New York State Department of Environmental Conservation
Division of Fish, Wildlife and Marine Resources, Region 8
Bureau of Fisheries
6274 East Avon-Lima Road, Avon, New York 14414-9519
Phone: (585) 226-5343 • **FAX:** (585) 226-6323
Website: www.dec.ny.gov

Joe Martens
Commissioner

Dear Angler,

Thank you for returning your 2014 Keuka Lake angler diary. This is the 47th anniversary of our volunteer angler diary program on Keuka Lake, one of the longest programs in the state. Enclosed is a summary of your personal catch information, referenced to the code number on the cover of your diary, a summary of 1968 through 2014 catch statistics, your 2014 diary, and, if needed, a new diary for the 2015 season. If you need additional diaries throughout the year please contact our office.

A REMINDER: **Please follow the directions that are found in your diary book. Unfortunately, we have had to delete various records because of incomplete trip 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 target 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". It is important that you record the approximate length for all fish caught, including those that are released**.**

A total of 1,836 legal sized lake trout were caught in 2014, about 700 less than in 2013. It also took longer to catch a legal sized salmonid, 1.6 hours versus 1.2 hours. Catch rates were still higher than for diary cooperators on Canandaigua and Seneca Lakes' whom averaged 2.7 and 2.2 hours, respectively to catch one legal salmonine this past year. Similar to last year, 98% of all salmonines caught were lake trout, indicating rainbow trout, brown trout, and Atlantic salmon contribute little to the overall cooperator catch. Length and weight of lake trout kept averaged 20.6 inches and 2.8 pounds, similar to recent years. July and August accounted for 43% of all lake trout caught. It is important to remember that the lake trout population in Keuka Lake continues to be sustained entirely by naturally reproduced fish. The high catch rates experienced by cooperators, while good for the angler, are likely a result of an overabundant lake trout population and somewhat depressed forage population. This leads to few memorable or trophy sized fish, poor growth and condition of lake trout, and negative impacts to other lake fishes.

Atlantic salmon catch remained very low with only eight reported, two of which were legal size. This marks the fourth year in a row that less than ten Atlantic salmon were caught. The Atlantic salmon population is supported entirely by the annual stocking of 22,300 yearlings. Stocking numbers have varied little since they were first introduced in 1981 and have remained near 22,300 yearlings since 1991. A total of 13 brown trout were caught, three legal and 10 sublegal. Although still low, this catch was better than any in the last eight years. The proportion of sublegal brown trout caught may indicate a good year class which will soon be legal sized, however, the total number is still very low. The brown trout population is currently maintained by annually stocking 7,800 yearling brown trout.

Catch of both Atlantic salmon and brown trout has been very poor the last decade. In general, catch peaked in the late 1980's and mid 1990's and has since declined. The original goal of the brown trout and Atlantic salmon stocking programs were to add diversity to angler catch. Although the goal was initially achieved, recent results from the diary program suggest that these stocking programs need to be re-evaluated. Recent changes in the lake as a result of introduction of aquatic invasive species, decreases in forage abundance, and increases in lake trout abundance may be negatively impacting brown trout and

Atlantic salmon. As I have indicated in the recent past, if catch of both species remains low, elimination of one or both of the stocking programs need to be considered as these fish may be more cost effectively used in other water bodies in New York.

Rainbow trout catch was identical to last year with 21 reported. Forty-three percent of the legal sized rainbow trout (N=16) were released. Hopefully rainbow catch will continue to increase, however current evidence suggests that the rainbow trout fishery in Keuka Lake and its tributaries has significantly declined within the last several decades. We believe rainbow trout populations may have been impacted by abundant lake predators (i.e. lake trout) and decreased forage abundance, resulting in increased predation by lake predators when the young rainbow trout enter the lake. Additionally, there have been periodic stream blockages and mainstem flow issues in Cold Brook that may have inhibited the adult spawning population from reaching adequate spawning habitat. Regulations to reduce the harvest of rainbow trout in both the lake and the streams were enacted October 2012.

In addition to regulations and trying to maintain an open stream channel, experimental stockings of Finger Lakes strain fall fingerling rainbow trout in Cold Brook were initiated in 2010 in an attempt to increase the rainbow trout population. A total of 12 of the 21 rainbow trout caught were observed by Cooperators for fin clips. No clips were found indicating that stocked fish are not being caught in the lake, although the sample size is very small. Catch of stocked rainbow trout by Diary Cooperators is one way the success of the stocking program will be evaluated. Since the current catch of rainbow trout is so low, it is imperative all rainbow trout be observed for a missing LV or adipose clip. **Please remember to examine any rainbow trout caught and record either the <u>clip</u> observed or <u>no clip</u> in your diary booklet for all rainbow trout caught.** They will be identified by a left ventral or adipose fin clip. If the clip column is left blank we will assume that you did not inspect the fish for clips and will have to leave it out of the analysis.

A questionnaire was mailed to all 168 participants in the Region 8 Cold Water Angler Diary Program. A total of 117 surveys were returned. Thank you to all that responded as we got some excellent comments concerning the program. We are looking into the feasibility of accomplishing some of these ideas into the Program. The overwhelming majority of respondents felt the Program was beneficial to lake management as well as themselves. Similar to last year, we plan to host a couple of meetings sometime this summer with Angler Diary Cooperators and those interested in the Program to discuss recurring issues, how we can make keeping a diary easier, and ways to increase diary participation. We are not planning in depth discussions on the lakes at these meetings but will be able to answer any questions you may have. A letter will be mailed out to all participants with further details about the proposed meetings.

The Department's website is undergoing some changes this year and therefore we will not be posting our reports online. If you would like to see the results from other lakes, please contact our office and we will make sure you receive it.

Thank you for your continued cooperation and good luck fishing during the 2015 season.

Good Fishing,

Brad E. Hammers
Senior Aquatic Biologist
brad.hammers@dec.ny.gov

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

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

Table 1. Summary of 2014 Keuka Lake angler diary trips

Angler	Days Fished	Angler Trips	Angler Hours	Avg Trip (hrs)	Caught LTC	Caught BTC	Caught RTC	Caught LLS	Kept LTK	Kept BTK	Kept RTK	Kept LLS	Legal Salmonids Caught	Hrs to Catch Legal
5	1	1	1.00	1.00	2	0	0	0	2	0	0	0	2	0.50
31	1	1	2.00	2.00	1	0	0	0	0	0	0	0	1	2.00
203	7	8	15.00	2.00	2	0	0	0	2	0	0	0	2	7.50
352	12	25	110.25	4.23	61	0	2	0	39	0	0	0	63	1.75
355	16	16	28.25	1.77	44	0	0	0	37	0	0	0	38	0.74
360	24	26	69.75	2.66	31	0	0	0	16	0	0	0	20	3.49
369	5	5	8.00	1.60	14	0	0	0	0	0	0	0	14	0.57
371	6	9	23.75	2.63	15	0	0	0	7	0	0	0	8	2.97
372	1	3	6.00	2.00	0	0	0	0	0	0	0	0	0	
382	3	6	17.00	3.00	8	0	0	0	7	0	0	0	7	2.43
386	19	19	38.25	2.01	30	0	0	0	25	0	0	0	27	1.42
388	7	10	24.75	2.46	13	0	0	0	2	0	0	0	3	8.25
391	23	43	113.75	2.45	87	0	0	0	4	0	0	0	87	1.31
486	5	9	23.00	2.60	13	0	0	0	6	0	0	0	8	2.88
487	18	60	382.75	6.31	244	0	0	0	121	0	0	0	237	1.61
489	4	8	31.50	3.94	11	0	2	0	8	0	2	0	12	2.63
547	2	6	37.50	6.25	17	0	0	0	8	0	0	0	11	3.41
560	1	2	9.50	4.75	14	0	0	0	6	0	0	0	13	0.73
564	10	42	254.50	6.25	92	1	1	0	53	0	1	0	92	2.77
591	1	2	12.00	6.00	3	0	0	0	3	0	0	0	3	4.00
595	2	6	30.75	5.13	42	0	0	0	15	0	0	0	38	0.81
702	22	37	117.50	3.01	87	0	1	0	26	0	0	0	86	1.37
705	2	5	7.25	1.63	3	0	0	0	0	0	0	0	3	2.42
713	23	23	74.75	3.25	114	0	0	2	53	0	0	1	95	0.79
720	9	9	49.25	5.47	64	0	0	0	31	0	0	0	55	0.90
721	115	288	1043.75	3.51	837	12	11	7	301	1	4	2	749	1.39
36	**421**	**783**	**2859.00**	**3.22**	**2026**	**13**	**21**	**10**	**849**	**1**	**9**	**4**	**1836**	**1.56**

Angler	Days Fished	Angler Trips	Angler Hours	Avg Trip (hrs)	Caught LTC	Caught BTC	Caught RTC	Caught LLS	Kept LTK	Kept BTK	Kept RTK	Kept LLS	Legal Salmonids Caught	Hrs to Catch Legal
723	1	3	10.50	3.50	10	0	0	0	3	0	0	0	10	1.05
725	20	20	56.00	2.80	55	0	0	1	23	0	0	1	49	1.14
731	10	10	19.75	1.98	19	0	2	0	0	0	1	0	21	0.94
734	6	12	33.00	2.75	4	0	1	0	4	0	1	0	5	6.60
738	6	6	6.75	1.13	4	0	0	0	4	0	0	0	4	1.69
741	5	10	41.00	4.10	16	0	0	0	8	0	0	0	10	4.10
743	13	17	48.75	2.81	23	0	0	0	12	0	0	0	21	2.32
755	12	12	23.00	1.92	29	0	0	0	9	0	0	0	26	0.88
776	8	22	81.50	3.56	16	0	1	0	14	0	0	0	16	5.09
908	1	2	7.00	3.50	1	0	0	0	0	0	0	0	0	
36	**421**	**783**	**2859.00**	**3.22**	**2026**	**13**	**21**	**10**	**849**	**1**	**9**	**4**	**1836**	**1.56**