

2020 Winter Angling Survey Report for Thumb Lake, Charlevoix County

Waterbody	Thumb Lake
Year	2020
County	Charlevoix County
Sites	"Thumb Lake"
Survey period	January 1 to March 22
Survey design	Roving (instantaneous)-roving
Count methods/modes	Roving (instantaneous)/open ice and shanty
Clerk time	1/2 time
Survey purpose	Characterize general effort and catch aspects of the fishery

Notes

This survey followed a roving (instantaneous)-roving design. Funding was provided by the Federal Aid to Sport Fish Restoration Project F-81, Study 230499. One clerk worked 1/2 time to collect angling survey data. Three weekdays and two weekend days were randomly selected for sampling during each week of the survey season. The time spent on Thumb Lake was split with Les Cheneaux Islands (*site 214*). No holidays were sampled. Clerk followed a randomized count and interview schedule. One of two shifts was selected each sample day. The entire water body was sampled each day. Starting location and direction of travel were randomized for both counting and interviewing. Roving (instantaneous) counts of open ice and shanty anglers were made once per day. Survey period for both counts and interviews was January 1 to March 22. Months were estimated separately. Estimates are available for open ice and shanty. "NAN" in a table means there was not enough information to make a calculation.

Table –Daylight hours used to estimate catch and effort each month of Thumb Lake creel survey from January 1 to March 22, 2020.

Year	Month	Daylight Hours
2020	January	12
2020	February	14
2020	March	14

Estimated harvest, catch per hour, and fishing pressure for Thumb Lake open ice angling. Two standard errors are given below the estimates.

Species	C/H	January	February	March	Season
HARVEST					
Yellow Perch	0.3277	623	33	50	705
	0.2995	581	67	109	595
Splake	0.0333	49	0	22	72
	0.0310	55	0	29	62
TOTAL HARVEST	0.3610	672	33	72	777
	0.3055	584	67	113	599
RELEASED					
Yellow Perch	1.9753	2,921	358	972	4,250
	1.7197	2,338	298	2,435	3,389
Bluegill	0.0919	198	0	0	198
	0.1402	294	0	0	294
TOTAL RELEASED	2.0671	3,118	358	972	4,448
	1.7382	2,356	298	2,435	3,402
TOTAL CATCH	2.4281	3,791	390	1,044	5,225
	1.8158	2,428	306	2,438	3,454
ANGLER HOURS		1,086	455	611	2,152
		621	160	393	752
ANGLER TRIPS		345	159	174	678
		229	70	130	272

Estimated harvest, catch per hour, and fishing pressure for Thumb Lake shanty angling. Two standard errors are given below the estimates.

Species	C/H	January	February	March	Season
HARVEST					
Yellow Perch	1.0858	1,975	2,101	1,097	5,173
	0.7446	1,531	2,464	1,136	3,115
Splake	0.0357	18	85	67	170
	0.0285	28	98	70	124
TOTAL HARVEST	1.1215	1,993	2,187	1,164	5,343
	0.7508	1,531	2,466	1,138	3,118
RELEASED					
Yellow Perch	2.4118	4,102	5,632	1,757	11,490
	1.3827	3,332	3,961	1,545	5,402
Brown Trout	0.0020	0	9	0	9
	0.0040	0	19	0	19
Splake	0.0016	8	0	0	8
	0.0033	15	0	0	15
TOTAL RELEASED	2.4153	4,109	5,641	1,757	11,508
	1.3834	3,332	3,961	1,545	5,402
TOTAL CATCH	3.5369	6,102	7,828	2,920	16,851
	1.7495	3,667	4,666	1,919	6,237
ANGLER HOURS		1,450	2,290	1,024	4,764
		900	1,121	615	1,563
ANGLER TRIPS		344	471	230	1,046
		228	248	144	366

Estimated harvest, catch per hour, and fishing pressure for Thumb Lake shanty and open ice combined. Two standard errors are given below the estimates.

Species	C/H	January	February	March	Season
HARVEST					
Yellow Perch	0.8500	2,598	2,134	1,147	5,878
	0.5057	1,638	2,465	1,141	3,172
Splake	0.0349	67	85	89	242
	0.0219	61	98	76	138
TOTAL HARVEST	0.8849	2,665	2,219	1,236	6,120
	0.5099	1,639	2,467	1,144	3,175
RELEASED					
Yellow Perch	2.2760	7,023	5,989	2,729	15,741
	1.0845	4,070	3,973	2,884	6,377
Bluegill	0.0286	198	0	0	198
	0.0431	294	0	0	294
Brown Trout	0.0014	0	9	0	9
	0.0027	0	19	0	19
Splake	0.0011	8	0	0	8
	0.0022	15	0	0	15
TOTAL RELEASED	2.3070	7,228	5,999	2,729	15,956
	1.0894	4,081	3,973	2,884	6,384
TOTAL CATCH	3.1919	9,893	8,218	3,964	22,075
	1.3053	4,397	4,676	3,102	7,129
ANGLER HOURS		2,536	2,745	1,635	6,916
		1,094	1,132	729	1,735
ANGLER TRIPS		689	630	405	1,724
		323	257	193	456