NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife and Marine Resources, Bureau of Fisheries, Region 8
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Dear Angler,

Thank you for returning your 2021 Keuka Lake angler diary. This is the 54th 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 and a summary of 1968 through 2021 catch statistics. You should have already received your 2020 diary, and, if needed, a new diary for the 2021 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.

A total of 889 salmonines were caught in 2021. Although this seems like a significant decrease from last years' 1,496 total fish, remember that one diary cooperator accounted for 41% of the total catch last year. This cooperator is no longer participating in the program. Total catch between 2020 and 2021 is similar if you exclude 2020 catch by this one cooperator. Legal-sized fish represented 89% of the catch. Anglers averaged only 1.2 hours to catch a legal salmonine, similar to rates experienced in 2019 and 2020. For comparison, diary cooperators on Seneca Lake averaged 4.0 hours, respectively to catch one legal salmonine 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.

Legal sized lake trout represented 89% of the lake trout catch. Length and weight of lake trout kept averaged 20.0 inches and 2.6 pounds, slightly larger than last year. Forty-three percent of legal-sized lake trout were released, less than in 2019 and 2020. The majority of the lake trout catch occurred throughout the summer. Lake trout in Keuka Lake continue to be sustained entirely by naturally reproduced fish.

Only two rainbow trout were reported by diary cooperators. Currently, the population is being supplemented by stocking of 2,500 Finger Lakes strain rainbow trout in Cold Brook. This will be the third year for yearling stocking. Previous attempts to stock fingerling (smaller) rainbow trout were not considered successful. Rainbow trout have not significantly contributed to the lake catch for over two decades. Unfortunately, rainbow trout have been impacted directly and indirectly by abundant lake predators, decreased lake forage abundance, continuous changes to access to spawning habitat in Cold Brook, and potentially limited 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.

Reintroduction of cisco, a native forage species, is continuing. To date, about 465,000 ciscoes have been stocked. We will continue to stock up to 100,000 cisco annually. The acoustic tagging study has been completed and receivers and flags removed from the lake. Results from the study are being evaluated by Cornell University. Additionally, we will be conducting several projects on Keuka Lake this year that will assist with the evaluation of the forage reintroduction as well as the current status of various fish populations. Surveys will include our standard lake trout assessment netting, standard forage assessment netting, and a black bass (electrofishing) and yellow perch (netting) assessment. Information provided by these projects will assist in the management of Keuka Lake.

Overall, it appears that the Keuka Lake fishery, primarily naturally reproduced lake trout continue to rebound. Forage continues to be an issue. We are still in the early stages of determining whether the cisco reintroduction was successful. It is important if you either catch or find a cisco in a fish stomach, please save it and contact us. Based on specialized marking technique while in the hatchery, we are able to determine when the fish was stocked or if it is a result of natural reproduction. Alewives continue to be present, but we get varying reports from anglers concerning their abundance. It is likely that lake trout are still being supported by mysids, freshwater shrimp, but are very opportunistic if alewives are in the area. We do have reports of lake trout feeding on yellow perch throughout the year indicating alewife numbers are still low in comparison to years prior to their decline. As state above, rainbow trout population continues to be impacted by a variety of factors. Both Atlantic salmon and brown trout will continue to be scarce and no changes regarding stocking of these species are anticipated. We anticipate having a better picture of the Keuka Lake fishery by the end of this year. Our goal is to provide anglers with a fishery that is balanced with the current lake conditions and result in high angler satisfaction.

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 2022 season.

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Table 1. Summary of 2021 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	4	4	20.42	4.98	18	0	0	0	15	0	0	0	17	1.20
167	3	4	4.50	1.17	0	0	0	0	0	0	0	0	0	
352	10	19	77.50	3.78	82	0	0	0	69	0	0	0	81	0.96
355	15	15	27.38	1.83	24	0	0	0	24	0	0	0	24	1.14
386	25	25	34.83	1.39	26	0	0	0	23	0	0	0	26	1.34
396	1	2	9.00	4.50	0	0	0	0	0	0	0	0	0	
423	2	2	2.00	1.00	0	0	0	0	0	0	0	0	0	
447	3	6	5.33	0.89	0	0	0	0	0	0	0	0	0	
462	1	1	1.00	1.00	0	0	0	0	0	0	0	0	0	
487	1	1	8.50	8.50	4	0	0	0	4	0	0	0	4	2.13
511	4	12	17.00	1.38	4	0	0	0	2	0	0	0	4	4.25
526	5	5	6.00	1.20	6	0	0	0	6	0	0	0	6	1.00
565	1	2	9.00	4.50	5	0	0	0	0	0	0	0	4	2.25
699	1	3	18.00	6.00	1	0	0	0	1	0	0	0	1	18.00
702	14	20	50.00	2.32	21	0	0	0	8	0	0	0	21	2.38
713	46	46	87.33	1.90	210	0	0	0	43	0	0	0	156	0.56
714	57	57	101.50	1.78	115	0	0	0	5	0	0	0	115	0.88
722	3	3	6.50	2.17	3	0	0	0	3	0	0	0	3	2.17
725	5	5	14.50	2.90	18	0	0	0	12	0	0	0	15	0.97
730	1	2	6.00	3.00	0	0	0	0	0	0	0	0	0	
743	7	7	17.00	2.43	6	0	0	0	4	0	0	0	6	2.83
776	12	24	78.50	3.17	8	0	0	0	6	0	0	0	8	9.81
848	25	32	67.08	2.01	77	0	0	0	76	0	0	0	76	0.88
850	12	15	38.50	2.67	70	0	0	0	5	0	0	0	44	0.88
908	12	20	88.00	4.17	63	0	2	0	52	0	2	0	54	1.63
927	23	33	147.00	3.96	97	0	0	0	89	0	0	0	97	1.52
960	14	15	23.50	1.54	31	0	0	0	0	0	0	0	31	0.76
27	**307**	**380**	**965.88**	**2.82**	**889**	**0**	**2**	**0**	**447**	**0**	**2**	**0**	**793**	**1.22**

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

			TOTAL SALMONIDS[1] KEPT				AVE LENGTH OF FISH KEPT (IN.)[2]				AVE WEIGHT OF FISH KEPT (LBS.)[3]					
YEAR	TOTAL FISHING TRIPS	AVE HOURS/ TRIP	LT	RT	BT	LLS	LT	RT	BT	LLS	LT	RT	BT	LLS	# HOURS TO CATCH LEGAL SALMONID[4]	COOPERATORS
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

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