

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

Dear Angler,

Thank you for returning your 2019 Seneca Lake angler diary. This is the 47th anniversary of our volunteer angler diary program on Seneca Lake. Data provided by you has been important to our efforts to manage the salmon and trout fisheries in Seneca Lake.

Enclosed is a summary of your personal catch information, referenced to the code number on the cover of your diary, a summary of 1973 through 2019 catch statistics, your 2019 diary, and, if needed, a new diary for the 2020 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 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".
- Only lake trout and 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.

The 2019 fishing season once again showed a declining trend in both cooperators (26) and total trips (261), both all-time lows. It is understandable that with angler success being better in adjacent waterbodies, that trip numbers in Seneca would continue to decrease. It is anticipated that as angler success increases, which we anticipate within the coming years, both trip numbers and angler cooperators will also increase.

As you might expect with decreasing trips, total catch of salmonines also decreased. A total of 263 salmonines were caught by diary cooperators. Of these, 88% were legal sized resulting in 4.7 h to catch a legal salmonine, similar to recent years. Recent low catch rates are slightly better than those experienced in 1977-79, just prior to the start of lamprey control. For comparison, catch rates on Keuka and Canandaigua Lakes were 1.2 and 1.5 h respectively.

Lake trout comprised 82% of all salmonines caught. Average length and weight of lake trout kept were 21.0 inches and 3.7 pounds. Lake trout catch was spread out from May-August. Anglers released 39% of legal lake trout caught. Based on fin clips, 37% of lake trout caught were wild, similar to last year. Based on recent information suggesting natural recruitment is decreasing, plans are to increase stocking to pre-2012 levels at 40,000 fingerlings and 20,000 yearlings annually. Stocking numbers will increase this year, but it will be 2021 until proposed numbers are reached.

Atlantic salmon continue to be the second most caught species comprising 13% of the total catch. Sixty-six percent of Atlantic salmon were legal sized with anglers releasing 39% of these fish. Currently, 24,000 Atlantic salmon yearlings are stocked in Seneca Lake, a number

that hasn't changed since 1988. However, since returns of Atlantic salmon appear to be much better than brown trout in the recent past, efforts to increase their stocking numbers are being considered.

Both rainbow and brown trout continue to contribute little to the overall lake fishery in recent years. Only 10 rainbow and 2 brown trout were caught by diary cooperators in 2019. These low catches relate to the reduced effort and are consistent with increased lamprey populations. Rainbow trout management will focus on the spring fishery in Catharine Creek. Annual stocking of 10,000 Finger Lakes strain yearlings will continue as returns to the stream fishery remain around 20%. The brown trout population is maintained almost entirely by annual stockings of 43,000 fingerlings and 21,600 yearlings. With recent poor returns and current lake conditions, consideration is being given to reducing/eliminating brown trout stocking and increasing stockings of other species that anglers catch, such as Atlantic salmon.

As I mentioned last year, we believe several factors have resulted in the recent poor catch rates in Seneca Lake. Most notably are the negative impacts resulting from excessive sea lamprey predation. We remain committed to the next treatment in 2021. Other factors negatively impacting angler catch rates include abundant forage populations, decreased lake trout natural recruitment, and lake trout stocking reductions in 2012. We are addressing these issues by increasing lake trout stocking numbers to pre 2012 levels. Increased stocked along with effective, regularly scheduled sea lamprey control should produce positive responses in the Seneca Lake fishery. Please be assured that our goal is to provide the anglers with a fishery that is balanced with the current conditions in the lake.

DEC is still developing a Finger Lakes Management Plan which will outline the overall management direction for the Finger Lakes as well as lake specific goals and objectives, including Seneca Lake. Public meetings to present the plan as well as receive public comments are proposed for 2020. Additionally, we are planning to carry out several sampling activities on Seneca Lake to assess current fishery conditions. These include our standard lake trout assessment, forage fish assessment using recently developed standardized techniques, and a first ever warmwater fishery assessment targeting primarily smallmouth and largemouth bass.

Participation in our warmwater diary program remains very low. We are interested in anglers fishing for either largemouth and smallmouth bass, northern pike, chain pickerel, and yellow perch. If you target these species and are interested in participating in the program or know other anglers that may be interested, please contact us at 585-226-5343. We would like to record trips targeting warmwater species in a separate diary.

We have a very ambitious schedule for Seneca Lake this coming year. However, we are unsure how the current Covid-19 pandemic will impact this work. At this time we are working within the constraints of the most recent guidance we are receiving from the Governors office. This will potentially allow us to complete some of the proposed tasks currently scheduled. However, as you are aware, this situation is anything but consistent.

Thank you for your continued cooperation, be safe, and good luck fishing during the 2020 season.

Good Fishing,

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

Table 1. Summary of 2019 Seneca Lake angler diary trips

Angler	Days Fished	Angler Trips	Angler Hours	Avg Trip (hrs)	Caught				Kept			Legal Salmonids Caught	Hrs to Catch Legal	
					LTC	BTC	RTC	LLS	LTK	BTK	RTK			LLS
460	8	10	40.00	3.88	0	0	0	0	0	0	0	0		
471	5	9	45.00	4.80	3	0	0	0	1	0	0	0	3	15.00
472	18	29	71.75	2.28	49	0	0	0	26	0	0	0	40	1.79
475	5	7	10.00	1.40	0	0	0	0	0	0	0	0	0	
485	14	14	70.75	5.05	64	0	0	0	48	0	0	0	61	1.16
487	10	16	81.50	5.05	2	1	1	11	1	0	0	7	15	5.43
492	4	5	17.50	3.13	0	0	1	1	0	0	0	0	2	8.75
494	8	8	14.75	1.84	11	0	0	0	11	0	0	0	11	1.34
510	11	12	32.75	2.84	22	0	1	2	0	0	0	0	22	1.49
513	6	13	75.00	5.33	7	0	0	0	7	0	0	0	7	10.71
535	1	1	1.50	1.50	0	0	0	0	0	0	0	0	0	
539	3	3	5.50	1.83	7	0	0	0	0	0	0	0	7	0.79
547	3	9	63.00	7.00	0	0	1	1	0	0	0	0	0	
563	3	3	7.25	2.42	0	0	0	0	0	0	0	0	0	
565	3	8	36.50	4.50	5	0	2	0	3	0	1	0	7	5.21
566	4	5	7.50	1.50	1	0	0	4	0	0	0	2	4	1.88
595	4	12	81.75	6.81	6	0	1	4	5	0	1	3	9	9.08
607	4	4	9.25	2.31	0	0	0	0	0	0	0	0	0	
629	5	5	7.00	1.40	5	0	0	0	0	0	0	0	3	2.33
646	1	1	2.25	2.25	0	0	0	0	0	0	0	0	0	
653	9	9	19.50	2.17	1	1	0	3	0	0	0	1	2	9.75
687	16	17	40.25	2.30	8	0	0	6	5	0	0	0	8	5.03
699	10	19	94.50	4.85	1	0	1	2	1	0	1	1	4	23.63
963	10	28	126.00	4.70	12	0	0	1	2	0	0	0	13	9.69
965	4	13	120.50	9.75	12	0	2	0	3	0	0	0	14	8.61
968	1	1	0.25	0.25	0	0	0	0	0	0	0	0	0	
26	170	261	1081.50	3.51	216	2	10	35	113	0	3	14	232	4.66

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

YEAR	TOTAL FISHING TRIPS	AVE HOURS/ TRIP	TOTAL SALMONIDS ¹				AVE LENGTH OF FISH				AVE WEIGHT OF FISH				# HOURS TO CATCH LEGAL SALMONID ⁴	NUMBER OF COOPERATORS
			LT	RT	BT	LLS	LT	RT	BT	LLS	KEPT (LBS.) ³					
											LT	RT	BT	LLS		
1973	1762	4.7	2120	75	6	-	20.6	21.2	-	-	3.8	3.4	-	-	3.0	76
1974	2394	4.7	2018	64	2	-	21.2	20.2	-	-	3.2	3.6	-	-	4.6	74
1975	2584	4.3	2176	134	3	-	20.2	18.2	-	-	3.0	2.7	-	-	4.4	100
1976	2190	4.6	2088	72	1	-	21.5	20.2	-	-	3.5	3.8	-	-	4.6	91
1977	1984	4.8	1422	31	1	-	21.7	21.4	-	-	3.6	4.4	-	-	6.0	83
1978	1817	4.4	1168	112	3	-	21.9	17.4	-	-	3.8	2.1	-	-	5.6	85
1979	2095	4.2	859	244	5	-	22.1	16.1	-	-	4.0	2.1	-	-	6.9	96
1980	1901	4.0	987	429	40	-	22.7	17.3	15.2	-	4.3	2.1	1.6	-	4.5	84
1981	2438	3.8	1132	797	163	-	21.6	17.4	16.2	-	3.9	2.3	2.2	-	3.7	97
1982	1774	3.8	1333	170	89	1	21.6	18.7	15.8	-	3.8	2.9	1.9	-	3.6	100
1983	2151	3.8	1866	202	133	5	22.1	17.1	16.6	19.1	4.1	2.4	2.2	3.1	3.1	100
1984	2749	3.9	1602	385	188	6	20.6	18.5	17.0	20.0	3.5	2.8	2.6	3.6	3.6	119
1985	2377	3.5	2232	250	176	5	20.7	19.7	16.6	19.7	3.4	3.4	2.4	3.7	2.7	100
1986	2518	3.4	2216	246	169	5	21.8	19.5	17.9	16.8	3.8	3.2	3.0	1.8	2.7	102
1987	2931	3.5	2927	317	232	7	21.8	16.9	17.9	16.5	3.8	2.2	3.0	1.8	2.5	119
1988	3205	3.5	2647	563	281	5	21.6	18.7	18.9	-	3.7	2.9	3.7	-	2.6	132
1989	3948	3.4	3671	335	273	37	22.0	19.3	20.0	18.0	3.8	3.0	4.4	2.1	2.3	142
1990	3819	3.6	3428	298	233	101	21.7	19.7	18.7	17.8	3.6	3.1	3.3	2.1	2.7	141
1991	4120	3.5	3765	233	188	49	22.2	19.6	19.1	19.3	3.8	3.1	3.2	2.8	2.7	143
1992	2844	3.5	2316	244	135	131	21.1	19.7	21.3	18.4	3.3	3.2	4.6	2.3	2.7	139
1993	2895	3.5	2532	98	127	60	20.1	19.2	18.6	19.0	3.2	2.8	3.2	3.0	2.6	132
1994	3520	3.8	2849	107	182	97	20.6	18.5	18.8	17.7	3.2	2.6	3.5	2.3	3.0	152
1995	3235	3.5	3132	79	92	128	21.6	19.5	20.6	18.0	3.4	3.1	4.2	2.1	2.2	130
1996	2761	3.4	2641	163	68	133	21.8	19.3	21.3	18.6	3.6	2.9	4.6	2.3	1.9	121
1997	3154	3.1	3490	61	38	59	21.2	20.5	22.0	20.9	3.3	3.3	5.5	3.3	1.5	120
1998	2309	3.1	2507	38	46	48	20.6	22.7	21.0	21.8	2.9	4.6	4.2	4.0	1.4	106
1999	1622	3.1	1679	42	7	40	20.1	18.7	19.5	18.4	2.8	2.5	3.4	2.4	1.6	93
2000	1433	2.7	1612	32	12	17	20.0	20.0	20.3	19.4	2.6	3.8	3.4	2.7	1.3	89
2001	1451	2.8	1830	17	12	23	20.4	19.4	18.9	16.8	2.8	3.2	4.1	2.0	1.2	68
2002	1697	3.3	1896	27	40	69	21.0	20.4	19.7	18.9	3.1	3.3	3.7	2.4	1.6	76
2003	1199	2.8	1184	19	26	50	21.1	20.9	20.0	18.9	3.1	3.6	4.2	2.4	1.5	67
2004	1121	2.9	1072	7	21	48	21.2	-	22.4	21.4	3.2	-	4.7	3.4	1.4	62
2005	1038	3.4	846	5	9	10	21.4	20.1	20.2	17.6	3.2	3.6	3.5	2.4	1.4	65
2006	937	3.4	770	48	12	48	21.8	19.3	18.1	19.0	3.5	2.9	2.9	2.4	1.7	55
2007	1110	3.0	1108	12	20	16	21.6	22.1	19.7	20.9	3.5	4.3	3.3	2.9	1.3	53
2008	1088	2.9	1108	13	10	15	22.1	20.8	22.0	19.0	3.7	3.8	5.2	2.0	1.2	52
2009	992	3.2	877	11	4	120	21.5	19.2	24.0	16.9	3.3	2.6	6.0	2.6	1.8	46
2010	951	3.6	536	18	25	186	22.5	20.5	19.8	18.7	4.0	2.8	3.6	2.8	2.3	61
2011	964	3.7	644	40	47	180	22.0	19.8	19.5	18.8	3.8	3.0	3.7	3.3	1.8	59
2012	905	3.6	570	23	50	65	22.7	22.2	22.4	19.9	4.2	4.1	4.9	3.8	2.2	56
2013	887	3.3	508	15	99	124	22.1	19.1	22.8	18.9	4.2	4.1	5.0	3.2	2.2	53
2014	843	3.7	606	22	42	82	22.4	20.3	24.1	20.0	4.4	3.2	5.8	3.6	2.2	53
2015	696	3.8	401	21	18	26	22.8	21.5	23.0	20.6	4.5	3.6	5.9	2.9	2.5	52
2016	548	3.8	195	2	13	48	22.8	21.0	21.1	21.2	4.3	3.0	2.0	3.9	4.8	48
2017	394	4.3	152	16	14	32	20.9	17.8	19.6	19.1	3.5	2.6	4.2	2.6	5.0	43
2018	352	3.9	146	8	8	38	19.7	19.0	19.9	19.5	3.7	2.7	4.3	2.4	4.5	34
2019	261	3.5	113	3	0	14	21.0	19.0		18.8	3.7	2.2		3.0	4.7	26

1 Salmonids = Lake Trout – LT; Rainbow Trout – RT; Brown Trout – BT; Landlocked Salmon – LLS

2 Average Length of Fish with Recorded Lengths

3 Average Weight of Fish with Recorded Weights

4 Includes Legal Salmonids Released