

Period: April 1, 2024-March 31, 2025 (Segment 36-2) Federal Project Number: F23AF00870 State Grant Number: R29G60F29RP36 Study 3 Job 1188

MINNESOTA DEPARTMENT OF NATURAL RESOURCES DIVISION OF FISH AND WILDLIFE SECTION OF FISHERIES

# COMPLETION REPORT LAKE SUPERIOR SUMMER CREEL SURVEY 2024

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#### Abstract

Anglers fished for 198,322 hours in the Minnesota waters of Lake Superior during the 2024 summer access-based creel survey and charter census. This was slightly above the 10-year average of 186,860 hours. Nearly all effort, 98%, was from a boat in the Minnesota waters of Lake Superior. The total effort is the sixth highest in the last 30 years. Just over 68% of the total effort occurred in the Lower Shore area from Duluth to Two Harbors.

Minnesota-based anglers on Lake Superior primarily target salmonines including Lake Trout (*Salvelinus namaycush*) of both the lean and siscowet strains, Coho Salmon (*Oncorhynchus kisutch*), Chinook Salmon (*O. tshawytscha*), and Steelhead Rainbow Trout (*O. mykiss*). Anglers caught 51,889 total salmonines, of which 42,303 were harvested. The combined salmonid catch rate was 0.2617 fish per hour (f/hr). Anglers harvested 81.5% of all salmonids caught.

Anglers caught 45,653 lean Lake Trout, 676 siscowet Lake Trout, harvested 37,405 leans, and 573 siscowets. Lean Lake Trout were caught at a rate 0.2302 f/hr and accounted for 88% of all salmonines caught. The catch rate for lean Lake Trout was the highest observed. The lean Lake Trout caught were 93% wild fish, the highest observed. Stocked fish were the most prevalent near Duluth where they comprised 16% of the catch. The average length of harvested lean Lake Trout was 22.5 inches.

Anglers also caught Coho Salmon, Chinook Salmon, Pink Salmon (*O. gorbuscha*), Steelhead Rainbow Trout, Brown Trout (*Salmo trutta*), Brook Trout (*Salvelinus fontinalis*), and Splake (*Salvelinus namaycush × Salvelinus fontinalis*). Anglers caught 2,354 Coho Salmon at a rate of 0.0119 f/h which was less than half of last year's catch. Anglers caught 633 Chinook Salmon, the second lowest in the last 30 years. Anglers caught 1,629 Pink Salmon this year. A combined total of 4,616 salmon were caught with 2,189 from the Lower Shore and 2,427 from the Upper Shore. Anglers also kept 143 Brown Trout, kept 2 Splake, released 450 Brook Trout, and released 4 stocked Steelhead Trout. A total of 351 unclipped Steelhead Rainbow Trout were caught by anglers and 36 of those were harvested illegally. They also caught 1,127 Walleye (*Sander vitreus*), 33 Lake Whitefish (*Coregonus clupeaformis*), 17 Northern Pike (*Esox lucius*), and 13 Cisco (*Coregonus artedi*).

A new question was added to the creel survey in 2024 asking boat anglers what the highest level of electronics used were. The options in order from least to most sophisticated were none, depth finder, flasher, sonar, sonar with GPS, side scan sonar, and live imaging. Of the 389 private sport boat interviews conducted 79% used sonar with GPS, 9% used sonar without GPS, and 5% used live imaging. The catch rate for lean Lake Trout using live imaging was 0.2427 f/h, slightly higher than the rate of 0.2260 f/h for all private sport anglers using all electronic types combined.

Fifty-three charter captains were licensed to fish in the Minnesota waters of Lake Superior in 2024. Five captains reported no trips, and 3 captains fished only in St. Louis River Estuary. Since 2018, charter results are reported as a separate angler type in the annual Lake Superior summer creel survey report.

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#### Introduction

Lake Superior and its tributaries contain habitats that support unique pelagic, benthic, and anadromous fisheries, contributing greatly to the diversity of angling opportunities in Minnesota. Several salmonines including Lake Trout, Steelhead Rainbow Trout, Brook Trout, Coho Salmon, Chinook Salmon, and Pink Salmon provide quality recreational fisheries along the North Shore of Lake Superior throughout the year.

During the first half of the 20th century, Lake Trout were the mainstay of the Lake Superior sport fishery and, along with Cisco supported an important commercial fishery. By the late 1940s the Lake Trout harvest began to decline due to overfishing (Hansen et al. 1995). During the 1950s the Sea Lamprey (*Petromyzon marinus*) became established in Lake Superior and preyed heavily on Lake Trout. Populations of Lake Trout declined precipitously, due to mortality from Sea Lamprey, and both the sport and commercial fisheries collapsed. By the early 1960s, effective control of Sea Lamprey had been achieved. Minnesota and other states and provinces began stocking to both rehabilitate the depleted Lake Trout stocks and to introduce new strains of salmon species to diversify the fishery. Efforts to follow the recovery plan (Hansen 1996) were successful, Minnesota suspended stocking of Lake Trout in 2016, and Lake Trout were declared officially recovered in 2024 (Lake Superior Committee 2024). The state of Minnesota has monitored the recreational fishery in the Minnesota waters of Lake Superior annually since 1969.

This report presents results from Minnesota's 2024 access-based Lake Superior summer creel survey and charter fishing census. Charter captains reported their entire year's effort and catch as required by law (State Statute 97C.311). Only Minnesota-based private sport fishing and charter fishing in the Minnesota waters of Lake Superior were included in this report. Some data was collected from anglers that fished the St. Louis River Estuary, but it is not presented in this report.

Lake Superior Management Plans (Schreiner et al. 1995; Schreiner et al. 2006; Goldsworthy et al. 2016) have suggested periodic diet sampling for salmonines to evaluate changes in the fish community and the impact of limited forage on the salmonine populations. Lake Trout, a primary predator species in Lake Superior, historically persisted on a forage base of Cisco and other coregonines. Establishment of Rainbow Smelt (*Osmerus mordax*) and overfishing of Cisco stocks led to the replacement of coregonines by Smelt as the primary forage of Lake Trout (Dryer et al. 1965). Conner et al. (1993) found that Smelt were the most important forage for various salmonines in Minnesota waters of Lake Superior. Smelt abundance declined in the early 1980s (Gorman 2007) and remains low. However, Lake Trout diets are still comprised primarily of Smelt in May (Blankenheim 2024), most likely due to their high concentrations in the warmer waters and nearshore spawning movement. Diet samples were collected in 2024 and were processed independently from this survey as a part of a different study.

#### Methods

This report of summer Lake Superior fishing is comprised of two primary components and a subcomponent of the charter fishery. The primary components include 1) a survey of private sport anglers, which is access-based and follows a stratified random statistical design and in 2024 was conducted from May 25 through October 6, and 2) a census of chartered anglers throughout the year. The subcomponent includes a survey of chartered trips to determine specific catch characteristics that are not reported in the charter census. The basic statistical method and formulas for the private sport angler survey are described by Bindman and Mach (1997), and more detail of the design of the Lake Superior summer creel survey is described by Halpern (1995a, b). The survey includes private sport boaters, charter captain's personal trips, and shore anglers. The charter census includes data that are supplied by charter captains in monthly fishing reports. These data are required of charter captains and include location and time of fishing, number of anglers and lines, number of each species that were kept or released, and the number of fish with fin clips that indicate stocking. Being a census, no observable measurement error exists with these data. However, reporting error does exist, is not readily calculated, is presumed to be unbiased, and is ignored in this report. In previous years, charter trips were included in the creel survey and may have increased variance estimates. Beginning in 2018, as a subcomponent to the charter census, charter trips are also surveyed to determine angler demographics and fish attributes such as length, weight, number of Lamprey wounds, and occurrence of fin clips. The survey and census components include only fishing in the Minnesota waters of Lake Superior (Figure 1) and excluded angling in the St Louis River Estuary and Wisconsin.

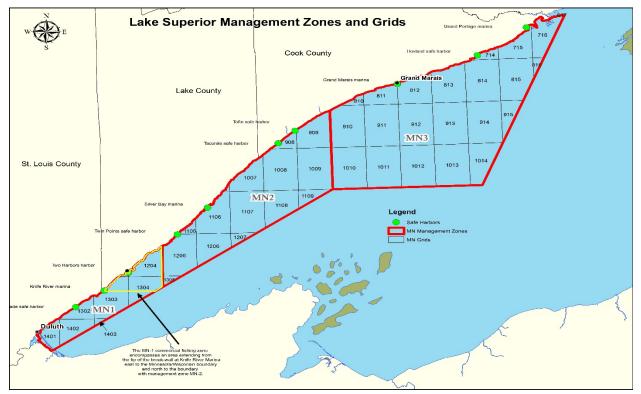


Figure 1. Map of statistical zones and safe harbors in the Minnesota waters of Lake Superior.

The 2024 survey began on May 25 and ended on October 6, when the Lake Trout season closed. The data collected during the few days in May and October were included in the June and September periods respectively. The creel clerks visited the stations and groups of stations (Clusters) that are described in Table 1. Clusters 1 and 2 are located closer to Duluth to the southwest and comprise the Lower Shore, whereas Clusters 3 and 4 are to the northeast and comprise the Upper Shore. Two clerks work on the creel survey, one in each Shore area. Halpern (2003) described the general mechanics of this creel survey in more detail. The sampling design was revised in 2017 when sampling effort was dropped from two locations. One very small public access was dropped at Tofte in the Taconite Harbor area due to low use and high travel times to the access. Also, Harbor Cove was dropped from the Harbor Cove/Lakehead Marina station due to the owner revoking permission to sample on the property. The counts from Taconite Harbor and Lakehead Marina, were adjusted based on previous estimates of effort at the dropped accesses. Taconite Harbor received 88% of the effort at Station 9 in 2014-2015 and Harbor Cove Marina received 50% of the effort at Station 2 from 2014 through 27 July 2017. Also in 2020, sampling effort was reduced but not eliminated at the Twin Points public access due to decreased fishing effort in recent years.

References to creel survey numbers for 2023 are from Beckman's 2024 report. Results from the creel survey and charter census are reported both separately and combined within tables in this report to assess total catch and effort trends. Figures generally include combined data, except for angler effort and for the number of captains and their number of trips.

Shore	Cluster	Station	Description
Lower	1-Duluth	1	Charter Dock
		2	Lakehead Boat Basin
		3	Rice's Point Landing
Lower	2-McQuade to Two Harbors	4	McQuade Public Access
		5	Knife River-Knife River Marina
		6	Two Harbors-Agate Bay Access
Upper	3-Twin Points to Tofte	7	Twin Points Access
		8	Silver Bay Access and Marina
		9	Taconite Harbor, Tofte
Upper	4-Grand Marais to Hovland	10	Grand Marais Access and Marina
		11	Devil Track and Brule Rivers, Hovland Access

Table 1. Creel survey clusters and stations for the 2024 Lake Superior summer creel survey.

#### **Results and Discussion**

#### **Fishing Effort**

Private sport fishing effort in the Minnesota waters of Lake Superior was estimated from 579 Lower Shore and 480 Upper Shore activity counts in 2024 (Table 2). Each clerk conducted counts on 97 days of the 135-day survey season. Private anglers fished for 141,058 hours (Figure 2), during 35,908 trips, which lasted 3.9 hours and contained 2.3 anglers on average. Charter anglers fished for 57,264 hours (Figure 2), during 2,097 trips, which lasted 5.3 hours and contained 5.1 anglers on average.

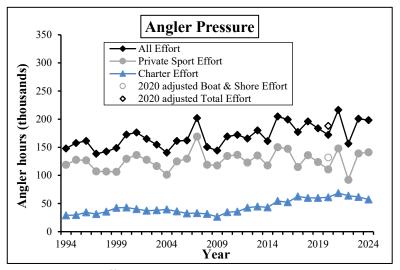


Figure 2. Angling effort in the Lake Superior summer creel survey, 1994-2024. The design of the summer Lake Superior creel survey was changed in 1994 (Halpern 1995a, b).

Overall angler effort was

very similar to 2023 and was the sixth highest observed since 1994 (Figure 2). Survey design changes in 1994 eliminated sampling locations where anglers caught few salmonines and effort has varied from 138,522 to 216,488 hours since then (Figure 2). The Lower Shore accounted for 62% of the private effort from boats, 31% of the effort from shore (Table 3), and 86% of the effort from charters in 2024 (Table 4). Overall, 68% of total fishing effort came from the Lower Shore.

Shore angling continues to comprise a small fraction of summer effort on Lake Superior. Shoreline anglers fished for just 4,147 hours, accounting for 2% of the total fishing effort this season.

Individual charter captains ran anywhere from 0 to 145 trips (Figure 3). Five captains reported no trips, and 3 others only ran trips in the St. Louis River Estuary. Nine captains conducted more than 100 trips.

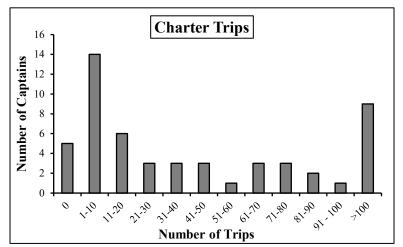


Figure 3. Number of trips by individual charter captains for the 2024 season.

## **Catch and Catch Rates**

#### All Salmonines

Salmonines include trout and salmon species. Private sport anglers caught 35,883 salmonines (Table 5) and charter anglers caught 16,012 salmonines (Table 6), for a total catch of 51,895 fish (Table 7). The total catch was very similar to 2023 and the third highest observed in the last 30 years (Figure 4). Anglers released 18% of the total salmonine catch.

Angler catch and harvest rates were calculated in fish per hour (f/hr). Private anglers caught 0.2544 and harvested 0.2000 f/hr (Table 8). Charter anglers caught

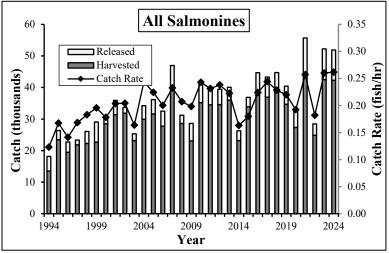


Figure 4. All Salmonines combined catch and catch rate in the Minnesota waters of Lake Superior during summer creel surveys from 1994-2024.

0.2796 and harvested 0.2461 f/hr (Table 9). Combined, anglers caught 0.2617 and harvested 0.2133 f/hr (Table 10) and these rates were very similar to 2023 (Figure 3). The combined catch rate was the highest recorded in the last 30 years (Figure 3). Charter anglers continue to catch salmonines at a higher rate than private anglers.

## Lean Lake Trout

Private sport anglers caught 31,873 and kept 25,421 lean Lake Trout (Table 5), whereas charter anglers caught 13,780 and kept 11,984 in 2024 (Table 6). Combined, anglers caught 45,653, the highest catch in the last 30 years (Figure 5). Anglers released 18% of the leans they caught, 8,248 fish, and harvested 37,405 fish, the highest ever observed. Lean Lake Trout accounted for 88% of all salmonines caught and harvested. Sixty-eight percent of all harvested leans were from the Lower Shore (Table 7). Overall, anglers caught 0.2302 f/hr and kept 0.1886 f/hr (Table 10). Among private parties fishing from a boat, 68% caught one or more, 48% caught two or more, and 33% caught at least three on a trip (Table 11). Success rates were much higher for charter anglers, 97% of parties caught at least one, 95% caught at least two, and 89% caught at least three lean Lake Trout on a trip (Table 12).

Lean Lake Trout lengths were similar between private anglers and charter anglers. The average harvested fish lengths were 22.6 and 22 inches respectively (Table 13 and 14). Over 90% of the fish harvested were 16.5-27.4 inches and the mean length and length distributions were comparable with fish harvested in 2023. Released fish were 21 inches for private sport anglers (Table 15) and 22.9 inches for charter anglers (Table 16). Private anglers kept

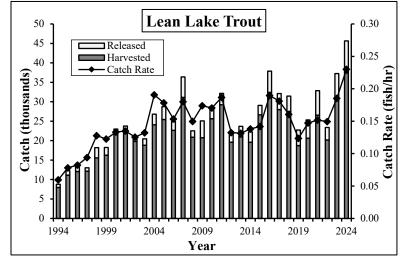


Figure 5. Lean Lake Trout catch and catch rate in the Minnesota waters Superior during summer creel surveys from 1994-2024.

fish that were 3.71 pounds on average (Table 17) and charter anglers kept fish that were 3.48 pounds on average, slightly heavier than 2023 (Table 18). Yield for lean Lake Trout was 94,334 pounds by private anglers (Table 19) and 41,764 pounds by charter anglers (Table 20). The total combined yield was 136,098 pounds and that is the highest yield observed during the Lake Superior summer creel survey by over 30,000 pounds (Table 21). The increased weight of lean Lake Trout and the historically high catch were both contributing factors.

Creel clerks checked 1,009 Lake Trout in 2024 and observed no fin clips on 93% of harvested fish, which indicates that they were wild and not stocked. Including fish measured by anglers, wild fish comprised 84% of the fish caught from the Lower Shore, and 99% from the Upper Shore, consistent with the trend the last few years (Figure 6). Minnesota stocked Lake Trout through 2015 in the Lower Shore area and through 2003 in the Upper Shore area. Wisconsin has stocked Lake Trout through 2024.

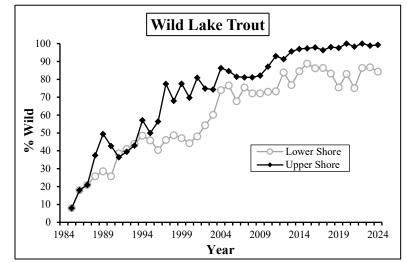


Figure 6. Percent of wild Lake Trout observed by creel clerks during Lake Superior summer creel surveys from 1984-2024.

All but 2 of the clipped fish had only adipose clips and were relatively small indicating they were most likely stocked by the Wisconsin DNR in the last 10 years.

#### **Siscowet**

Siscowet, a deep-water form of Lake Trout, have generally contributed little to the sport fishery, but catch had remained above 1,000 since 2015, until this year (Figure 7). Anglers caught a total of 676 siscowet in 2024, well below the previous 10-year average catch of 1,459 fish. Siscowet and lean Lake Trout can be difficult to tell apart. A new clerk who was inexperienced at telling them apart conducted the Lower Shore survey this year and he may be part of the reason for the reduced number of siscowet observed.

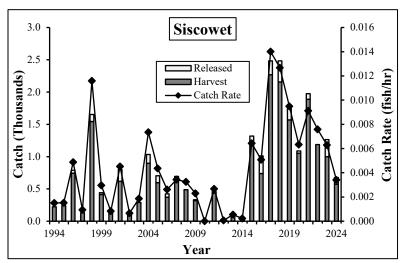


Figure 7. Siscowet Lake Trout catch and catch rate in the Minnesota waters of Lake Superior during summer creel surveys from 1994-2024.

#### Coho Salmon

Private anglers caught 1,187 and kept 1,156 Coho Salmon (Table 5), whereas charter anglers caught 1,167 and kept 1,161 fish in 2024 (Table 6). Combined, anglers caught 2,354 Coho Salmon and only released 37 fish (Figure 8). The Lake Superior Management Plan's target was an average annual catch of 3,000 Coho from 2016-2025. Despite being below that in 2024, the average was 5,409 fish annually during that period. Coho Salmon accounted for 4.5% of all salmonines caught and 5.5% of all salmonines harvested in 2024. Seventy percent of the fish

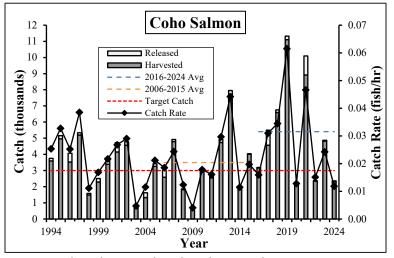


Figure 8. Coho Salmon catch and catch rate in the Minnesota waters of Lake Superior during summer creel surveys from 1994-2024. The Lake Superior Management plan Target catch (dotted red line) is displayed for reference.

were caught in the Lower Shore area (Table 7). The catch rate of private anglers was 0.0084 f/h (Table 8) and charter anglers caught 0.0204 f/h (Table 9). Among private sport parties, 4.8% caught one or more, 1.4% caught two or more, and 0.4% caught three fish on a trip (Table 11). Success rates were better for charter angling parties; 31.2% of parties caught one or more, 9.7% caught two or more fish, and 4.3% caught at least three fish (Table 12). Anglers kept Coho Salmon that were 19.8 inches long on average (Tables 13 and 14). The average weight of harvested fish was 2.46 pounds, down (Tables 20 and 21) from 2023 when they averaged 3.08

pounds. However, they were still well over the 10-year average of 2.05 pounds. The elevated weight of Coho Salmon observed for the last 2 years is likely a response to the large 2022 yearclass of Cisco available as forage. Combined, anglers harvested 5,492 pounds of Coho Salmon (Table 21). The Coho catch seems to follow a boom-and-bust cycle and this year was largely a bust (Figure 8). Coho Salmon were last stocked in 2006 by the Michigan DNR and last stocked in Minnesota waters in 1974. All Coho Salmon caught in Lake Superior are the result of natural reproduction.

## Chinook Salmon

Private anglers caught 409 and released 31 Chinook Salmon, whereas charter anglers caught 224 and kept all but 6 fish. Combined, anglers caught 633 fish, the second lowest observed in the last 30 years (Figure 9). This was well below the 2016 Lake Superior Management Plan target of 2,500 fish per year for 2016-2025. Chinook Salmon accounted for only 1.2% of all salmonines caught and 1.4% of all salmonines harvested. Eighty-four percent of fish were caught in Lower Shore waters (Table 7). Private sport anglers caught 0.0029 f/hr (Table

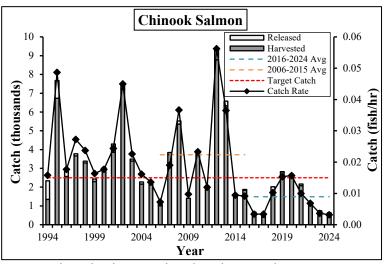


Figure 9. Chinook Salmon catch and catch rate in the Minnesota waters of Lake Superior during summer creel surveys from 1994-2024. The Lake Superior Management plan Target catch (dotted red line) is displayed for reference.

8) and charter anglers caught 0.0039 f/hr (Table 9), and combined they caught 0.0032 f/h (Table 10). Among private sport parties, 2.4% caught one or more and 0.4% caught two (Table 11). Success rates were higher for charter angling parties; 12.9% of parties caught one fish and no parties caught more than one in a single trip (Table 12). Anglers kept fish that were 25.9 inches long on average (Table 13 and 14). Although sample size was limited the average weight of Chinooks this year was 10.32 pounds, almost double the 10-year average of 5.60 pounds. This marks the second year in a row that fish have been well above the average weight observed over the past 10 years and, like Coho Salmon, was likely a response to the large amount of 2022 year-class Cisco available to feed on. Combined, anglers harvested 3,004 pounds of Chinook Salmon (Table 21). Creel clerks examined 14 fish for stocking clips and observed no clipped fish, indicating that Chinook Salmon stocking in other jurisdictions did not contribute directly to the fish caught in the Minnesota waters of Lake Superior.

#### Steelhead Rainbow Trout

Anglers caught 351 steelhead Rainbow Trout this year (Figure 10) and only 4 fish had a fin clip indicating stocking. Eightythree percent were caught in the Upper Shore (Table 7). The location of highest catches changes annually, indicating that steelhead movement patterns vary from year to year. Anglers kept 36 unclipped steelhead despite the ban on harvest of unclipped steelhead in the Minnesota waters of Lake Superior. There is often some incidental harvest that goes undetected as anglers sometimes misidentify smaller steelhead as

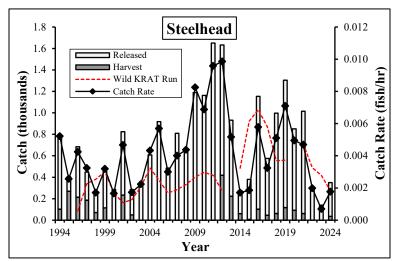


Figure 10. Steelhead Rainbow Trout catch and catch rate in the Minnesota waters of Lake Superior during summer creel surveys from 1994-2024. The wild Steelhead catch at the Knife River Adult Trap from 1996-2024 (dotted red line).

salmon. The total summer catch has ranged from 140 to 1,650 over the last 30 years. The total wild catch at the Knife River Adult Trap has ranged from 86 to 1,029 since 1996. This highlights the variability in catch due to environmental conditions and the importance of restricting harvest to avoid over exploitation of the fishery. No Knife River Trap data was available for 2013 and 2020 due to trap repairs and the Covid-19 pandemic respectively.

#### Pink Salmon

Minnesota-based anglers caught 1,629 Pink Salmon (Table 7). Over 99% were caught in Upper Shore waters. The overall catch rate was 0.0082 f/h (Figure 11). Pink Salmon catches fluctuate drastically from year to year and have been trending towards larger booms recently. Pink Salmon reproduce naturally in Lake Superior and the fluctuation in catch likely reflects the variability in reproductive success of Pink Salmon along the North Shore (Schreiner et al. 2006).

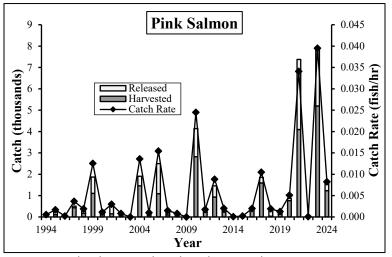


Figure 11. Pink Salmon catch and catch rate in the Minnesota waters Of Lake Superior during summer creel surveys from 1994-2024.

## **Other Species**

Anglers catch low numbers of several other fish species during the summer. Catch data for the infrequently caught salmonines were combined and reported as 599 "other salmonines" (Table 7). This included 143 harvested Brown Trout, 2 harvested Splake, 4 released clipped Steelhead, and 450 released Brook Trout. Anglers caught these other salmonines at a rate of 0.0030 f/h (Table 10). Walleye were the most often caught non-salmonine and of the 1,127 that were caught, 943 were harvested (Table 7). The total Walleye yield was 2,178 pounds (Table 21). Anglers also caught 33 Lake Whitefish, 17 Northern Pike, and 13 Cisco in Lake Superior.

# **Angler Demographics**

## <u>Residence</u>

Creel clerks asked anglers for the zip code of their primary residence, age range, and gender during each interview conducted to assess the demographics of North Shore summer anglers. Zip code data has been collected every year since 2012. Minnesota and Wisconsin accounted for 89.4% of all interviewed anglers in 2024 which is very similar to previous years (Figure 12). The anglers interviewed during the summer creel surveys primarily resided in the zip code districts near Lake Superior and the Twin Cities. However, anglers from all around Minnesota, Wisconsin, and the country continue to fish the Minnesota waters of Lake Superior each year illustrating the immense recreational and economic value of this unique fishery.

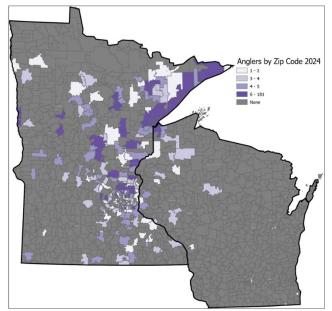


Figure 12. Zip codes of interviewed anglers residing in Minnesota and Wisconsin in 2024. N=1,563.

#### Age and Gender

Since 2012, anglers were asked to provide their age and gender. The distribution of ages in 2024 was very similar to the overall trend seen through the years (Figure 13). Individuals identifying as male continue to make up the majority of anglers interviewed. Of the 2,003 anglers that answered in 2024, 83% of them identified as male and 17% as female (Figure 14). The percentage of male and female anglers has been very similar since 2012.

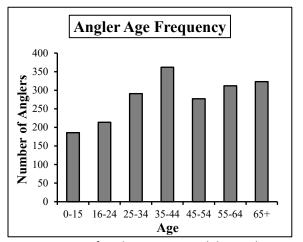


Figure 13. Age of anglers interviewed during the 2024 Lake Superior creel survey. N=1,965.

## Technology

There are various types of technology available to boat anglers. Each type of electronic offers different advantages and features. In the fall of 2023, the Minnesota DNR Creel Technical Committee asked that lake creel surveys add a standardize question about the electronics anglers utilized while fishing. This is part of an effort to monitor the impacts of improving technology on angler success. Of the 389 interviews conducted with private boat

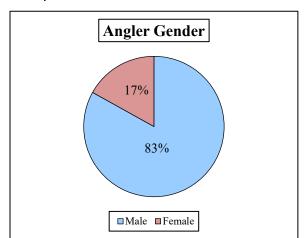


Figure 14. Gender of anglers interviewed during the 2024 Lake Superior summer creel survey. N=2,003.

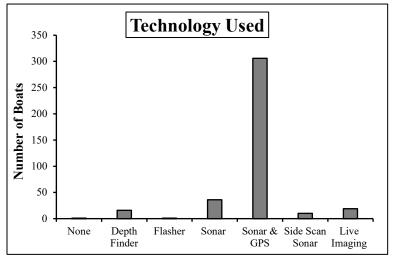


Figure 15. Technology used by private sport boat anglers in 2024. Equipment increases in sophistication from left to right. N=389.

anglers 79% used a sonar with GPS capabilities, 9% used sonar without GPS, and 5% used live imaging units (Figure 15). The catch rate for lean Lake Trout using live imaging was 0.2427 f/h, only slightly higher than the combined rate of 0.2260 f/h (Table 8). Just over 44% of the Lake Trout caught by private sport anglers using live scope were released. Studies suggest that Lake Trout hooking mortality can be high, especially during the summer months when water temperatures are higher (Sitar et al. 2017). How the use of live imaging to locate and potentially catch more fish impacts the fishery remains to be seen and must be monitored closely.

#### Summary

The Lake Superior creel survey continues to provide essential information on the fishery in the Minnesota waters of Lake Superior. This is vital to the future management of Lake Superior fish stocks and for coordinated management among Lake Superior fisheries management agencies especially with the recent advances in fishing technology. The summer of 2024 was a historic year for Lake Trout angling on Lake Superior with record catches observed. Most of the Lake Trout caught in the Minnesota waters of Lake Superior were wild fish, a testament to the success of recovery efforts and reinforcing the status of this fishery as officially recovered.

## Acknowledgements

Keith Reeves created the Access and Excel databases that make this report possible. Phil Kunze and Jackson Ratliff both spent their summers collecting and entering the data for this report. Andrew Williquette made the choropleth map for angler demographics. Josh Blankenheim created the district map for the Minnesota waters of Lake Superior. Cory Goldsworthy reviewed the manuscript.

Period: April 1, 2024-March 31, 2025 (Segment 36-2) Federal Project Number: F23AF00870 State Grant Number: R29G60F29RP36 Study 3 Job 1188

# MINNESOTA DEPARTMENT OF NATURAL RESOURCES DIVISION OF FISH AND WILDLIFE SECTION OF FISHERIES

# COMPLETION REPORT LAKE SUPERIOR SUMMER CREEL SURVEY 2024

by Nathan T. Beckman Lake Superior Fisheries Office

Approved:

Area Supervisor Date

Approved:

Regional Fisheries Approval Date

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						Days			Intervie	ws
District <sup>1</sup>	Cluster <sup>2</sup>	Day Туре	Days Visited	Activity Counts	Boat	Shore	Charter	Boat	Shore	Charter
MN-1	1	Weekday	23	138	12	8	15	5	0	26
		Weekend	19	114	14	8	16	15	0	32
		Total	42	252	26	16	31	20	0	58
MN-1	2	Weekday	30	177	21	10	5	59	14	0
		Weekend	25	150	27	13	0	125	18	5
		Total	55	327	48	23	5	184	32	5
MN-2	3	Weekday	27	135	20	3	4	50	5	4
		Weekend	22	110	20	3	3	53	5	3
		Total	49	245	40	6	7	103	10	7
MN-3	4	Weekday	26	125	18	18	14	89	42	18
		Weekend	22	110	18	20	5	120	41	5
		Total	48	235	36	38	19	209	83	23
Lower	1&2	Weekday	53	315	33	18	20	64	14	26
		Weekend	44	264	41	21	16	140	18	37
		Total	97	579	74	39	36	204	32	63
Upper	3&4	Weekday	53	260	38	21	18	139	47	22
		Weekend	44	220	38	23	8	173	46	8
		Total	97	480	76	44	26	312	93	30
Total	All	Weekday	106	575	71	39	38	203	61	48
		Weekend	88	484	79	44	24	313	64	45
		Total	194	1059	150	83	62	516	125	93

Table 2. Frequency of clerk visits, number of activity counts, and interviews by cluster, day type, and angler type during the 2024 Lake Superior summer creel survey.

<sup>1</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>2</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

					Воа	t				Shor	e <sup>3</sup>	
District <sup>1</sup>	Cluster <sup>2</sup>	Station	June	July	Aug	Sept	Summer	June	July	Aug	Sept	Summer
MN-1	1	1, 2, 3	9.9	7.7	8.3	3.9	7.5	0.0	0.0	0.0	0.0	0.0
		1	4.9	1.4	1.3	1.3	2.1	0	0	0	0	0
		2	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0
		3	5.0	6.3	7.0	2.6	5.4	0	0	0	0	0
MN-1	2	4,5,6	70.8	53.7	40.0	57.3	54.0	45.3	39.2	18.2	30.0	31.2
		4	36.8	19.3	15.0	16.8	21.2	8.5	4.8	0	7.4	5.2
		5	28.6	20.8	9.9	16.2	18.2	0	0	0	0	0
		6	5.4	13.5	15.1	24.4	14.7	36.9	34.3	18.2	22.6	26.0
MN-2	3	7,8,9	10.4	21.3	27.4	26.3	21.9	0.0	1.5	30.6	0.0	7.4
		7	1.2	4.1	4.1	2.6	3.2	0	0	26.4	0	6.1
		8	6.8	14.7	15.9	15.7	13.6	0	0	0	0	0
		9	2.4	2.5	7.4	8.0	5.2	0.0	1.5	4.2	0	1.3
MN-3	4	10,11	8.9	17.3	24.3	12.5	16.5	54.7	59.4	51.1	70.0	61.3
		10	5.1	15.3	19.2	10.0	13.1	26.1	52.7	42.3	18.4	32.6
		11	3.8	2.0	5.1	2.4	3.4	29	6.7	8.8	51.6	28.8
Lower	1&2	1-6	80.7	61.4	48.3	61.2	61.5	45.3	39.2	18.2	30.0	31.2
Upper	3&4	7-11	19.3	38.6	51.7	38.8	38.5	54.7	60.9	81.7	70.0	68.8

Table 3. Monthly distribution of fishing effort for private sport boat and shore anglers by cluster, station, and month as a percentage of the angler hours during the 2024 Lake Superior summer creel survey.

<sup>1</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>2</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland. <sup>3</sup> All shore fishing in Cluster 1 occurs in the St. Louis Estuary, not in Lake Superior, and is not included.

				Charter						All		
District <sup>1</sup>	Cluster <sup>2</sup>	Station	June	July	Aug	Sept	Summer	June	July	Aug	Sept	Summer
MN-1	1	1,2,3	88.3	79.5	81.1	83.9	83.5	39.6	28.3	26.8	22.2	29.3
		1	62.0	58.8	50.9	58.2	57.7	26.6	18.0	14.0	14.3	18.1
		2	26.3	20.7	30.2	25.8	25.7	10.0	6.0	7.7	5.9	7.4
		3	0.0	0.0	0	0	0.0	3.0	4.4	5.1	1.9	3.7
MN-1	2	4,5,6	1.4	4.4	3.3	2.4	2.8	44.1	39.2	30.2	43.5	38.7
		4	0.2	0.0	0	0.0	0.1	22.6	13.5	11.0	12.5	14.8
		5	0.0	3.9	1.7	0.3	1.5	17.4	15.6	7.6	11.9	13.0
		6	1.2	0.4	1.3	2.1	1.2	4.1	10.1	11.6	19.2	11.0
MN-2	3	7,8,9	6.4	13.2	10.9	8.5	9.7	8.8	18.6	23.2	21.1	18.1
		7	0.3	0	0	0.0	0.1	0.9	2.9	3.4	1.9	2.3
		8	3.0	7.9	5.5	4.4	5.1	5.3	12.5	13.0	12.4	10.9
		9	3.1	5.2	5.4	4.1	4.4	2.6	3.2	6.8	6.8	4.9
MN-3	4	10,11	3.9	2.9	4.6	5.2	4.1	7.5	13.9	19.7	13.2	13.9
		10	3.9	2.9	4.6	5.1	4.0	4.8	12.4	15.9	9.2	10.9
		11	0	0	0	0.2	0	2.6	1.5	3.8	4.0	3.0
Lower	1&2	1-6	89.7	83.9	84.4	86.3	86.3	83.7	67.5	57.0	65.7	68.1
Upper	3&4	7-11	10.3	16.1	15.5	13.7	13.7	16.3	32.5	42.9	34.3	31.9

Table 4. Monthly distribution of fishing effort for charter anglers and for all anglers by cluster, station and month as a percentage of angler hours during the 2024 Lake Superior summer creel survey.

<sup>1</sup>Great Lakes Fishery Commission Statistical Districts.

<sup>2</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

istrict <sup>1</sup>	Cluster <sup>2</sup>	Fate	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Other <sup>3</sup> Salmonines	Total Salmonines	Walley
MN-1	1	Kept	1,003	31	60	0	0	0	0	1,094	153
	-	hept	(737)	(42)	(39)	(0)	(0)	(0)	(0)	(739)	(126)
		Released	120	0	31	0	0	0	0	151	0
			(122)	(0)	(42)	(0)	(0)	(0)	(0)	(129)	(0)
		Total	1,123	31	91	Ó	0 0	0 0	0	1,245	153
			(747)	(42)	(57)	(0)	(0)	(0)	(0)	(750)	(126)
MN-1	2	Kept	15,200	451	242	0	59	0	76	16,028	61
			(5,236)	(381)	(201)	(0)	(61)	(0)	(82)	(5,255)	(89)
		Released	2,307	31	0	0	0	0	0	2,338	0
			(1,472)	(44)	(0)	(0)	(0)	(0)	(0)	(1,473)	(0)
		Total	17,507	482	242	0	59	0	76	18,366	61
			(5,439)	(384)	(201)	(0)	(61)	(0)	(82)	(5,458)	(89)
MN-2	3	Kept	4,907	622	0	36	36	651	33	6,285	0
			(2,122)	(599)	(0)	(40)	(40)	(435)	(53)	(2,249)	(0)
		Released	2,165	0	0	95	0	36	0	2,296	0
			(1,218)	(0)	(0)	(87)	(0)	(56)	(0)	(1,222)	(0)
		Total	7,072	622	0	131	36	687	33	8,581	0
			(2,447)	(599)	(0)	(96)	(40)	(439)	(53)	(2,560)	(0)
MN-3	4	Kept	4,311	52	76	0	Û Û	365	0 0	4,804	0
			(1,798)	(60)	(65)	(0)	0	(429)	(0)	(1,851)	(0)
		Released	1,860	0	0	118	103	357	449	2,887	0
			(896)	(0)	(0)	(80)	(105)	(338)	(411)	(1,050)	(0)
		Total	6,171	52	76	118	103	722	449	7,691	0
			(2,009)	(60)	(65)	(80)	(105)	(546)	(411)	(2,128)	(0)
Lower	1&2	Kept	16,203	482	302	0	59	0	76	17,122	214
		-1	(5,288)	(383)	(205)	(0)	(61)	(0)	(82)	(5,307)	(154
		Released	2,427	31	31	0	0	0	0	2,489	0
			(1,477)	(44)	(42)	(0)	(0)	(0)	(0)	(1,479)	(0)
		Total	18,630	513	333	0	59	0	76	19,611	214
			(5,490)	(386)	(209)	(0)	(61)	(0)	(82)	(5,509)	(154)
Upper	3&4	Kept	9,218	674	76	36	36	1,016	33	11,089	0
oppe.		nept	(2,781)	(602)	(65)	(40)	(40)	(611)	(53)	(2,913)	(0)
		Released	4,025	0	0	213	103	393	449	5,183	0
			(1,512)	(0)	(0)	(118)	(105)	(343)	(411)	(1,611)	(0)
		Total	13,243	674	76	249	139	1,409	482	16,272	0
			(3,166)	(602)	(65)	(125)	(112)	(700)	(414)	(3,329)	(0)
Total	All	Kept	25,421	1,156	378	36	95	1,016	109	28,211	214
	7.01	nept	(5,974)	(714)	(215)	(40)	(73)	(611)	(98)	(6,054)	(154
		Released	6,452	31	31	213	103	393	449	7,672	0
			(2,114)	(44)	(42)	(118)	(105)	(343)	(411)	(2,187)	(0)
		Total	31,873	1,187	409	249	198	1,409	558	35,883	214
		iotai	51,075	1,107		L 73	100	±, 100	550	55,005	~

Table 5. Catch by species, cluster, and shore area for all private sport anglers during the 2024 Lake Superior summer creel survey. Standard error is in parenthesis.

<sup>1</sup> Great Lakes Fishery Commission Statistical Districts. <sup>2</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

<sup>3</sup> 109 harvested Brown Trout and 449 released Brook Trout.

District <sup>1</sup>	Cluster <sup>2</sup>	Fate	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Other <sup>3</sup> Salmonines	Total Salmonines	Walleye
MN-1	1	Kept	8,863	1,124	190	0	428	8	35	10,648	728
		Released	290	6	4	59	0	0	4	363	184
		Total	9,153	1,130	194	59	428	8	39	11,011	912
MN-1	2	Kept	537	9	2	0	7	0	0	555	1
		Released	752	0	0	2	0	0	0	754	0
		Total	1,289	9	2	2	7	0	0	1,309	1
MN-2	3	Kept	1,698	28	13	0	33	158	1	1,931	0
		Released	434	0	1	24	0	3	0	462	0
		Total	2,132	28	14	24	33	161	1	2,393	0
MN-3	4	Kept	886	0	13	0	10	51	0	960	0
		Released	320	0	1	17	0	0	1	339	0
		Total	1,206	0	14	17	10	51	1	1,299	0
Lower	1&2	Kept	9,400	1,133	192	0	435	8	35	11,203	729
		Released	1,042	6	4	61	0	0	4	1,117	184
		Total	10,442	1,139	196	61	435	8	39	12,320	913
Upper	3&4	Kept	2,584	28	26	0	43	209	1	2,891	0
		Released	754	0	2	41	0	3	1	801	0
		Total	3,338	28	28	41	43	212	2	3,692	0
Total	All	Kept	11,984	1,161	218	0	478	217	36	14,094	729
		Released	1,796	6	6	102	0	3	5	1,918	184
		Total	13,780	1,167	224	102	478	220	41	16,012	913

Table 6. Catch by species, cluster, and shore area for chartered anglers during the 2024 Lake Superior summer creel survey. Standard error is 0 for all values.

<sup>1</sup>Great Lakes Fishery Commission Statistical Districts.

<sup>2</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

<sup>3</sup> 34 harvested Brown Trout, 2 harvested Splake, 4 released clipped Steelhead, and 1 released Brook Trout.

District <sup>1</sup>	Cluster <sup>2</sup>	Fate	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink	Other <sup>3</sup> Salmonines	Total Salmonines	Walleye
MN-1	1	Kept	9,866	1,155	250	0	428	8	35	11,742	881
			(737)	(42)	(39)	(0)	(0)	(0)	(0)	(739)	(126)
		Released	410	6	35	59	0	0	4	514	184
			(122)	(0)	(42)	(0)	(0)	(0)	(0)	(129)	(0)
		Total	10,276	1,161	285	59	428	8	39	12,256	1,065
			(747)	(42)	(57)	(0)	(0)	(0)	(0)	(750)	(126)
MN-1	2	Kept	15,737	460	244	0	66	0	76	16,583	62
			(5 <i>,</i> 236)	(381)	(201)	(0)	(61)	(0)	(82)	(5,255)	(89)
		Released	3,059	31	0	2	0	0	0	3,092	0
			(1,472)	(44)	(0)	(0)	(0)	(0)	(0)	(1,473)	(0)
		Total	18,796	491	244	2	66	0	76	19,675	62
			(5,439)	(384)	(201)	(0)	(61)	(0)	(82)	(5,458)	(89)
MN-2	3	Kept	6,605	650	13	36	69	809	34	8,216	0
			(2,122)	(599)	(0)	(40)	(40)	(435)	(53)	(2,249)	(0)
		Released	2,599	0	1	119	0	39	0	2,758	0
			(1,218)	(0)	(0)	(87)	(0)	(56)	(0)	(1,222)	(0)
		Total	9,204	650	14	155	69	848	34	10,974	0
			(2,447)	(599)	(0)	(96)	(40)	(439)	(53)	(2,560)	(0)
MN-3	4	Kept	5,197	52	89	0	10	416	0	5,764	0
			(1,798)	(60)	(65)	(0)	(0)	(429)	(0)	(1,851)	(0)
		Released	2,180	0	1	135	103	357	450	3,226	0
			(896)	(0)	(0)	(80)	(105)	(338)	(411)	(1,050)	(0)
		Total	7,377	52	90	135	113	773	450	8,990	0
			(2,009)	(60)	(65)	(80)	(105)	(546)	(411)	(2,128)	(0)
Lower	1&2	Kept	25,603	1,615	494	0	494	8	111	28,325	943
			(5 <i>,</i> 288)	(383)	(205)	(0)	(61)	(0)	(82)	(5,307)	(154)
		Released	3,469	37	35	61	0	0	4	3,606	184
			(1,477)	(44)	(42)	(0)	(0)	(0)	(0)	(1,479)	(0)
		Total	29,072	1,652	529	61	494	8	115	31,931	1,127
			(5,490)	(386)	(209)	(0)	(61)	(0)	(82)	(5 <i>,</i> 509)	(154)
Upper	3&4	Kept	11,802	702	102	36	79	1,225	34	13,980	0
			(2,781)	(602)	(65)	(40)	(40)	(611)	(53)	(2,913)	(0)
		Released	4,779	0	2	254	103	396	450	5,984	0
			(1,512)	(0)	(0)	(118)	(105)	(343)	(411)	(1,611)	(0)
		Total	16,581	702	104	290	182	1,621	484	19,964	0
			(3,166)	(602)	(65)	(125)	(112)	(700)	(414)	(3,329)	(0)
Total	All	Kept	37,405	2,317	596	36	573	1,233	145	42,305	943
			(5,974)	(714)	(215)	(40)	(73)	(611)	(98)	(6,054)	(154)
		Released	8,248	37	37	315	103	396	454	9,590	184
			(2,114)	(44)	(42)	(118)	(105)	(343)	(411)	(2,187)	(0)
		Total	45,653	2,354	633	351	676	1,629	599	51,895	1,127
			(6,274)	(715)	(219)	(96)	(74)	(614)	(100)	(6,350)	(154)

Table 7. Catch by species, cluster, and shore area for all anglers during the 2024 Lake Superior summer creel survey. Standard error is in parenthesis.

<sup>1</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>2</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

<sup>3</sup> 143 harvested Brown Trout, 2 harvested Splake, 4 released clipped Steelhead, and 450 released Brook Trout.

District <sup>1</sup>	Cluster <sup>2</sup>	Creel surve Fate	Lake	Coho	Chinook	Steelhead	Siscowet	Pink	Other <sup>3</sup>	Total	Walleye
District	Cluster	Fale	Trout	Salmon	Salmon	Steemeau	Siscower	Salmon	Salmonines	Salmonines	walleye
MN-1	1	Kept	0.0980	0.0030	0.0059	0.0000	0.0000	0.0000	0.0000	0.1069	0.0149
			(0.0737)	(0.0042)	(0.0039)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0743)	(0.0125)
		Released	0.0117	0.0000	0.0030	0.0000	0.0000	0.0000	0.0000	0.0147	0.0000
			(0.0121)	(0.0000)	(0.0042)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0129)	(0.0000)
		Total	0.1097	0.0030	0.0089	0.0000	0.0000	0.0000	0.0000	0.1216	0.0149
			(0.0747)	(0.0042)	(0.0057)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0754)	(0.0125)
MN-1	2	Kept	0.2014	0.0060	0.0032	0.0000	0.0008	0.0000	0.0010	0.2124	0.0008
			(0.0720)	(0.0051)	(0.0027)	(0.0000)	(0.0008)	(0.0000)	(0.0011)	(0.0726)	(0.0012)
		Released	0.0306	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0310	0.0000
			(0.0197)	(0.0006)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0197)	(0.0000)
		Total	0.2320	0.0064	0.0032	0.0000	0.0008	0.0000	0.0010	0.2434	0.0008
			(0.0746)	(0.0051)	(0.0027)	(0.0000)	(0.0008)	(0.0000)	(0.0011)	(0.0752)	(0.0012)
MN-2	3	Kept	0.1622	0.0206	0.0000	0.0012	0.0012	0.0215	0.0011	0.2078	0.0000
			(0.0729)	(0.0200)	(0.0000)	(0.0013)	(0.0013)	(0.0146)	(0.0018)	(0.0785)	(0.0000)
		Released	0.0716	0.0000	0.0000	0.0031	0.0000	0.0012	0.0000	0.0759	0.0000
			(0.0412)	(0.0000)	(0.0000)	(0.0029)	(0.0000)	(0.0019)	(0.0000)	(0.0414)	(0.0000)
		Total	0.2338	0.0206	0.0000	0.0043	0.0012	0.0227	0.0011	0.2837	0.0000
			(0.0837)	(0.0200)	(0.0000)	(0.0032)	(0.0013)	(0.0147)	(0.0018)	(0.0887)	(0.0000)
MN-3	4	Kept	0.1717	0.0021	0.0030	0.0000	0.0000	0.0145	0.0000	0.1913	0.0000
			(0.0738)	(0.0024)	(0.0026)	(0.0000)	(0.0000)	(0.0172)	(0.0000)	(0.0763)	(0.0000)
		Released	0.0741	0.0000	0.0000	0.0047	0.0041	0.0142	0.0179	0.1150	0.0000
			(0.0365)	(0.0000)	(0.0000)	(0.0032)	(0.0042)	(0.0135)	(0.0165)	(0.0435)	(0.0000)
		Total	0.2458	0.0021	0.0030	0.0047	0.0041	0.0288	0.0179	0.3063	0.0000
			(0.0823)	(0.0024)	(0.0026)	(0.0032)	(0.0042)	(0.0219)	(0.0165)	(0.0878)	(0.0000)
Lower	1&2	Kept	0.1891	0.0056	0.0035	0.0000	0.0007	0.0000	0.0009	0.1998	0.0025
			(0.0639)	(0.0045)	(0.0024)	(0.0000)	(0.0007)	(0.0000)	(0.0010)	(0.0640)	(0.0018)
		Released	0.0283	0.0004	0.0004	0.0000	0.0000	0.0000	0.0000	0.0290	0.0000
			(0.0174)	(0.0005)	(0.0005)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0173)	(0.0000)
		Total	0.2174	0.0060	0.0039	0.0000	0.0007	0.0000	0.0009	0.2288	0.0025
			(0.0662)	(0.0045)	(0.0025)	(0.0000)	(0.0007)	(0.0000)	(0.0010)	(0.0663)	(0.0018)
Upper	3&4	Kept	0.1665	0.0122	0.0014	0.0007	0.0007	0.0184	0.0006	0.2003	0.0000
			(0.0521)	(0.0109)	(0.0012)	(0.0007)	(0.0007)	(0.0111)	(0.0010)	(0.0548)	(0.0000)
		Released	0.0727	0.0000	0.0000	0.0038	0.0019	0.0071	0.0081	0.0936	0.0000
			(0.0280)	(0.0000)	(0.0000)	(0.0022)	(0.0019)	(0.0062)	(0.0075)	(0.0300)	(0.0000)
		Total	0.2392	0.0122	0.0014	0.0045	0.0025	0.0255	0.0087	0.2940	0.0000
			(0.0591)	(0.0109)	(0.0012)	(0.0023)	(0.0020)	(0.0127)	(0.0076)	(0.0625)	(0.0000)
Total	All	Kept	0.1802	0.0082	0.0027	0.0003	0.0007	0.0072	0.0008	0.2000	0.0015
			(0.0438)	(0.0051)	(0.0015)	(0.0003)	(0.0005)	(0.0044)	(0.0007)	(0.0447)	(0.0011)
		Released	0.0457	0.0002	0.0002	0.0015	0.0007	0.0028	0.0032	0.0544	0.0000
		-	(0.0152)	(0.0003)	(0.0003)	(0.0008)	(0.0007)	(0.0024)	(0.0029)	(0.0159)	(0.0000)
		Total	0.2260	0.0084	0.0029	0.0018	0.0014	0.0100	0.0040	0.2544	0.0015
			(0.0464)	(0.0051)	(0.0015)	(0.0009)	(0.0009)	(0.0050)	(0.0030)	(0.0474)	(0.0011)
			/	/	, /	/	,/	/	,,	· · ·	/

Table 8. Catch rate (fish/hr) by species, cluster, and shore area for private sport boat and shore anglers during the 2024 Lake Superior summer creel survey. Standard error is in parenthesis.

<sup>1</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>2</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

<sup>3</sup> 109 harvested Brown Trout and 449 released Brook Trout.

District <sup>1</sup>	Cluster <sup>2</sup>	Fate	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Other <sup>3</sup> Salmonines	Total Salmonines	Walleye
MN-1	1	Kept	0.1855	0.0235	0.0040	0.0000	0.0090	0.0002	0.0007	0.2228	0.0152
		Released	0.0061	0.0001	0.0001	0.0012	0.0000	0.0000	0.0001	0.0076	0.0039
		Total	0.1915	0.0236	0.0041	0.0012	0.0090	0.0002	0.0008	0.2304	0.0191
MN-1	2	Kept	0.3319	0.0056	0.0012	0.0000	0.0043	0.0000	0.0000	0.3430	0.0006
		Released	0.4648	0.0000	0.0000	0.0012	0.0000	0.0000	0.0000	0.4660	0.0000
		Total	0.7967	0.0056	0.0012	0.0012	0.0043	0.0000	0.0000	0.8090	0.0006
MN-2	3	Kept	0.3066	0.0051	0.0023	0.0000	0.0060	0.0285	0.0002	0.3486	0.0000
		Released	0.0784	0.0000	0.0002	0.0043	0.0000	0.0005	0.0000	0.0834	0.0000
		Total	0.3849	0.0051	0.0025	0.0043	0.0060	0.0291	0.0002	0.4320	0.0000
MN-3	4	Kept	0.3819	0.0000	0.0056	0.0000	0.0043	0.0220	0.0000	0.4138	0.0000
		Released	0.1379	0.0000	0.0004	0.0073	0.0000	0.0000	0.0004	0.1461	0.0000
		Total	0.5198	0.0000	0.0060	0.0073	0.0043	0.0220	0.0004	0.5599	0.0000
Lower	1&2	Kept	0.1903	0.0229	0.0039	0.0000	0.0088	0.0002	0.0007	0.2268	0.0148
		Released	0.0211	0.0001	0.0001	0.0012	0.0000	0.0000	0.0001	0.0226	0.0037
		Total	0.2114	0.0231	0.0040	0.0012	0.0088	0.0002	0.0008	0.2494	0.0185
Upper	3&4	Kept	0.3288	0.0036	0.0033	0.0000	0.0055	0.0266	0.0001	0.3679	0.0000
		Released	0.0959	0.0000	0.0003	0.0052	0.0000	0.0004	0.0001	0.1019	0.0000
		Total	0.4247	0.0036	0.0036	0.0052	0.0055	0.0270	0.0003	0.4698	0.0000
Total	All	Kept	0.2093	0.0203	0.0038	0.0000	0.0083	0.0038	0.0006	0.2461	0.0127
		Released	0.0314	0.0001	0.0001	0.0018	0.0000	0.0001	0.0001	0.0335	0.0032
		Total	0.2406	0.0204	0.0039	0.0018	0.0083	0.0038	0.0007	0.2796	0.0159

Table 9. Catch rate (fish/hr) by species, cluster, and shore area for charter anglers during the 2024 Lake Superior summer creel survey. Standard error is 0 for all values.

<sup>1</sup>Great Lakes Fishery Commission Statistical Districts.

<sup>2</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

<sup>3</sup> 34 harvested Brown Trout, 2 harvested Splake, 4 released clipped Steelhead, and 1 released Brook Trout.

District <sup>1</sup>	Cluster <sup>2</sup>	Fate	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Other <sup>3</sup> Salmonines	Total Salmonines	Walleye
MN-1	1	Kept	0.1700	0.0199	0.0043	0.0000	0.0074	0.0001	0.0006	0.2024	0.0152
			(0.0737)	(0.0042)	(0.0039)	0.0000	0.0000	0.0000	0.0000	(0.0743)	(0.012
		Released	0.0071	0.0001	0.0006	0.0010	0.0000	0.0000	0.0001	0.0089	0.003
		neicubeu	(0.0121)	0.0000	(0.0042)	0.0000	0.0000	0.0000	0.0000	(0.0129)	0.000
		Total	0.1771	0.0200	0.0049	0.0010	0.0074	0.0001	0.0007	0.2112	0.018
			(0.0747)	(0.0042)	(0.0057)	0.0000	0.0000	0.0000	0.0000	(0.0754)	(0.012
MN-1	2	Kept	0.2042	0.0060	0.0032	0.0000	0.0009	0.0000	0.0010	0.2151	0.000
			(0.0720)	(0.0051)	(0.0027)	0.0000	(0.0008)	0.0000	(0.0011)	(0.0726)	(0.001
		Released	0.0397	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0401	0.000
			(0.0197)	(0.0006)	0.0000	0.0000	0.0000	0.0000	0.0000	(0.0197)	0.000
		Total	0.2438	0.0064	0.0032	0.0000	0.0009	0.0000	0.0010	0.2552	0.000
			(0.0746)	(0.0051)	(0.0027)	0.0000	(0.0008)	0.0000	(0.0011)	(0.0752)	(0.001
MN-2	3	Kept	0.1846	0.0182	0.0004	0.0010	0.0019	0.0226	0.0010	0.2296	0.000
		-1	(0.0729)	(0.0200)	0.0000	(0.0013)	(0.0013)	(0.0146)	(0.0018)	(0.0785)	0.000
		Released	0.0726	0.0000	0.0000	0.0033	0.0000	0.0011	0.0000	0.0771	0.000
			(0.0412)	0.0000	0.0000	(0.0029)	0.0000	(0.0019)	0.0000	(0.0414)	0.000
		Total	0.2572	0.0182	0.0004	0.0043	0.0019	0.0237	0.0010	0.3067	0.000
			(0.0837)	(0.0200)	0.0000	(0.0032)	(0.0013)	(0.0147)	(0.0018)	(0.0887)	0.000
MN-3	4	Kept	0.2070	0.0021	0.0035	0.0000	0.0004	0.0166	0.0000	0.2296	0.000
			(0.0738)	(0.0024)	(0.0026)	0.0000	0.0000	(0.0172)	0.0000	(0.0763)	0.000
		Released	0.0868	0.0000	0.0000	0.0054	0.0041	0.0142	0.0179	0.1285	0.000
			(0.0365)	0.0000	0.0000	(0.0032)	(0.0042)	(0.0135)	(0.0165)	(0.0435)	0.000
		Total	0.2938	0.0021	0.0036	0.0054	0.0045	0.0308	0.0179	0.3580	0.000
			(0.0823)	(0.0024)	(0.0026)	(0.0032)	(0.0042)	(0.0219)	(0.0165)	(0.0878)	0.000
Lower	1&2	Kept	0.1895	0.0120	0.0037	0.0000	0.0037	0.0001	0.0008	0.2096	0.007
			(0.0639)	(0.0045)	(0.0024)	0.0000	(0.0007)	0.0000	(0.0010)	(0.0640)	(0.001
		Released	0.0257	0.0003	0.0003	0.0005	0.0000	0.0000	0.0000	0.0267	0.001
			(0.0174)	(0.0005)	(0.0005)	0.0000	0.0000	0.0000	0.0000	(0.0173)	0.000
		Total	0.2152	0.0122	0.0039	0.0005	0.0037	0.0001	0.0009	0.2363	0.008
			(0.0662)	(0.0045)	(0.0025)	0.0000	(0.0007)	0.0000	(0.0012)	(0.0548)	(0.001
Upper	3&4	Kept	0.1867	0.0111	0.0016	0.0006	0.0012	0.0194	0.0005	0.2212	0.000
••			(0.0521)	(0.0109)	(0.0012)	(0.0007)	(0.0007)	(0.0111)	(0.0010)	(0.0548)	0.000
		Released	0.0756	0.0000	0.0000	0.0040	0.0016	0.0063	0.0071	0.0947	0.000
			(0.0280)	0.0000	0.0000	(0.0022)	(0.0019)	(0.0062)	(0.0075)	(0.0300)	0.000
		Total	0.2623	0.0111	0.0016	0.0046	0.0029	0.0256	0.0077	0.3158	0.000
			(0.0591)	(0.0109)	(0.0012)	(0.0023)	(0.0020)	(0.0127)	(0.0076)	(0.0625)	0.000
Total	All	Kept	0.1886	0.0117	0.0030	0.0002	0.0029	0.0062	0.0007	0.2133	0.004
			(0.0438)	(0.0051)	(0.0015)	(0.0003)	(0.0005)	(0.0044)	(0.0007)	(0.0447)	(0.001
		Released	0.0416	0.0002	0.0002	0.0016	0.0005	0.0020	0.0023	0.0484	0.000
			0.0110								
			(0.0152)	(0.0003)	(0.0003)	(0.0008)	(0.0007)	(0.0024)	(0.0029)	(0.0159)	0.000
		Total	(0.0152) 0.2302	(0.0003) 0.0119	(0.0003) 0.0032	(0.0008) 0.0018	(0.0007) 0.0034	(0.0024) 0.0082	(0.0029) 0.0030	(0.0159) 0.2617	0.000 0.005

Table 10. Catch rate (fish/hr) by species, cluster, and shore area for all anglers during the 2024 Lake Superior summer creel survey. Standard error is in parenthesis.

<sup>1</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>2</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

<sup>3</sup>143 harvested Brown Trout, 2 harvested Splake, 4 released clipped Steelhead, and 450 released Brook Trout.

Number Caught	Lake	Lake Trout		Coho Salmon		Chinook Salmon		Steelhead		Siscowet		Salmon		Total Salmonines	
	Boat	Shore	Boat	Shore	Boat	Shore	Boat	Shore	Boat	Shore	Boat	Shore	Boat	Shore	
0	31.8	100.0	95.2	100.0	97.6	100.0	97.4	100.0	98.8	100.0	94.2	95.8	27.2	93.7	
1	20.0	0.0	3.4	0.0	2.0	0.0	2.4	0.0	0.8	0.0	3.0	0.0	18.6	0.0	
2	15.4	0.0	1.0	0.0	0.4	0.0	0.2	0.0	0.2	0.0	1.8	2.1	16.6	2.1	
3	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.6	2.1	14.8	2.1	
4	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	7.0	0.0	
5	4.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	2.1	
6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	
7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	
8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	
9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	
10	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.8	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	
>=12	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	

Table 11. Percent of private sport angling parties, by angler type, that caught specific numbers of fish during the 2024 Lake Superior summer creel survey. Excludes personal trips by charter captains.

Table 12. Percent of chartered angling parties that caught specific numbers of fish during the 2024 Lake Superior summer creel survey.

Number Caught	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Combined Salmonines
0	2.8	68.8	87.1	87	87	95	1.4
1	2.2	21.5	12.9	10.8	5.4	3.2	1.2
2	6.5	5.4	0	0	2.2	1.1	3.7
3	10.8	3.2	0	2.2	4.3	0	11.1
4	7.5	1.1	0	0	1.1	0	9.9
5	9.7	0	0	0	0	1.1	8.6
6	11.8	0	0	0	0	0	9.9
7	9.7	0	0	0	0	0	11.1
8	7.5	0	0	0	0	0	3.7
9	5.4	0	0	0	0	0	8.6
10	2.2	0	0	0	0	0	3.7
11	3.2	0	0	0	0	0	2.5
>=12	20.7	0	0	0	0	0	24.6

Length (in)	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon
<14.5						
14.5 to 15.4	4					5
15.5 to 16.4	4					12
16.5 to 17.4	17					
17.5 to 18.4	11	1			1	1
18.5 to 19.4	12	2			_	_
19.5 to 20.4	16					
20.5 to 21.4	20			1		
21.5 to 22.4	24				1	
22.5 to 23.4	18	3				
23.5 to 24.4	25		1			
24.5 to 25.4	19		1			
25.5 to 26.4	15					
26.5 to 27.4	9					
27.5 to 28.4	5		1			
28.5 to 29.4						
29.5 to 30.4	3					
30.5 to 31.4	1					
31.5 to 32.4	1					
32.5 to 33.4	2		1			
>33.4	5		1			
Average	22.6	20.8	29.4	20.8	19.8	15.8
Sample Size	211	6	5	1	2	18

Table 13. Length-frequency distribution (in) and sample size of harvested salmonines by private sport boat and shore anglers during the 2024 Lake Superior summer creel survey.

creer survey.	Lake	Coho	Chinook			Pink
				Steelhead	Siscowet	
Length (in)	Trout	Salmon	Salmon			Salmon
<13.5						
13.5 to 14.4	1		2			1
14.5 to 15.4	3					7
15.5 to 16.4	6					
16.5 to 17.4	20				2	
17.5 to 18.4	20	7			2	
18.5 to 19.4	28	3			2	
19.5 to 20.4	36	3	1			
20.5 to 21.4	37	2			1	
21.5 to 22.4	24	3			1	
22.5 to 23.4	34		1			
23.5 to 24.4	34	1	2			
24.5 to 25.4	20				1	
25.5 to 26.4	23					
26.5 to 27.4	14					
27.5 to 28.4	8					
28.5 to 29.4	4		1			
29.5 to 30.4	2					
30.5 to 31.4	4					
31.5 to 32.4			1			
32.5 to 33.4						
>33.4			1			
Average	22	19.6	24	0	19.7	15.9
Sample Size	318	19	7	0	9	8

Table 14. Length-frequency distribution (in) and sample size of harvested salmonines by charter anglers during the 2024 Lake Superior summer creel survey.

	Lake	Coho	Chinook	Steelhead	Siscowet	Pink	Brook
Length (in)	Trout	Salmon	Salmon	oteemedia	0.000.000	Salmon	Trout
<9.5							2
9.5 to 10.4							9
10.5 to 11.4							
11.5 to 12.4							3
12.5 to 13.4							
13.5 to 14.4	6						1
14.5 to 15.4	2					3	
15.5 to 16.4	22			1		13	1
16.5 to 17.4	19						1
17.5 to 18.4	27				5		
18.5 to 19.4	3						
19.5 to 20.4	50						
20.5 to 21.4							
21.5 to 22.4	30						
22.5 to 23.4	2						
23.5 to 24.4	21			3	1		
24.5 to 25.4	5			3			
25.5 to 26.4	9						
26.5 to 27.4	4			5			
27.5 to 28.4	4			1			
28.5 to 29.4	2						
29.5 to 30.4	4						
30.5 to 31.4							
31.5 to 32.4							
32.5 to 33.4	1						
33.5 to 34.4	3						
>34.4	4						
Average	21	0	0	25.1	19	15.8	10.75
Sample Size	218	0	0	13	6	16	17

Table 15. Length-frequency distribution (in) and sample size of released salmonines by private sport boat and shore anglers during the 2024 Lake Superior summer creel survey.

by charter anglers during the 2024 Lake Superior summer creel survey.									
	Lake	Coho	Chinook	Steelhead	Siscowet	Pink	Brook		
Length (in)	Trout	Salmon	Salmon	Steemedu	SISCOWEL	Salmon	Trout		
<11.5									
11.5 to 12.4	2								
12.5 to 13.4									
13.5 to 14.4									
14.5 to 15.4									
15.5 to 16.4	9						1		
16.5 to 17.4	2								
17.5 to 18.4	2								
18.5 to 19.4									
19.5 to 20.4				1					
20.5 to 21.4									
21.5 to 22.4	16								
22.5 to 23.4	2								
23.5 to 24.4	16			2					
24.5 to 25.4	8								
25.5 to 26.4	12			3					
26.5 to 27.4	2								
27.5 to 28.4				1					
28.5 to 29.4									
29.5 to 30.4	1								
30.5 to 31.4	1								
31.5 to 32.4									
>32.4	2								
Average	22.9	0	0	24.9	0	0	16		
Sample Size	75	0	0	7	0	0	1		

Table 16. Length-frequency distribution (in) and sample size of released salmonines by charter anglers during the 2024 Lake Superior summer creel survey.

District <sup>3</sup>	Cluster <sup>4</sup>	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Walleye
MN-1	1	3.69	1.99	5.04	0.00	0.00	0.00	2.35
		(3.89)	(2.95)	(3.97)	(0.00)	(0.00)	(0.00)	(2.12)
MN-1	2	3.68	1.99	5.04	0.00	3.01	0.00	2.35
		(1.83)	(1.89)	(4.43)	(0.00)	(3.35)	(0.00)	(3.67)
MN-2	3	3.95	3.10	0.00	4.15	3.01	1.06	0.00
		(2.47)	(4.25)	(0.00)	(5.21)	(3.78)	(1.03)	(0.00)
MN-3	4	3.53	3.05	5.04	0.00	0.00	1.08	0.00
		(2.15)	(5.20)	(4.64)	(0.00)	(0.00)	(1.85)	(0.00)
MN-1	Lower	3.68	1.99	5.04	0.00	3.01	0.00	2.35
		(1.74)	(1.77)	(3.64)	(0.00)	(3.35)	(0.00)	(1.84)
MN-2 & 3	Upper	3.76	3.10	5.04	4.15	3.01	1.07	0.00
		(1.65)	(3.94)	(4.64)	(5.21)	(3.78)	(0.09)	(0.00)
Total	All	3.71	2.64	5.04	4.15	3.01	1.07	2.35
		(1.26)	(2.33)	(3.05)	(5.21)	(2.53)	(0.94)	(1.84)
	Sample Size	211	6	5	1	2	18	1

Table 17. Average weight<sup>1</sup> (lbs) of harvested fish by species, cluster, and shore area for private boat and shore anglers in the 2024 Lake Superior summer creel survey. Standard error is in parentheses.

<sup>1</sup>Due to low sample size, weights were calculated from a length-weight regression.

<sup>2</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>3</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

Table 18. Average<sup>1</sup> weight (lbs) of harvested fish by species, cluster, and shore area for charter anglers during the 2024 Lake Superior summer creel survey<sup>2</sup>. Standard error is in parentheses.

District <sup>3</sup>	Cluster <sup>4</sup>	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Walleye
MN-1	1	3.47	2.11	5.04	0.00	3.01	1.09	2.30
		(0.38)	(0.41)	(1.06)	(0.00)	(0.69)	(0.47)	(0.29)
MN-1	2	3.52	2.57	5.04	0.00	3.01	0.00	2.30
		(0.38)	(0.29)	(2.55)	(0.00)	(0.99)	(0.00)	(0.67)
MN-2	3	3.56	1.99	5.04	0.00	3.01	1.07	0.00
		(0.35)	(0.72)	(1.43)	(0.00)	(2.08)	(0.30)	(0.00)
MN-3	4	3.44	0.00	5.04	0.00	3.01	1.07	0.00
		(0.35)	(0.00)	(2.16)	(0.00)	(1.44)	(0.28)	(0.00)
MN-1	Lower	3.48	2.11	5.04	0.00	3.01	1.09	2.30
		(0.36)	(0.40)	(1.05)	(0.00)	(0.66)	(0.47)	(0.29)
MN-2 & 3	Upper	3.52	1.99	5.04	0.00	3.01	1.07	0.00
		(0.26)	(0.72)	(1.29)	(0.00)	(1.19)	(0.23)	(0.00)
Total	All	3.48	2.11	5.04	0.00	3.01	1.07	2.30
		(0.29)	(0.39)	(0.94)	(0.00)	(0.65)	(0.23)	(0.29)
	Sample Size	318	19	7	0	9	8	10

<sup>1</sup>Due to low sample size, weights were calculated from a length-weight regression.

<sup>2</sup> Excludes personal trips by licensed charter captains.

<sup>3</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>4</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

District <sup>2</sup>	Cluster <sup>3</sup>	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Other⁴ Salmonines	Total Salmonines	Walleye
MN-1	1	3,704	62	302	0	0	0	0	4,068	360
		(2 <i>,</i> 793)	(35)	(139)	(0)	(0)	(0)	(0)	(2,797)	(134)
MN-1	2	55 <i>,</i> 997	897	1,220	0	178	0	321	58,612	143
		(20,106)	(386)	(357)	(0)	(72)	(0)	(643)	(20,123)	(81)
MN-2	3	19,402	1,928	0	149	108	693	139	22,420	0
		(8 <i>,</i> 777)	(1,881)	(0)	(84)	(62)	(488)	(279)	(8,995)	(0)
MN-3	4	15,231	159	383	0	0	395	0	16,167	0
		(6,723)	(198)	(128)	(0)	(0)	(492)	(0)	(6,745)	(0)
MN-1	1&2	59,701	959	1,522	0	178	0	321	62,680	503
		(20,299)	(387)	(383)	(0)	(72)	(0)	(643)	(20,317)	(156)
MN-2 & 3	3&4	34,633	2,087	383	149	108	1,087	139	38,587	0
		(11,056)	(1,892)	(128)	(84)	(62)	(693)	(279)	(11,243)	(0)
Total	All	94,334	3,046	1,905	149	286	1,087	460	101,268	503
		(23,115)	(1,931)	(404)	(84)	(94)	(693)	(701)	(23,220)	(156)

Table 19. Yield<sup>1</sup> (lbs) by species, cluster, and shore area for private sport boat and shore anglers during the 2024 Lake Superior summer creel survey. Standard error is in parentheses.

<sup>1</sup> Estimates are rounded to the nearest pound.

<sup>2</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>3</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

<sup>4</sup> Brown Trout (460 lbs).

Table 20. Yield <sup>1</sup> (lbs) by species, cluster, and shore area for charter anglers during the 2024 Lake Superior summer creel
survey. Standard error is in parentheses.

District <sup>2</sup>	Cluster <sup>3</sup>	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Other <sup>4</sup> Salmonines	Total Salmonines	Walleye
MN-1	1	30,781	2,367	958	0	1,288	9	148	35,551	1,673
		(11,697)	(1,510)	(985)	(0)	(1,066)	(0)	(13)	(11,883)	(393)
MN-1	2	1,892	23	10	0	21	0	0	1,946	2
		(1,172)	(12)	(16)	(0)	(21)	(0)	(0)	(1,173)	(1)
MN-2	3	6,040	56	66	0	99	170	4	6,434	0
		(3 <i>,</i> 563)	(47)	(78)	(0)	(48)	(86)	(2)	(3,565)	(0)
MN-3	4	3,051	0	66	0	30	55	0	3,202	0
		(1,810)	(0)	(96)	(0)	(12)	(27)	(0)	(1,813)	(0)
MN-1	1&2	32,673	2,390	968	0	1,309	9	148	37,497	1,675
		(11,755)	(1,510)	(985)	(0)	(1,066)	(0)	(13)	(11,941)	(393)
MN-2 & 3	3&4	9,091	56	131	0	129	224	4	9,636	0
		(3,997)	(47)	(124)	(0)	(49)	(90)	(2)	(4,000)	(0)
Total	All	41,764	2,446	1,099	0	1,439	233	152	47,133	1,675
		(12,416)	(1,511)	(993)	(0)	(1,068)	(90)	(13)	(12,593)	(393)

<sup>1</sup> Estimates are rounded to the nearest pound.

<sup>2</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>3</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

<sup>4</sup> Brown Trout (143 lbs) and Splake (9 lbs). Anglers also harvested Cisco (20 lbs), Northern Pike (12 lbs), Lake Whitefish (6 lbs).

District <sup>2</sup>	Cluster <sup>3</sup>	Lake Trout	Coho Salmon	Chinook Salmon	Steelhead	Siscowet	Pink Salmon	Other <sup>4</sup> Salmonines	Total Salmonines	Walleye
MN-1	1	34,485	2,429	1,260	0	1,288	9	148	39,619	2,032
		(12,026)	(1,511)	(995)	(0)	(1,066)	(0)	(13)	(12,208)	(415)
MN-1	2	57 <i>,</i> 889	921	1,230	0	199	0	321	60,558	146
		(20,140)	(386)	(357)	(0)	(75)	(0)	(643)	(20,157)	(81)
MN-2	3	25,442	1,984	66	149	208	862	143	28,854	0
		(9 <i>,</i> 473)	(1,882)	(78)	(84)	(78)	(495)	(279)	(9,676)	(0)
MN-3	4	18,282	159	449	0	30	449	0	19,369	0
		(6,962)	(198)	(160)	(0)	(12)	(492)	(0)	(6,984)	(0)
MN-1	1&2	92,374	3,349	2,490	0	1,487	9	469	100,178	2,178
		(23,457)	(1,559)	(1,057)	(0)	(1,069)	(0)	(644)	(23,566)	(423)
MN-2 & 3	3&4	43,724	2,143	514	149	238	1,312	143	48,223	0
		(11,756)	(1,893)	(178)	(84)	(79)	(699)	(279)	(11,933)	(0)
Total	All	136,098	5,492	3,004	149	1,725	1,320	612	148,401	2,178
		(26,238)	(2,452)	(1,072)	(84)	(1,072)	(698)	(702)	(26,415)	(423)

Table 21. Yield<sup>1</sup> (lbs) by species, cluster, and shore area for all anglers during the 2024 Lake Superior summer creel survey. Standard error is in parentheses.

<sup>1</sup> Estimates are rounded to the nearest pound.

<sup>2</sup> Great Lakes Fishery Commission Statistical Districts.

<sup>3</sup> Cluster 1=Duluth, Cluster 2=McQuade-Two Harbors, Cluster 3=Twin Points-Taconite Harbor, Cluster 4=Grand Marais-Hovland.

<sup>4</sup> Brown Trout (603 lbs) and Splake (9 lbs). Anglers also harvested Cisco (20 lbs), Northern Pike (12 lbs), and Lake Whitefish (6 lbs).