## DEPARTMENT OF NATURAL RESOURCES

### COMMERCIAL FISHING SUMMARY MINNESOTA WATERS OF LAKE SUPERIOR

2023

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

Prepared by:

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#### **Executive Summary**

This report summarizes data from monthly fishing reports, special permits, and incidental harvest by Lake Superior commercial operators fishing in the Minnesota waters of Lake Superior from January through December. Lake Herring (*Coregonus artedi*) will be reported as Cisco, the term standardized by the American Fisheries Society for this species. There are four morphotypes of Lake Trout (*Salvelinus namaycush*) recognized in Lake Superior: the lean, humper, redfin, and siscowet. For the purposes of this report, "Lake Trout" refers to lean Lake Trout and "Siscowet" refers to the deepwater morphotype. Cisco harvest includes the non-tribal commercial harvest within the Grand Portage Band of Lake Superior Chippewa Reservation. All effort is uncorrected for soak time. Data are summarized by statistical reporting districts (MN-1, MN-2, and MN-3) (Figure 1).

#### **Cisco**

- Twenty-five commercial operators were licensed in 2023: three in MN-1, eight in MN-2, and fourteen in MN-3 (Table 1). There was one apprentice in MN-1 and two in MN-3. Collectively, 38,000 feet of Cisco net was licensed amongst the 25 operators.
- Fourteen permits for the November Cisco roe season were issued: 2 in MN-1, 5 in MN-2, and 7 in MN-3 (Table 1).
- The gross market value for all Cisco harvested was estimated at \$189,969.12 (Table 2). Gross market value is determined as the dockside value of fish in round weight before processing or handling adds value.
- During the traditional Cisco harvest season (all months excluding November) commercial operators set 705,475 feet of net and harvested 177,115 pounds of Cisco, producing a catch per unit effort (CPUE) of 251 pounds per 1,000 feet of net (Tables 3-6; Figure 2).
- For the November Cisco season, quotas were implemented for each statistical district and applied to commercial operators who participated. Beginning in 2016, the Grand Portage Band of Lake Superior Chippewa opted to set their own November Cisco quota, but continue to allow some state-licensed operators to fish in their waters. During November, state-licensed operators set 235,370 feet of net, catching a total of 110,717 pounds (83,044 pounds in Minnesota waters and 27,673 pounds in Grand Portage waters) of Cisco and producing a CPUE of 470 pounds per 1,000 feet of net (Tables 7 and 8; Figure 2). Thirty-eight percent of the total Cisco harvest was taken in the November season (Figure 3). Ten percent of the statistical district quota was harvested in MN-1, 19% in MN-2, and 40% in MN-3 (Table 8). Overall, 30% of the November quota was harvested.

#### Chubs (Coregonus hoyi and C. kiyi)

- Two operators elected to be licensed for chub fishing. The amount of chub net licensed was 3,000 feet (Table 1).
- A total of 6,500 feet of chub net was set, which caught 64 pounds of chubs for a CPUE of 9.8 pounds per 1,000 feet of net (Tables 3-6).

#### Lake Trout

- Thirteen commercial operators requested permits to fish the summer expanded commercial assessment (i.e. "commercial season"): two in MN-1, five in MN-2, and six in MN-3 (Table 1). A total of 148,900 feet of net was set (Table 3). Lake Trout harvest in MN-1, MN-2, and MN-3 was 2,438 pounds, 2,187 pounds, and 8,287 pounds, for a total harvest of 12,912 pounds (Tables 9-11; Figure 4). The overall CPUE was 86.7 pounds per 1,000 feet (Table 5).
- Lake Trout possession has always been allowed as by-catch in the Cisco, chub, and Round Whitefish fisheries and totaled 963 pounds (Tables 4 and 6; Figure 5).
- Several commercial operators in MN-2 and MN-3 assist annually in the May Lake Trout assessment survey under MNDNR permit; in 2023 there were three that participated (Table 1). They set 19,750 feet of net and caught 270 pounds of Lake Trout in MN-2 and 1,026 pounds in MN-3 for a total of 1,296 pounds and an overall CPUE of 65.6 pounds per 1,000 feet of net (Tables 3-5).
- Two commercial operators participated in the spawning Lake Trout assessment under MNDNR permit (Table 1). They set 5,250 feet of net and caught 873 pounds of Lake Trout in MN-2 and 756 pounds in MN-3 for a total of 1,629 pounds and an overall CPUE of 310 pounds per 1,000 feet of net (Tables 3-5).
- The estimated gross market value of all harvested Lake Trout in the round was \$20,832 (Table 2).

#### **Round Whitefish**

- Thirteen Round Whitefish (*Prosopium cylindraceum*) permits were granted to commercial operators (Table 1).
- Operators set 58,800 feet of net and caught 3,944 pounds of Round Whitefish for a CPUE of 67 pounds per 1,000 feet of net (Tables 3-6; Figure 6).
- The season typically runs from April 1 June 30, and November 15 December 31, but an exception was granted to the permit holders in MN-1 so that they could fish July and August.

#### **Other species**

• Relatively little biomass of other species was retained in commercial operations. There was 606 pounds of Lake Whitefish (*Coregonus clupeaformis*) and 266 pounds of Siscowet harvested for the year (Table 1).

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<u>Item</u> Number of operators	<u>MN-1</u> 3	<u>MN-2</u> 8	<u>MN-3</u> 14	TOTAL 25
Number of apprentices	1	0	2	3
Cisco net licensed (feet) <sup>1</sup>	3,300	12,900	21,800	38,000
Chub net licensed (feet) <sup>2</sup>	0	2,000	1,000	3,000
Pound nets (number)	0	0	0	0
Trap nets (number)	0	0	0	0
Round Whitefish permits	2	4	7	13
November Cisco permits	2	5	7	14
Lake Trout assessment permits				
May	0	2	1	3
Commercial	2	5	6	13
Spawning	0	1	1	2

# Table 1. License summary of the commercial fishery by statistical district in the Minnesota waters of Lake Superior, 2023.

<sup>1</sup> 2.25-2.75 inch stretch measurement gill nets weighted to fish suspended off the bottom.

 $^{\rm 2}$  2.25-2.75 inch stretch measurement gill nets weighted to fish on the bottom.

Chaolina				Total	Average	Approximate
Species	MN-1	MN-2	MN-3	Total	Price/lb	Value
Cisco	8,718	32,163	246,951	287,832	\$0.66	\$189,969.12
Chubs	0	0	64	64	\$0.50	\$32.00
Smelt	0	0	0	0	\$0.00	\$0.00
Lake trout						
Cisco net <sup>1</sup>	113	260	455	828	\$1.24	\$1,026.72
Chub net <sup>2</sup>	0	0	0	0	\$1.24	\$0.00
Round Whitefish net <sup>3</sup>	0	0	135	135	\$1.24	\$167.40
Assessment <sup>4</sup>	0	1,143	1,782	2,925	\$1.24	\$3,627.00
Commercial <sup>5</sup>	2,438	2,187	8,287	12,912	\$1.24	<u>\$16,010.88</u>
Total	2,551	3,590	10,659	16,800		\$20,832.00
Siscowet						
Cisco net <sup>1</sup>	0	0	0	0	\$1.24	\$0.00
Chub net <sup>2</sup>	0	0	0	0	\$1.24	\$0.00
Assessment <sup>4</sup>	0	13	29	42	\$1.24	\$52.08
Commercial <sup>5</sup>	0	48	176	224	\$1.24	\$277.76
Total	0	61	205	266		\$329.84
Round whitefish	8	295	3,641	3,944	\$0.55	\$2,169.20
Suckers	0	0	0	0	N/A	\$0.00
Burbot	0	0	0	0	N/A	\$0.00
Lake Whitefish	294	111	201	606	\$1.44 Tot	<b>\$872.64</b> al <b>\$214,204.80</b>

Table 2. Total catch of all species in pounds (all gear combined), by statisticaldistrict and dockside gross harvest value in the Minnesota waters of Lake Superior,2023. Prices are in the round, before handling and processing adds value.

<sup>1</sup> Bycatch in Cisco nets

<sup>2</sup> Bycatch in chub nets

<sup>3</sup> Bycatch in Round Whitefish nets

<sup>4</sup> Taken under permit during Lake Trout assessment netting operations

<sup>5</sup> Expanded commercial assessment

#### Table 3. Reported fishing effort (feet of net) by gear type and statistical district in the Minnesota waters of Lake Superior, 2023. Effort is not corrected for soak time.

						Lake Tro	out	Pound	Trap
		2.25 - 2.75 in	ch stretch	3.0 inch stretch		h stretch	5.5 inch stretch	Net	Net
District		Cisco Net	Chub Net	Round Whitefish Net	May <sup>3</sup>	Com.4	Spawn ⁵	Lifts	Lifts
MN-1		63,675 <sup>1</sup> 9,650 <sup>2</sup>	0	800		32,600		0	0
	Sub-total	73,325							
MN-2		99,320 <sup>1</sup> 79,700 <sup>2</sup>	0	10,000	7,000	26,800	2,250	0	0
	Sub-total	179,020							
MN-3		542,480 <sup>1</sup> 146,020 <sup>2</sup>	6,500	48,000	12,750	89,500	3,000	0	0
	Sub-total								
Shorewide		705,475 <sup>1</sup>							
		235,370 <sup>2</sup>							
	Total	940,845	6,500	58,800	19,750	148,900	5,250	0	0

<sup>4</sup> Expanded commercial Lake Trout assessment

<sup>5</sup> Lake Trout spawning assessment permit

						Lake Trout		_	_
		2.25 - 2.75 i		3.0 inch stretch	4.5 inch		5.5 inch stretch	Pound	
District		Cisco Net	Chub Net	Round Whitefish	May <sup>5</sup>	Com.6	Spawn <sup>7</sup>	Net	Ne
MN-1	Cisco	5,618 <sup>1</sup>							
		3,100 <sup>2</sup>							
	Sub-total	8,718							
	Chub								
	Smelt								
	Burbot								
	Suckers								
	Lake Whitefish					294			
	Lake trout	113 <sup>3</sup>				2,438			
	Siscowet								
	Round Whitefish			8					
MN-2	Cisco	15,414 <sup>1</sup>		38 <sup>4</sup>					
		16,749 <sup>2</sup>							
	Sub-total	32,163							
	Chub								
	Burbot								
	Suckers								
	Lake Whitefish					111			
	Lake trout	260 <sup>3</sup>			270	2,187	873		
	Siscowet				13	48			
	Round Whitefish			295					
MN-3	Cisco	156,083 <sup>1</sup>		210 4					
		90,868 <sup>2</sup>							
	Sub-total								
	Chub	,	64						
	Burbot		0.						
	Suckers								
	Lake Whitefish				59	138	4		
	Lake trout	455 <sup>3</sup>		135 <sup>4</sup>	1,026	8,287	756		
	Siscowet	400		100	29	176	100		
	Round Whitefish			3,641	25	170			
Shorev				0,041					
0110101	Cisco	177,115 <sup>1</sup>		248 <sup>4</sup>					
	01300	110,717 <sup>2</sup>		240					
	Total								
	Chub	207,002	64						
	Burbot		04						
	Suckers								
					50	E 40	4		
	Lake Whitefish	828 <sup>3</sup>		135 <sup>4</sup>	59 1 206	543	4		
	Lake trout	028		135	1,296	12,912	1,629		
	Siscowet			2.044	42	224			
	Round Whitefish onal Cisco season, e			3,944					

# Table 4. Harvest (pounds) of major species by gear type and statistical district in the Minnesota waters of Lake Superior, 2023.

<sup>2</sup> November Cisco season

<sup>3</sup> Bycatch of Lake Trout and Siscowet in Cisco nets

<sup>4</sup> Bycatch in Round Whitefish nets

<sup>5</sup> May Lake Trout assessment permit

<sup>6</sup> Expanded commerial Lake Trout assessment

<sup>7</sup> Lake Trout spawning assessment permit

				Pounds	/1,000 feet o	of net		Pounds/	/lift
		2.25 - 2.75 ir	nch stretch	3.0 inch stretch		h stretch	5.5 inch stretch	Pound	Tra
District		Cisco Net	Chub Net	Round Whitefish	May <sup>5</sup>	Com.6	Spawn <sup>7</sup>	Net	Net
MN-1	Cisco	88.2 <sup>1</sup>					•		
		321.2 <sup>2</sup>							
	Sub-total	118.9							
	Chub								
	Smelt								
	Burbot								
	Suckers								
	Lake Whitefish					9.0			
	Lake trout	1.5 <sup>3</sup>				74.8			
	Siscowet								
	Round Whitefish								
MN-2	Cisco			3.8 <sup>4</sup>					
	Sub-total	179.7							
	Chub								
	Burbot								
	Suckers								
	Lake whitefish								
	Lake trout	1.5 <sup>3</sup>			38.6	81.6	388.0		
	Siscowet				1.9	1.8			
	Round Whitefish			29.5					
MN-3	Cisco			4.4 <sup>4</sup>					
		358.7							
	Chub		9.8						
	Burbot								
	Suckers								
	Lake whitefish				4.6	1.5	1.3		
	Lake trout	0.7 <sup>3</sup>		2.8 <sup>4</sup>	80.5	92.6	252.0		
	Siscowet				2.3	2.0			
	Round Whitefish			75.9					
Shorewide	2								
	Cisco			4.2 <sup>4</sup>					
		305.9							
	Chub		9.8						
	Burbot								
	Suckers								
	Lake whitefish				3.0				
	Lake trout			2.3 <sup>4</sup>	65.6	86.7	310.3		
	Siscowet	$\begin{tabular}{ c c c c c c } \hline \hline Chub Net & Round Whitefish & May & Com.® & Spawn & Net \\ \hline & 321.2 & 2 & & & & & & & & & & & & & & & & &$							
E Shorewide Shorewide E Shorew	Round Whitefish			67.1					

# Table 5. Catch per unit effort (CPUE) in pounds of major species by gear type and statistical district in the Minnesota waters of Lake Superior, 2023.

<sup>2</sup> November Cisco assessment

<sup>3</sup> Bycatch of Lake Trout and Siscowet in Cisco nets

<sup>4</sup> Bycatch in Round Whitefish nets

<sup>5</sup> May Lake Trout assessment permit

<sup>6</sup> Expanded commercial Lake Trout assessment

<sup>7</sup> Lake Trout spawning assessment permit

						Round	Lak	e Trout		Sisc	owet		Lake Whit	tefish	
Month	Cisco	Chub	Smelt	Sucker	Burbot	Whitefish	Bycatch		Com.	Bycatch		Com.	Bycatch		Com.
MN-1 January										,					
February															
March															
April															
May	28														
June	359								474			0			35
July	631					8	25		570			0			20
August	905						6		866			0			52
September	560						5		528			0			187
October	500						12								
November	3,100						55								
December	2,635						10								
Totals	8,718	0	0	0	0	8	113	0	2,438	0	0	0	0	0	294
MN-2 January	0,1.10	-	•	•	•				_,	•	•	•	•	-	
February															
March															
April						78									
May						133		270			13				
June						79			424			45			0
July	257						5		767			0			67
August	1,185						4		890			0			44
September	1,021						11		106			3			0
October	8,945						113	182				0			Ũ
November	16,749						106	691							
December	4,006					5	21								
Totals	32,163	0	0	0	0	295	260	1,143	2,187	0	13	48	0	0	111
MN-3 January	,							.,	_,						
February															
March															
April	2,902					866	38								
May	886	14				756	94	1,026			29			59	
June	11,333					1,636	113	.,	1,716			68			11
July	15,658	24				,	31		1,909			24			23
August	12,812	26							1,499			8			0
September	12,634						84		3,163			76			104
October	94,083						108	438	2,120					4	
November	90,868					3	122	318							
December	5,775					380									
Totals	246,951	64	0	0	0	3,641	590	1,782	8,287	0	29	176	0	63	138
Shorewide	,		-	-	-	-,		.,	-,	-			-		
Total	287,832	64	0	0	0	3,944	963	2,925	12,912	0	42	224	0	63	543

Table 6. Total catch of major commercial species in pounds, by species, month, and statistical district in the Minnesota waters of Lake Superior, 2023.

	License		Feet of Net	Pounds	Number	CPUE
District	Number	Grid	Fished	Caught	Days	Lbs./1000 feet
MN-1	<u>13</u>	1303	3,650	1,300	17	356
	<u>18</u>	1303	6,000	1,800	20	300
	Subtotal		9,650	3,100	37	321
MN-2	<u>7</u>	1205	10,500	1035	24	99
	<u>45</u>	1205	12,900	1,392	10	108
	<u>62</u>	1106	32,700	9144	27	280
	<u>201</u>	1205	22,100	4428	16	200
	<u>202</u>	1106	1,500	750	5	500
	Subtotal		79,700	16,749	82	210
MN-3	<u>9</u> <sup>G</sup>	715	1,360	1920	8	1,412
	<u>20</u>	811	14,000	9555	14	683
	20 21 22 <sup>G</sup>	714	2,700	1960	3	726
	<u>22</u> <sup>G</sup>	715	7,300	8290	8	1,136
	<u>301</u> <sup>G</sup>	716	16,800	15538	28	925
	<u>302</u> <sup>G</sup>	715	1,360	1925	8	1,415
	<u>303</u>	714	65,000	26385	26	406
	<u>304</u>	811	6,500	8515	13	1,310
	<u>305</u>	812	6,000	4030	12	672
	<u>306</u>	811	3,000	2600	6	867
	<u>308</u>	714	22,000	10150	11	461
	Subtotal		146,020	90,868	137	622
	Shorewide					
	Total		235,370	110,717	256	470

Table 7. Effort, harvest, and catch per unit effort (CPUE) of Cisco by statistical district and permit holder during November 2023 in the Minnesota waters of Lake Superior. Data from state-licensed operators who fished Grand Portage Band of Lake Superior Chippewa waters is included.

<sup>G</sup> operators whose harvest was from Grand Portage Band of Lake Superior Chippewa waters under their quota

Table 8. Harvest compared to total allowable catch (TAC), fishing effort, and catch per unit effort (CPUE) of Cisco, by season and statistical district in the Minnesota waters of Lake Superior, 2023. Data from state-licensed operators who fished Grand Portage Band of Chippewa waters is included.

Shorewide No	ovember	December	Jan-Oct	Calculated	% Area		November
Biomass	2022	2022	2023	November	of		District
Estimate H	larvest	Harvest	Harvest	TAC	District		Quota
489,571 8	38,414	2,820	122,374	275,963	0.115	MN-1	31,736
		·		·	0.314	MN-2	86,652
					0.571	MN-3	157,575
					Total No	ovember TAC	275,963
MN-1			% of			CPUE	% of Nov
	unds		Annual	Feet of Net	% of Net	lbs./1000	TAC
	rvested		Harvest	Fished	Fished	feet	Harvested
Fillet	5,618		64%	63,675	87%	88	i lai vesteu
Roe-Nov*	3,100		36%	9,650	13%	321	10%
Totals	8.718		3078	73,325	1576	119	1078
*MN-1 Novemb	-, -	31,736		10,020		113	
<u>MN-2</u>			% of			CPUE	% of Nov
	unds		Annual	Feet of Net	% of Net	lbs./1000	TAC
	rvested		Harvest	Fished	Fished	feet	Harvested
Fillet	15,414		48%	99,320	55%	155	
Roe-Nov*	16,749		52%	79,700	45%	210	19%
Totals	32,163			179,020		180	
*MN-2 Novemb	per TAC:	86,652					
<u>MN-3</u>			% of			CPUE	% of Nov
Po	unds		Annual	Feet of Net	% of Net	lbs./1000	TAC
Season Ha	rvested		Harvest	Fished	Fished	feet	Harvested
Fillet	156,083		63%	542,480	79%	288	
Roe-Nov <sup>1</sup>	63,195		26%	119,200	17%	530	40%
Roe-Nov <sup>G</sup>	27,673		11%	26,820	4%	1,032	
Roe-Total	90,868		37%	146,020	21%	622	
Totals	246,951			688,500		359	
*MN-3 Novemb	per TAC:	157,575					
Shorewide			% of			CPUE	% of Nov
	unds		Annual	Feet of Net	% of Net	lbs./1000	TAC
	rvested		Harvest	Fished	Fished	feet	Harvested
Fillet	177,115		62%	705,475	75%	251	
Roe-Nov <sup>1</sup>	83,044		29%	208,550	22%	398	30%
Roe-Nov <sup>G</sup>	27,673		10%	26,820	3%	1,032	0070
	110,717		38%	235,370	25%	470	
	287,832		0070	940,845	2070	306	

<sup>1</sup> commercial operators fishing under State of Minnesota November permits and quotas

<sup>G</sup> commercial operators fishing in Grand Portage waters under Grand Portage Band of Chippewa quota

\*November TAC is determined by reducing the shorewide biomas estimate by subtracting the actual cisco harvest during January through September and the previous year's October through December harvest

	Feet		Lake Trout Siscowet Lake W							Vhitefish			
	of Net		Number	lb	s./1000 ft		Number	lb	s./1000 ft		Number		lbs./1000 ft
	Fished	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE
Permitt	ee 13 Grid	1303											
June	4,000	50	12.5	220	55.0		0.0		0.0	8	2.0	31	7.8
July	4,000	59	14.8	231	57.8		0.0		0.0	4	1.0	14	3.5
August	4,000	98	24.5	419	104.8		0.0		0.0	9	2.3	39	9.8
Sept	3,000	68	22.7	344	114.7		0.0		0.0	33	11.0	127	42.3
	15,000	275	18.3	1,214	80.9	0	0.0	0	0.0	54	3.6	211	14.1
<u>Permitt</u>	ee 18 Grid	<u>1303</u>											
June	5,100	63	12.4	254	49.8		0.0		0.0	1	0.2	4	0.8
July	6,500	84	12.9	339	52.2		0.0		0.0	2	0.3	6	0.9
August	3,500	103	29.4	447	127.7		0.0		0.0	3	0.9	13	3.7
Sept	2,500	41	16.4	184	73.6		0.0		0.0	13	5.2	60	24.0
	17,600	291	16.5	1,224	69.5	0	0.0	0	0.0	19	1.1	83	4.7
Total ef	fort and har	vest in MN1											
June	9,100	113	12.4	474	52.1	0	0.0	0	0.0	9	1.0	35	3.8
July	10,500	143	13.6	570	54.3	0	0.0	0	0.0	6	0.6	20	1.9
August	7,500	201	26.8	866	115.5	0	0.0	0	0.0	12	1.6	52	6.9
Sept	5,500	109	19.8	528	96.0	0	0.0	0	0.0	46	8.4	187	34.0
Totals	32,600	566	17.4	2,438	74.8	0	0.0	0	0.0	73	2.2	294	9.0

 Table 9. Effort, harvest and catch per unit effort (CPUE) for commercial Lake Trout, Siscowet and Lake Whitefish by permit in

 Statistical District MN-1, Minnesota waters of Lake Superior, 2023.

	Feet		Siscowet				Lake Whitefish						
	of Net	_	Number	lb	s./1000 ft		Number	lb	s./1000 ft		Number	lb	s./1000 f
	Fished	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE
Permittee	e 45 Grid 12	<u>205</u>											
June			0.0		0.0		0.0		0.0		0.0		0.0
July			0.0		0.0		0.0		0.0		0.0		0.0
August			0.0		0.0		0.0		0.0		0.0		0.0
Sept			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	0	0.0	0	0.0
<u>Permittee</u>	e 62 Grid 1	<u>106</u>											
June	3,500	38	10.9	130	37.1	10	2.9	30	8.6		0.0		0.0
July			0.0		0.0		0.0		0.0		0.0		0.0
August			0.0		0.0		0.0		0.0		0.0		0.0
Sept	1,500	9	6.0	34	22.7	1	0.7	3	2.0		0.0		0.0
	5,000	47	9.4	164	32.8	11	2.2	33	6.6	0	0.0	0	0.0
Permittee	e 7 Grid 12	<u>05</u>											
June			0.0		0.0		0.0		0.0		0.0		0.0
July			0.0		0.0		0.0		0.0		0.0		0.0
August			0.0		0.0		0.0		0.0		0.0		0.0
Sept			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	0	0.0	0	0.0
Permittee	e 201 Grid 1	105											
June			0.0		0.0		0.0		0.0		0.0		0.0
July			0.0		0.0		0.0		0.0		0.0		0.0
August			0.0		0.0		0.0		0.0		0.0		0.0
Sept			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	0	0.0	0	0.0

Table 10. Effort, harvest and catch per unit effort (CPUE) for commercial Lake Trout, Siscowet and Lake Whitefish by permit in Statistical District MN-2, Minnesota waters of Lake Superior, 2023.

	Feet		Lak		Sis	scowet		Lake Whitefish					
	of Net		Number	lb	s./1000 ft		Number	lb	s./1000 ft		Number	l	bs./1000 ft
	Fished	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE
Permittee	202 Grid 11	06											
June	3,500	48	13.7	174	49.7	5	1.4	15	4.3		0.0		0.0
July			0.0		0.0		0.0		0.0		0.0		0.0
August			0.0		0.0		0.0		0.0		0.0		0.0
Sept			0.0		0.0		0.0		0.0		0.0		0.0
	3,500	48	13.7	174	49.7	5	1.4	15	4.3	0	0.0	0	0.0
<u>Permittee</u>	203 Grid 90	<u>)9</u>											
June	1,500	32	21.3	120	80.0		0.0		0.0		0.0		0.0
July	7,200	175	24.3	767	106.5		0.0		0.0	12	1.7	67	9.3
August	9,000	177	19.7	890	98.9		0.0		0.0	8	0.9	44	4.9
Sept	600	16	26.7	72	120.0		0.0		0.0		0.0		0.0
	18,300	400	21.9	1,849	101.0	0	0.0	0	0.0	20	1.1	111	6.1
Total effo	rt and harve	est in MN2											
June	8,500	118	13.9	424	49.9	15	1.8	45	5.3	0	0.0	0	0.0
July	7,200	175	24.3	767	106.5	0	0.0	0	0.0	12	1.7	67	9.3
August	9,000	177	19.7	890	98.9	0	0.0	0	0.0	8	0.9	44	4.9
Sept	2,100	25	11.9	106	50.5	1	0.5	3	1.4	0	0.0	0	0.0
Totals	26,800	495	18.5	2,187	81.6	16	0.6	48	1.8	20	0.7	111	4.1

Table 10 continued. Effort, harvest and catch per unit effort (CPUE) for commercial Lake Trout, Siscowet and Lake Whitefish by permit in Statistical District MN-2, Minnesota waters of Lake Superior, 2023.

	Feet	Lake Trout					Siscowet				Lake Whitefish			
	of Net		Number	k	s./1000 ft		Number	lb	s./1000 ft		Number		lbs./1000 ft	
	Fished	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE	
Permittee	e 20 Grid 812													
June	6,000	128	21.3	509	84.8	1	0.2	3	0.5		0.0		0.0	
July	4,500	126	28.0	501	111.3	5	1.1	15	3.3	3	0.7	9	2.0	
August	2,250	73	32.4	289	128.4		0.0		0.0		0.0		0.0	
Sept	5,250	183	34.9	787	149.9	8	1.5	23	4.4	4	0.8	16	3.0	
	18,000	510	28.3	2,086	115.9	14	0.8	41	2.3	7	0.4	25	1.4	
<u>Permittee</u>	e 21 Grid 714													
June	1,200	11	9.2	44	36.7	1	0.8	3	2.5		0.0		0.0	
July	3,600	19	5.3	62	17.2	3	0.8	6	1.7		0.0		0.0	
August			0.0		0.0		0.0		0.0		0.0		0.0	
Sept	1,200	10	8.3	38	31.7	8	6.7	22	18.3		0.0		0.0	
	6,000	40	6.7	144	24.0	12	2.0	31	5.2	0	0.0	0	0.0	
Permittee	e 303 Grid 71	<u>4</u>												
June	3,750	102	27.2	330	88.0	6	1.6	19	5.1		0.0		0.0	
July	6,000	130	21.7	480	80.0		0.0		0.0	1	0.2	8	1.3	
August	5,250	117	22.3	455	86.7	3	0.6	8	1.5		0.0		0.0	
Sept	6,000	163	27.2	842	140.3	4	0.7	13	2.2	2	0.3	10	1.7	
	21,000	512	24.4	2,107	100.3	13	0.6	40	1.9	3	0.1	18	0.9	

 Table 11. Effort, harvest and catch per unit effort (CPUE) for commercial Lake Trout, Siscowet and Lake Whitefish by permit in

 Statistical District MN-3, Minnesota waters of Lake Superior, 2023.

	Feet	Lake Trout					Siscowet				Lake Whitefish			
	of Net		Number	I	os./1000 ft		Number	lb	s./1000 ft		Number		lbs./1000 ft	
	Fished	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE	Number	/1000 ft	Pounds	CPUE	
Permittee	e 304 Grid 811													
June	6,000	129	21.5	424	70.7	1	0.2	10	1.7		0.0		0.0	
July	6,000	130	21.7	443	73.8		0.0		0.0		0.0		0.0	
August	4,500	130	28.9	455	101.1		0.0		0.0		0.0		0.0	
Sept	4,000	130	32.5	687	171.8	5	1.3	14	3.5	4	1.0	22	5.5	
	20,500	519	25.3	2,009	98.0	6	0.3	24	1.2	4	0.2	22	1.1	
<u>Permittee</u>	e 308 Grid 814													
June	8,250	123	14.9	409	49.6	10	1.2	33	4.0	2	0.2	11	1.3	
July	6,000	128	21.3	423	70.5	1	0.2	3	0.5	2	0.3	6	1.0	
August	3,750	83	22.1	300	80.0		0.0		0.0		0.0		0.0	
Sept	6,000	176	29.3	809	134.8	2	0.3	4	0.7	11	1.8	56	9.3	
	24,000	510	21.3	1,941	80.9	13	0.5	40	1.7	15	0.6	73	3.0	
Total effo	ort and harvest	in <u>MN3</u>												
June	25,200	493	19.6	1,716	68.1	19	0.8	68	2.7	2	0.1	11	0.4	
July	26,100	533	20.4	1,909	73.1	9	0.3	24	0.9	6	0.2	23	0.9	
August	15,750	403	25.6	1,499	95.2	3	0.2	8	0.5	0	0.0	0	0.0	
Sept	22,450	662	29.5	3,163	140.9	27	1.2	76	3.4	21	0.9	104	4.6	
Totals	89,500	2,091	23.4	8,287	92.6	58	0.6	176	2.0	29	0.3	138	1.5	

Table 11 continued. Effort, harvest and catch per unit effort (CPUE) for commercial Lake Trout, Siscowet and Lake Whitefish by permit in Statistical District MN-3, Minnesota waters of Lake Superior, 2023.

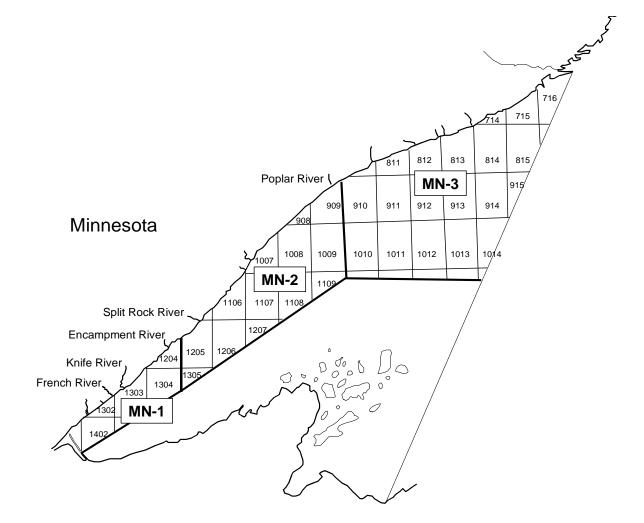


Figure 1. Statistical reporting districts and grids, Minnesota waters of Lake Superior.

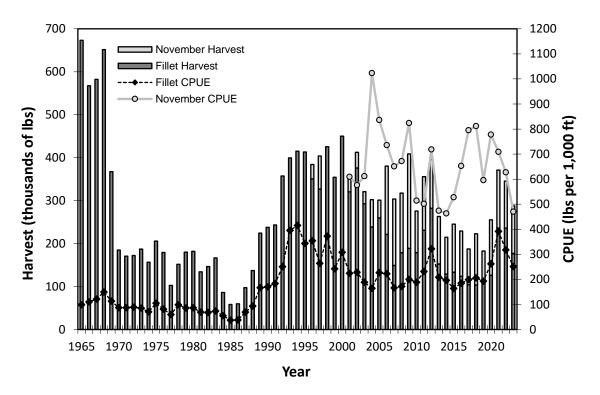


Figure 2. Cisco harvest and catch per unit effort (CPUE) in the commercial gill net fishery, Minnesota waters of Lake Superior, 1965-2023. Harvest has been restricted in November since 1973.

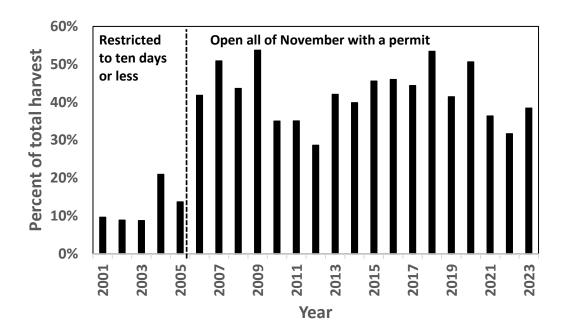


Figure 3. Percent of yearly Cisco harvest taken during November, Minnesota waters of Lake Superior, 2001-2023.

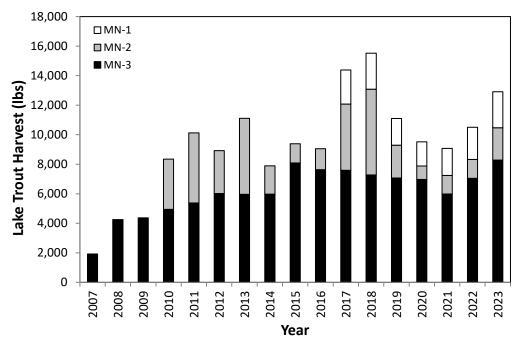


Figure 4. Lake Trout harvest by statistical district in the summer expanded commercial assessment, Minnesota waters of Lake Superior, 2007-2023.

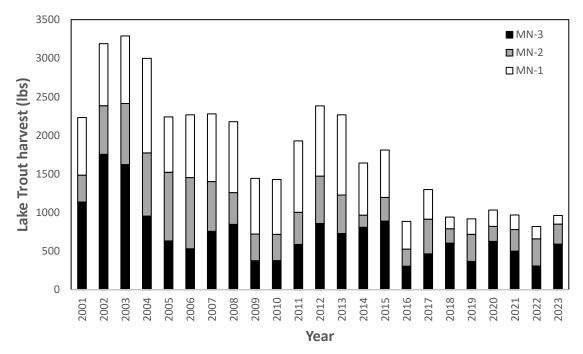


Figure 5. Incidental Lake Trout harvest in Cisco, chub, and Round Whitefish nets by statistical district, Minnesota waters of Lake Superior, 2001-2023.

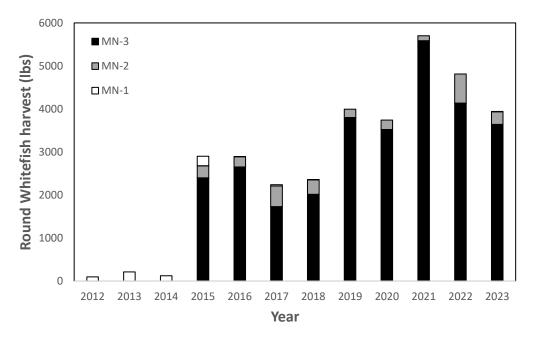


Figure 6. Round Whitefish harvest by statistical district, Minnesota waters of Lake Superior, 2012-2023.

# Appendix 1. Commercial operators, apprentices, gear allocation, and special assessments, Minnesota waters of Lake Superior, 2023.

			Feet of	Feet of Round				
Master	Apprentice	Feet of	Chub	Whitefish	Pound	Trap		Statistical
License No.	License	Cisco Net	Net	Net	Nets	Nets	Special Assessments	District
7		800					November Cisco	MN-2
9 <sup>1</sup>		500						MN-3
13		1,500		400			Expanded Commercial	MN-1
							November Cisco	
15	Yes	1,200						MN-1
18		600		400			Expanded Commercial	MN-1
							November Cisco	
20		2,000	1,000	400			May Lake Trout	MN-3
							Expanded Commercial	
							November Cisco	
21		1,500		400			Expanded Commercial	MN-3
							November Cisco	
22 <sup>1</sup>		1,000						MN-3
29		1,200						MN-3
45		1,800		400			May Lake Trout	MN-2
							Expanded Commercial	
							November Cisco	
46 <sup>1</sup>		1,000						MN-3
62		2,700	2,000	400			May Lake Trout	MN-2
							Expanded Commercial	
							November Cisco	
79		1,000						MN-2
201		2,000					Expanded Commercial	MN-2
							November Cisco	
202		2,400		400			Expanded Commercial	MN-2
							November Cisco	
203		700		400			Expanded Commercial	MN-2
204		1,500						MN-2
301 <sup>1</sup>		1,000						MN-3
302 <sup>1</sup>		500						MN-3
303		3,500		400			Expanded Commercial	MN-3
		-,					November Cisco	
304		2,000		400			Expanded Commercial	MN-3
		,					November Cisco	
305		2,000		400			November Cisco	MN-3
306		2,000					November Cisco	MN-3
307	Yes	600		400			Expanded Commercial	MN-3
308	Yes	3,000		400			Expanded Commercial	MN-3
Total		38,000	3,000	5,200	0	0		

<sup>1</sup> operators who only fished in Reservation waters with permission from the Grand Portage Band of Lake Superior Chippewa

### COMMERCIAL FISHING SUMMARY MINNESOTA WATERS OF LAKE SUPERIOR

2023

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

Prepared by: Josh Blankenheim Minnesota Department of Natural Resources Lake Superior Area Fisheries Office

Approved by:\_\_\_\_\_ Area Supervisor

Approved by:\_\_\_\_\_ Regional Fisheries