



**Biological and Commercial Catch Statistics  
from the Chippewa Inter-Tribal Gill Net Fishery  
within Michigan Waters of Lake Superior  
During 2006**

by  
William P. Mattes  
Great Lakes Indian Fish & Wildlife Commission

Matthew J. Symbal  
Red Cliff Fisheries Department  
Red Cliff Band of Lake Superior Chippewa Indians  
P.O. Box 529  
Bayfield, WI 54814

H. Gene Mensch  
Keweenaw Bay Natural Resources Department  
Keweenaw Bay Indian Community  
P.O. Box 10  
L'Anse, MI 49946

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**GREAT LAKES INDIAN FISH  
& WILDLIFE COMMISSION**  
Biological Services Division  
P.O. Box 9  
Odanah, WI 54861  
(715) 682-6619

## ABSTRACT

The 2006 commercial inter-tribal fishery in the 1842 treaty-ceded waters of Michigan consisted of seven (7) large boats and 15 small boats, representing 22 tribal licensees from the Keweenaw Bay, Bad River and Red Cliff Bands of Lake Superior Chippewa. Gill nets were the only gear used in the fishery.

The fishing season for whitefish and lake trout was closed from November 1 through November 27 and commercial fishing was prohibited during October in seven seasonal refuges. Target fishing for lean lake trout (fishing in water < 35 fathoms) in areas outside the refuges was prohibited during October to reduce the impact of fishing on spawning stocks of lake trout. The Keweenaw Bay tribe managed their lake herring fishery through a quota system.

Fishermen reported fishing 5.75 million feet of gill net and harvesting 1,036,589 round pounds of fish. Whitefish was the primary target species, making up 85.8% of the total, followed by lake trout (13.4%), with the remaining 0.7% consisting of lake herring (ciscoe), siscowet, salmon, walleye, trout (rainbow and brown), and burbot.

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## INTRODUCTION

The Red Cliff, Bad River and Keweenaw Bay Bands of Lake Superior Chippewa entered into an agreement to establish an inter-tribal off-reservation assessment fishery in the western Michigan waters of Lake Superior (from the Wisconsin- Michigan state line to the West Entry in the Keweenaw Peninsula) on 23 August 1984. In 1988 tribal off-reservation commercial fishing expanded to include more fishermen and fishing in waters east of the Keweenaw Peninsula. An inter-tribal agreement was developed to manage this expanded fishery. Since 1990 Bad River and Red Cliff have managed their fishery within the guidelines of this inter-tribal agreement, while Keweenaw Bay manages their fishery through a fisheries management plan. Results of the early assessment fishery and the expanded commercial fishery have been reported annually as administrative reports of the Great Lakes Indian Fish and Wildlife Commission.

Biological and commercial fishery statistics were summarized for calendar year 2006 from the inter-tribal fishery in the 1842 treaty-ceded territory within Michigan waters of Lake Superior (Figure 1), and compared to those from previous years. Statistics were reported by management unit, grid, and gear type as indicated on individual catch reports.

### **Description of the Fishery**

The commercial fishery consisted of seven (7) large boats and 15 small boats, representing 22 tribal licenses from the Keweenaw Bay, Bad River and Red Cliff Bands. As in previous years, the area south of a line from the East Entry of Keweenaw Peninsula to Point Abbaye (Figure 1) was open only to Keweenaw Bay small boat fishermen. Gill nets were the only gear used in the fishery during 2006.

The fishing season for whitefish and lake trout was closed from November 1 through November 27. Fishing for siscowet was prohibited in water less than 35 fathoms during the closed season for lake trout and whitefish. Commercial fishing was prohibited during October in seasonal refuges, of which four were created in 1988, and three in 1989 (Figure 1). Target fishing for lean lake trout in other areas was prohibited during October to reduce the impact of fishing on spawning stocks of lake trout. The Keweenaw Bay tribe employed a quota system for regulating lake herring harvest by its fishermen. The Bad River and Red Cliff tribes did not use this system for lake herring. Also, the three bands allowed fishing for lake herring year-round (i.e. no seasonal restriction).



## Quota Management System

Since 1985, the tribes have used a quota management system to regulate lake trout harvest and to limit mortality on lake trout stocks in the 1842 inter-tribal gill net fishery within Michigan waters of Lake Superior. In 1985 and 1986, each gill net tug was assigned a lake trout quota of 3,750 or 15,000 pounds depending on tribal affiliation. Starting with the 1987-1990 time period and for each of the four management units, total allowable catch (TAC, expressed as number of fish) values were estimated for each year within the time period. The average TAC was then calculated and used as the TAC for each fishing year within the time period. A tribal fishing year began in November and ran through October of the next year. Harvest quotas applied only to lean lake trout (referred to as "lake trout" in this report). Harvest of siscowet, a form of lake trout that generally inhabits deeper water and has a higher fat content than lean lake trout, was not regulated by quotas. TAC's and tribal quotas by management unit, and each fishing year within a 4-6 year period were as follows:

UNIT		YEARS				
		Nov. 1987- Oct. 1990 <sup>1</sup>	Nov. 1990- Oct. 1994 <sup>2</sup>	Nov. 1994- Oct. 1999 <sup>3</sup>	Nov.1999- Oct. 2005 <sup>4,5</sup>	Nov. 2006- Oct. 2009 <sup>6</sup>
MI-2	TAC	19,800	10,400	9,700	6,606	6,606
	Tribal	9,900	5,200	4,850	3,303	3,303
MI-3	TAC	5,000	7,600	6,600	4,950	4,950
	Tribal	2,500	3,800	3,300	2,475	2,475
MI-4	TAC	20,600	53,400	46,920	40,440	43,200
	Tribal	10,300	26,700	23,460	20,220	21,600
MI-5	TAC	16,100	15,700	17,080	33,130	33,130
	Tribal	4,830	4,710	5,124	16,565	16,565
Total	TAC	61,500	87,100	80,300	85,126	87,886
	Tribal	27,530	40,410	36,734	42,563	43,943

<sup>1</sup> GLIFWC. 1987.

<sup>2</sup> Ebener et al. 1989.

<sup>3</sup> Mattes. 1994.

<sup>4</sup> Mattes. 2000.

<sup>5</sup> Mattes. 2004.

<sup>6</sup> Mattes. 2006.

## METHODS

Effort and harvest data were collected from mandatory daily catch reports filed bi-weekly by all fishermen who sold fish in their names, or by the boat captain who reported all effort and catch for his vessel. Gill net effort was reported as linear feet of gill net lifted. Harvest was reported in both dressed and round pounds. Species for which harvest was reported by fishermen as dressed pounds and conversion factors used to calculate round pounds are as follows:

<b>Species</b>	<b>Conversion</b>
Whitefish	1.17
Lake trout	1.25
Siscowet	1.25
Salmon and Trout	1.25
Herring	1.20
Round whitefish (menominee)	1.15
Chub	1.20

Harvest of other species (walleye, sucker, smelt, burbot, and northern pike) were reported by fishermen as round pounds.

Biological statistics were derived from biological monitoring data. Biological monitoring of catches occurred several times a month by the Keweenaw Bay Natural Resources Department, the Red Cliff Fisheries Department, and the Great Lakes Indian Fish and Wildlife Commission.

## RESULTS AND DISCUSSION

### Commercial Catch and Effort Statistics

Fishermen reported fishing 5.75 million feet of gill net and harvesting 1,036,589 round pounds of fish. Whitefish was the primary target species, making up 85.8% of the total, followed by lake trout (13.4%), with the remaining 0.7% consisting of lake herring (ciscoe), siscowet, salmon, walleye, trout (rainbow and brown), and burbot.

#### Unit MI-2

Harvest. Forty-two percent of the overall harvest was taken in MI-2 (Table 1). Of the 434,030 round pounds harvested in MI-2, 97.2% were whitefish, 2.6% lake trout, and 0.2% siscowet (Table 2). Lake trout harvest was highest in grid 1316 (4,983 dressed pounds) but less than 2,500 dressed pounds were taken in each of the remaining seven statistical grids fished (Figure 2). Whitefish harvest was greatest in grid 1413 (128,389 dressed pounds), followed by grids 1512 and 1316 (77,957 and 42,827 dressed pounds, respectively). Greater than 30,000 pounds was also harvested from grids 1414 and 1315 (33,179 and 30,346, respectively). Less than 30,000 pounds were taken in each of the other three grids fished (Figure 3).

Effort. Twenty-nine percent of the overall gill-net effort occurred in MI-2 (Table 1) which was fished by two tribes (Table 3). Fishing effort in MI-2 was 1,642,450 feet with 26% (418,600 feet) occurring in grid 1413 and over 250,000 feet fished in two other grids (1512 and 1316) (Figure 4). Gill-nets of 4 ½ inch mesh accounted for 1.53 million feet or 93% of the unit's effort (Table 2 and Figure 5).

Target Effort and Harvest. All fishing effort was targeted at whitefish and lake trout (Tables 4 and 5). Target effort (1.64 million feet) and harvest of whitefish (360,434 dressed pounds) was greater than the 1985-2006 average (303,589 feet and 54,365 dressed pounds, respectively). Target lake trout harvest (9,072 dressed pounds) was above the 1985-2006 average of 7,153 dressed pounds.

Catch Per Effort (CPE). Whitefish CPE (pounds harvested per 1,000 feet of gill-net) for targeted fishing in the eight grids fished in MI-2 ranged from 144-307 pounds (Table 4). Whitefish CPE for the eight grids combined was 219 above the average CPE of 179 for this unit for the 22 year period 1985-2006 (Table 5). Lake trout CPE for targeted fishing ranged from 0-19 per grid and was 6 for all grids combined, below the 1985-2006 average CPE of 24 pounds.

#### Unit MI-3

Harvest. Thirty-one percent of the overall harvest was taken in MI-3 (Table 1). Of the 325,414 round pounds harvested in MI-3, 95.1% were whitefish and 4.9% lake trout (Table 2). Harvest occurred in eight statistical grids. Lake trout harvest was greatest in grid 1024 (9,792 dressed pounds), but less than 2,500 dressed pounds in each of the seven remaining grids fished (Figure 2). Whitefish harvest was greatest in grid 1219 (129,135 dressed pounds) followed by grids 1121 and 1024 (70,765 and 40,515 dressed pounds, respectively). Whitefish harvest was less than 15,000 pounds in each of the other five grids fished (Figure 3).

Effort. Thirty percent of the overall gill-net effort occurred in MI-3 (Table 1) which was fished by three tribes (Table 3). Fishing effort in MI-3 was 1,731,000 feet with 35% (601,400 feet) occurring in grid 1121, followed by 32% (555,000 feet) in grid 1219, and 24% (414,800 feet) in grid 1024 (Figure 4). Gill-nets of 4 ½ inch mesh accounted for 98% of the unit's effort (Table 2 and Figure 5).

Target Effort and Harvest. All fishing effort in MI-3 was targeted at whitefish and lake trout (Table 4). Target gill-net effort (1.73 million feet) was below the 1985-2006 average of 1.84 million feet (Table 5). Target harvest of whitefish (264,460 dressed pounds) was above the 1985-2006 average (159,360 dressed pounds). Target harvest of lake trout (12,714 dressed pounds) was below the 1985-2006 average (19,324 dressed pounds).

Catch Per Effort (CPE). Whitefish CPE (pounds harvested per 1,000 feet of gill-net) for targeted fishing in the eight grids fished ranged from 18-379 pounds (Table 4). Whitefish CPE for the eight grids combined was 153 pounds and above the average CPE of 86 for this unit for the 22 year period 1985-2006 (Table 5). Lake trout CPE for targeted fishing ranged from 1-39 pounds and was 7 for all grids combined, below the 1985-2006 average CPE of 10 pounds.

#### Unit MI-4

Harvest. Seventeen percent of the overall harvest was taken in MI-4 (Table 1). Of the 177,870 round pounds harvested, 59.7% were whitefish, 37.1% lake trout, 1.3% herring, 1.1% siscowet, 0.6% salmon, and 0.1% walleye (Table 2). Harvest occurred in twelve statistical grids. Lake trout harvest was highest in grids 1423 and 1223 (15,474 and 13,945 dressed pounds, respectively), and greater than 7,500 pounds in two other grids (1224 and 1323) (Figure 2). Less than 2,500 dressed pounds were harvested in each of the other eight grids fished. Whitefish harvest was greatest in grid 1026 (19,047 dressed pounds) followed by grids 1423 and 1223 (18,421 and 17,350 dressed pounds, respectively) and exceeded 10,000 pounds in two other grids (1323 and 1224) (Figure 3). Less than 5,000 dressed pounds were harvested in each of the other seven grids fished.

Effort. Twenty-eight percent of the overall gill-net effort occurred in MI-4 (Table 1) which was fished by three tribes (Table 3). Fishing effort in MI-4 was 1,629,230 feet with all but 21,000 feet being large mesh effort (Table 2). Effort was greatest in grid 1423 (364,315 feet or 22% of the unit's effort) and exceeded 250,000 feet in three other grids (1223, 1323, and 1224) (Figure 4). Gill-nets of 4 ½ inch mesh accounted for 1,426,950 feet or 88% of the unit's effort (Figure 5).

Target Effort and Harvest. The majority of fishing effort (1,601,855 feet) was targeted at whitefish and lake trout with 16,800 feet directed at lake herring, 7,200 feet targeted at salmon, and 3,375 feet targeted at siscowet (Table 4). Target effort for whitefish and lake trout (1.6 million feet) was lower than the 1985-2006 average of 3.3 million feet (Table 5). Target harvest of whitefish (90,777 dressed pounds) was below the 1985-2006 average (199,847 dressed pounds). Target harvest of lake trout (52,758 dressed pounds) was also below the 1985-2006 average (72,615 dressed pounds). Target harvest was 1,692 dressed pounds for herring, 48 dressed pounds for salmon, and 165 dressed pounds for siscowet.

Catch Per Effort (CPE). Whitefish CPE (pounds harvested per 1,000 feet of gill-net) for targeted fishing in the twelve grids fished ranged from 20-136 pounds (Table 4). Whitefish CPE for the twelve grids combined was 57 pounds and near the average CPE of 60 for this unit for the 22 year period 1985-2006 (Table 5). Lake trout CPE for targeted fishing ranged from 5-51 pounds and was 33 for all grids combined, above the 1985-2006 average CPE of 22 pounds. CPE for targeted effort was 101 dressed pounds for herring, 7 dressed pounds for salmon, and 49 dressed pounds for siscowet.

#### Unit MI-5

Harvest. Ten percent of the overall harvest was taken in MI-5 (Table 1). Of the 99,276 round pounds harvested in MI-5, 46.2% were whitefish, 52.8% lake trout, 0.9% herring, and 0.1% salmon (Table 2). Harvest occurred in four statistical grids. Lake trout harvest was highest in grids 1529 and 1428 (18,255 and 10,692 dressed pounds, respectively) and exceeded 5,000 dressed pounds in grid 1429 (Figure 2). Whitefish harvest was greatest in grid 1429 (33,977 dressed pounds). Less than 10,000 dressed pounds were harvested in each of the other three grids fished (Figure 3).

Effort. Thirteen percent of the overall gill-net effort occurred in MI-5 (Table 1) which was fished by two tribes (Table 3). Fishing effort in MI-5 was 746,700 feet with 43% (323,300 feet) occurring in grid 1529 followed by 29% (215,500 feet) and 27% (203,900 feet) in grids 1429 and 1428, respectively (Figure 4). Gill-nets of 4 ½ inch mesh accounted for 734,400 feet or 98% of the unit's effort (Table 2 and Figure 5).

Target Effort and Harvest. The majority of fishing effort (738,700 feet) was targeted at whitefish and lake trout with 8,000 feet directed at lake herring (Table 4). Gill net effort targeted at whitefish and lake trout (0.7 million feet) was above the 1986-2006 average of 0.4 million feet (Table 5). Target harvest of whitefish (44,839 dressed pounds) was above the 1986-2006 average (28,326 dressed pounds). Target harvest of lake trout (36,650 dressed pounds) was higher than the 1986-2006 average (20,091 dressed pounds).

Catch Per Effort (CPE). Whitefish CPE (pounds harvested per 1,000 feet of gill-net) for targeted fishing in the four grids fished ranged from 20-158 pounds (Table 4). Whitefish CPE for the four grids combined was 61 pounds and below the average CPE of 71 for this unit for the 21 year period 1986-2006 (Table 5). Lake trout CPE for targeted fishing ranged from 33-138 pounds and was 50 for all grids combined, the same as the 1986-2006 average CPE of 50 pounds.

## **Biological Statistics**

### Lake Trout MI-2

Sixteen year classes of wild trout (4, 6-13, 17, 19, 21, 23, 24, 30, 31) were represented in a sample of 63 lake trout aged from MI-2 (Table 6). Mean age of wild fish was 10.6 years with fish ten years and older representing 40% of the catch.

Mean length for the 73 fish measured was 23.9 inches and mean weight for the 55 fish weighed was 3.4 pounds round. Average size at age of 7-9 year old wild lake trout has decreased and become narrower since 1985, while average size of age 10 wild fish has fluctuated due to low sample size in some years (Figure 6).

Lamprey marking rates were 1.4 wounds and 9.6 scars/100 fish (Table 7). Annual total mortality was estimated to be 22% ( $Z=0.25 \pm 0.03$ ) for wild fish ages 7-13 (Table 8).

### Lake Trout MI-3

Seven age groups of hatchery fish (9-11, 13, 14, 16, 24) and fifteen year classes of wild trout (4-15, 19, 24, 31) were represented in a sample of 159 lake trout aged from MI-3 (Table 9). Mean age of hatchery and wild fish was 12.5 and 9.2 years, respectively. Fish ten years and older made up 32% of the wild component of the catch.

For wild fish mean length for the 162 fish measured was 23.8 inches and mean weight for the 161 fish weighed was 4.8 pounds round. Average size at age of 7-10 year old wild lake trout has decreased and become narrower since 1985 (Figure 6).

Overall lamprey-marking rates were 3.5 wounds and 4.6 scars/100 fish, with fish > 29.0 inches exhibiting the highest scarring rate (Table 7). Annual total mortality rate was estimated at 45% ( $Z=0.60, \pm 0.04$ ) for wild fish ages 9-11 (Table 8).

### Lake Trout MI-4

Eleven age groups of hatchery fish (4-13, 25) and fifteen year classes of wild trout (3-17) were represented in a sample of 254 lake trout aged from MI-4 (Table 10). Mean age of hatchery and wild fish was 9.2 and 8.8 years, respectively. Fish ten years and older made up 35% of the wild component of the catch.

Mean length of the 282 fish sampled was 22.7 inches and mean weight of the 232 fish weighed was 4.0 round pounds (Table 10). The average size of wild fish (22.5 inches, 3.7 pounds) was lower than that of hatchery fish (23.7 inches, 4.8 pounds). Average length of wild fish at ages 7-10 has decreased and become narrower since 1985 (Figure 6).

Lamprey marking rates were 4.3 wounds and 4.6 scars/100 fish compared to 2.1 wounds and 1.8 scars/100 fish in 2005 (Table 7). Annual total mortality for fish ages 9-15 was estimated to be 43% ( $Z=0.56 \pm 0.08$ ) for wild fish and 45% ( $Z=0.59 \pm 0.09$ ) for wild and hatchery fish combined (Table 8).

### Lake Trout MI-5

Twelve year classes of wild trout (3-13, 16) were represented in a sample of 115 lake trout aged from MI-5 (Table 11). Mean age of was 8.6 years with fish ten years and older representing 22% of the catch.

Mean length for the 122 fish measured was 23.5 inches and mean weight for the 120 fish weighed was 4.3 pounds round. Average length of wild fish at ages 7-10 has been tracked since 1987 (Figure 6). The variation in the average length of wild fish at ages 7-10 has become narrower since 1987.

Lamprey marking rates were 3.3 wounds and 9.0 scars/100 fish compared to zero wounds and 3.7 scars/100 fish in 2005 (Table 7). Annual total mortality was estimated to be 48% ( $Z=0.66 \pm 0.10$ ) for wild fish ages 8-13 (Table 8).

### Lake Whitefish MI-2

Twelve age groups (6-16, 19) were represented in the 710 whitefish aged in MI-2 which had a mean age of 9.4 years (Table 12). Mean length of the 886 fish sampled was 20.0 inches and mean weight of the 473 fish weighed was 2.6 round pounds. The average length of age 7 to 10 year old fish has generally been similar since 1995 (Figure 7). Annual total mortality was estimated at 51% ( $Z=0.71 \pm 0.05$ ) for ages 9-12.

### Lake Whitefish MI-3

Eleven age groups (5-15) were represented in the 976 whitefish aged in MI-3, which had a mean age of 8.9 years (Table 12). The 1996 and 1997 year classes (ages 10 and 9) comprised 17% and 30% of the sample, respectively, while the 1998 year class (age 8) comprised 30% of the sample. Average length of 1,076 lake whitefish measured was 19.7 inches and weight for 983 lake whitefish sampled was 2.5 round pounds. The average length of age 7 to 10 year old fish has generally been similar since 1995 (Figure 7). Annual total mortality was estimated at 51% ( $Z=0.72 \pm 0.09$ ) for ages 8-13.

### Lake Whitefish MI-4

Thirteen age groups (4-15, 18) were represented in the 618 whitefish aged in MI-4, which had a mean age of 8.7 years (Table 12). The 1996 and 1997 year classes (ages 10 and 9) comprised 14% and 20% of the sample, respectively, while the 1998 year class (age 8) comprised 25% of the sample. Average length of 665 lake whitefish measured was 20.3 inches and weight for 510 lake whitefish sampled was 2.9 round pounds. The average length of age 7 to 10 year old fish, which had increased from 1998-2002, remained low in 2006 (Figure 7). Annual total mortality was estimated at 48% ( $Z=0.66 \pm 0.05$ ) for ages 8-15.

### Lake Whitefish MI-5

Ten age groups (5-13, 20) were represented in the 61 whitefish aged in MI-5 (Table 12). Mean age was 8.9 years, mean length was 21.8 inches, and mean weight was 3.7 round pounds.

The average length of age 7 to 10 year old fish has generally shown the most variation of any of the units since 1995 (Figure 7). Annual total mortality was estimated at 38% ( $Z=0.47 \pm 0.07$ ) for ages 9-13.

#### Siscowet

There were twenty age groups of siscowet in the 70 fish sampled in units MI-3, MI-4, and MI-5 (Table 13) which had a mean age of 17.2 years. Mean length and weight for 76 fish sampled was 22.3 inches and 3.4 round pounds, respectively. Annual total mortality was estimated at 28% ( $Z=0.33 \pm 0.09$ ) for ages 16-19 for all units combined.

#### Lake Herring and Menominee Whitefish

In MI-4 nine age groups (3-11) were represented in 23 fish aged; mean age was 7.7, mean length was 14.9 inches and mean weight was 1.0 round pounds (Table 14). For the seventh consecutive year otoliths replaced scale samples as the aging structure used to assign age to individual fish. Total annual mortality was estimated at 65% ( $Z=1.04 \pm 0.33$ ) for ages 8-10.

No menominee whitefish were sampled in 2006.

#### Coho and Chinook Salmon

Only one coho salmon was sampled from MI-4 in 2006 (Table 15). It was age 2, 14.3 inches, and weighed 1.7 pounds round.

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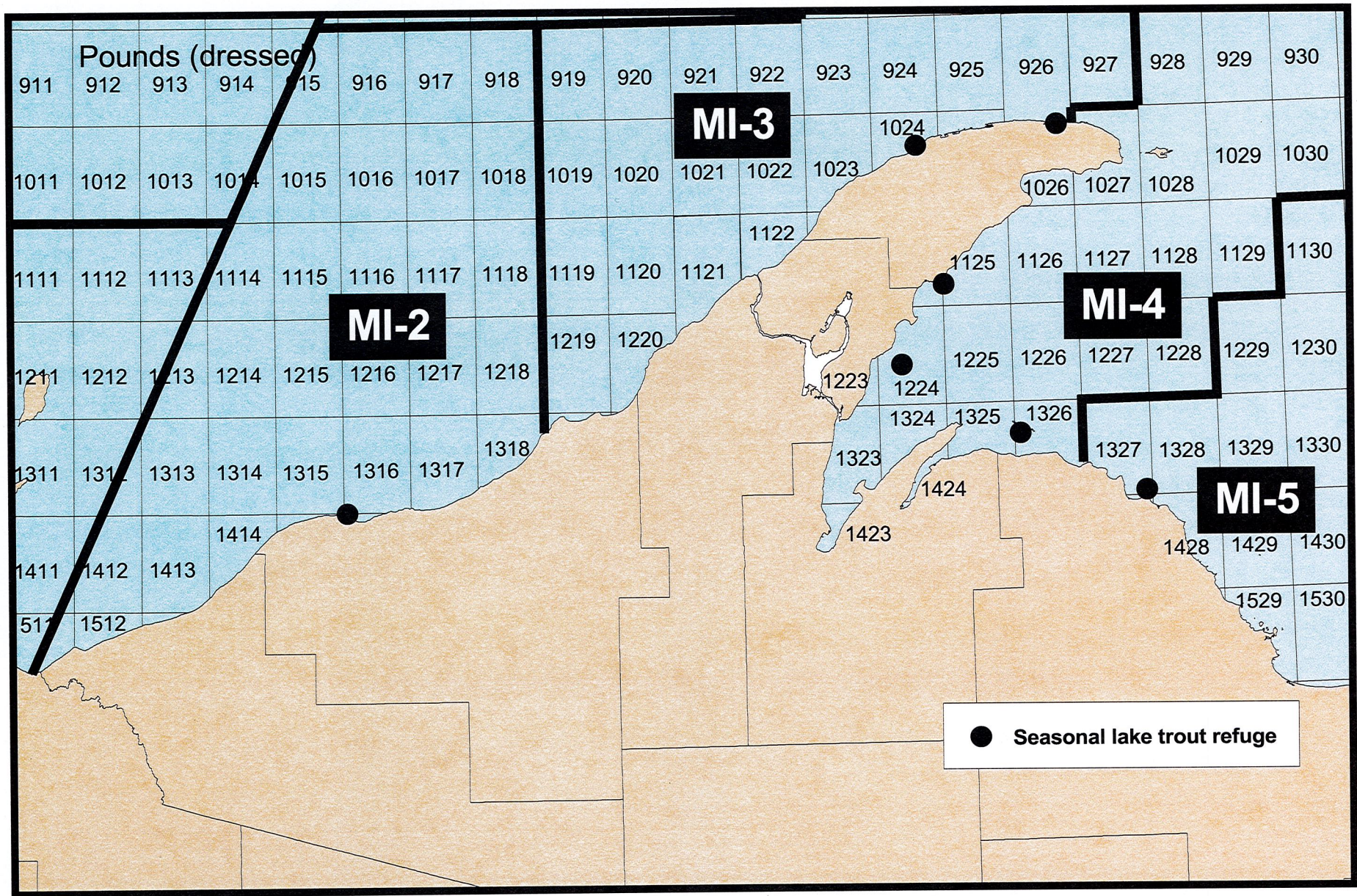


Figure 1. Management units and statistical grids in the 1842 treaty ceded area within Michigan waters of Lake Superior.

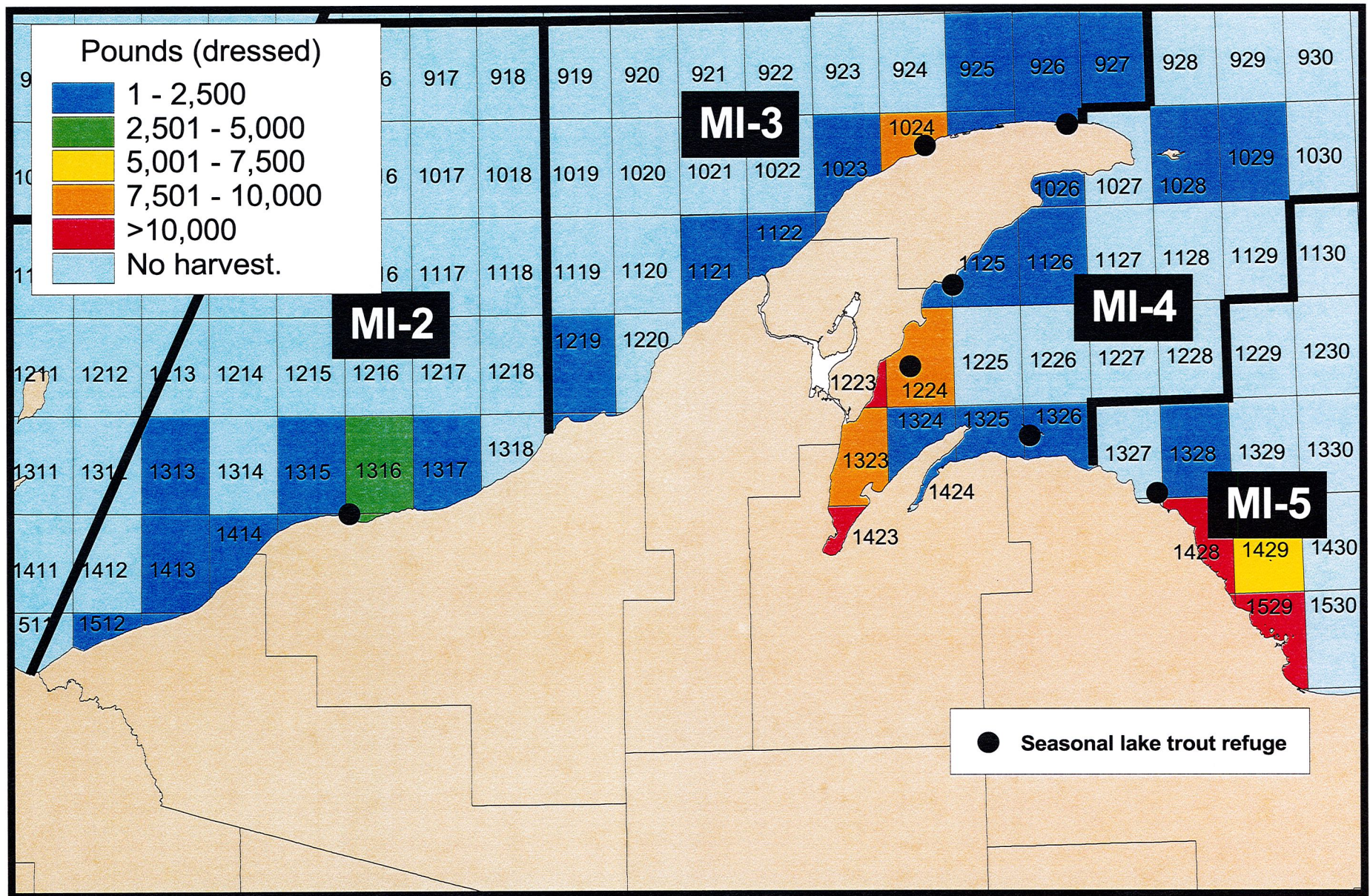


Figure 2. Lake trout harvest (dressed pounds) by statistical grid in the 1842 treaty ceded area within Michigan waters of Lake Superior during 2006.

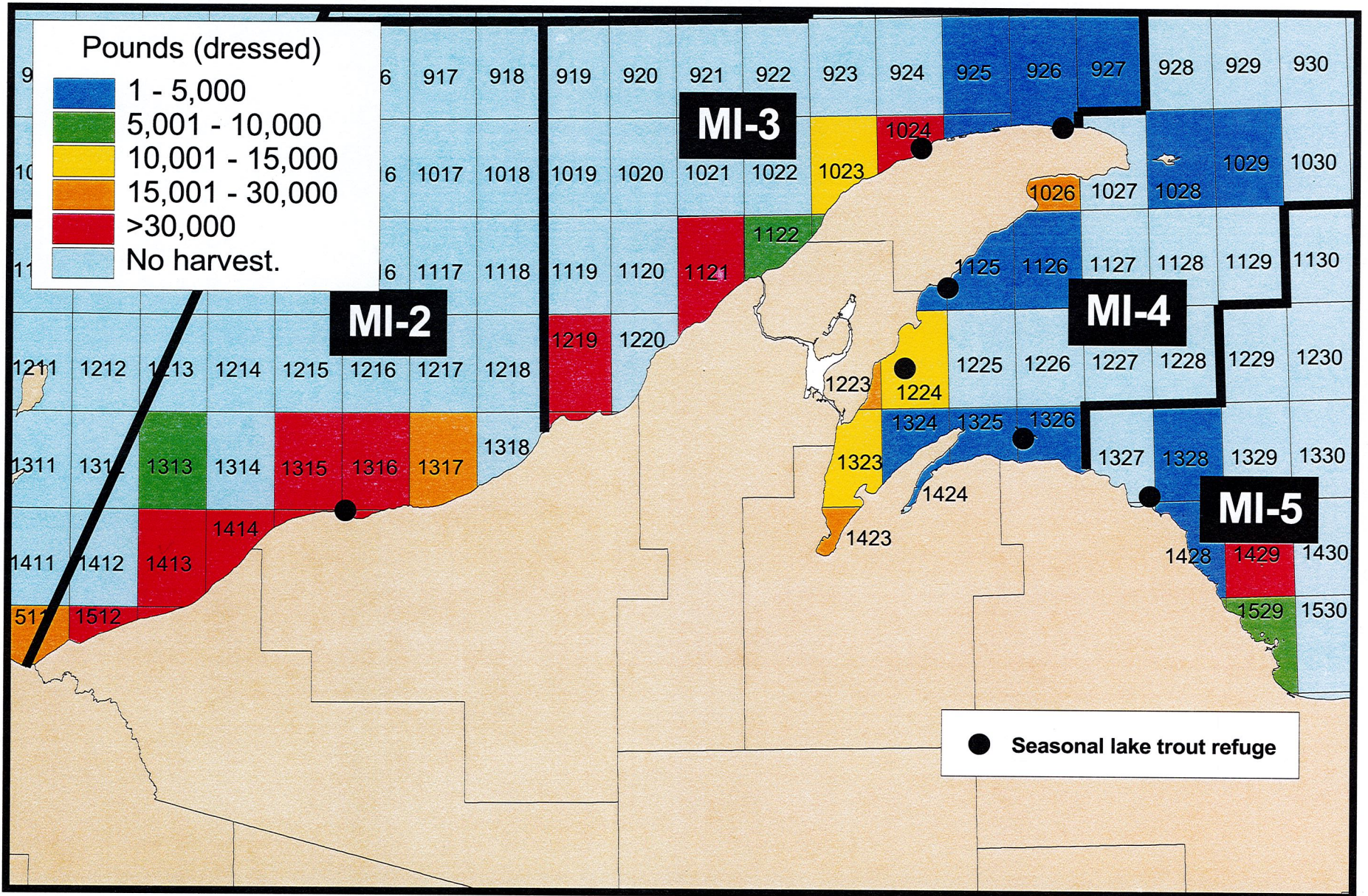


Figure 3. Whitefish harvest (dressed pounds) by statistical grid in the 1842 treaty ceded area within Michigan waters of Lake Superior during 2006.

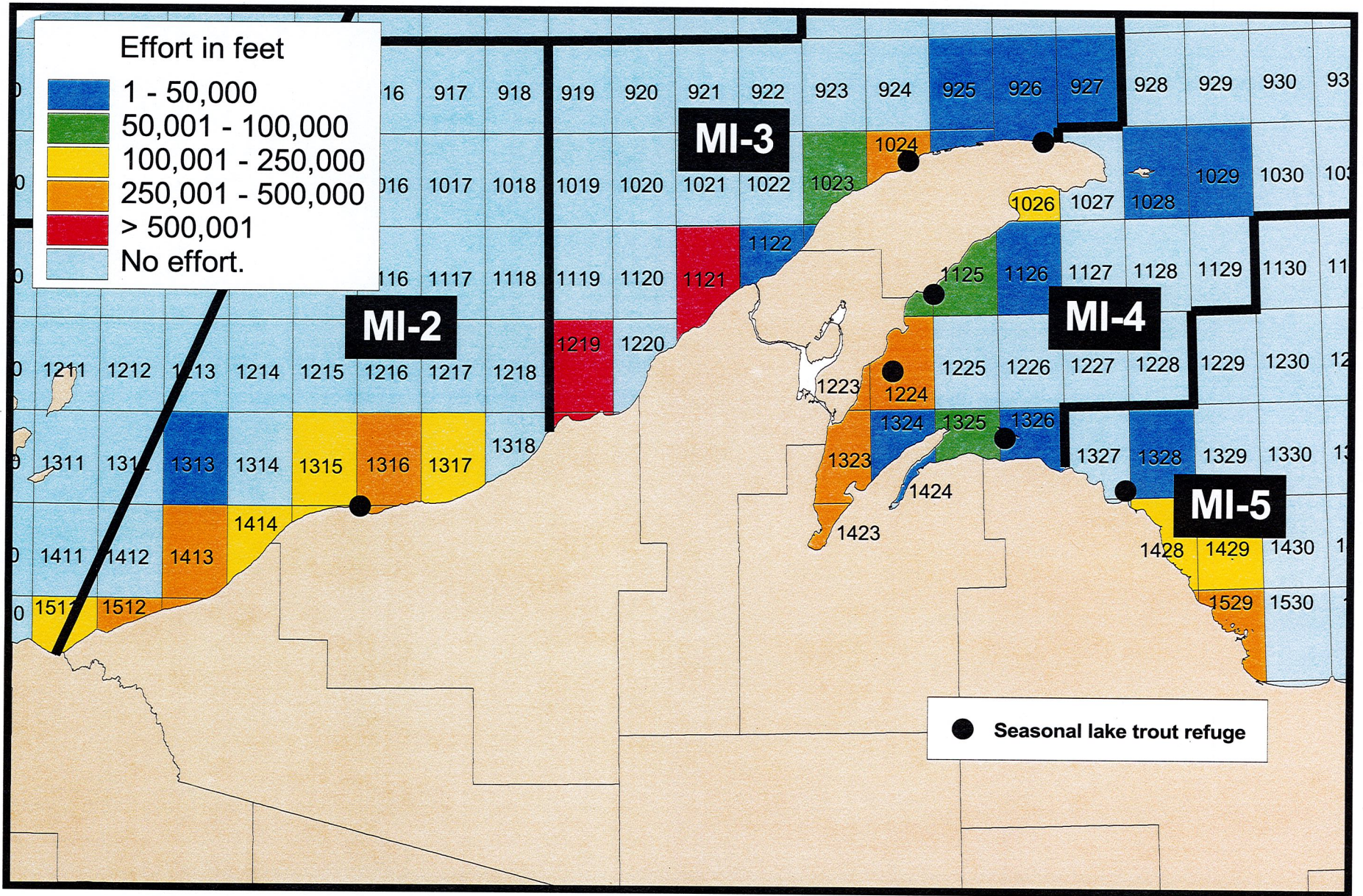


Figure 4. Effort in feet by statistical grid in the 1842 treaty ceded area within Michigan waters of Lake Superior during 2006.

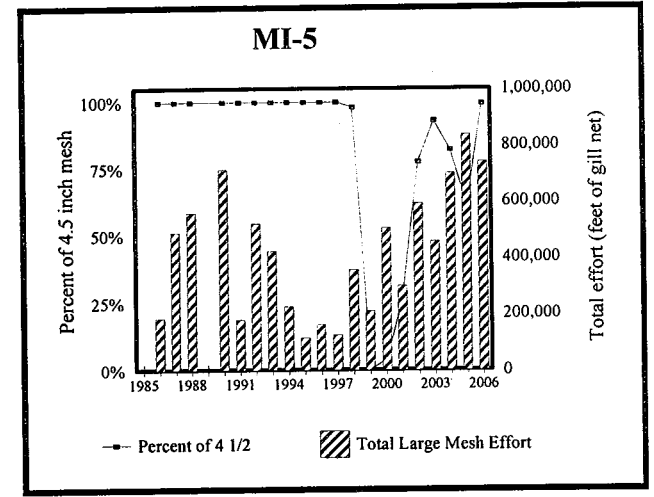
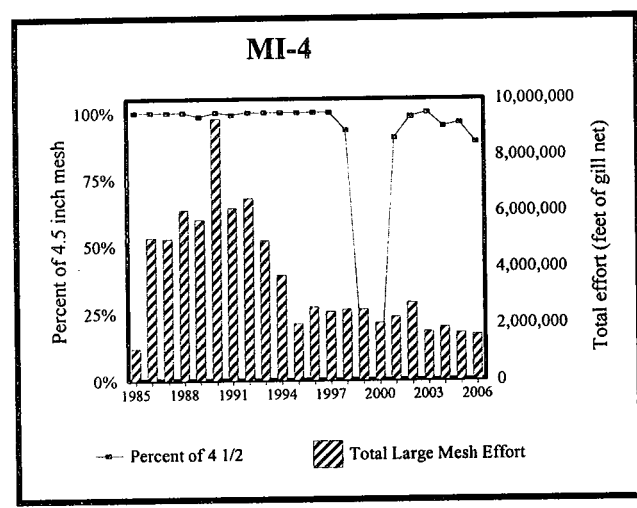
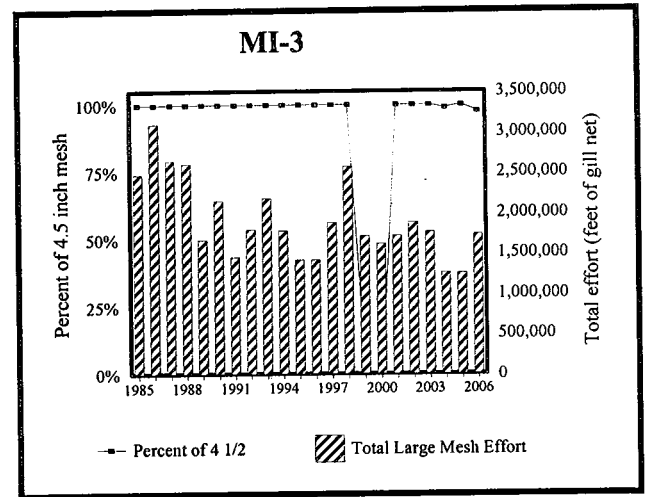
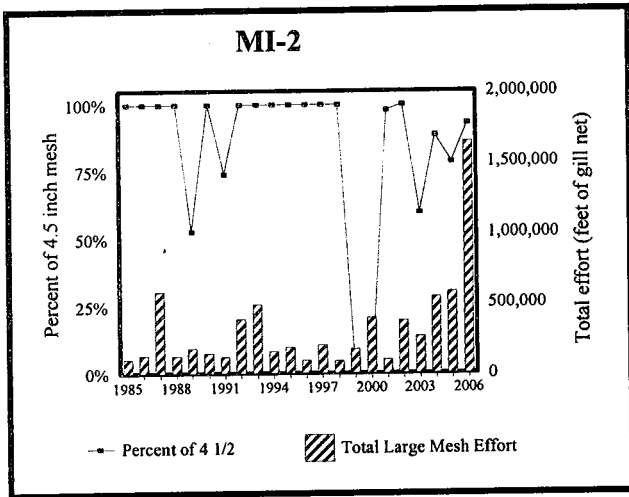
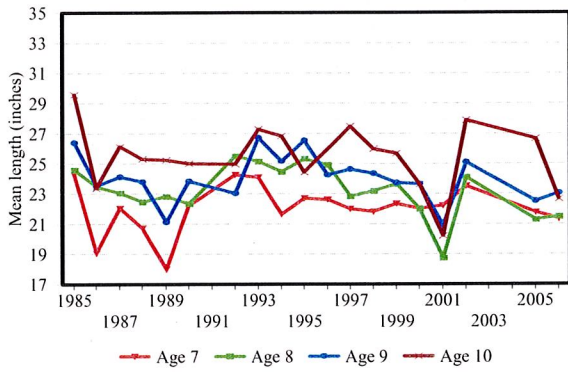
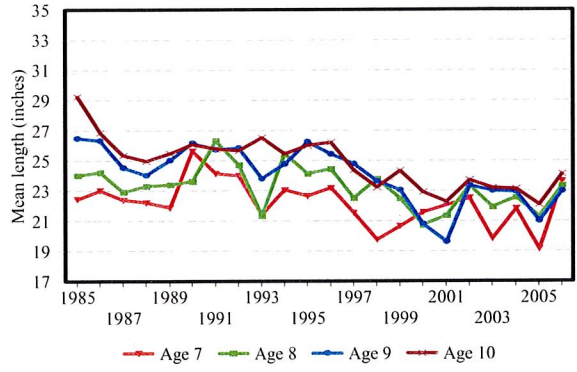


Figure 5. Total tribal large mesh gill net effort and percent composed of 4 1/2 inch mesh by management unit, 1985 to 2006.

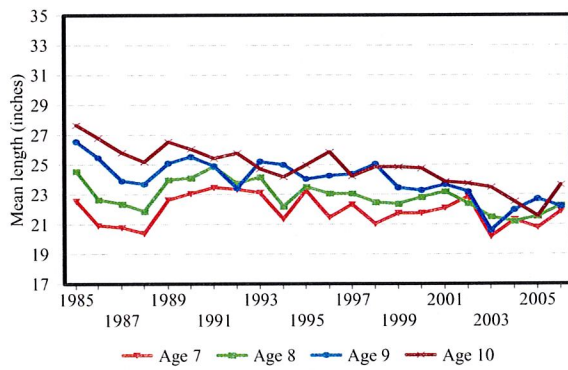
**Wild Lake Trout MI-2**



**Wild Lake Trout MI-3**



**Wild Lake Trout MI-4**



**Wild Lake Trout MI-5**

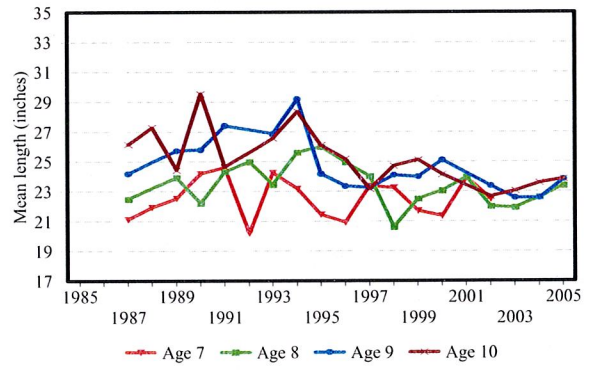
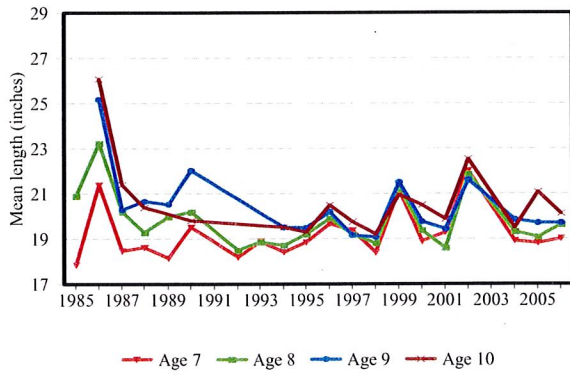
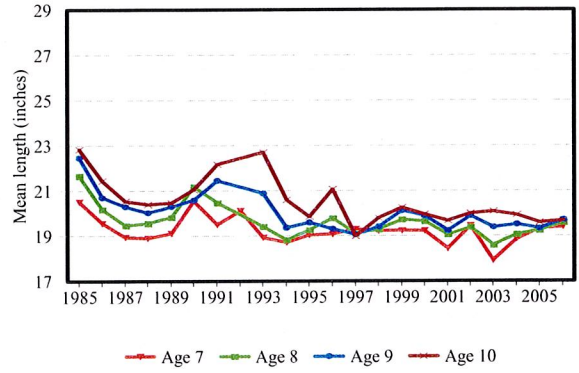


Figure 6. Trends in average length (inches) of wild lake trout (ages 7-10) in Michigan management units within the 1842 treaty ceded area, from 1985-2006.

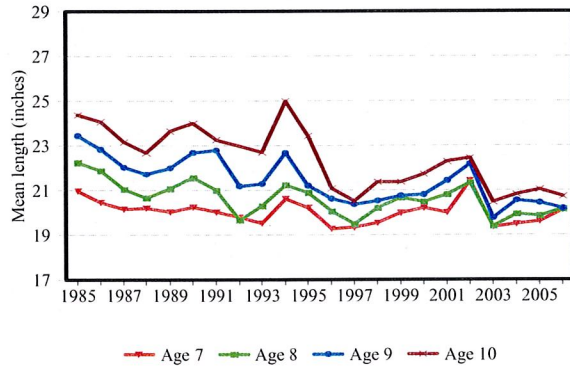
**Whitefish MI-2**



**Whitefish MI-3**



**Whitefish MI-4**



**Whitefish MI-5**

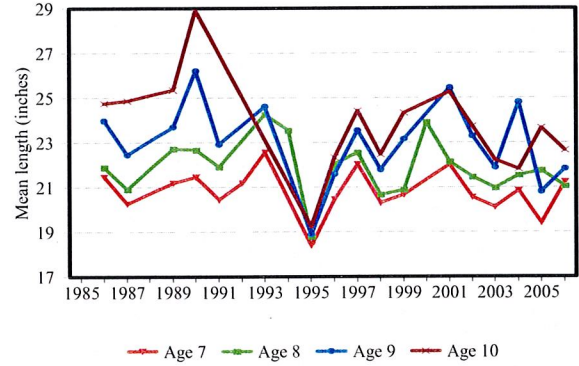


Figure 7. Trends in average length (inches) of whitefish (ages 7-10) in Michigan management units within the 1842 treaty ceded area, from 1985-2006.

Table 1. Total tribal commercial gill net effort (feet) and harvest (pounds) by management unit, grid, and species from the 1842 ceded area within Michigan waters of Lake Superior in 2006.

Management Unit	Grid	Effort	Percent of Total Effort*	Lake trout	Whitefish	Siscowet	Herring	Salmon	Trout	Walleye	Northern Pike	Sucker	Smelt	Burbot	Total Harvest Round Pounds	Percent of Total Harvest
MI-2	1313	24,000	1.5%	85	7,220	0	0	0	0	0	0	0	0	0		
	1315	211,200	12.9%	154	30,346	34	5	0	0	0	0	0	0	0		
	1316	257,600	15.7%	4,983	42,827	155	9	0	0	0	0	0	0	0		
	1317	108,700	6.6%	78	19,979	350	0	0	0	0	0	0	0	0		
	1413	418,600	25.5%	1,969	128,389	100	9	0	0	0	0	0	0	0		
	1414	191,200	11.6%	1,280	33,179	0	4	0	0	0	0	0	0	0		
	1511	124,200	7.6%	0	20,537	0	0	0	0	0	0	0	0	0		
	1512	306,950	18.7%	523	77,957	66	57	0	0	0	0	0	0	0		
Subtotals:	Effort:	1,642,450	28.6%													
	Dressed Pounds:			9,072	360,434	705	84	0	0							
	Round Pounds:			11,340.0	421,707.8	881.3	100.8	0.0	0.0	0	0	0	0	0	434,029.8	41.9%
MI-3	925	12,000	0.7%	465	4,553	0	0	0	0	0	0	0	0	0		
	926	900	0.1%	10	16	0	0	0	0	0	0	0	0	0		
	927	900	0.1%	19	35	0	0	0	0	0	0	0	0	0		
	1023	96,000	5.5%	65	13,185	0	0	0	0	0	0	0	0	0		
	1024	414,800	24.0%	9,792	40,515	0	0	0	0	0	0	0	0	0		
	1121	601,400	34.7%	910	70,765	31	21	0	0	0	0	0	0	0		
	1122	50,000	2.9%	616	6,256	25	7	0	0	0	0	0	0	0		
	1219	555,000	32.1%	837	129,135	0	0	0	0	0	0	0	0	0		
Subtotals:	Effort:	1,731,000	30.1%													
	Dressed Pounds:			12,714	264,460	56	28	0	0							
	Round Pounds:			15,892.5	309,418.2	70.0	33.6	0.0	0.0	0	0	0	0	0	325,414.3	31.4%
MI-4	1026	140,000	8.6%	1,249	19,047	0	0	0	0	0	0	0	0	0		
	1028	900	0.1%	20	45	0	0	0	0	0	0	0	0	0		
	1029	1,800	0.1%	28	58	0	0	0	0	0	0	0	0	0		
	1125	96,000	5.9%	1,705	2,780	0	0	0	0	0	0	0	0	0		
	1126	36,000	2.2%	194	3,200	0	0	0	0	0	0	0	0	0		
	1223	327,000	20.1%	13,945	17,350	238	0	23	0	0	0	0	0	0		
	1224	254,000	15.6%	8,838	12,225	515	0	5	0	10	0	0	0	0		
	1323	296,855	18.2%	8,504	13,145	392	1,585	103	15	53	0	0	0	0		
	1324	41,600	2.6%	2,112	3,204	11	0	3	0	0	0	0	0	0		
	1325	68,100	4.2%	738	1,257	23	0	5	0	0	0	0	0	0		
	1326	2,660	0.2%	50	101	0	0	2	0	0	0	0	0	0		
	1423	364,315	22.4%	15,474	18,421	359	307	778	6	93	0	0	0	0		
	Subtotals:	Effort:	1,629,230	28.3%												
	Dressed Pounds:			52,857	90,833	1,538	1,892	919	21							
	Round Pounds:			66,071.3	106,274.6	1,922.5	2,270.4	1,148.8	26.3	156	0	0	0	0	177,869.8	17.2%
MI-5	1328	4,000	0.5%	550	300	0	0	0	0	0	0	0	0	0		
	1428	203,900	27.3%	10,692	4,090	0	111	12	0	0	0	0	0	0		
	1429	215,500	28.9%	7,171	33,977	0	0	0	0	0	0	0	0	0		
	1529	323,300	43.3%	18,255	6,472	0	601	78	4	3	0	0	0	4		
Subtotals:	Effort:	746,700	13.0%													
	Dressed Pounds:			36,668	44,839	0	712	90	4							
	Round Pounds:			45,835.0	52,461.6	0.0	854.4	112.5	5.0	3	0	0	0	4	99,275.5	9.6%
Grand Totals:	Effort:	5,749,380														
	Dressed Pounds:			111,311	760,566	2,299	2,716	1,009	25							
	Round Pounds:			139,138.8	889,862.2	2,873.8	3,259.2	1,261.3	31.3	159	0	0	0	4	1,036,589.4	

\*For subtotals, percentage refers to percent of overall effort fished in unit.



Table 2. Tribal commercial gill net effort (feet) harvest (pounds) by management unit, gill net mesh size, and species from the 1842 ceded area within Michigan waters of Lake Superior in 2006.

Unit	Mesh	Effort	Percent of									Total Harvest Round Pounds
			Total Effort*	Lake trout	Whitefish	Siscowet	Herring	Salmon	Trout	Walleye	Burbot	
MI-2	4.5	1,527,250	93.0%	7,990	325,040	681	58	0	0	0	0	
	5	48,000	2.9%	958	6,909	4	4	0	0	0	0	
	4.5 - 5	67,200	4.1%	124	28,485	20	22	0				
Subtotals:	Effort:	1,642,450	28.6%									
	Dressed Pounds:			9,072	360,434	705	84	0	0			
	Round Pounds:			11,340.0	421,707.8	881.3	100.8	0.0	0.0	0.0	0.0	434,029.8
	Percent of Unit Harvest:			2.6%	97.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
MI-3	4.5	1,689,000	97.6%	12,196	253,556	56	28	0	0	0	0	
	4.5-5	42,000	2.4%	518	10,904	0	0	0	0	0	0	
	Subtotals:	Effort:	1,731,000	30.1%								
	Dressed Pounds:			12,714	264,460	56	28	0	0			
	Round Pounds:			15,892.5	309,418.2	70.0	33.6	0.0	0.0	0.0	0.0	325,414.3
	Percent of Unit Harvest:			4.9%	95.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
MI-4	3.0	19,800	1.2%	120	105	0	1,757	37	0	0	0	
	4.0	1,200	0.1%	23	56	9	0	0	0	0	0	
	4.5	1,426,950	87.6%	45,937	85,114	1,165	120	413	0	10	0	
	5.0	179,280	11.0%	6,770	5,558	364	15	447	21	146	0	
	5.5	2,000	0.1%	7	0	0	0	22	0	0	0	
Subtotals:	Effort:	1,629,230	28.3%									
	Dressed Pounds:			52,857	90,833	1,538	1,892	919	21			
	Round Pounds:			66,071.3	106,274.6	1,922.5	2,270.4	1,148.8	26.3	156.0	0.0	177,869.8
	Percent of Unit Harvest:			37.1%	59.7%	1.1%	1.3%	0.6%	0.0%	0.1%	0.0%	
MI-5	3.0	8,000	1.1%	18	0	0	563	24	0	3	0	
	4.5	734,400	98.4%	36,537	44,606	0	84	64	0	0	0	
	5.25	4,300	0.6%	113	233	0	65	2	4	0	4	
Subtotals:	Effort:	746,700	13.0%									
	Dressed Pounds:			36,668	44,839	0	712	90	4			
	Round Pounds:			45,835.0	52,461.6	0.0	854.4	112.5	5.0	3.0	4.0	99,275.5
	Percent of Unit Harvest:			46.2%	52.8%	0.0%	0.9%	0.1%	0.0%	0.0%	0.0%	
Totals:	Effort:	5,749,380										
	Dressed Pounds:			111,311	760,566	2,299	2,716	1,009	25			
	Round Pounds:			139,138.8	889,862.2	2,873.8	3,259.2	1,261.3	31.3	159.0	4.0	1,036,589.4
	Percent of Total Harvest:			13.4%	85.8%	0.3%	0.3%	0.1%	0.0%	0.0%	0.0%	

\*For subtotals, percentage refers to percent of overall effort fished in unit.

Table 3. Total and target harvest, effort, and CPE by management unit and tribe for lake trout, whitefish, and siscowet in Michigan waters of Lake Superior in 2006.\*

Unit	Tribe	TOTAL HARVEST							TARGET HARVEST							
		Effort	Whitefish pounds	CPE	Lake trout pounds	CPE	Siscowet pounds	CPE	Effort	Whitefish pounds	CPE	Lake trout pounds	CPE	Effort	Siscowet pounds	CPE
MI-2	Bad River	1,117,450	205,851	184	6,263	6	705	1	1,117,450	205,851	184	6,263	6	0	0	0
	Keweenaw Bay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Red Cliff	525,000	154,583	294	2,809	5	0	0	525,000	154,583	294	2,809	5	0	0	0
	subtotal	1,642,450	360,434	219	9,072	6	705	0	1,642,450	360,434	219	9,072	6	0	0	0
MI-3	Bad River	423,200	46,053	109	10,031	24	56	0	423,200	46,053	109	10,031	24	0	0	0
	Keweenaw Bay	51,800	6,033	116	735	14	0	0	51,800	6,033	116	735	14	0	0	0
	Red Cliff	1,256,000	212,374	169	1,948	2	0	0	1,256,000	212,374	169	1,948	2	0	0	0
	subtotal	1,731,000	264,460	153	12,714	7	56	0	1,731,000	264,460	153	12,714	7	0	0	0
MI-4	Bad River	12,000	725	60	442	37	0	0	12,000	725	60	442	37	3,375	165	49
	Keweenaw Bay	1,261,230	60,181	48	49,026	39	1,538	1	1,233,855	60,125	49	48,927	40	0	0	0
	Red Cliff	356,000	29,927	84	3,389	10	0	0	356,000	29,927	84	3,389	10	0	0	0
	subtotal	1,629,230	90,833	56	52,857	32	1,538	1	1,601,855	90,777	57	52,758	33	3,375	165	0
MI-5	Bad River	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Keweenaw Bay	620,700	12,074	19	36,306	58	0	0	612,700	12,074	20	36,288	59	0	0	0
	Red Cliff	126,000	32,765	260	362	3	0	0	126,000	32,765	260	362	3	0	0	0
	subtotal	746,700	44,839	60	36,668	49	0	0	738,700	44,839	61	36,650	50	0	0	0
Total	Bad River	1,552,650	252,629	163	16,736	11	761	0	1,552,650	252,629	163	16,736	11	3,375	165	0
	Keweenaw Bay	1,933,730	78,288	40	86,067	45	1,538	1	1,898,355	78,232	41	85,950	45	0	0	0
	Red Cliff	2,263,000	429,649	190	8,508	4	0	0	2,263,000	429,649	190	8,508	4	0	0	0
	All Tribes	5,749,380	760,566	132	111,311	19	2,299	0	5,714,005	760,510	133	111,194	19	3,375	165	0

\*Pounds are in dressed weight, effort is feet of net lifted and CPE is pounds/1000 ft of net lifted. Target species was assigned to each lift based on reported target species from individual catch reports. Target effort for whitefish and lake trout was combined.

Table 4. Gill net harvest, effort, and CPE for target species by management unit and grid in Michigan waters of Lake Superior in 2006.\*

Unit	Grid	Whitefish			Lake trout			Siscowet			Salmon			Herring		
		Effort	pounds	CPE	Effort	pounds	CPE	Effort	pounds	CPE	Effort	pounds	CPE	Effort	pounds	CPE
MI-2	1313	24,000	7,220	301	24,000	85	4									
	1315	211,200	30,346	144	211,200	154	1									
	1316	257,600	42,827	166	257,600	4,983	19									
	1317	108,700	19,979	184	108,700	78	1									
	1413	418,600	128,389	307	418,600	1,969	5									
	1414	191,200	33,179	174	191,200	1,280	7									
	1511	124,200	20,537	165	124,200	0	0									
	1512	306,950	77,957	254	306,950	523	2									
	subtotal	1,642,450	360,434	219	1,642,450	9,072	6	0	0	0	0	0	0	0	0	0
MI-3	925	12,000	4,553	379	12,000	465	39									
	926	900	16	18	900	10	11									
	927	900	35	39	900	19	21									
	1023	96,000	13,185	137	96,000	65	1									
	1024	414,800	40,515	98	414,800	9,792	24									
	1121	601,400	70,765	118	601,400	910	2									
	1122	50,000	6,256	125	50,000	616	12									
	1219	555,000	129,135	233	555,000	837	2									
	subtotal	1,731,000	264,460	153	1,731,000	12,714	7	0	0	0	0	0	0	0	0	0
MI-4	1026	140,000	19,047	136	140,000	1,249	9									
	1028	900	45	50	900	20	22									
	1029	1,800	58	32	1,800	28	16									
	1125	96,000	2,780	29	96,000	1,705	18									
	1126	36,000	3,200	89	36,000	194	5									
	1223	327,000	17,350	53	327,000	13,945	43									
	1224	254,000	12,225	48	254,000	8,838	35									
	1323	284,280	13,095	46	284,280	8,423	30	3,375	165	49	2,000	22	11	7,200	1,585	220
	1324	41,600	3,204	77	41,600	2,112	51									
	1325	64,100	1,257	20	64,100	738	12				4,000	5	1			
	1326	2,660	101	38	2,660	50	19									
	1423	353,515	18,415	52	353,515	15,456	44				1,200	21	18	9,600	107	11
	subtotal	1,601,855	90,777	57	1,601,855	52,758	33	3,375	165	49	7,200	48	7	16,800	1,692	101
MI-5	1327	4,000	300	75	4,000	550	138									
	1328	200,900	4,090	20	200,900	10,692	53									
	1428	215,500	33,977	158	215,500	7,171	33						3,000	43	14	
	1529	318,300	6,472	20	318,300	18,237	57						5,000	520	104	
	subtotal	738,700	44,839	61	738,700	36,650	50	0	0	0	0	0	0	8,000	563	70
Grand Total		5,714,005	760,510	133	5,714,005	111,194	19	3,375	165	49	7,200	48	7	24,800	2,255	91

\*Pounds are in dressed weight, effort is feet of net lifted and CPE is pounds/1,000 ft of net lifted. Target species was assigned to each lift based on reported target species from individual catch reports. Target effort for whitefish and lake trout was combined.

Table 5. Tribal commercial gill net effort (feet), harvest (dressed pounds), and catch per unit effort (CPE, pounds/1,000 feet) for whitefish, lake trout and siscowet by management unit and year from the 1842 ceded area within Michigan waters of Lake Superior from 1985-2006. Target effort for whitefish and lake trout was combined.

Unit	Year	Whitefish				Lake trout				Siscowet			
		Target effort	Target harvest	CPE	Total Harvest	Target effort	Target harvest	CPE	Total Harvest	Target effort	Target harvest	CPE	Total Harvest
MI-2	1985	101,100	5,664	56	5,664	101,100	9,238	91	9,238	0	0	0	45
	1986	128,000	16,234	127	16,234	128,000	7,550	59	7,550	0	0	0	63
	1987	576,200	80,246	139	80,246	576,200	18,568	32	18,633	3,200	0	0	2,059
	1988	98,000	2,809	29	2,809	98,000	17,374	177	17,374	24,000	4,945	206	5,377
	1989	178,000	33,511	188	33,511	178,000	13,488	76	13,488	0	0	0	4,181
	1990	113,000	22,867	202	24,012	113,000	2,789	25	3,269	28,000	8,145	291	13,308
	1991	136,800	32,003	234	32,003	136,800	5,273	39	5,273	0	0	0	812
	1992	217,000	44,814	207	45,377	217,000	2,290	11	2,332	166,000	25,946	156	27,476
	1993	419,100	74,220	177	74,473	419,100	7,780	19	8,263	52,400	10,029	191	18,680
	1994	148,200	17,629	119	17,629	148,200	7,790	53	7,790	5,000	747	149	1,990
	1995	155,000	11,236	73	12,160	155,000	9,729	63	10,104	15,000	3,307	221	6,682
	1996	89,600	4,418	49	4,418	89,600	7,777	87	7,777	1,200	3	3	189
	1997	196,300	19,512	99	19,512	196,300	10,675	54	11,302	5,000	1,608	322	2,311
	1998	85,400	10,250	120	10,250	85,400	3,125	37	3,125	0	0	0	250
	1999	170,100	31,466	185	31,466	170,100	1,130	7	1,130	0	0	0	3,628
	2000	391,800	120,494	308	120,494	391,800	3,925	10	3,925	0	0	0	3,911
	2001	95,000	16,944	178	16,944	95,000	463	5	463	0	0	0	1,483
	2002	371,800	43,377	117	43,377	371,800	3,582	10	3,582	0	0	0	6,667
	2003	261,600	37,887	145	37,887	261,600	2,910	11	2,910	0	0	0	1,700
	2004	526,900	80,959	154	80,959	526,900	5,745	11	5,745	0	0	0	26
	2005	577,600	129,062	223	129,062	577,600	7,103	12	7,103	0	0	0	280
	2006	1,642,450	360,434	219	360,434	1,642,450	9,072	6	9,072	0	0	0	705
Average:		303,589	54,365	179	54,496	303,589	7,153	24	7,248	13,627	2,488	183	4,628
MI-3	1985	2,475,200	309,525	125	309,525	2,475,200	31,501	13	31,501	0	0	0	6,098
	1986	2,936,200	265,269	90	266,919	2,936,200	39,682	14	39,888	161,000	26,172	163	44,384
	1987	2,098,900	136,353	65	145,245	2,098,900	36,409	17	37,340	538,800	58,797	109	78,320
	1988	2,427,300	222,321	92	225,440	2,427,300	32,677	14	33,158	176,400	21,934	124	34,289
	1989	1,596,000	134,078	84	134,182	1,596,000	28,215	18	28,224	68,000	10,660	157	22,461
	1990	2,127,500	110,615	52	110,615	2,127,500	28,361	13	28,361	20,000	2,967	148	28,771
	1991	1,329,900	62,714	47	65,264	1,329,900	22,507	17	23,790	123,400	14,458	117	30,005
	1992	1,675,200	119,291	71	120,176	1,675,200	19,537	12	19,912	84,600	8,272	98	27,350
	1993	2,100,100	172,270	82	172,488	2,100,100	16,958	8	17,255	63,700	5,933	93	22,052
	1994	1,703,800	73,556	43	74,632	1,703,800	12,651	7	13,433	71,000	5,053	71	22,099
	1995	1,408,400	91,358	65	91,358	1,408,400	8,013	6	8,013	0	0	0	9,774
	1996	1,359,700	135,822	100	136,622	1,359,700	9,843	7	10,798	56,000	2,750	49	6,277
	1997	1,854,100	136,221	74	136,971	1,854,100	15,954	9	16,435	18,000	1,546	86	13,270
	1998	2,556,700	267,336	105	267,411	2,556,700	24,629	10	24,759	9,500	400	42	11,706
	1999	1,706,300	178,485	105	178,485	1,706,300	12,430	7	12,430	0	0	0	11,455
	2000	1,609,300	204,065	127	204,065	1,609,300	8,951	6	8,951	0	0	0	3,389
	2001	1,711,600	154,154	90	154,154	1,711,600	17,246	10	17,246	0	0	0	7,819
	2002	1,879,000	85,980	46	85,980	1,879,000	19,558	10	19,558	0	0	0	8,986
	2003	1,759,000	196,274	112	196,274	1,759,000	12,585	7	12,585	0	0	0	0
	2004	1,255,400	67,579	54	67,579	1,255,400	9,973	8	9,973	0	0	0	0
	2005	1,246,000	118,185	95	118,185	1,246,000	4,738	4	4,738	0	0	0	0
	2006	1,731,000	264,460	153	264,460	1,731,000	12,714	7	12,714	0	0	0	56
Average:		1,843,027	159,360	86	160,274	1,843,027	19,324	10	19,594	63,200	7,225	114	17,662
MI-4	1985	1,083,275	218,666	202	219,376	1,083,275	43,118	40	44,289	0	0	0	241
	1986	4,864,900	526,710	108	527,148	4,864,900	129,258	27	129,565	105,800	25,924	245	32,038
	1987	4,110,190	300,332	73	301,898	4,110,190	71,863	18	72,864	768,200	136,596	178	160,297
	1988	5,547,065	245,246	44	246,854	5,547,065	117,982	21	119,281	266,000	34,653	130	53,689
	1989	6,781,675	371,247	55	372,637	6,781,675	112,829	17	114,353	70,000	21,781	311	58,127
	1990	8,557,900	377,190	44	382,839	8,557,900	133,645	16	139,272	600,500	38,606	64	81,902
	1991	5,945,200	278,295	47	286,046	5,945,200	94,581	16	104,481	789,300	55,800	71	96,699
	1992	5,152,100	299,967	58	313,370	5,152,100	74,849	15	86,074	950,750	46,489	49	96,550
	1993	3,939,425	165,440	42	176,357	3,939,425	65,184	17	76,105	747,500	55,090	74	92,518
	1994	2,801,325	88,866	32	95,085	2,801,325	53,075	19	62,290	559,050	38,703	69	60,395
	1995	1,529,225	74,466	49	84,682	1,529,225	47,471	31	61,986	376,000	35,363	94	51,510
	1996	2,096,400	101,931	49	108,219	2,096,400	43,737	21	50,828	336,900	23,662	70	38,361
	1997	2,238,988	127,998	57	129,103	2,238,988	54,929	25	56,302	137,986	41,753	303	65,555
	1998	2,202,700	136,100	62	139,384	2,202,700	60,014	27	63,419	196,870	19,377	98	33,038
	1999	2,338,100	141,873	61	143,432	2,338,100	69,671	30	70,896	79,400	14,920	188	25,154
	2000	1,922,025	128,261	67	129,288	1,922,025	78,318	41	79,097	43,700	6,616	151	17,851
	2001	2,193,800	114,051	52	114,867	2,193,800	66,726	30	67,347	22,800	6,949	305	34,091
	2002	2,735,450	160,561	59	160,564	2,735,450	91,897	34	91,897	0	0	0	19,050
	2003	1,714,600	158,437	92	158,437	1,714,600	45,406	27	45,406	0	0	0	500
	2004	1,864,550	147,536	79	147,594	1,864,550	49,185	26	49,208	0	0	0	664
	2005	1,660,670	142,676	86	142,676	1,660,670	41,026	25	41,026	0	0	0	123
	2006	1,601,855	90,777	57	90,833	1,601,855	52,758	33	52,857	3,375	165	49	1,538
Average:		3,312,792	199,847	60	203,213	3,312,792	72,615	22	76,311	275,188	27,384	100	46,359

Table 5. Continued.

Unit	Year	Whitefish				Lake trout				Siscowet			
		Target effort	Target harvest	CPE	Total Harvest	Target effort	Target harvest	CPE	Total Harvest	Target effort	Target harvest	CPE	Total Harvest
MI-5	1986	180,000	25,205	140	25,205	180,000	10,667	59	10,667	4,000	750	188	1,772
	1987	440,000	32,095	73	33,126	440,000	13,509	31	13,509	48,000	2,502	52	6,269
	1988	551,900	47,233	86	47,363	551,900	32,105	58	32,105	6,000	333	56	5,449
	1989	225,500	42,809	190	42,809	225,500	12,661	56	12,661	0	0	0	2,785
	1990	706,000	80,394	114	80,394	706,000	18,490	26	18,490	0	0	0	10,026
	1991	305,500	24,355	80	24,540	305,500	7,789	26	7,899	36,000	405	11	9,787
	1992	426,000	35,827	84	37,169	426,000	8,042	19	8,977	72,000	2,970	41	8,672
	1993	416,000	21,375	51	21,522	416,000	25,555	61	25,597	4,500	206	46	2,833
	1994	211,000	5,318	25	5,388	211,000	24,974	118	24,974	14,000	290	21	2,878
	1995	113,400	9,288	82	9,288	113,400	8,445	75	8,445	0	0	0	1,839
	1996	161,400	7,672	48	7,672	161,400	8,040	50	8,040	0	0	0	1,033
	1997	102,300	17,997	176	18,831	102,300	5,249	51	6,105	8,000	200	25	1,855
	1998	280,300	23,950	85	24,452	280,300	14,942	53	16,247	74,000	1,989	27	4,023
	1999	178,000	12,213	69	12,813	178,000	18,342	103	19,824	15,500	1,222	79	4,038
	2000	481,800	44,454	92	44,842	481,800	48,030	100	48,479	7,500	578	77	3,073
	2001	292,700	22,949	78	22,949	292,700	6,377	22	7,321	0	0	0	0
	2002	576,600	31,159	54	31,329	576,600	23,010	40	23,010	0	0	0	1,849
2003	454,500	14,988	33	14,988	454,500	37,706	83	37,706	0	0	0	5	
2004	705,700	20,742	29	20,742	705,700	31,827	45	31,827	0	0	0	480	
2005	835,070	29,985	36	29,988	835,070	29,505	35	29,530	1,190	60	50	383	
2006	738,700	44,839	61	44,839	738,700	36,650	50	36,668	0	0	0	0	
Average:		399,160	28,326	71	28,583	399,160	20,091	50	20,385	13,842	548	40	3,288
All units	1985	3,659,575	533,855	146	534,565	3,659,575	83,857	23	85,028	0	0	0	6,384
	1986	8,109,100	833,418	103	835,506	8,109,100	187,157	23	187,670	270,800	52,846	195	78,257
	1987	7,225,290	549,026	76	560,515	7,225,290	140,349	19	142,346	1,358,200	197,895	146	246,945
	1988	8,624,265	517,609	60	522,466	8,624,265	200,138	23	201,918	472,400	61,865	131	98,804
	1989	8,781,175	581,645	66	583,139	8,781,175	167,193	19	168,726	138,000	32,441	235	87,554
	1990	11,504,400	591,066	51	597,860	11,504,400	183,285	16	189,392	648,500	49,718	77	134,007
	1991	7,717,400	397,367	51	407,853	7,717,400	130,150	17	141,443	948,700	70,663	74	137,303
	1992	7,470,300	499,899	67	516,092	7,470,300	104,718	14	117,295	1,273,350	83,677	66	160,048
	1993	6,874,625	433,305	63	444,840	6,874,625	115,477	17	127,220	868,100	71,258	82	136,083
	1994	4,864,325	185,369	38	192,734	4,864,325	98,490	20	108,487	649,050	44,793	69	87,362
	1995	3,206,025	186,348	58	197,488	3,206,025	73,658	23	88,548	391,000	38,670	99	69,805
	1996	3,707,100	249,843	67	256,931	3,707,100	69,397	19	77,443	394,100	26,415	67	45,860
	1997	4,391,688	301,728	69	304,417	4,391,688	86,807	20	90,144	168,986	45,107	267	82,991
	1998	5,125,100	437,636	85	441,497	5,125,100	102,710	20	107,550	280,370	21,766	78	49,017
	1999	4,392,500	364,037	83	366,196	4,392,500	101,573	23	104,280	94,900	16,142	170	44,275
	2000	4,404,925	497,274	113	498,689	4,404,925	139,224	32	140,452	51,200	7,194	141	28,224
	2001	4,293,100	308,098	72	308,914	4,293,100	90,812	21	92,377	22,800	6,949	305	43,393
2002	5,562,850	321,077	58	321,250	5,562,850	138,047	25	138,047	0	0	0	36,552	
2003	4,189,700	407,586	97	407,586	4,189,700	98,607	24	98,607	0	0	0	2,205	
2004	4,352,550	316,816	73	316,874	4,352,550	96,730	22	96,753	0	0	0	1,170	
2005	4,319,340	419,908	97	419,911	4,319,340	82,372	19	82,397	1,190	60	50	786	
2006	5,714,005	760,510	133	760,566	5,714,005	111,194	19	111,311	3,375	165	49	2,299	
Average:		5,840,424	440,610	75	445,268	5,840,424	118,270	20	122,611	365,228	37,619	103	71,787

Table 6. Age and size composition of hatchery (H) and wild (N) lake trout in tribal commercial harvests from unit MI-2 during 2006. Weight is in round pounds, length is in inches, and sd=standard deviation.

Unit	Origin	Age	Number		Length (in.)		Weight (lbs)		
			Aged	Measured	mean	sd	Weighed	mean	sd
MI-2	N								
			0	10	26.6	4.7	5	3.8	1.6
		4	1	1	12.5		1	0.6	
		6	6	6	20.6	1.9	6	2.7	0.8
		7	15	15	21.3	2.3	15	2.9	0.8
		8	9	9	21.5	1.6	8	2.9	0.6
		9	7	7	23.0	2.8	7	3.7	1.4
		10	5	5	22.7	1.0	5	3.8	0.6
		11	4	4	22.9	2.5	3	3.3	1.0
		12	4	4	24.9	2.4	3	4.6	2.4
		13	3	3	26.0	2.4	2	7.5	4.7
		17	1	1	28.5		0		
		19	1	1	29.0		0		
		21	2	2	31.3	3.2	0		
		23	2	2	29.9	0.6	0		
		24	1	1	36.0		0		
		30	1	1	34.4		0		
		31	1	1	36.0		0		
Sample Size:			63	73			55		
Means:			10.6		23.9	4.6		3.4	1.5
Sample Size:			63	73			55		
Means:			10.6		23.9	4.6		3.4	1.5

Table 7. Lamprey wounding and scarring rates (marks/100 fish) on lake trout, per Lake Superior Technical Committee protocol, captured in the tribal commercial harvests from management units in the 1842 ceded area within Michigan waters of Lake Superior during 2006.

Unit	Length Category (Inches)	Fish Examined	Type AI, AII, AIII Wounds	Wounds per 100 fish	Scars	Scars per 100 fish
<b>MI-2</b>						
	1: < 17	2	0	0.0	0	0.0
	2: 17-20.9	12	0	0.0	0	0.0
	3: 21-24.9	39	0	0.0	1	2.6
	4: 25-28.9	10	1	10.0	1	10.0
	5: > 29	10	0	0.0	5	50.0
	Total:	73	1	1.4	7	9.6
<b>MI-3</b>						
	2: 17-20.9	23	0	0.0	1	4.3
	3: 21-24.9	106	2	1.9	1	0.9
	4: 25-28.9	31	1	3.2	3	9.7
	5: > 29	13	3	23.1	3	23.1
	Total:	173	6	3.5	8	4.6
<b>MI-4</b>						
	1: < 17	3	0	0.0	0	0.0
	2: 17-20.9	70	0	0.0	1	1.4
	3: 21-24.9	154	5	3.2	4	2.6
	4: 25-28.9	48	1	2.1	4	8.3
	5: > 29	7	6	85.7	4	57.1
	Total:	282	12	4.3	13	4.6
<b>MI-5</b>						
	2: 17-20.9	16	0	0.0	0	0.0
	3: 21-24.9	70	2	2.9	2	2.9
	4: 25-28.9	35	2	5.7	8	22.9
	5: > 29	1	0	0.0	1	100.0
	Total:	122	4	3.3	11	9.0

Table 8. Catch curve mortality and survival rates on lake trout from management units in the 1842 ceded area within Michigan waters of Lake Superior for data collected January-December 1988-2006.

Management Unit	Year	Ages	Wild and Hatchery Lake Trout Combined				Wild Lake Trout				
			Instantaneous total mortality	95% confidence limit for	Annual total mortality	Annual Survival	Instantaneous total mortality	95% confidence limit for	Annual total mortality	Annual Survival	
			Z	Z	A	S	Ages	Z	Z	A	S
MI-2	2006	7-13	0.25	+/- 0.03	0.22	0.78	7-13	0.25	+/- 0.03	0.22	0.78
	2005	6-17	0.23	+/- 0.05	0.21	0.79	6-17	0.23	+/- 0.05	0.21	0.79
	2002	9-11	0.46	+/- 0.03	0.37	0.63	9-11	0.46	+/- 0.03	0.37	0.63
	2001	9-15	0.34	+/- 0.10	0.29	0.71	9-15	0.33	+/- 0.10	0.28	0.72
	2000	9-13	0.22	+/- 0.30	0.20	0.80	9-13	0.22	+/- 0.34	0.20	0.80
	1999	7-13	0.29	+/- 0.16	0.25	0.75	7-13	0.26	+/- 0.16	0.23	0.77
	1998	7-13	0.39	+/- 0.11	0.32	0.68	7-13	0.39	+/- 0.11	0.32	0.68
	1990	8-12	0.71	+/- 0.25	0.51	0.49	8-11	0.75	+/- 0.42	0.53	0.47
	1988	9-13	0.41	+/- 0.31	0.33	0.67	9-13	0.41	+/- 0.31	0.33	0.67
MI-3	2006	9-11	0.50	+/- 0.01	0.39	0.61	9-11	0.60	+/- 0.04	0.45	0.55
	2005	9-15	0.32	+/- 0.08	0.27	0.73	9-15	0.32	+/- 0.08	0.27	0.73
	2004	8-17	0.39	+/- 0.05	0.32	0.68	8-17	0.39	+/- 0.04	0.32	0.68
	2003	7-14	0.29	+/- 0.07	0.25	0.87	7-14	0.28	+/- 0.08	0.24	0.87
	2002	7-20	0.31	+/- 0.04	0.27	0.73	7-20	0.31	+/- 0.04	0.27	0.73
	2000	7-11	0.20	+/- 0.45	0.18	0.82	7-11	0.20	+/- 0.45	0.18	0.81
	1999	7-16	0.04	+/- 0.09	0.20	0.80	7-16	0.22	+/- 0.10	0.20	0.80
	1997	7-11	0.21	+/- 0.20	0.19	0.81	7-11	0.18	+/- 0.21	0.17	0.84
	1996	8-13	0.28	+/- 0.19	0.24	0.76	8-13	0.24	+/- 0.27	0.21	0.79
	1995	8-11	0.56	+/- 0.33	0.43	0.57	8-11	0.52	+/- 0.33	0.41	0.60
	1992	7-13	0.37	+/- 0.36	0.31	0.69	Insufficient data.				
	1991	8-11	0.40	+/- 0.33	0.33	0.67	8-11	0.47	+/- 0.35	0.38	0.63
	1989	8-11	0.64	+/- 0.09	0.47	0.53	8-12	0.72	+/- 0.08	0.51	0.49
	1988	11-13	0.78	+/- 0.45	0.54	0.46	9-13	0.65	+/- 0.40	0.48	0.52



Table 8. Continued.

Management		Wild and Hatchery Lake Trout Combined					Wild Lake Trout				
		Instantaneous total mortality	95% confidence limit for	Annual total mortality	Annual Survival	Instantaneous total mortality	95% confidence limit for	Annual total mortality	Annual Survival		
Unit	Year	Ages	Z	Z	A	S	Ages	Z	Z	A	S
MI-4	2006	9-15	0.59	+/- 0.09	0.45	0.55	9-15	0.56	+/- 0.08	0.43	0.57
	2005	8-18	0.31	+/- 0.06	0.27	0.73	8-18	0.29	+/- 0.06	0.25	0.75
	2004	8-15	0.30	+/- 0.04	0.26	0.74	8-15	0.26	+/- 0.04	0.23	0.88
	2003	8-17	0.27	+/- 0.04	0.24	0.88	8-17	0.26	+/- 0.05	0.23	0.88
	2002	7-12	0.27	+/- 0.06	0.24	0.76	7-12	0.23	+/- 0.07	0.21	0.79
	2001	7-15	0.37	+/- 0.06	0.31	0.69	7-15	0.36	+/- 0.05	0.30	0.70
	2000	5-13	0.27	+/- 0.52	0.24	0.76	6-13	0.32	+/- 0.59	0.28	0.72
	1999	7-12	0.25	+/- 0.03	0.22	0.78	7-12	0.20	+/- 0.07	0.18	0.82
	1998	7-12	0.30	+/- 0.13	0.26	0.74	7-12	0.22	+/- 0.17	0.20	0.80
	1997	7-12	0.34	+/- 0.12	0.29	0.71	7-12	0.46	+/- 0.18	0.37	0.63
	1996	7-12	0.57	+/- 0.15	0.43	0.57	7-12	0.56	+/- 0.16	0.43	0.57
	1995	7-12	0.25	+/- 0.17	0.22	0.78	7-12	0.20	+/- 0.23	0.18	0.82
	1994	7-12	0.31	+/- 0.09	0.27	0.73	7-12	0.28	+/- 0.10	0.24	0.76
	1993	6-11	0.30	+/- 0.24	0.26	0.74	6-11	0.35	+/- 0.33	0.30	0.71
	1992	5-11	0.45	+/- 0.08	0.36	0.64	5-11	0.43	+/- 0.11	0.35	0.65
	1991	6-11	0.58	+/- 0.10	0.44	0.56	6-11	0.59	+/- 0.13	0.45	0.55
	1990	6-11	0.59	+/- 0.09	0.45	0.55	6-11	0.72	+/- 0.15	0.51	0.49
1989	7-11	0.71	+/- 0.22	0.51	0.49	7-11	0.79	+/- 0.40	0.55	0.45	
1988	8-13	0.54	+/- 0.28	0.42	0.58	9-13	0.91	+/- 0.13	0.60	0.40	
MI-5	2006	8-13	0.66	+/- 0.10	0.48	0.52	8-13	0.66	+/- 0.10	0.48	0.52
	2005	8-17	0.33	+/- 0.03	0.28	0.72	8-17	0.33	+/- 0.03	0.28	0.72
	2004	8-15	0.44	+/- 0.06	0.36	0.64	8-15	0.47	+/- 0.06	0.37	0.63
	2003	12-22	0.27	+/- 0.05	0.24	0.88	12-22	0.26	+/- 0.05	0.23	0.88
	2001	7-15	0.28	+/- 0.07	0.24	0.76	7-15	0.27	+/- 0.07	0.24	0.76
	2000	10-16	0.17	+/- 0.26	0.16	0.84	10-16	0.19	+/- 0.34	0.17	0.83
	1991	5-8	0.60	+/- 0.45	0.45	0.55	5-8	0.74	+/- 0.56	0.52	0.48

Table 9. Age and size composition of hatchery (H) and wild (N) lake trout in tribal commercial harvests from unit MI-3 during 2006. Weight is in round pounds, length is in inches, and sd=standard deviation.

Unit	Origin	Age	Number		Length (in.)		Weight (lbs)		
			Aged	Measured	mean	sd	Weighed	mean	sd
MI-3									
	H								
		9	2	2	25.4	1.8	2	5.7	1.0
		10	2	2	20.7	1.1	2	3.0	0.6
		11	3	3	23.2	2.8	3	4.4	2.3
		13	1	1	30.2		1	8.0	
		14	1	1	24.7		1	5.1	
		16	1	1	36.0		1	16.0	
		24	1	1	32.5		1	11.2	
Sample Size:			11	11			11		
Means:			12.5		25.9	5.1		6.4	4.1
	N								
			0	14	25.3	4.6	13	7.0	5.5
		4	1	1	22.2		1	4.3	
		5	3	3	22.4	0.3	3	3.6	0.1
		6	8	8	22.4	1.6	8	4.0	1.0
		7	14	14	23.6	2.2	14	4.4	1.2
		8	35	35	23.3	2.3	35	4.3	1.5
		9	39	39	23.0	2.0	39	4.2	1.2
		10	23	23	24.1	2.4	23	4.7	1.5
		11	12	12	23.4	2.5	12	4.6	1.7
		12	4	4	25.6	3.9	4	6.3	3.6
		13	1	1	24.5		1	4.3	
		14	2	2	22.1	1.2	2	3.7	0.6
		15	3	3	26.5	3.0	3	5.9	2.4
		19	1	1	33.0		1	12.7	
		24	1	1	34.9		1	16.0	
		31	1	1	33.6		1	13.0	
Sample Size:			148	162			161		
Means:			9.2		23.8	2.9		4.8	2.5
Sample Size:			159	173			172		
Means:			9.5		23.9	3.1		4.9	2.7

Table 10. Age and size composition of hatchery (H) and wild (N) lake trout in tribal commercial harvests from unit MI-4 during 2006. Weight is in round pounds, length is in inches, and sd=standard deviation.

Unit	Origin	Age	Number		Length (in.)		Weight (lbs)		
			Aged	Measured	mean	sd	Weighed	mean	sd
MI-4									
H									
			0	6	24.7	3.3	6	5.9	1.9
		4	1	1	17.9		1	2.0	
		5	2	2	18.2	2.9	2	2.2	1.6
		6	6	6	22.4	2.8	6	4.6	1.6
		7	4	4	21.1	1.4	3	3.1	0.3
		8	5	5	23.2	1.8	5	4.4	1.5
		9	5	5	24.5	1.0	5	5.2	0.7
		10	4	4	25.2	2.2	4	5.6	1.7
		11	10	10	24.2	1.3	10	4.7	1.0
		12	3	3	25.8	5.0	3	5.4	3.2
		13	1	1	26.7		1	5.4	
		25	1	1	29.5		1	8.8	
Sample Size:			42	48			47		
Means:			9.2		23.7	3.0		4.8	1.8
N									
			0	23	23.0	2.0	22	3.9	1.1
		3	1	1	19.2		1	2.8	
		4	4	4	18.9	0.7	4	2.5	0.2
		5	12	12	19.7	2.0	7	2.6	0.9
		6	18	17	20.8	2.1	11	3.2	1.2
		7	29	29	21.9	1.6	24	3.4	0.8
		8	39	39	22.3	1.7	32	3.6	0.8
		9	34	34	22.2	2.3	24	3.2	1.0
		10	23	23	23.6	1.8	15	4.2	1.0
		11	26	26	23.6	3.0	24	4.3	1.6
		12	11	11	23.6	1.9	9	3.9	0.8
		13	6	6	24.0	3.3	6	4.6	2.1
		14	4	4	25.2	3.2	3	5.7	2.5
		15	1	1	23.0		0		
		16	3	3	24.4	4.7	2	5.9	2.9
		17	1	1	27.7		1	6.6	
Sample Size:			212	234			185		
Means:			8.8		22.5	2.5		3.7	1.3
Sample Size:									
Sample Size:			254	282			232		
Means:			8.9		22.7	2.6		4.0	1.4

Table 11. Age and size composition of hatchery (H) and wild (N) lake trout in tribal commercial harvests from unit MI-5 during 2006. Weight is in round pounds, length is in inches, and sd=standard deviation.

Unit	Origin	Age	Number		Length (in.)		Weight (lbs)		
			Aged	Measured	mean	sd	Weighed	mean	sd
MI-5	N		0	7	25.2	1.1	7	5.4	1.3
		3	1	1	21.0		1	2.9	
		4	1	1	19.3		1	1.9	
		5	1	1	21.3		1	3.3	
		6	7	7	20.4	1.6	7	2.9	0.9
		7	14	14	22.5	1.7	14	3.7	0.8
		8	30	30	23.4	1.9	30	4.2	1.2
		9	36	36	23.8	2.0	35	4.4	1.0
		10	14	14	23.8	2.1	14	4.5	1.2
		11	6	6	26.0	4.6	6	6.5	3.8
		12	2	2	25.4	3.3	2	5.1	2.1
		13	2	2	23.9	0.2	2	3.9	0.4
		16	1	1	26.1		0		
Sample Size:			115	122			120		
Means:			8.6		23.5	2.3		4.3	1.5
Sample Size:			115	122			120		
Means:			8.6		23.5	2.3		4.3	1.5

Table 12. Age and size composition of whitefish in tribal commercial harvests from management units in the 1842 ceded area within Michigan waters of Lake Superior during 2006. Weight is in round pounds, length is in inches, and sd=standard deviation.

Unit	Age	Number	Number	Length (in.)		Number	Weight (lbs)	
		Aged	Measured	mean	sd	Weighed	mean	sd
MI-2								
		0	176	20.1	1.7	0		
	6	4	4	19.3	1.1	2	2.4	0.6
	7	38	38	19.0	1.0	29	2.2	0.3
	8	164	164	19.6	1.0	102	2.4	0.4
	9	230	230	19.7	1.1	151	2.4	0.4
	10	142	142	20.1	1.3	94	2.7	0.7
	11	61	61	20.1	1.3	48	2.7	0.8
	12	29	29	21.2	1.9	20	3.2	1.1
	13	23	23	20.7	1.7	16	3.0	1.1
	14	15	15	22.4	1.9	7	3.9	1.1
	15	1	1	20.2		1	2.8	
	16	2	2	23.0	3.7	2	4.0	1.6
	19	1	1	28.0		1	8.0	
Sample Size:		710	886			473		
Means:		9.4		20.0	1.5		2.6	0.7
MI-3								
		0	100	19.7	0.9	9	2.6	0.5
	5	2	2	20.3	1.9	2	3.2	1.6
	6	18	18	19.8	1.1	18	2.5	0.5
	7	93	93	19.4	1.5	93	2.3	0.5
	8	297	297	19.6	1.1	297	2.4	0.5
	9	293	293	19.7	1.1	291	2.4	0.5
	10	169	169	19.7	1.2	169	2.5	0.5
	11	65	65	20.2	1.9	65	2.8	1.2
	12	25	25	20.1	1.9	25	2.7	1.1
	13	10	10	20.2	2.0	10	2.7	0.8
	14	1	1	19.4		1	2.2	
	15	3	3	22.5	0.7	3	3.7	0.6
Sample Size:		976	1,076			983		
Means:		8.9		19.7	1.2		2.5	0.6

Table 12. Continued.

Unit	Age	Number	Number	Length (in.)		Number	Weight (lbs)	
		Aged	Measured	mean	sd	Weighed	mean	sd
MI-4								
		0	47	20.0	1.4	5	3.3	1.2
	4	1	1	23.2		1	4.6	
	5	8	8	19.9	1.6	8	2.8	0.8
	6	30	30	19.7	1.3	22	2.6	0.6
	7	117	117	20.1	1.8	87	2.8	0.8
	8	156	156	20.2	1.6	129	2.8	0.8
	9	125	125	20.2	1.7	103	2.8	0.8
	10	88	88	20.7	1.7	71	3.0	0.8
	11	58	58	20.8	1.7	53	3.1	0.9
	12	20	20	20.7	1.8	19	3.0	0.9
	13	7	7	21.6	1.4	6	3.4	0.8
	14	5	5	21.4	1.6	4	3.5	1.3
	15	2	2	22.3	2.4	1	5.8	
	18	1	1	28.4		1	7.3	
Sample Size:		618	665			510		
Means:		8.7		20.3	1.7		2.9	0.8
MI-5								
	5	2	2	16.8	0.4	2	2.1	0.2
	6	10	10	19.7	1.6	10	2.6	0.4
	7	5	5	21.2	1.9	5	3.1	0.4
	8	10	10	21.0	1.1	10	3.2	0.6
	9	14	14	21.8	2.0	12	3.4	0.9
	10	7	7	22.6	1.6	7	3.9	1.0
	11	7	7	22.8	2.2	7	4.1	1.7
	12	3	3	24.4	1.0	3	5.1	0.8
	13	2	2	27.3	0.5	2	7.5	0.3
	20	1	1	30.2		1	11.3	
Sample Size:		61	61			59		
Means:		8.9		21.8	2.6		3.7	1.6

Table 13. Age and size composition of siscowet in tribal commercial harvests from management units in the 1842 ceded area within Michigan waters of Lake Superior during 2006. Weight is in round pounds, length is in inches, and sd=standard deviation.

Unit	Age	Number		Length (in.)		Number		Weight (lbs)	
		Aged	Measured	mean	sd	Weighed	mean	sd	
MI-3									
		0	4	20.7	1.3	4	2.6	0.5	
	11	1	1	21.5		1	3.1		
	12	3	3	22.1	1.5	3	3.6	0.8	
	13	2	2	19.5	0.6	2	2.3	0.4	
	15	2	2	24.3	3.7	2	3.3	0.8	
	16	4	4	23.0	2.5	4	4.1	1.6	
	17	4	4	24.8	0.6	4	4.5	1.0	
	18	4	4	22.6	1.6	4	3.1	0.5	
	19	2	2	24.4	1.1	2	4.9	1.3	
	20	4	4	23.3	1.3	4	3.5	0.7	
	21	4	4	23.8	1.9	4	3.8	1.2	
	22	6	6	23.0	2.0	6	3.7	1.1	
	23	6	6	24.1	0.8	6	4.6	1.1	
	24	2	2	24.4	0.1	2	4.5	0.8	
	26	1	1	24.7		1	4.2		
	28	1	1	27.8		1	7.1		
	33	1	1	24.8		1	4.6		
Sample Size:		47	51			51			
Means:		19.4		23.3	2.0		3.8	1.2	
MI-4									
		0	2	19.4	0.3	2	2.3	0.2	
	9	1	1	20.9		1	2.6		
	10	4	4	20.4	1.9	4	2.6	0.8	
	11	6	6	20.2	3.1	6	2.5	1.1	
	12	2	2	19.7	2.5	2	2.3	1.0	
	13	3	3	21.0	0.3	3	3.1	0.1	
	14	1	1	19.0		1	2.1		
	16	2	2	18.8	0.4	2	2.0	0.3	
	20	1	1	23.8		1	4.0		
Sample Size:		20	22			22			
Means:		12.2		20.2	2.0		2.6	0.8	
MI-5									
	5	1	1	17.1		1	1.8		
	13	1	1	24.0		1	4.6		
	26	1	1	20.7		1	2.2		
Sample Size:		3	3			3			
Means:		14.7		20.6	3.5		2.9	1.5	
Sample Size:		70	76			76			
Means:		17.2		22.3	2.5		3.4	1.2	

Table 14. Age and size composition of lake herring in tribal commercial harvests from management units in the 1842 ceded area within Michigan waters of Lake Superior during 2006. Weight is in round pounds, length is in inches, and sd=standard deviation.

Unit	Age	Number		Length (in.)		Number	Weight (lbs)	
		Aged	Measured	mean	sd	Weighed	mean	sd
MI-4								
		0	52	14.7	1.3	1	1.0	
	3	1	1	13.2		1	0.7	
	4	1	1	14.3		1	0.7	
	5	2	2	14.6	0.2	2	0.8	0.2
	6	2	2	14.6	0.6	2	1.0	0.5
	7	1	1	15.1		1	0.9	
	8	8	8	15.8	1.5	8	1.0	0.4
	9	5	5	15.2	1.7	5	1.1	0.2
	10	1	1	15.6		1	0.9	
	11	2	2	17.5	1.2	2	1.5	0.2
Sample Size:		23	75			24		
Means:		7.7		14.9	1.4		1.0	0.3
MI-5								
	9	1	1	18.1		0		
Sample Size:		1	1			0		
Means:		9.0		18.1				



Table 15. Age and size composition of coho salmon in tribal commercial harvests during 2006. Weight is in round pounds, length is in inches, and sd=standard deviation.

Unit	Age	Number		Length (in.)		Number		Weight (lbs)	
		Aged	Measured	mean	sd	Weighed	mean	sd	
MI-4	2	1	1	14.3		1	1.7		
Sample Size:		1	1			1			
Means:	2.0			14.3			1.7		