trout, Atlantic salmon, rainbow smelt and cisco for the development of a long-term fisheries management plan in the future. The plan will also implement management actions to effect change in the recruitment of Atlantic salmon to the fishery, using the outcome of those actions to determine the fate of the Atlantic salmon stocking program.

Goals for the Fishery

Goal 1: Characterize the adult lake trout population to inform future management goals.

Rationale: Lake trout are native to Lake George, and have been sustained through natural reproduction since the mid 1980's. Although catch rates remain high, recently anglers have expressed concern about poor condition and a lack of fish over 28 inches being caught. Comparison of Fulton's condition factor (K-factor) to lake trout from other recently sampled waters also indicates that larger fish in Lake George may be thinner than average. More information is needed to determine what management actions may exist to increase the quality of the lake trout in the fishery.

OBJECTIVE	STRATEGY/ACTION	MEASURES of SUCCESS
Determine relative abundance and condition	Conduct adult lake trout surveys in 2026, 2027 and 2028.	Lake trout population is characterized and reported on.
Determine if the fitness of adult lake trout in Lake George is comparable to other Adirondack Lakes.		Fulton's condition K- factor for 23-inch lake trout increases to 0.9.

Goal 2: Characterize the population of forage fish available to adult lake trout

Rationale: The primary native forage fish in Lake George was cisco, also known as lake herring. Populations of cisco, along with lake trout, declined precipitously in the 1950s perhaps due to the use of DDT pesticides (George 1981). By the early 1970s, stocking rainbow smelt as a supplemental forage base had become successful and smelt were observed spawning in several Lake George tributaries (George 1981). Yellow perch may also be a key forage species for lake trout. Establishing a sampling protocol and baseline relative abundance for each species will allow fisheries managers to track changes to the forage base over time.

OBJECTIVE	STRATEGY/ACTION	MEASURES OF SUCCESS
Determine relative abundance of cisco, yellow perch and rainbow smelt.	Conduct forage fish assessments following Finger Lakes forage fish protocols in 2028 and 2029.	Cisco, yellow perch and rainbow smelt populations are characterized and reported on.
	Evaluate open water sampling techniques including sonar and trawling surveys.	Develop a forage base sampling protocol by 2029.
Determine prey selectivity and relative abundance of forage species consumed by lake trout.	Conduct stomach content analysis of both juvenile and legal sized (≥23") lake trout from spring gill net and fall trap net surveys.	Characterize the diet of juvenile and adult lake trout.

Goal 3: Create a viable fishery for Atlantic salmon.

Rationale: Atlantic salmon catch rates have not met angler expectations since the 1990's. Current stocking methods have not produced a satisfactory fishery. Net pen stocking may reduce mortality by allowing yearling salmon to acclimate to the lake before release, increasing post stocking survival. Results of this experiment will determine if a viable fishery can be created or if cold water species management should focus solely on lake trout.

OBJECTIVE	STRATEGY/ACTION	MEASURES of SUCCESS
Increase Atlantic Salmon recruitment to the fishery.	Work with stakeholders to conduct an experiment comparing recruitment of direct stocked vs. net pen-reared fingerlings. Methods include: • 2 sites established for release and net pen rearing • 8,250 adipose fin clipped fingerlings direct stocked per site • 8,250 unclipped fingerlings held in net pens without feed and released at night after 1 week.	Catch rates of pen-reared Atlantic salmon aged 2 and older are statistically greater than direct stocked Atlantic salmon.
	Conduct spring gill net and fall trap net surveys to assess the proportion of pen held vs. direct stocked Atlantic salmon recruiting to the fishery.	Survey catch rates of pen-reared Atlantic salmon aged 2 and older are statistically greater than direct stocked Atlantic salmon.
	Evaluate Atlantic salmon catch rates through volunteer angler surveys using QR code entry forms.	Mean angler catch rate for Atlantic salmon is at least 0.1 per hour by 2029.

Goal 4: Characterize and track the status of the black bass populations.

Rationale: Lake George currently supports a high-quality black bass fishery with high angler catch rates and a high level of angler satisfaction (Jones 2025). However, tracking the quality of the black bass fishery through angler surveys is not currently a viable management option due to the cost and effort necessary to conduct these on a regular basis. A more viable option is to track the status of the populations using the standard Bureau of Fisheries protocol for sampling black bass (Brooking et al. 2018). Sampling results will be used to infer the quality of the fishery (i.e., relatively high catch rates of quality-sized fish and good size structure should yield good angler catch rates of desirable-sized fish).

Trends in the fishery will also be tracked by using the results of tournament data derived from Black Bass Tournament Permitting and Reporting System in 2024. Individual fish data from catch and release bass tournaments may also be used to track size trends. This information may be particularly helpful for assessing the smallmouth bass fishery if electrofishing surveys prove to be an ineffective sampling technique. The information derived from population surveys and bass tournament results will be used in the development of more specific management objectives in the future.

OBJECTIVE	STRATEGY/ACTION	MEASURES of SUCCESS
Determine largemouth bass and smallmouth bass population relative abundance, size structure, age structure, growth and condition.	Conduct standardized Bureau of Fisheries surveys using the Black Bass and Sunfish Boat Electrofishing Survey Protocol in 2025 and 2029 (Brooking et al. 2018).	Survey results reveal that the methodology employed provides the data needed for an adequate assessment of the smallmouth bass and largemouth bass population.
Determine if data from black bass tournaments can complement indirect sampling efforts and serve as data source for tracking size trends for largemouth bass and smallmouth bass.	Develop size structure indexes for bass caught in weigh-in and catch and release tournaments using information from the Black Bass Tournament Permitting and Reporting System.	Data results from catch and release tournaments serve as a viable comparative measure of indirect survey effectiveness to track changes in size structure

Timeline

2025

- June 30: Conduct electrofishing surveys following protocol described in *Black Bass and Sunfish Electrofishing Protocol for Lakes and Ponds* (Brooking et al. 2018),
- November 30: Conduct fall trap netting surveys for Atlantic salmon,

2026

- January 31: Draft reports summarizing data collected from 2025 kayak and motorboat bass fishing tournaments,
- January 31: Draft technical briefs for 2025 centrarchid and salmonid surveys,
- April 30: Conduct nearshore gill net surveys for Atlantic salmon
- May 31: Conduct gill net survey for lake trout following finger lakes methods (Hammers and Kosowski 2011),

- May 31: Complete salmon stocking,
- November 30: Conduct trap net surveys for Atlantic salmon,

2027

- January 31: Draft technical briefs for 2026 salmonid surveys,
- January 31: Draft reports summarizing data collected from 2026 kayak and motorboat bass fishing tournaments,
- April 30: Conduct nearshore gill net surveys for Atlantic salmon,
- May 31: Conduct gill net survey for lake trout following finger lakes methods (Hammers and Kosowski 2011),
- May 31: Complete Atlantic salmon stocking,
- November 30: Conduct trap net surveys for salmon,

2028

- January 31: Draft technical briefs for 2027 salmonid surveys,
- January 31: Draft reports summarizing data collected from 2027 kayak and motorboat bass fishing tournaments,
- April 30: Conduct nearshore gill net surveys for Atlantic salmon,
- May 31: Complete Atlantic salmon stocking,
- May 31: Conduct gill net survey for lake trout following finger lakes methods (Hammers and Kosowski 2011),
- August 31: Evaluate the success of experimental Atlantic salmon stocking policy,
- November 30: Conduct forage surveys using standard finger lakes gill net protocol (Zollweg-Horan 2024), paired with trawl and/or hydro acoustic surveys.

2029

- January 31: Draft technical briefs for 2028 lake trout and forage surveys,
- January 31: Draft reports summarizing data collected from 2028 kayak and motorboat bass fishing tournaments,
- May 31: Conduct electrofishing surveys following protocol described in *Black Bass and Sunfish Electrofishing Protocol for Lakes and Ponds* (Brooking et al. 2018),
- November 30: Conduct forage surveys using standard finger lakes gill net protocol (Zollweg-Horan 2024), paired with trawl and/or hydro acoustic surveys,
- November 30: Develop a report on the status of lake trout fishery in Lake George, identify possible management actions and hold public meeting,
- December 31: Begin drafting next 10-year fisheries management plan for Lake George,

Literature Cited

Austerman, P. 2024. Canandaigua Lake Angler Diary Report 2023. New York State Department of Environmental Conservation. Avon, New York.

Brooking, T., J. Loukmas., R. Jackson, T. VanDeValk. 2018. Black bass and sunfish sampling manual for lakes and ponds. Cornell University and New York State Department of Environmental conservation. Federal Aid in Sportfish Restoration, Project F-63-R, Job 2-2.3 Final Report.

Duda, M.D., M. Jones, T. Beppler, S.J. Bissel, A. Center, A. Criscione, P. Doherty, G.L. Hughes, C. Gerken, A. Lanier. 2019. New York angler effort and expenditures in 2017: Report 1 of 4. Report for the New York State Department of Environmental Conservation, Division of Fish and Wildlife by Responsive Management. Harrisonburg, Virginia.

George, C.J. 1981. The fishes of the Lake George watershed. Typewritten Manuscript. Department of Biological Sciences, Union College. Schenectady, New York.

Hammers, B., D. Kosowski. 2011. Summary of Salmonine monitoring in Seneca Lake, 1999-2009. New York State Department of Environmental Conservation. Avon, New York.

Hammers, B. 2024(a). Keuka Lake Anger Diary Letter 2023. New York State Department of Environmental Conservation. Avon, New York.

Hammers, B. 2024(b). Seneca Lake Angler Diary Letter 2023. New York State Department of Environmental Conservation. Avon, New York.

Jones, K. 2025. Draft 2023 Lake George Open Water Fishing Creel Survey Report. New York State Department of Environmental Conservation. Warrensburg, New York.

Miller, W. 1991. Lake George angler diary cooperator summary for the 1990 fishing season. New York State Department of Environmental Conservation. Warrensburg, New York.

Piccolo, J.J., W.A. Hubert, R.A. Whaley. 1993. Standard Weight Equation for Lake Trout. North American Journal of Fisheries Management 13:401-404.

Zollweg-Horan, E. 2024. Cayuga Lake Finder Lakes Standard Netting. New York State Department of Environmental Conservation. Cortland, New York.