

LAKE GEORGE

ANGLER DIARY COOPERATOR SUMMARY

FOR THE 2007 FISHING SEASON



Photo by Jeff Johnson

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NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
RAY BROOK, NEW YORK 12977



Introduction

Lake George is a 28,160-acre body of water bordered by Warren, Washington and Essex counties in the eastern Adirondacks. It is a two-story lake which means that it contains both coldwater and warmwater game fish. A program designed to monitor the lake's coldwater salmonid fishery, through the help of volunteer angler cooperators, was begun in the early 1970's. These volunteers have maintained detailed diaries of their open water salmonid fishing trips and have gathered a large amount of angler catch data.

This report summarizes Lake George landlocked salmon and lake trout angler diary data and landlocked salmon age and growth data collected during 2007.

If you were a cooperator during the 2007 fishing season, your results are listed beside your assigned angler number in the tables presenting individual catch and fishing effort statistics. Your angler cooperator number is located on the left hand side of the address label on the envelope in which this information was sent, and on your 2008 angler diaries. In order to facilitate comparison of data between years, angler diary cooperator numbers will not be changed, so be sure to keep your angler number confidential.

The angler diary program has been an extremely effective and worthwhile program. Those anglers who have participated should be proud of their effort knowing that their time has led to more effective management of Lake George.

If you maintained a diary, but find no reference to your angler cooperator number in any of the attached tables, it is possible that the data which you submitted were not used because an essential ingredient (such as record of the starting and finishing times of unsuccessful trips, etc.) was lacking or the diary arrived too late to be included in the summaries. Please contact Emily Zollweg at the NYSDEC office in Warrensburg or phone (518) 623-1264 or send email to: eczollwe@gw.dec.state.ny.us if your data were not presented.

When reading the tables, please be aware that the "Number of Angler Trips" and the "Number of Hours Fished" refers to the cooperator plus any fishing guests who accompanied that cooperator and have data recorded in his or her diary.

Results

Participating Angler Cooperators

During 2007, 27 cooperators, out of over 100 who were sent a diary or report, returned usable diaries. This is a very nice increase in the number of active participants- so Thank You! For those of you who indicated they wanted their diaries returned, they were returned after data entry was completed. My thanks to the following angler cooperators who returned diaries:

Name		
<i>Arthur Babiak</i>	<i>Steve Kabrehl</i>	<i>Ed Nadeau</i>
<i>Tim Barnhard</i>	<i>Robert J. Koshgarian</i>	<i>Dave Pelchar</i>
<i>Raoul Charbonneau</i>	<i>Dan Ladd</i>	<i>Paul Pontiff</i>
<i>Mark Clemente</i>	<i>Barry Leeds</i>	<i>John Shaninger</i>
<i>Walter H. Curren</i>	<i>Michael Majewski</i>	<i>Ken Sheffield</i>
<i>Edward Donoghue</i>	<i>Pat Mannix</i>	<i>Robert Sledd</i>
<i>Edward L. DuFour</i>	<i>John Marra</i>	<i>Mike Strutz</i>
<i>Eric Guby</i>	<i>Donald Mentipty</i>	<i>Bill West</i>
<i>Jeff Johnson</i>	<i>Robert Murray Jr.</i>	<i>Glen Atchinson</i>

Anglers Exclusively Targeting Lake Trout or Landlocked Salmon

In this report catch and creel rates are calculated separately for lake trout and landlocked salmon. Excluding trips that targeted both lake trout and landlocked salmon creates tables that provide “exclusive” catch data. Thus, the angler was focused on catching one species during that trip. Anglers that did not indicate a species preference or who fished for both landlocked salmon and lake trout during the same fishing trip are included in the total catch tables.

Although “exclusive” reporting criteria reduce the number of angler trips used for certain calculations, it may be a more accurate representation of lake trout or landlocked salmon catch or creel rates. It also provides a consistent method to compare catch and creel rates with other waters.

Length Frequency Distribution Sample Sizes

Sample sizes reported on length frequency distribution graphics in this report do not correspond with sample sizes in the catch summary tables. Sample sizes reported in length frequency tables are based on all fish caught that had recorded lengths. Sample sizes reported in the catch summary tables are based on the number of fish caught that could be associated with an angling effort (catch per hour). Some angler diary cooperators forget to record the time that fishing started or ended. Fishing trips with missing effort data are excluded from the catch rate summaries; however, fish captured during excluded trips are used in length frequency distributions and in mean length summaries.

Overall Salmonid Catch and Creel Rates

Twenty-seven angler cooperators fished for salmonids at least once during 2007. They provided records for a total of 996 fishing trips totaling almost 4000 hours over 490 days (Table 1). The mean length of a fishing trip was 3.7 hours.

Cooperators landed a total of 1,917 lake trout and landlocked salmon in 2007 versus 3,154 in

2006 and 1,544 in 2005. The salmonid catch rate was 0.52 or one salmonid every 1.9 hours in 2007. Anglers creeled 353 (18.5%) of the lake trout and salmon caught in 2007 compared to 361 (11.4%) in 2006, 144 (9.3%) in 2005, 93 (8.2%) in 2004 and 47 (3.8%) in 2003. The salmonid creel rate in 2007 was 0.10/hour versus 0.02/hour in 2003.

TABLE 1.

LAKE GEORGE									
ANGLER DIARY COOPERATOR FISHING RESULTS									
2007 FISHING SEASON, ALL SALMONIDS									
ACTUAL CREEL RATE									
BASIN	ANGLER NUMBER	NUMBER DAYS FISHED	NUMBER ANGLER TRIPS	NUMBER HOURS FISHED	MEAN TRIP LENGTH	NUMBER CAUGHT	CATCH PER HOUR	NUMBER CREELED	CREELED PER HOUR
North	155	5	6.0	29.00	4.83	10	.34	0	.00
	157	12	22.0	53.83	2.45	38	.71	3	.06
	173	10	10.0	7.58	.76	5	.66	0	.00
	234	10	18.0	58.50	3.25	1	.02	0	.00
	237	4	8.0	50.00	6.25	14	.28	2	.04
	330	4	6.0	28.00	4.67	20	.71	3	.11
	331	50	113.0	455.92	4.03	196	.43	3	.01
	351	1	3.0	13.25	4.42	1	.08	0	.00
	357	24	25.0	79.00	3.16	23	.29	6	.08
	367	12	34.0	139.75	4.11	64	.46	29	.21
	378	5	9.0	46.00	5.11	17	.37	0	.00
	385	36	42.0	91.50	2.18	25	.27	6	.07
	397	3	5.0	8.50	1.70	1	.12	0	.00
	404	8	9.0	36.50	4.06	16	.44	7	.19
	SUBTOTAL		184	310.0	1097.3	3.54	431	.39	59
South	148	39	41.0	117.83	2.87	93	.79	9	.08
	155	5	7.0	54.00	7.71	8	.15	3	.06
	260	2	4.0	11.00	2.75	2	.18	0	.00
	324	4	9.0	18.50	2.06	4	.22	2	.11
	330	7	9.0	42.50	4.72	29	.68	3	.07
	350	9	17.0	50.00	2.94	26	.52	7	.14
	351	19	64.0	265.00	4.14	130	.49	8	.03
	352	14	32.0	115.67	3.61	54	.47	18	.16
	354	165	410.0	1454.5	3.55	1050	.72	225	.15
	366	1	2.0	16.00	8.00	3	.19	1	.06
	367	6	17.0	110.75	6.51	22	.20	8	.07
	370	2	3.0	9.50	3.17	1	.11	1	.11
	393	7	10.0	31.75	3.18	0	.00	0	0
	396	6	11.0	55.00	5.00	11	.20	0	.00
	400	7	20.0	144.25	7.21	16	.11	9	.06
	402	6	17.0	55.00	3.24	10	.18	0	.00
	403	5	9.0	28.00	3.11	15	.54	0	.00
404	2	4.0	20.00	5.00	12	.60	0	.00	
SUBTOTAL		306	686.0	2599.3	3.79	1486	.57	294	.11
TOTAL		490	996.0	3696.6	3.71	1917	.52	353	.10

Lake Trout

Twenty-five angler cooperators targeting lake trout landed a total of 1,698 lake trout in 2007 and had a catch rate of 0.52/hour (Table 2). Mean length of lake trout caught was 21.0 inches. Participating anglers creeled 297 (17.6%) of the lake trout caught in 2007. Mean length of lake trout creeled was 24.7 inches. In 2006, 18 cooperators caught 2,823 lake trout and had a catch rate of 0.62/hour. Figure 1 illustrates the 2007 angler diary cooperator lake trout length frequency distribution. Of 1,794 lake trout caught by all anglers, 603 were 23 inches or greater in length (33.6%) and 1,074 were 21 inches or greater in length (59.9%). The 1,794 lake trout measured had a mean length of 20.9 inches.

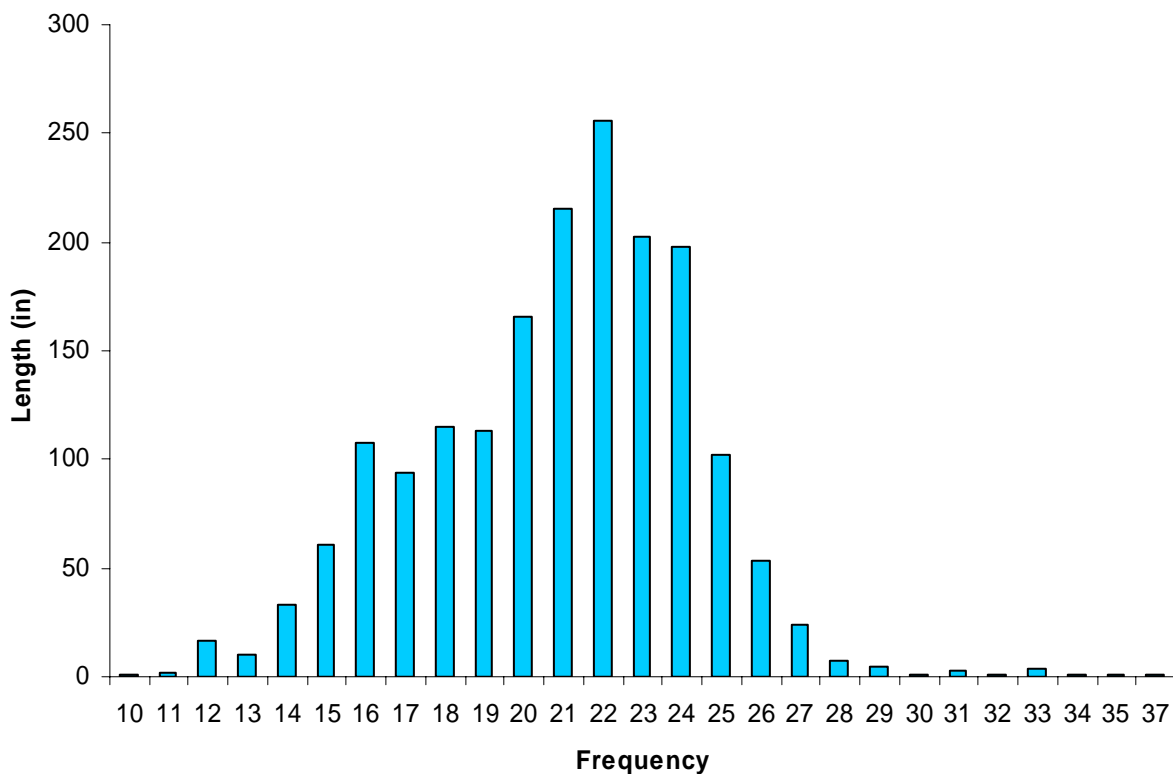


Figure 1. Length frequency distribution of lake trout caught by anglers in Lake George, 2007.

Anglers Exclusively Targeting Lake Trout

Seventeen angler cooperators exclusively targeted lake trout 2007. The exclusive catch rate was 0.58/hour versus the overall rate of 0.54/hour, and the exclusive creel rate was 0.10 lake trout per hour versus 0.09/hour overall creel rate. Other catch statistics were similar between these two groups, so tables are not repeated here to save space.

TABLE 2

LAKE GEORGE ANGLER DIARY COOPERATOR FISHING RESULTS 2007 FISHING SEASON, ACTUAL CREEL RATE ANGLERS TARGETING LAKE TROUT												
BASIN	ANGLER NUMBER	NUMBER DAYS FISHED	NUMBER ANGLER TRIPS	NUMBER HOURS FISHED	MEAN TRIP LENGTH	NUMBER CAUGHT	CATCH PER HOUR	NUMBER CREELED	CREELED PER HOUR	MEAN LENGTH CAUGHT	MEAN LENGTH CREELED	
North	157	10	20.0	51.17	2.56	36	.70	3	.06	22.02	25.67	
	173	10	10.0	7.58	.76	5	.66	0	0	23.20	0	
	234	9	16.0	55.50	3.47	0	.00	0	0	0	0	
	237	4	8.0	50.00	6.25	14	.28	2	.04	24.38	25.63	
	330	4	6.0	28.00	4.67	20	.71	3	.11	21.85	24.67	
	331	50	113.0	455.92	4.03	196	.43	3	.01	18.89	25.92	
	351	1	3.0	13.25	4.42	1	.08	0	0	24.50	0	
	357	19	20.0	58.50	2.93	21	.36	5	.09	21.62	27.60	
	367	11	31.0	133.75	4.31	64	.48	29	.22	23.24	26.32	
	378	5	9.0	46.00	5.11	17	.37	0	0	22.82	0	
	385	36	42.0	91.50	2.18	22	.24	6	.07	21.02	24.75	
	397	3	5.0	8.50	1.70	1	.12	0	0	23.00	0	
	404	8	9.0	36.50	4.06	16	.44	7	.19	23.34	26.39	
	SUBTOTAL		170	292.0	1036.2	3.55	413	.40	58	.06	20.83	26.11
	South	260	2	4.0	11.00	2.75	2	.18	0	0	23.63	0
324		2	5.0	9.50	1.90	1	.11	0	0	22.50	0	
330		7	9.0	42.50	4.72	29	.68	3	.07	20.98	24.33	
350		9	17.0	50.00	2.94	25	.50	6	.12	21.20	25.50	
351		19	64.0	265.00	4.14	130	.49	8	.03	21.97	24.13	
352		14	32.0	115.67	3.61	54	.47	18	.16	21.60	24.86	
354		142	356.0	1311.0	3.68	958	.73	188	.14	20.83	24.36	
366		1	2.0	16.00	8.00	2	.13	0	0	23.00	0	
367		6	17.0	110.75	6.51	22	.20	8	.07	21.91	24.66	
370		2	3.0	9.50	3.17	0	.00	0	0	0	0	
393		3	4.0	13.25	3.31	0	.00	0	0	0	0	
396		6	11.0	55.00	5.00	11	.20	0	0	23.73	0	
400		4	11.0	101.50	9.23	15	.15	8	.08	21.80	23.25	
402		6	17.0	55.00	3.24	9	.16	0	0	22.75	0	
403		5	9.0	28.00	3.11	15	.54	0	0	19.73	0	
404		2	4.0	20.00	5.00	12	.60	0	0	19.58	0	
SUBTOTAL			230	565.0	2213.7	3.92	1285	.58	239	.11	21.04	24.39
TOTAL		400	857.0	3249.8	3.79	1698	.52	297	.09	20.99	24.72	

Catch Rate for Legal Sized Lake Trout

An additional analysis was performed to discover the lake trout creel rate if every fish over the minimum size limit of 23 inches were kept. For 2007, the theoretical maximum creel rate would have been 0.16/hour versus the 0.10/hour actually kept by cooperators. Thus, 1.6 times more lake trout could have been harvested than really occurred. Legal lake trout comprised 33.6% of the angler catch in 2007 (603 of 1794); this is the highest rate in recent years. In 2006, legal lake trout comprised 29.9% of the angler catch; in 2005, legal lake trout comprised 21.6% of the angler catch; and in 2004, legal lake trout comprised 25.4% of the angler catch. In 2003, legal lake trout comprised only 14% of the total catch. If the lake trout size limit were lowered to the statewide size limit of 21 inches, 1074 lake trout or 0.30 fish/hour, could have been harvested.

Landlocked Salmon

Eighteen angler cooperators targeted landlocked salmon in 2007, catching a total of 132 landlocked Atlantic salmon (Table 3). Mean length of salmon caught was 17.5 inches. Cooperators spent approximately 1172 hours pursuing salmon, which translates to a catch rate of 0.11 salmon/hour. Thus, it took an average of 9.1 hours to catch a salmon on Lake George in 2007. Forty-six of the 132 salmon caught (35%) were creeled and these fish had an average length of 20.2 inches. The 2003 catch rate was 0.03/hour and the 2004 catch rate was 0.12/hour, the same rate as 2007, thus 2004/2007 saw a 400% improvement in salmon catch rates over 2003.

TABLE 3.

LAKE GEORGE ANGLER DIARY COOPERATOR FISHING RESULTS 2007 FISHING SEASON, ACTUAL CREEL RATE ANGLERS TARGETING LANDLOCKED SALMON											
BASIN	ANGLER NUMBER	NUMBER DAYS FISHED	NUMBER ANGLER TRIPS	NUMBER HOURS FISHED	MEAN TRIP LENGTH	NUMBER CAUGHT	CATCH PER HOUR	NUMBER CREELED	CREELED PER HOUR	MEAN LENGTH CAUGHT	MEAN LENGTH CREELED
North	155	5	6.0	29.00	4.83	2	.07	0	0	16.00	0
	157	6	11.0	27.17	2.47	1	.04	0	0	14.50	0
	234	10	18.0	58.50	3.25	1	.02	0	0	17.00	0
	330	2	2.0	7.00	3.50	0	.00	0	0	0	0
	357	16	16.0	60.00	3.75	2	.03	1	.02	22.00	25.00
	367	1	3.0	6.00	2.00	0	.00	0	0	0	0
	385	36	42.0	91.50	2.18	3	.03	0	0	15.67	0
SUBTOTAL		76	98.0	279.17	2.85	9	.03	1	.00	17.17	25.00
South	148	39	41.0	117.83	2.87	46	.39	9	.08	17.48	20.56
	155	5	7.0	54.00	7.71	0	.00	0	0	0	0
	324	3	7.0	13.50	1.93	3	.22	2	.15	19.00	20.75
	330	7	9.0	42.50	4.72	0	.00	0	0	0	0
	352	1	2.0	4.67	2.33	0	.00	0	0	0	0
	354	45	113.0	422.50	3.74	70	.17	32	.08	17.50	19.91
	366	1	2.0	16.00	8.00	1	.06	1	.06	23.00	23.00
	370	2	3.0	9.50	3.17	1	.11	0	0	13.00	0
	393	7	10.0	31.75	3.18	0	.00	0	0	0	0
	396	1	2.0	10.00	5.00	0	.00	0	0	0	0
	400	4	11.0	101.50	9.23	1	.01	1	.01	19.00	19.00
	402	6	17.0	55.00	3.24	1	.02	0	0	12.00	0
	403	3	5.0	14.00	2.80	0	.00	0	0	0	0
SUBTOTAL		124	229.0	892.75	3.90	123	.14	45	.05	17.50	20.12
TOTAL		200	327.0	1171.9	3.58	132	.11	46	.04	17.48	20.23

The 2007 angler diary cooperator landlocked salmon length frequency distribution is illustrated in Figure 2. This graph includes length data from all salmon caught by cooperators. Of 138 salmon caught, 73 were 18 inches or greater in length (53%). The 138 salmon caught had a mean length of 18 inches.

Nine angler cooperators focused some of their angling time exclusively fishing for landlocked salmon in 2007 (Table 4). They fished a total of 399 hours and caught 94 salmon for a catch rate of 0.24/hour. The 2006 exclusive catch rate was 0.35/hour and the 2003 exclusive catch rate for salmon was only 0.03/hour; thus there has been a substantial increase in salmon catch rates in recent years. Twenty-nine of the 94 salmon caught in 2007 were creeled, yielding a creel rate of 0.07/hour. The mean length caught was 17.1 inches, while the mean length creeled was 19.6 inches. Had all legal salmon been creeled; however, 73 fish would have been kept and the theoretical maximum creel rate would have been 0.07/hour.

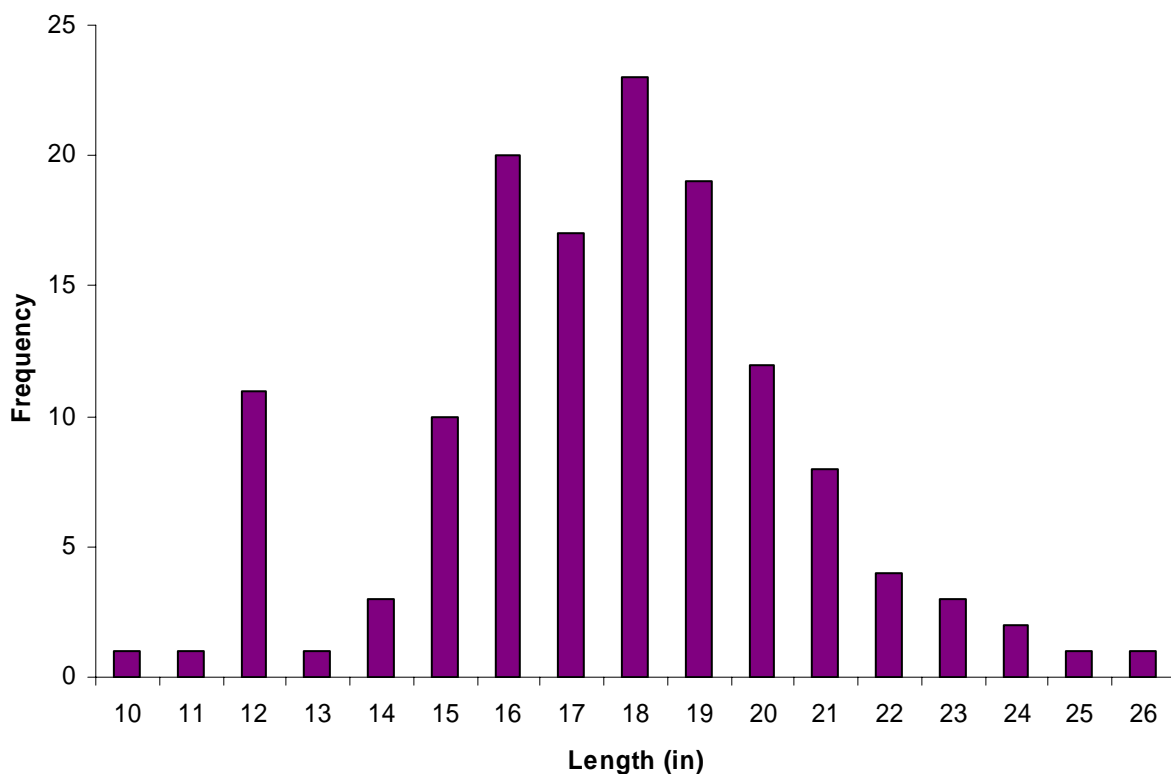


Figure 2. Length frequency distribution of landlocked salmon caught by anglers in Lake George, 2007.

TABLE 4.

LAKE GEORGE
 ANGLER DIARY COOPERATOR FISHING RESULTS
 2007 OPEN WATER FISHING SEASON
 ANGLERS TARGETING LANDLOCKED SALMON EXCLUSIVELY

BASIN	ANGLER NUMBER	NUMBER DAYS FISHED	NUMBER ANGLER TRIPS	NUMBER HOURS FISHED	MEAN TRIP LENGTH	NUMBER CAUGHT	CATCH PER HOUR	NUMBER CREELED	CREELED PER HOUR	MEAN LENGTH CAUGHT	MEAN LENGTH CREELED
North	155	5	6.0	29.00	4.83	2	.07	0	0	16.00	0
	157	2	2.0	2.67	1.33	0	.00	0	0	0	0
	234	1	2.0	3.00	1.50	0	.00	0	0	0	0
	357	5	5.0	20.50	4.10	0	.00	0	0	0	0
	367	1	3.0	6.00	2.00	0	.00	0	0	0	0
SUBTOTAL		14	18.0	61.17	3.40	2	.03	0	0	16.00	0
South	148	39	41.0	117.83	2.87	46	.39	9	.08	17.48	20.56
	155	5	7.0	54.00	7.71	0	.00	0	0	0	0
	324	1	2.0	4.00	2.00	1	.25	0	0	15.50	0
	354	23	54.0	143.50	2.66	45	.31	20	.14	16.76	19.20
	393	4	6.0	18.50	3.08	0	.00	0	0	0	0
SUBTOTAL		72	110.0	337.83	3.07	92	.27	29	.09	17.10	19.62
TOTAL		86	128.0	399.00	3.12	94	.24	29	.07	17.08	19.62

Salmon Stocking

Approximately 38,000 healthy yearling salmon were stocked in Lake George during 2007 (Table 5). A total of 35,000 salmon yearlings were stocked in late-May 2007. The spring yearlings were not marked. In addition about 3,000, 9.6" -inch fall yearlings (Left ventral fin clip– bottom rear on left side) reared at the Warren County Hatchery were stocked in November. The hypothesis is that stocking larger salmon will increase annual salmon survival. Yearling and fall yearling salmon are differentially fin clipped to permit identification and evaluation. Only the fall stocked salmon will be fin clipped in the future.

Table 5. Lake George Landlocked Salmon Stocking History, 1999-2007

Year	Stocking Policy	Date	Number Stocked	Number per pound	Mean Length At Stocking	Fin Clip
1999	34,000		34,000	9.1	6.9"	
2000	34,000		34,000	10.4	6.5"	
2001	17,000	May	17,000		7.0"	AD
2001	17,000	June	17,000		7.6"	None
2001	3,000	October	3,100		10.5"	LV
2002	17,000	April	17,000		6.5"	AD
2002	17,000	June	17,000		7.0"	None
2002	3,100	October	3,100		10.0?	LV
2003	17,000	April	17,000	9.1	6.5"	AD
2003	17,000	June	17,000	6.6	7.5"	None
2003	3,000	October	3,104	2.85	9.6"	LV
2004	17,000	April	17,000	10.2	6.5"	None
2004	17,000	June	20,000	8.4	7.0"	AD
2004	3,000	October	2,500	1.9	11.5"	LV
2005	17,000	May	17,000	10.1	6.5"	AD
2005	17,000	May	17,000	10.1	6.5"	None
2005	3,000	October	3,014		10"	LV
2006	34,000	May	30,000	7.7	7"	None
2006	3,000	September	2940	3.0	9.8"	LV
2007	34,000	May	35,160	9.6	6.5"	None
2007	3,000	November	2,964	3.8	9.6"	LV

Lake Trout

Anglers Exclusively Targeting Lake Trout

North Basin creel rates were stable from 1987 through 1994 at 0.07 to 0.12 per hour, respectively, but remained below 0.10 per hour from 1996-2007 (Figure 3). It is known, however, that anglers are releasing legal size lake trout, which lowers the creel rate. For example, in 1995 participating North Basin cooperators targeting lake trout released about 59% of the legal lake trout they caught, while in 2004 anglers released about 75% percent of the legal lake trout they caught. In 2007, all anglers kept 51% of legal lake trout caught. It is apparent that the lower creel rate was due to a change in angler habits which may have changed again. In 2007, the creel rate in the North Basin was 0.06 lake trout per hour, based on the reported activities of 11 anglers.

The North Basin exclusive lake trout catch/hour dropped again in 2007 to 0.44 lake trout/hour versus 0.64/hour in 2004 (Figure 3). The maximum possible creel rate would have been 0.12/hr in 2007 compared to 0.19/hour in 2006, 0.16/hour in 2004 and 0.07/hour in 2003.

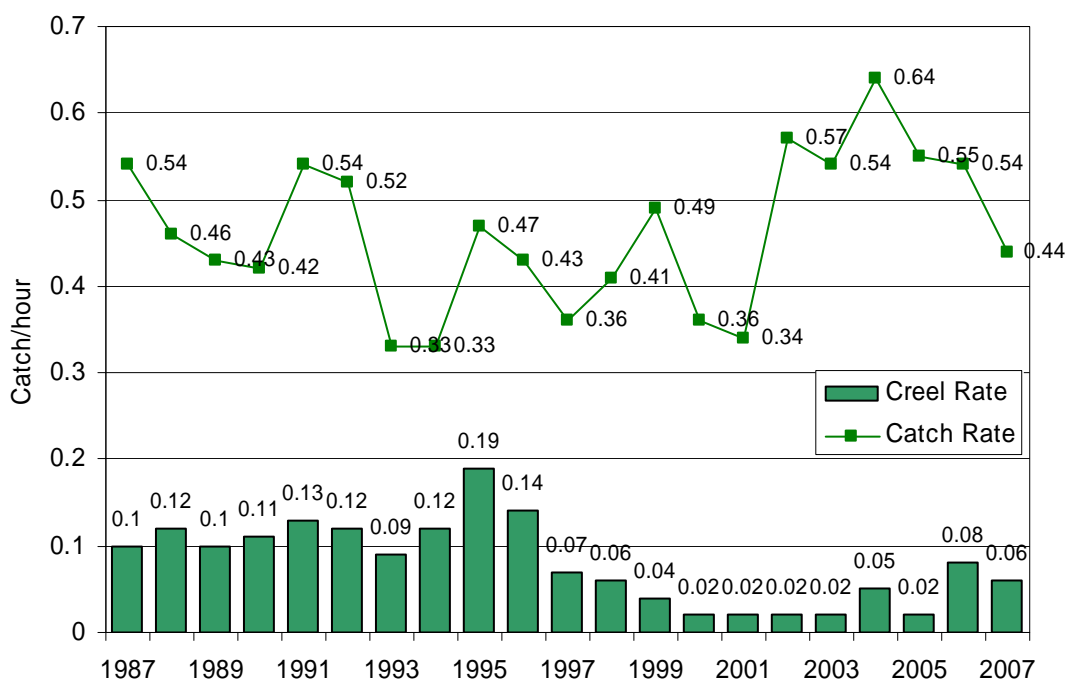


Figure 3. North Basin exclusively targeted lake trout catch and creel rates between 1987 and 2007.

South Basin

Declining participation in the angler diary program is a great concern. Only one cooperater fished exclusively for lake trout in the South Basin from 2002-2004. This low sample size made comparisons between the basins unreliable and as a consequence, statistics from each basin were not computed for those years. However, in 2005 and 2006, we had 5 and 6 anglers reporting fishing for lake trout exclusively in the southern zone which makes these comparisons possible. In 2007, nine anglers reported fishing exclusively for lake trout in the southern zone. We appreciate the assistance of these anglers and continue to seek means to increase the number of participating diary cooperaters.

South Basin creel rates were relatively stable from 1987 through 1999 at 0.02 to 0.18 per hour (Figure 4). It is known, however, that anglers are releasing legal size lake trout, which lowers the creel rate. It is apparent that the lower creel rate was due to a change in angler habits. In 2007, nine diary cooperaters fished the South Basin exclusively for lake trout. In 2007, the creel rate in the South Basin was calculated at 0.13 lake trout per hour, which is comparable with previous creel rates in this basin.

The South Basin exclusive lake trout catch/hour was relatively high in 2007 at 0.65 lake trout/hour (Figure 4). The maximum possible creel rate would have been 0.18/hour in 2007. The creel rates for the South Basin is one of the highest calculated. This increase may be due to increased catches of smaller salmon. In 2006 and 2007, these salmon were stocked with the

assistance of the Lake George Fishing Alliance, whose members include several angler diary cooperators. Stocking these fish by boat in deep water may have increased their survival in 2006 and 2007. This effort will be continued.

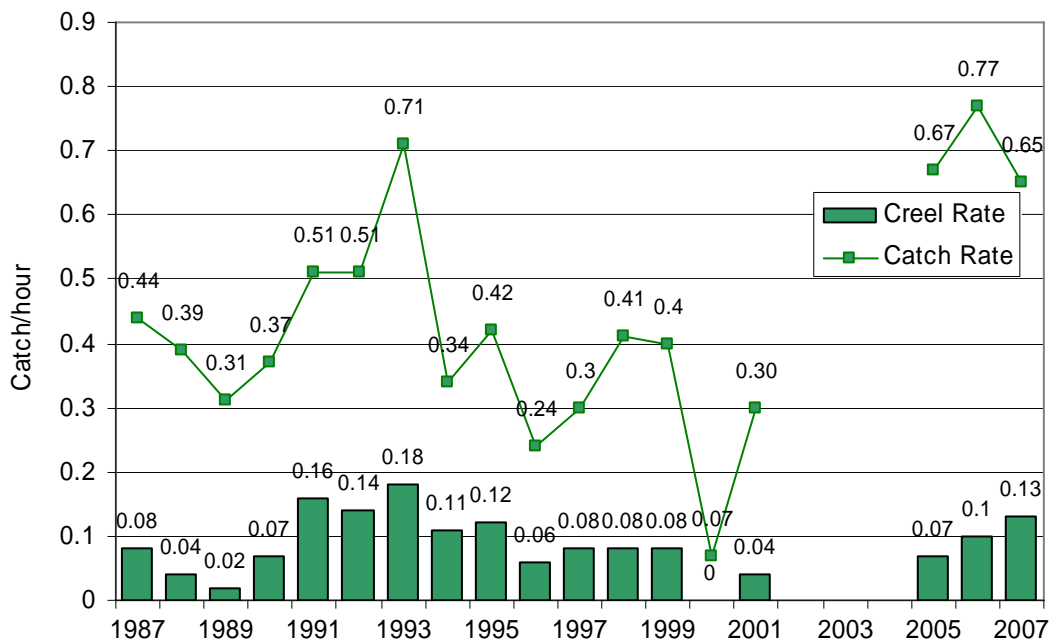


Figure 4. South Basin exclusively targeted lake trout catch and creel rates between 1987 and 2007. Data for 2002- 2004 omitted due to lack of data.

Conclusion

Natural Recruitment

Naturally recruited lake trout dominate the population in Lake George; however, it is not possible to determine the percentage of wild fish based on cooperator data. Six fin clipped lake trout ranging from 15- 28 inches were reported in 2006, and one 24 inch clipped lake trout was reported in 2007. Lake trout were last stocked in Lake George in 1998. Due to the decreasing percentage of stocked fish in the lake trout population, it is no longer necessary to track clipped lake trout in Lake George.

Landlocked Salmon

Lake George is one of relatively few lakes capable of producing a high quality Atlantic salmon fishery in New York. The Lake George salmon program has a long tradition and history.

Good growth is vital to maintain the quality of the landlocked salmon fishery. Slow growth caused by a weak smelt population or by over stocking would produce a decrease in the average size of salmon as well as a decrease in the number of larger salmon in the fishery. The 2008 season looks good for salmon fishing, ECO's reported that the 2006 and 2007 smelt runs in several tributaries were the best they had seen in a decade. In addition, the 2006 winter was slow for ice fishing due to lack of ice or accessible ice, therefore fewer salmon were harvested during the winter season in 2006. Better ice conditions in 2007-2008 may have improved the winter salmon fishing.

Salmon have a relatively short life span up to age four, but typically live to age three. The most abundant age class for the fishery is age two. To provide the best angling, salmon must reach 18 inches by fall at age two. Salmon are quickly harvested during years when two-year-old and older salmon are present as a result of good year class survival.

In 2007, the exclusive catch rate for legal salmon was 0.07/hour. That rate is still well below the catch rate objective of 0.12 - 0.18 per hour established in 1998, but better than the 2003 catch rate of 0.01/hour. Angler cooperator efforts in 2004 indicate a renewed interest in the fishery, which continued in 2005, 2006 and 2007.

It does not appear that forage problems are limiting salmon survival in Lake George. Rainbow smelt are a preferred food item for salmon and this office has received reports of strong smelt runs in recent years in most lake tributaries. The office also received calls from anglers who were catching significant numbers of smelt while ice fishing and were wondering whether they are legal to keep for personal consumption (they aren't, in Lake George). So, there are several indications of good smelt population numbers.

Predation is an obvious source of mortality and large lake trout can certainly forage on yearling or older salmon. About 60% of the 1,794 lake trout measured by cooperators in 2007 exceeded 21 inches in size while only 34% of lake trout exceeded the legal size of 23 inches. The catch rate for exclusively targeted lake trout was the highest on record in 2006 at 0.65/hour and only slightly lower in 2007 at 0.53/hour. The catch rate for legal sized lake trout (>23 inches) was 0.16/hour. However, the creel rate of only 0.09/hour clearly shows that cooperators are releasing many of the legal lake trout they catch. This was an improvement over 2003; however, when virtually all the legal lake trout were released.

If the cooperator trend for releasing lake trout extends to most coldwater anglers in Lake George, then a large predator base is being established in the lake. Anglers cannot expect a quality landlocked salmon program in addition to a trophy lake trout fishery. Either more anglers need to keep their catch of legal lake trout or they should reduce their expectations for the salmon fishery. In addition, there is a proposed regulation change starting in 2010 for the legal size of lake trout to change from 23 inches to 21 inches, making more lake trout available for harvest. If more lake trout are not harvested with the change in regulation, the hoped for improvement in salmon survival may not occur.

Salmon survival may also be partially dependent on the size at the time of stocking. It is believed that stocking limited numbers of larger yearling and fall yearling salmon may reduce survival variability. Various salmon management alternatives have been considered to try to

improve salmon catch rates and survival. These alternatives include stocking larger salmon in June rather than May and stocking limited numbers of large, fall yearling salmon. The hypothesis is that salmon stocked at a larger size in June or October may experience less mortality than salmon stocked in May. Stocking salmon yearlings in June rather than in mid-May allows stocking slightly larger salmon than can be stocked in mid-May. Typically salmon stocked in mid-May are about 10 per pound (6.5 inches) or smaller. Salmon stocked in June could potentially be about 8 per pound (7.5 inches) or larger. The potential difference in the size of salmon stocked in May or June has not been determined to be enough to increase survival. Due to limitations at the hatchery and lack of increased survival of June stocked salmon, the split spring stocking has been discontinued. All spring salmon are stocked at the end of May at about 7". These fish are dispersed in deeper areas of the lake with the help of angler cooperators and the Lake George Fishing Alliance. Many thanks to those who participated in 2006 and 2007!

Approximately, three thousand yearlings are transferred to the Warren County Hatchery in June each year from Adirondack Hatchery. These fish are stocked in late September or October as (left ventral) fin-clipped advanced fall yearlings. These fish represent 10% of the salmon stocked in Lake George. Twenty-six (19%) of the 138 salmon caught were fall yearlings. Six (12%) of the 50 salmon creel were fall yearlings. These results are different from our fall netting results in 2006, where 5 of 10 salmon caught (50%) were fall yearlings. In 2007 fall trapping, 4 of 11 salmon (36%) were fall yearlings. In 2007, the fall yearling fish were stocked by DEC personnel the same day the nets were set, but at least one mile away from the netting sites. Three of the salmon caught in 2007 were freshly stocked, had dispersed from the stocking sites and were caught within 48 hours. Due to warm autumn temperatures, stocking of the fall salmon was delayed until mid-November; however in future years, the stocking of the fall salmon and the assessment netting should not occur in the same week in order to allow the fish to disperse farther and acclimate to the lake.

Lake Trout

Lake trout catch rates were high in 2006 and there is some indication that average lake trout size was declining in recent years; however in 2006 and 2007, the average size lake trout caught increased. This could be due to increased harvest of legal fish – which is not indicated by diary data or by reduced growth rates due to large population size. Lake trout growth rates were studied in summer 2005 and will be again in 2008 by DEC to determine whether changes are needed in the size and bag limits to reduce numbers of fish. Juvenile lake trout recruitment appears to be satisfactory in both basins of the lake without the aid of stocking.

Diary Cooperator Program

Decreased participation in the angler diary cooperator program is of significant concern. The Department has been actively seeking new angler cooperators to increase the number of active participants to 75 or more. While the increased participation in 2006-2007 is wonderful, we still do not have enough active participants to be statistically confident in our results. If you know an angler that is interested in participating in the angler diary program please contact Emily Zollweg at (518) 623-1264.

Recommendations

1. Maintain the landlocked salmon stocking rate at 1.3 per acre (34,000 spring yearlings and 3,000 fall yearlings).
2. Actively seek new angler cooperators to increase the number of active participating angler diary cooperators to 75 or more.
3. Encourage angler cooperators to pay particular attention to which target species check boxes they check on the diary pages. If you are a cooperator that fishes for landlocked salmon you should check the landlocked salmon (LLS) check box even though you may occasionally catch a lake trout while fishing for salmon. If you are fishing for lake trout you should check the lake trout (LT) check box even though you may occasionally catch a landlocked salmon while fishing for lake trout.

Survey Plans for 2008

In July 2008, gill nets and electrofishing transects will be used to evaluate the warmwater fishery populations and to collect lake trout for food habits and growth analysis. Due to a busy sea lamprey control schedule, the fall spawning assessment is not planned for 2008.