

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife and Marine Resources, Bureau of Fisheries, Region 8  
6274 East Avon-Lima Road, Avon, NY 14414-9516  
P: (585) 226-2466 | F: (585) 226-6323  
[www.dec.ny.gov](http://www.dec.ny.gov)

Dear Angler,

Thank you for returning your 2022 Keuka Lake angler diary. This is the 55th anniversary of our volunteer angler diary program on Keuka Lake, one of the longest running programs in the state. Enclosed is a summary of your personal catch information, a summary of 1968 through 2022 catch statistics, your 2022 diary, and, if needed, a new diary for the 2023 season. If you need additional diaries, please contact our office.

**A REMINDER: Please follow the directions that are found in your diary book. Unfortunately, we have had to delete trip records because of incomplete information.**

- Remember to enter both your starting and ending time for each fishing trip. **We cannot use data from trips without start and end times.**
- Please indicate the species you are primarily fishing for.
- Record the appropriate code “C” if you keep the fish and “R” if you release the fish in the column marked “C/R”.
- Only rainbow trout have fin clips. Please be sure to write no mark over the fin pictures to indicate that you observed the fins and none were clipped. Leaving it blank means that you did not observe the fish for fin clips.

Results from 2022 were very similar to 2021. A total of 906 salmonids were caught in 2022. Legal-sized fish represented 95% of the catch. Anglers averaged only 1.3 hours to catch a legal salmonid, similar to rates experienced since 2019. For comparison, diary cooperators on Seneca Lake averaged 3.1 hours to catch one legal salmonid this past year.

Catch was almost exclusively lake trout with only two rainbow trout and no brown trout or Atlantic salmon reported. Stocking of both brown trout and Atlantic salmon were eliminated in 2018 to reduce predator competition on a stressed forage base. Catch of these species will remain low as numbers in the lake continue to decline. No stocking changes for brown trout and Atlantic salmon are anticipated at this time, especially with current forage conditions in the lake.

Length and weight of lake trout kept averaged 19.4 inches and 2.4 pounds. Forty-seven percent of legal-sized lake trout were released. Monthly catch of lake trout was similar from May – September, ranging from 142 in June to 171 in July. Keuka Lake lake trout continue to be 100% wild.

Only two rainbow trout, both legal sized, were reported by diary cooperators. Currently, the population is being supplemented by stocking of 2,500 Finger Lakes strain rainbow trout yearlings in Cold Brook. Rainbow trout have not significantly contributed to the lake catch for over two decades. Rainbow trout have been impacted by abundant lake predators, decreased lake forage abundance, continuous changes to access to spawning habitat in Cold Brook, and potential predation by brown trout in Cold Brook. Management efforts, such as stocking, forage reintroduction, predator reduction, and tributary maintenance, to address these issues continue to be employed to varying degrees of success.

Since 2018, about 470,000 ciscoes, a native forage fish, have been stocked in Keuka Lake. Stocking numbers in 2021 and 2022 have fallen well short of our 100,000 annual goal.



Additionally, in 2023 it is anticipated stocking numbers will remain low. A facility dedicated to raising Ciscoes at the Bath Fish Hatchery is currently under construction and, once completed, will have the capacity to meet this goal.

Results from the acoustic tagging study conducted in cooperation with Cornell University and United States Geological Service suggest that very few stocked cisco fingerlings survived past 90 days. This is likely due to mortality from predation and physiological stress related to lake acclimation. Larger yearling sized fish survived longer, with at least one tagged fish still swimming in the lake over one year after release. In cooperation with Cornell University, we are exploring options that might minimize this mortality. We did capture one cisco during sampling this past summer providing evidence that at least some may have survived. Additionally, one cooperator reported finding a cisco in the stomach of lake trout. Remember, if you find what you suspect is a cisco, please take a picture, freeze it and contact us. These fish are marked, and we can determine if it is a wild or stocked fish, and if a stocked fish, what year it was stocked.

In 2022, several surveys including standard lake trout assessment netting, standard forage assessment netting, and a black bass (electrofishing) and yellow perch (netting) assessment were conducted. Although data analyses are ongoing, observations suggest that forage, primarily alewife abundance, remains low. Lake trout gill net catch was lower than in 2019. Fish were in good condition, even though juveniles and adults appear to be feeding primarily on mysids. Yellow perch were also found in lake trout stomachs. The yellow perch population appears to be doing very well with numerous large, plump fish collected. The smallmouth bass population also appears to be in excellent shape with electrofishing results suggesting that catch rates were in the top 10% compared to similar waters.

One big surprise from the perch netting was the collection of over 40 walleyes representing several different age classes with fish up to 23 inches collected. This suggests that the walleye population is firmly established in Keuka Lake. Additionally, one cooperator reported catching a walleye. While we knew walleye were present in the lake, it was not apparent the extent until this survey. We are unsure how they were introduced into the lake. Establishment of another predator at a time when lake forage is already stressed is concerning. Walleye have been shown to negatively impact salmonid fisheries and we are unsure what impacts they may have on the success of cisco reintroduction.

The Keuka Lake coldwater fishery is supported almost entirely by naturally reproduced lake trout. Anglers continue to have a high success rate. Alewife abundance remains the lowest of any of the western Finger Lakes. Lake trout appear to be feeding mostly on mysids and yellow perch. Cisco reintroduction is ongoing, but early results suggest that methods to overcome early high mortality are needed. Smallmouth bass and yellow perch populations should offer anglers some excellent fishing opportunities.

If you have any questions about Keuka Lake, please feel free to contact me. Thank you for your continued cooperation and good luck fishing during the 2023 season.

Brad E. Hammers  
Senior Aquatic Biologist  
[brad.hammers@dec.ny.gov](mailto:brad.hammers@dec.ny.gov)

Table 1. Summary of 2022 Keuka Lake angler diary trips

Angler	Days Fished	Angler Trips	Angler Hours	Avg Trip (hrs)	Caught				Kept				Legal Salmonids Caught	Hrs to Catch Legal Salmonid
					LTC	BTC	RTC	LLS	LTK	BTK	RTK	LLS		
5	2	2	3.83	1.92	1	0	0	0	1	0	0	0	1	3.83
352	10	20	62.50	3.13	67	0	0	0	59	0	0	0	67	0.93
355	19	19	28.18	1.48	40	0	0	0	33	0	0	0	40	0.70
386	21	21	27.58	1.31	34	0	0	0	23	0	0	0	33	0.84
396	1	3	12.00	4.00	6	0	0	0	6	0	0	0	6	2.00
447	24	33	65.50	1.98	10	0	0	0	6	0	0	0	10	6.55
481	22	22	31.75	1.44	12	0	0	0	12	0	0	0	12	2.65
487	3	3	10.50	3.50	8	0	0	0	8	0	0	0	8	1.31
702	22	26	51.25	1.91	42	0	0	0	7	0	0	0	42	1.22
705	1	1	1.17	1.17	2	0	0	0	1	0	0	0	2	0.58
713	55	55	106.33	1.93	239	0	0	0	41	0	0	0	219	0.49
714	64	64	117.00	1.83	93	0	0	0	2	0	0	0	93	1.26
725	12	12	27.25	2.27	46	0	0	0	21	0	0	0	37	0.74
730	2	4	9.50	2.38	1	0	0	0	0	0	0	0	1	9.50
743	3	3	6.50	2.17	4	0	0	0	3	0	0	0	4	1.63
776	16	31	92.00	3.00	10	0	0	0	4	0	0	0	10	9.20
827	25	59	148.67	2.42	115	0	0	0	82	0	0	0	105	1.42
830	10	31	124.00	4.00	59	0	2	0	30	0	1	0	57	2.18
848	21	28	47.83	1.71	60	0	0	0	60	0	0	0	60	0.80
908	5	11	56.50	5.00	18	0	0	0	17	0	0	0	17	3.32
927	8	12	55.50	4.06	24	0	0	0	22	0	0	0	24	2.31
960	1	1	1.25	1.25	3	0	0	0	0	0	0	0	3	0.42
964	1	2	11.00	5.50	10	0	0	0	10	0	0	0	10	1.10
<b>23</b>	<b>348</b>	<b>463</b>	<b>1097.60</b>	<b>2.58</b>	<b>904</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>448</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>861</b>	<b>1.27</b>

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
KEUKA LAKE TROUT AND SALMON FISHING DIARY SUMMARY**

YEAR	TOTAL FISHING TRIPS	AVE HOURS/ TRIP	TOTAL SALMONIDS <sup>1</sup> KEPT				AVE LENGTH OF FISH KEPT (IN.) <sup>2</sup>				AVE WEIGHT OF FISH KEPT (LBS.) <sup>3</sup>				# HOURS TO CATCH LEGAL SALMONID <sup>4</sup>	COOPERATORS
			LT	RT	BT	LLS	LT	RT	BT	LLS	LT	RT	BT	LLS		
1968	1521	3.7	2088	3	3	-	17.9	-	-	-	2.0	-	-	-	2.6	45
1969	1545	3.1	1919	11	-	-	18.2	-	-	-	1.8	-	-	-	2.3	44
1970	1231	3.4	1306	2	-	-	18.3	-	-	-	1.9	-	-	-	3.1	38
1971	953	3.1	974	6	-	-	19.2	-	-	-	2.4	-	-	-	2.9	31
1972	396	3.3	378	2	-	-	19.5	-	-	-	2.7	-	-	-	3.5	21
1973	626	3.3	590	12	-	-	20.8	19.3	-	-	3.1	3.1	-	-	3.4	22
1974	823	3.4	724	23	-	-	22.4	21.0	-	-	3.7	4.0	-	-	3.7	42
1975	1383	3.6	1356	73	3	-	21.6	17.3	-	-	3.7	2.4	-	-	3.4	48
1976	1294	3.8	1293	81	1	-	21.5	18.9	-	-	3.5	3.0	-	-	3.5	49
1977	1218	3.5	702	78	3	-	21.0	19.8	-	-	3.3	3.8	-	-	5.1	42
1978	1211	3.4	893	166	4	-	20.4	17.8	-	-	3.0	2.6	-	-	3.8	45
1979	1265	3.4	921	194	4	-	20.6	18.4	-	-	3.3	2.9	-	-	3.4	43
1980	1609	3.6	1307	144	2	2	20.0	17.6	-	-	2.9	2.7	-	-	3.3	48
1981	2118	3.3	1498	211	59	22	20.0	17.7	14.7	18.7	2.9	2.6	2.0	2.6	3.1	70
1982	2677	3.1	1913	135	147	55	20.8	18.3	17.7	18.1	3.3	3.0	3.1	2.6	3.3	72
1983	2246	3.2	1313	128	200	100	21.8	19.1	18.8	20.3	3.9	3.1	3.9	3.4	3.5	61
1984	1772	3.4	1070	142	132	41	20.4	19.2	18.0	18.7	3.1	3.1	3.2	2.6	3.8	60
1985	1578	3.3	1359	71	82	114	21.5	19.0	17.5	17.5	3.8	3.3	2.7	1.8	2.8	54
1986	1229	3.2	1027	36	36	61	21.3	17.1	18.3	17.4	3.5	2.0	3.2	1.6	2.9	44
1987	1194	3.1	1125	31	25	40	20.9	17.7	19.2	18.4	3.3	2.8	3.8	2.8	2.6	41
1988	1574	3.0	1410	36	132	212	20.5	18.6	17.8	18.6	3.2	2.9	3.1	2.5	1.9	48
1989	1789	3.4	1490	86	339	146	20.8	18.2	18.1	21.6	3.4	2.6	3.0	3.8	2.0	70
1990	1814	3.0	1572	43	183	17	20.5	19.0	17.8	18.7	3.1	2.9	2.8	3.0	1.9	70
1991	1887	3.2	1503	57	102	58	20.6	19.4	19.1	18.3	3.1	3.2	3.3	2.4	2.1	64
1992	1895	3.2	1174	37	87	31	20.7	19.1	17.8	17.9	3.2	2.8	2.6	2.1	3.1	73
1993	1722	3.4	1273	32	62	29	19.8	19.5	17.4	17.3	3.0	3.3	2.6	1.8	2.6	68
1994	2160	3.2	2215	23	164	68	19.5	17.2	17.8	16.2	2.7	2.1	2.6	1.4	1.5	76
1995	2342	3.5	2285	28	158	95	19.7	19.7	18.7	18.3	2.7	3.3	3.3	2.2	1.7	81
1996	1633	3.2	1564	19	46	7	19.8	19.6	19.7	20.3	2.7	3.5	4.2	3.5	1.7	73
1997	1627	3.0	1789	9	48	22	20.7	20.3	19.5	17.6	3.0	3.0	3.6	2.1	1.7	74
1998	1510	3.3	1459	37	76	65	21.2	16.8	19.9	18.9	3.2	1.9	4.0	2.5	2.1	60
1999	1214	3.1	1031	12	28	20	21.1	18.9	18.7	18.8	3.2	2.8	3.7	2.5	2.3	62
2000	1065	3.1	994	8	15	17	21.1	19.3	20.6	18.9	3.1	3.3	3.4	2.5	2.0	54
2001	1271	4.0	1461	6	22	17	21.9	19.7	20.2	19.9	3.4	2.0	3.4	2.6	2.1	51
2002	919	3.8	1188	11	12	28	20.7	16.7	19.0	20.8	3.0	1.8	2.4	3.5	1.7	43
2003	797	2.9	731	0	10	13	19.9	-	24.1	22.7	2.6	-	6.7	4.5	1.3	43
2004	556	2.8	476	1	3	5	19.6	-	-	22.2	2.4	-	-	4.2	1.2	37
2005	461	3.1	566	5	5	11	20.6	22.4	17.2	18.3	2.6	4.6	1.3	2.0	1.3	31
2006	462	3.0	376	2	7	8	19.9	24.0	21.6	20.1	2.5	-	5.4	3.1	1.3	23
2007	516	3.1	443	0	0	3	19.8	0	0	23.0	2.6	0	0	5.5	1.7	24
2008	440	3.0	405	1	4	1	20.6	21	19.0	18.0	2.6	-	3.0	2.5	1.7	22
2009	731	3.9	720	2	2	4	19.7	-	24.3	19.0	2.5	-	7.8	2.9	2.0	28
2010	632	3.1	746	7	1	11	20.9	22.6	17.0	19.4	2.9	3.1	2.5	2.5	1.3	29
2011	663	3.3	741	5	3	3	20.3	24.2	26.0	21.0	2.7	-	6.8	-	1.4	36
2012	671	3.7	1008	9	1	1	20.6	23.1	27.5	20.5	2.7	6.5	12.5	-	1.1	35
2013	910	3.4	1280	12	0	1	20.1	20.1	-	18.0	2.6	2.3	-	2.0	1.2	36
2014	783	3.2	849	9	1	4	20.6	21.8	22	18.5	2.8	3.5	-	1.6	1.6	36
2015	678	3.7	459	2	9	1	20.3	21.5	18.4	21.0	3.1	-	2.1	-	2.5	36
2016	689	3.5	632	2	10	13	20.5	23.5	22.5	21.3	2.6	-	5.0	3.3	1.7	34
2017	722	3.5	500	7	6	4	19.9	23.4	24.0	22.3	3.5	2.6	4.2	2.6	2.3	37
2018	648	3.1	508	18	3	8	20.8	22.3	23.0	21.0	2.7	8.2	-	2.5	1.7	33
2019	397	3.0	565	3	2	1	20.2	24.0	26.0	23.0	2.6	4.0	-	3.5	1.2	33
2020	613	2.7	481	1	1	1	19.5	23.0	23.0	22.0	2.3	-	6.0	-	1.3	26
2021	380	2.8	447	2	0	0	20.0	21.0	-	-	2.6	-	-	-	1.2	27
2022	463	2.6	448	1	0	0	19.4	21.0	-	-	2.4	3.4	-	-	1.3	23

- 1 Salmonids = Lake Trout – LT; Rainbow Trout – RT; Brown Trout – BT; Landlocked Salmon – LLS
- 2 Average Length of Fish with Recorded Weights;
- 3 Average Weight of Fish with Recorded Lengths;
- 4 Includes Legal Salmonids Released