

WISCONSIN'S 2009 LAKE SUPERIOR CREEL SURVEY REPORT

BY: CHRIS ZUNKER
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
P.O. BOX 589
BAYFIELD, WI 54814
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INTRODUCTION

A creel survey was conducted on Wisconsin waters of Lake Superior during the winter ice fishery (Jan. 15, 2009 to March 23, 2009) and during the open water fishery (Ice-out April 16, 2009 to September 30, 2009).

These surveys were designed to collect data on angler pressure, harvest and biological statistics. Five fishery types were surveyed.

1. Open water cold private (salmonids caught by non-charter parties).
2. Open water cool private (cool water species caught by non-charter parties).
3. Ice shallow water (less than 60 feet of water).
4. Ice cool water (targeting cool water species, i.e. northern pike, walleye, yellow perch).
5. Ice deep water, "bobbing" (60 feet and deeper).

Two additional fisheries were monitored using the results from mandatory reporting.

1. Charter fishery.
2. Sturgeon fishery.

This creel survey was designed to put special emphasis on the lake trout harvest in Wisconsin waters of Lake Superior. Due to budget restraints and to insure accuracy in the lake trout harvest, certain predominately cool water sites, as well as the shore fishery, were dropped from the survey to allow more time at cold water (lake trout) access areas. The data (angler pressure and harvest) in this report are considered minimum numbers due to these factors.

METHODS

OPEN WATER PRIVATE

In 2009, a single loop time interval creel survey was conducted during the open water fishing season on Wisconsin waters of Lake Superior. Three creel clerks worked six different areas (Figure 1):

- One Route: Full Time. ¼ Time – Bayfield (public boat launch and marina). ¼ Time – Red Cliff (boat launch)
½ Time – Washburn (West End Park boat launch, Washburn Marina and Marina launch)
- One Route: Full Time. Superior (Barker's Island boat launch and Loon's Foot boat launch)
- One Route: ½ Time. Saxon (Saxon Harbor boat launch and Saxon Marina)

Each route consisted of various pressure sites the creel clerk checked. The sites selected and the amount of time spent at any given location was based on pressure counts from past years. The sites with the highest pressure were allotted a higher percentage of time to be checked during a route. Due to budget restraints several routes could not be surveyed including Ashland, Cornucopia / Port Wing, Little Sand Bay and the December open water fishery. Data (angler trips, angler hours and lake trout harvest) for Ashland and Little Sand Bay were derived by taking the percent change that occurred for Washburn from 2007 to 2009 and applying it to Ashland and Little Sand Bay numbers in 2007, the last time those two areas were surveyed. Cornucopia / Port Wing 2008 numbers were used in this report. December open water numbers were not extrapolated from known numbers due to the variability of the fishery.

In a single loop time-interval creel, the clerk starts and finishes a route at the initial pressure site (i.e. one complete circuit). The initial pressure site, as well as the direction of travel, changed randomly according to computer generated schedules (Appendix I).

Using the time interval procedure, vehicles with boat trailers and harbor boats were counted at each access site. Boats going out to fish or coming in from fishing were counted as a fraction of the time the clerk spent at the site [i.e. boat pressure = (creel shift in minutes – minutes at site) / creel shift in minutes]. A boat starting to fish was added to the initial pressure and a boat stopping or coming in from fishing was subtracted from the initial pressure. An example of a time interval pressure worksheet is shown in Appendix II.

The open water creel routes, start times, stop times, etc. are shown in Appendix III.

Boats returning from fishing were interviewed at the site. Total number of anglers on board was treated as an angler party. The type of fishery they were involved in was recorded. If the boat was fishing for cool water species such as northern pike, walleye, perch, smallmouth bass in a predominately cool water area, it was recorded as "open water cool private". If the boat was fishing trout or salmon, it was recorded in "open water cold private". If the boat was fishing for "anything that bites", the area the boat fished would determine which category to place the boat in. Finally, if the boat did not fish at all it was placed in the category "pleasure". Charter boats were not counted in pressure at a site due to mandatory reporting. Sailboats were also excluded from the pressure unless fishing gear (downriggers or rods) was present. The state waters that the boat fished in were determined. Areas such as Saxon Harbor and Superior are adjoining boundary waters. Computer programming in the final estimation of total harvest eliminated fish caught in waters other than Wisconsin. Boats that fished both states' waters had half the total catch assigned to Wisconsin waters.

The fish caught (if any) by the boat were identified and measured to the nearest tenth of an inch. Fin-clips were recorded as well as any tags that were present. An interview sample sheet is shown in Appendix IV.

Pressure and harvest estimates were calculated by route, month, weekday and weekend variables, as well as the type of fishery the anglers were involved in (i.e. open water cold, open water cool etc.). The open water creel survey data was calculated using SAS statistical computer program.

ICE CREEL

An ice fishery creel survey was conducted along the main shore from Washburn ("S" Curve) north through Bayfield, Red Cliff, Raspberry Bay and Cornucopia (Figure 1) Due to budget restraints Madeline Island was not surveyed this year and due to the variability of the fishery the western waters of Lake Superior and Saxon area were not surveyed. The ice fishery creel survey was conducted starting when lake trout waters were accessible out of Bayfield(1/15/09). Due to this start date several weeks of the shallow water and cool water fishery were missed, because of this the numbers in this report for these two fisheries should be considered minimal. The pressure estimate was done by the stratified creel survey method (Appendix V). Two separate vehicle counts were made daily at approximately 9:00 AM and 2:00 PM for each site in a given random route. Vehicles present in morning and afternoon checks were not counted twice. An ice pressure sample sheet is shown in Appendix VI. Interviews for the ice fishery creel were conducted in the same manner as the open water method. The number of anglers in a vehicle was considered an angling party. Anglers involved in the ice fishery were separated into three different fisheries: ice shallow water, ice cool water and ice "bobbing". Ice shallow water is considered fishing in waters less than 60 feet for salmonids, coregonids and smelt. Ice cool water is considered fishing for cool water species (yellow perch, walleye, northern pike, etc.). Ice "bobbing" is considered fishing in water deeper than 60 feet or more (mainly for lake trout and whitefish).

The ice fishing pressure and harvest rates were separated by month, weekend and weekday variables, as well as the type of fishery in which the anglers were involved.

CHARTER

Harvest estimates for guided charters came from mandatory monthly reports that were initiated in 1973. Information on number of anglers, hours fished, location (grid), and number of various species harvested was included in the monthly catch report (Appendix VII).

STURGEON

Harvest estimates on lake sturgeon were taken from mandatory registration. Pressure estimates were not available due to the incidental nature of the fishery. Starting Jan. 1, 2005 hook and line Sturgeon angler tags were issued through the ALIS license system replacing the old metal tag system.

The total number of lake trout harvested during the 2009 fishing year by sport angling was calculated using a weighted mean. Extraction of this number was done by fishery type, fishing port, harvest estimate, month, average length and percent of native origin fish. Weight extrapolated from the total harvest of this species was calculated using the length-weight regression equations from the DNR 2008-2009 spring lake trout and summer index assessments. The regression equations are as follows:

NATIVE ORIGIN	HATCHERY ORIGIN
$\text{Ln}(\text{weight grams}) = -12.115 + 3.065(\text{Ln length mm})$	$\text{Ln}(\text{weight grams}) = -12.721 + 3.162 (\text{Ln length mm})$
Observation = 938	Observations = 166
NATIVE AND HATCHERY ORIGIN	
$\text{Ln}(\text{weight grams}) = -12.208 + 3.080 (\text{Ln length mm})$	
Observations = 1,104	

Weights for other species were calculated using regression equations from data collected on various DNR assessment from 1998-2009. Weights for Chinook salmon were estimated using the Minnesota DNR Investigational Report # 382, Growth and Fecundity of Chinook salmon in Western Lake Superior (July 1985). See Appendix VIII for individual species regression equation.

RESULTS

OPEN WATER COLD PRIVATE

EFFORT – During 2009, an estimated 30,374 individual angler trips and 148,991 angler hours were spent pursuing cold water species (trout and salmon) in Wisconsin waters of Lake Superior (Table 1). Of the five areas surveyed Superior (Barker's Island) had the highest pressure with 7,075 angler trips and 34,836 angler hours. The effort out of Superior has increased over the last four years, and is the highest since mid 90's. Washburn's effort was second with 4,590 angler trips and 21,549 angler hours. This effort was similar to last years effort of 4,358 angler trips and 21,549 angler hours, but down from the average effort from 1993-09(6,681 angler trips and 31,800 angler hours). Saxon's effort was third with 3,200 angler trips and 15,394 angler hours. This is the lowest effort out of Saxon since 1996 (3,015 angler trips and 15,566 angler hours). Effort out of Bayfield was fourth with 3,687 angler trips and 18,605 angler hours, this effort is down from the last time Bayfield was surveyed in 2007 (4,762 angler trips and 27,124 angler hours). Red Cliff's effort was fifth with 1,452 angler trips and 9,355 angler hours this is about double the effort (759 angler trips and 4,622 angler hours) recorded in 2007 the last time Red Cliff was surveyed (Table 2).

HARVEST – An estimated 13,268 fish were harvested in the five areas surveyed. Lake trout continues to be the most abundant species harvested accounting for 68.8% of the total harvest with 9,128 fish (Table 3). Lake trout harvest was the highest out of the Superior with a harvest of 3,094, followed by Saxon (1,871), Red Cliff (1,479), Bayfield (1,382) and Washburn (1,302)(Table 1). Superior's lake trout harvest was the third year with an increase and the highest since 1993 (3,830) (Table 4). Saxon's lake trout harvest was the fifth year with a decrease lowest since 1996 (1,776)(Table 5). Red Cliff's lake trout harvest was almost double that of 2007(788) the last time Red Cliff was surveyed (Table 6). Bayfield's lake trout harvest was lower than in 2007 (1,382) the last time Bayfield was surveyed (Table 7). Washburn's lake trout harvest of 1,302 is similar to that of the last four years (Table 8).

Coho salmon were the second most harvested species in this fishery accounting for 13.1% of the harvest with 1,738 Coho. Average size coho in this fishery was 17.2". Walleye ranked third with 912 fish harvested accounting for 6.9% of the harvest. Average size of walleye in this fishery was 19.8". The majority (906 of 912 total) of the walleye harvest in this fishery occurs out of the Port of Superior. Brown trout ranked third with 728 fish harvested accounting for 5.5% of harvest. Average size brown trout in this fishery was 21.8". Chinook salmon ranked fourth with 463 fish for 3.5%. No other fish species accounted for more than 1.1% of the harvest in this fishery (Table 3).

Harvest of native origin lake trout accounted for 87.3% of the total lake trout harvest in this fishery. Native lake trout harvest was highest out of Saxon Harbor with 99.6%, followed by Ashland / Bayfield / Washburn (98.6%), and Superior (67.4%) (Table 9). In this fishery the average size lake trout was 22.1" (Native origin average size 22.2", Hatchery origin average size was 21.7").

Separating the estimated lake trout harvest of 14,701 by management zone in this fishery, 4,384 lake trout were harvested in WI-1 and 10,317 lake trout were harvested in WI-2 (Table10).

HARVEST RATES - The overall harvest rate for all species, in this fishery, of the five areas surveyed was highest out of Red Cliff (0.18 fish/hour), followed by Superior (0.14 fish/hour), Saxon (0.14 fish/hour), Washburn (0.12 fish/hour) and Bayfield (0.10 fish/hour) (Table 11-16). Red Cliff's overall harvest rate was similar to the last time that area was surveyed in 2007 (0.19 fish/hour). Superior's overall harvest rate was down from last year (0.16 fish/hour), but similar to the 1998-2009 average of 0.15 fish/hour. Saxon's overall harvest rate was lower than the previous year for the fifth straight year and the lowest since 1995. Washburn's overall harvest rate was down for the second straight year and lower than the 1998-2009 average of 0.14 fish/hour. Bayfield's overall harvest rate was lower than the last time that area was surveyed in 2007 (0.16 fish/hour) (Table 11-16).

Lake trout harvest rates were highest out of Red Cliff with 0.16 LT/hour, similar to 2007 (0.17 LT/hour). Saxon was second with 0.12 LT/hour same as last year with the second lowest lake trout harvest rate since 1995. Superior was third with 0.09 LT / hour. Superior's lake trout harvest rate was similar to the 1988-2009 average of 0.08 LT/hour. Bayfield's lake trout harvest rate was fourth with 0.07 LT/hour, similar to the previous years that area was surveyed. Washburn's lake trout harvest rate was last at 0.06 LT/hour the lowest rate since 1995 (Table 11-16).

Lake trout harvest rates (LT/angler hour) during the months of June – August (the peak of the LT season) was highest out of Saxon (0.143) followed by Bayfield (0.093), Superior (0.091) and Washburn (0.088). Saxon and Superior June-August rates were higher than last year, while Bayfield and Washburn were lower than last year. All areas surveyed including Corny / Port Wing (2008) had a combined LT harvest rate of 0.103 LT/hour during June – August (Table 17).

OPEN WATER COOL PRIVATE

This creel survey was designed to put special emphasis on the lake trout harvest in Wisconsin waters of Lake Superior. Due to budget restraints and to insure accuracy in the lake trout harvest, certain predominately cool water sites as well as the shore fishery, were dropped from the survey to allow more time at cold water (lake trout) access areas. The cool water data in this report should be considered minimum due to these factors.

EFFORT – During 2009, an estimated 5,816 individual angler trips and 21,470 angler hours were spent pursuing cool water species (walleye, smallmouth bass, northern pike, yellow perch, etc) in the surveyed areas (Table 1). The majority of this fishery in the Wisconsin waters of Lake Superior occurs in Chequamegon Bay and the Superior (Barker's Island) entry. Of the four areas surveyed Superior had the highest cool water effort with 4,737 angler trips and 16,860 angler hours, this was up slightly from the last year and consistent with previous years (Table 22). Washburn's effort was second with 1,047 angler trips and 4,410 angler hours, up from last year and consistent with the average from 2000-09 (1,024 angler trips and 4,410 angler hours)(Table 19). Bayfield (20 angler trips and 113 angler hours) and Saxon (12 angler trips and 87 angler hours) had minimal cool water activity (Table 20,18). The cool water effort surveyed out of Saxon occurred from anglers mostly fishing the Bad River; this effort was not reported in this report. Red Cliff had no cool water effort (Table 23).

HARVEST and HARVEST RATES – An estimated 2,261 fish were harvested in the cool water fishery in the surveyed areas, during 2009. Superior had the highest harvest with 2,153 fish followed by Washburn (66) and Saxon (42)(Table 1). Walleyes were the number one species harvested with 1,918. Walleye harvest was highest out of Superior with a harvest of 1,820(Table 1). The harvest rate was highest out of Saxon with a rate of 0.48 fish/hour (Table 18). Superior was second with 0.13 fish/hour, slightly higher than last years ten year low of 0.11 fish/hour (Table 22). Washburn was third with 0.01 fish/hour, the lowest it's been since 2003 (Table 19). Bayfield and Red Cliff had no harvest (Table 20,23).

ICE FISHERY

The 2009 ice fishing season started from various locations off of Ashland on December 8, 2008, approximately December 12, 2008 from the Washburn Coal Dock, and "bobbing" started approx. Jan 3, 2009 out of Red Cliff. Bobbing out of Cornucopia occurred from about Jan. 21, 2009 to March 22, 2009. The Western end of Lake Superior and Saxon had limited safe ice conditions but were not surveyed due to budget restraints. All fishing activity continued to the end of March. Overall, ice conditions were very good to excellent, with "bobbing" occurring as far out as the outer islands (Stockton, Cat, and Outer). The ice fishery creel survey started when lake trout waters were accessible out of Bayfield (1/15/09) and was conducted along the main shore from the Sioux River access north through Bayfield, Red Cliff, Raspberry Bay and Cornucopia. Due to budget restraints Madeline Island was not surveyed. The data from the shallow water and cool water creel should be considered the minimum due to the creel survey starting 4-6 weeks after these two fisheries started. Caution should be used when comparing ice fishery data from year to year due to the variability of ice formation / conditions from one year to the next.

ICE SHALLOW WATER

WASHBURN (SIOUX RIVER) - BAYFIELD- RED CLIFF - An estimated 1,524 angler trips and 8,180 angler hours were recorded in this shallow water fishery. This effort resulted in an estimated harvest of 911 fish (Table 1). Whitefish (308) was the number one species harvested, lake trout (173) was second, splake (158) third, lake herring (76) fourth and coho salmon (66) fifth. The overall harvest rate in this fishery was 0.111 fish/hour (Table 24).

CORNUCOPIA / BARK BAY- A limited shallow water fishery occurs in Bark Bay. An estimated 88 angler trips and 356 angler hours, this effort resulted in 100 fish harvested. 84 coho, 8 lake trout and 8 brown trout (Table 1).

ICE COOL WATER

WASHBURN / BAYFIELD- A limited cool water fishery exists off the Washburn / Bayfield areas with anglers targeting mainly yellow perch. An estimated 19 angler trips and 38 angler hours resulted in no fish harvested (Table 1).

CORNUCOPIA / BARK BAY- No trips were recorded for cool water species in this area.

ICE DEEP WATER BOBBING

APOSTLE ISLANDS (NOT INCL. MADELINE ISLAND) - Overall, ice conditions for "bobbing" were very good to excellent, with anglers fishing as far out as the outer islands. An estimated 4,192 angler trips and 26,595 angler hours resulted in an estimated harvest of 3,397 fish in this deep-water fishery (Table 1). Angler trips and angler hours were both lower than last year's effort (5,412 angler trips and 33,548 angler hours) but higher than the average since 1992(3,182 angler trips and 18,043 angler hours) (Table 25). Lake trout (2,133) was the number one species harvested in this fishery and accounted for 74.9% of the "bobbing" harvest. Whitefish ranked second with 546 fish harvested for 19.2% and siscowets (fats) third with 68 fish (2.4%) (Table 26). Overall harvest rate of 0.128 fish per hour was down for the second straight year and was the lowest since 1991. The lake trout harvest rate of 0.080 LT / hour was the lowest since 2002 (0.078 LT/hour)

and below the 1996-2009 average of 0.127 LT / hour (Table 27). The average size lake trout in this fishery for native origin lake trout was 23.3" and for hatchery origin lake trout 22.0" (Table 10).

CORNUCOPIA / BARK BAY- An estimated 1,091 angler trips and 6,840 angler hours and resulted in an estimated harvest of 1,050 fish (Table 1). This was the highest effort in this area since 2003 when there were 1,274 angler trips and 6,495 angler hours. The overall harvest rate of 0.154 fish/hour is down slightly from the 1996-2009 average of 0.165 fish/hour. The lake trout harvest rate was 0.123 lake trout / hour is down slightly from the 1996-2009 average of 0.148 LT/hour (Table 27).

CHARTER FISHERY

EFFORT - Twenty five (25) licensed charter captains were active during the 2009 open water season on the Wisconsin waters of Lake Superior. The number of anglers (1,459) and angler hours (8,680) were slightly above last years (1,320 anglers and 7,962 angler hours) but still the third lowest all time (Table 28). Ashland / Bayfield / Washburn had the highest effort with 780 angler trips and 4,172 angler hours, second was Superior with 354 angler trips and 2,409 angler hours, third was Saxon with 232 angler trips and 1,569 angler hours and last was Corny / Port Wing with 93 angler trips and 530 angler hours (Table 29-32).

HARVEST RATES - The overall harvest rate was 0.29 fish per hour and the lake trout harvest rate was 0.28 LT / hour. The overall harvest rate and the lake trout harvest rates were both higher than last years (0.26 fish / hour and 0.23 LT / hour) and higher than the average from 1973 to 2009 (0.25 fish / hour and 0.20 LT / hour). Ashland / Bayfield / Washburn had the highest overall harvest rate with 0.32 fish / hour and lake trout harvest rate of 0.30 LT / hour. The Cornucopia / Port Wing areas were second with 0.30 fish / hour and 0.28 LT / hour. Third was Superior with 0.27 fish / hour and 0.27 LT / hour. All three of the above areas have higher overall harvest rates and lake trout harvest rates than their averages since 1986. Saxon was last with 0.22 fish / hour and 0.22 LT / hour. Saxon's rates were slightly higher than last year's rates but lower than the averages since 1986 (Table 29-32).

HARVEST – The overall harvest of 2,502 fish was higher than last years 2,061 fish and was the third lowest all time. The lake trout harvest of 2,393 lake trout was higher than last years 1,813 lake trout and was the fourth lowest lake trout harvest all time (Table 28). Lake trout remain the number one harvested fish in this fishery, comprising 95.6% (2,393) of the overall harvest of 2,502 fish. Coho salmon were distant second with 58 fish for 2.3% of the harvest. Brown trout were third with 26 fish for 1.0% of the harvest (Table 33). Lake trout harvest was highest out of Ashland / Bayfield / Washburn with 1,266 lake trout, higher than last years record low. Superior was second (640), Saxon third (340) and Corny / Port Wing fourth (147). Corny / Port Wing lake trout harvest was their record low lake trout harvest. All areas were below their lake trout harvest averages since 1986 except Saxon which was up slightly (Table 29-32).

LAKE STURGEON FISHERY

Very few fishermen actually target sturgeon in Wisconsin waters of Lake Superior. The bulk of the harvest is incidental and occurs in Chequamegon Bay when angler pressure is at its height (ice fishery and the first month of open water). Harvest information is obtained from mandatory registration of angler caught sturgeon. In 2009, one sturgeon was registered, and was 52.5" (Table 34). Effort is unknown.

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TABLE 1. 2009 CREEL SURVEY STATISTICS (ESTIMATED ANGLER TRIPS, ANGLER HOURS AND HARVEST BY FISHERY)

FISHERY TYPE	ANGL.	ANGL.	BRWN			BROOK			MEN			BUR-			BLK.	ROCK	BLHD	TOTAL				
	TRIPS	HOURS	LKT	COHO	CHIN.	TROUT	SPLK	RBT	TROUT	FATS	WF	WF	HERR	BOT	SMELT	NOP	WAE	YEP	CRP	BASS	CATF	HRVST
WSHB/BYF SHAL.	1,524	8,180	173	66		61	158				308		76		59			10				911
WSHB/BYF COOL	19	38																				0
BOBBING APOS.ISL.	4,192	26,595	2,133	18		10	8		618	546		56		8								3,397
CORNY. SHAL.	88	356	8	84		8																100
CORNY. COOL	0	0																				0
CORNY. BOBB.	1,091	6,840	839	3					192			4	6	6								1,050
TOTAL	6,914	42,009	3,153	171	0	79	166	0	0	810	854	0	136	6	73	0	0	10	0	0	0	5,458
AVE. LENGTH(INCH)			23.4	15.3		23.3	16.6			23.2	19.1		17.4	26.2	7.2			8.0				

CHARTER																						
ASH.BAYF.WASH.	780	4,172	1,266	38	7	25	1	1					1									1,340
CORN. - PORT W.	93	530	147	5	6	1																159
SAXON	232	1,569	340	2																		342
SUPERIOR	354	2,409	640	13	8																	661
TOTAL	1,459	8,680	2,393	58	21	26	1	1	0	0	0	0	1	0	0	1	0	0	0	0	0	2,502

OPEN WATER COLD ** NUMBERS DERIVED FROM PREVIOUS YEARS**																						
* ASHLAND *	3,726	17,645	2,422																			2,422
BAYFIELD	3,687	18,605	1,382	104		278	39	16	16	16												1,851
CORN.-PORT W.	4,350	19,397	1,833																			1,833
* L. SAND BAY *	2,294	12,210	1,318																			1,318
RED CLIFF	1,452	9,355	1,479	23		109	10			18												1,639
SAXON	3,200	15,394	1,871	159	53	69		3		68												2,223
SUPERIOR	7,075	34,836	3,094	430	348	106		17		30	5				3	906						4,939
WASHBURN	4,590	21,549	1,302	1,022	62	166	37			11					10	6						2,616
TOTAL	30,374	148,991	14,701	1,738	463	728	86	36	16	143	5	0	0	0	13	912	0	0	0	0	0	18,841
AVE. LENGTH(INCH)			22.1	17.2	21.6	21.8	18.5	20.8	21.0	23.2	17.1				31.5	19.8						

OPEN WATER COOL																						
BAYFIELD	20	113																				0
SAXON	12	87														42						42
SUPERIOR	4,737	16,860	62	5											46	1,820	131	17	29	43		2,153
WASHBURN	1,047	4,410													10	56						66
TOTAL	5,816	21,470	62	5	0	56	1,918	131	17	29	43		2,261									
AVE. LENGTH(INCH)			17.7	16.0											27.2	17.9	9.7	12.6	9.4	19.3		

WI - 1 TOTALS	15,307	68,183	5,194	453	362	107	0	17	0	30	5	0	0	0	0	49	2,726	131	17	0	43	9,134
WI - 2 TOTALS	29,256	152,967	15,115	1,519	122	726	253	20	16	923	854	0	137	6	73	21	104	10	0	29	0	19,928
GRAND TOTAL	44,563	221,150	20,309	1,972	484	833	253	37	16	953	859	0	137	6	73	70	2,830	141	17	29	43	29,062
AVE. LENGTH (IN)			22.4	17.1	21.7	21.9	17.3	20.9	21.0	23.2	19.1		17.4	26.2	7.2	28.0	18.5	9.6	12.6	9.4	19.3	
AVE. WEIGHT (LBS)			3.36	1.75	3.61	4.23	1.79	3.61	--	3.78	2.21		1.47	5.27	0.07	4.76	2.11	0.42	--	--	--	
TOTAL WEIGHT			68,238	3,451	1,747	3,524	453	134	--	3,602	1,898		201	32	5.1	333	5,971	59	--	--	--	
SAMPLE SIZE			1,599	281	86	90	18	6	1	155	75		14	3	1	14	618	29	3	6	9	

STURGEON: 1 FISH REGISTRATED. EFFORT UNKNOWN.

**TABLE 2
ESTIMATED ANGLER EFFORT(ANGLER TRIPS AND ANGLER HOURS) BY AREA IN WISCONSIN WATERS
OF LAKE SUPERIOR OPEN WATER COLD PRIVATE 1993-2009.**

ANGLER TRIPS																		
AREA	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	AVERAGE
ASHLAND	1,021	2,941						2,193					4,233		2,869			2,651
BAYFIELD		3,815						4,818							4,762		3,687	4,271
CORN. - PORT W.	6,295	6,646	6,486	4,030	3,392	6,888	5,792	3,664	6,913	6,351	6,848	6,979		6,153		4,350		5,771
LITTLE SAND BAY		317													1,766			1,042
RED CLIFF															759		1,452	1,106
SAXON HARBOR	4,020	4,462	3,587	3,015	4,510	3,454	3,641	3,758	3,391	3,708	3,308	4,976	4,882	3,607	3,882	3,469	3,200	3,816
SUPERIOR	9,728	7,640	7,745	6,495	4,500	4,300	5,271	4,050		6,586	5,387	5,883	6,831	3,462	5,108	5,869	7,075	5,996
WASHBURN	6,891	7,925	7,256	6,120	5,967	8,257	12,337	9,744	7,774	8,463	5,232	5,812	5,130	4,190	3,534	4,358	4,590	6,681
TOTAL	27,955	33,746	25,074	19,660	18,369	22,899	27,041	28,227	18,078	25,108	20,775	23,650	21,076	17,412	22,680	18,046	20,004	

ANGLER HOURS																		
AREA	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	AVERAGE
ASHLAND	5,940	16,186						11,943					20,556		15,120			13,949
BAYFIELD		21,528						24,895							27,124		18,605	23,038
CORN. - PORT W.	25,798	28,284	26,971	18,493	15,295	26,983	26,891	15,489	29,656	29,443	31,388	31,070		26,068		19,397		25,088
LITTLE SAND BAY		1,345													10,463			5,904
RED CLIFF															4,622		9,355	6,989
SAXON HARBOR	21,627	23,423	17,714	15,566	22,653	16,196	17,921	18,436	17,358	15,791	16,152	23,479	22,185	17,993	19,571	16,396	15,394	18,697
SUPERIOR	58,215	41,718	41,424	37,674	23,454	21,634	25,692	19,219		33,027	25,434	29,773	31,569	16,263	25,126	30,078	34,836	30,946
WASHBURN	36,428	37,729	35,750	26,588	26,133	35,275	56,503	48,631	38,769	37,015	24,277	29,253	25,849	20,402	18,472	21,978	21,549	31,800
TOTAL	148,008	170,213	121,859	98,321	87,535	100,088	127,007	138,613	85,783	115,276	97,251	113,575	100,159	80,726	120,498	87,849	99,739	

TABLE 3
WISCONSIN'S LAKE SUPERIOR. OPEN WATER COLD PRIVATE ESTIMATED HARVEST 1999 - 2009.
(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	SPLAKE	RAINB. TROUT	ATL. SAL.	BROOK TROUT	FATS	WHITE FISH	HERR	MULE	BURBOT	PINK SAL.	MUSKY	NOP	SMB	WAE	YEP	TOTAL HRVST
1999	13,243	8,267	1,885	1,099	503	135			330	35	23					215		578		26,313
D	(50.3%)	(31.4%)	(7.2%)	(4.2%)	(1.9%)	(0.5%)			(1.3%)	(0.1%)	(0.1%)					(0.8%)		(2.2%)		
2000	14,001	3,596	1,219	1,227	374	101	18	18	150	25	12					138		220		21,099
E	(66.4%)	(17.0%)	(5.8%)	(5.8%)	(1.8%)	(0.5%)	(0.1%)	(0.1%)	(0.7%)	(0.1%)	(0.1%)					(0.7%)		(1.0%)		
2001	9,339	2,230	552	732	158	127			59	9						71		53		13,330
F	(70.1%)	(16.7%)	(4.1%)	(5.5%)	(1.2%)	(1.0%)			(0.4%)	(0.1%)						(0.5%)		(0.4%)		
2002	9,954	3,223	1,492	441	87	75			371	12	5	21				63		2,271	102	18,117
D	(54.9%)	(17.8%)	(8.2%)	(2.4%)	(0.5%)	(0.4%)			(2.0%)	(0.1%)	(0.0%)	(0.1%)				(0.3%)		(12.5%)	(0.6%)	
2003	8,647	1,242	1,012	336	66	51			163	85	34					68		2,474		14,178
D	(61.0%)	(8.8%)	(7.1%)	(2.4%)	(0.5%)	(0.4%)			(1.1%)	(0.6%)	(0.2%)					(0.5%)		(17.4%)		
2004	12,797	2,793	1,231	453	72	132		12	669							26		1,804		19,989
D	(64.0%)	(14.0%)	(6.2%)	(2.3%)	(0.4%)	(0.7%)		(0.1%)	(3.3%)							(0.1%)		(9.0%)		
2005	13,877	2,551	716	271	132	56			61		16					86		793		18,559
G	(74.8%)	(13.7%)	(3.9%)	(1.5%)	(0.7%)	(0.3%)			(0.3%)		(0.1%)					(0.5%)		(4.3%)		
2006	7,204	1,751	368	480	99	97			409	22				33		33		403		10,899
D	(66.1%)	(16.1%)	(3.4%)	(4.4%)	(0.9%)	(0.9%)			(3.8%)	(0.2%)				(0.3%)		(0.3%)		(3.7%)		
2007	11,428	5,595	952	1,634	79	80		20	72		7					18		638		20,523
H	(55.7%)	(27.3%)	(4.6%)	(8.0%)	(0.4%)	(0.4%)		(0.1%)	(0.4%)		(0.0%)					(0.1%)		(3.1%)		
2008	7,948	2,777	925	746	85	56			215		15					34		1,174		13,975
D	(56.9%)	(19.9%)	(6.6%)	(5.3%)	(0.6%)	(0.4%)			(1.5%)		(0.1%)					(0.2%)		(8.4%)		
2009	9,128	1,738	463	728	86	36		16	143	5						13		912		13,268
I	(68.8%)	(13.1%)	(3.5%)	(5.5%)	(0.6%)	(0.3%)		(0.1%)	(1.1%)	(0.0%)						(0.1%)		(6.9%)		

A - ASHLAND(KREHER PARK, MARINA), CORN./PORT WING, SAXON SUPERIOR, WASHBURN.

B - ASHLAND(KREHER PARK, MARINA, SECOND LAND.), CORN./PORT WING, SAXON, SUPERIOR, WASHBURN.

C - ASHLAND(KREHER PARK, MARINA, SECOND LAND.), BAYFIELD, CORN./PORT WING, SAXON, SUPERIOR, WASHBURN.

D- CORN./PORT WING, SAXON, SUPERIOR, WASHBURN.

E- ASHLAND(KREHER PARK, MARINA), BAYFIELD, CORN./PORT WING, SAXON, SUPERIOR, WASHBURN.

F- CORN./PORT WING, SAXON, WASHBURN.

G- ASHLAND(KREHER PARK, MARINA, SECOND LAND.), SAXON, SUPERIOR, WASHBURN.

H- ASHLAND(KREHER PARK, MARINA, SECOND LAND.),BAYFIELD, LITTLE SAND BAY, RED CLIFF, SAXON, SUPERIOR, WASHBURN.

I- BAYFIELD, RED CLIFF, SAXON, SUPERIOR, WASHBURN.

TABLE 4
WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1990 - 2009.
PORT OF SUPERIOR
(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	RAINB. TROUT	ATLAN. SAL.	SPLAKE	BROOK TROUT	FATS	HERR	BURBOT	WF	MUSKY	NOP	WAE	YEP	TOTAL HARVEST
1990	2,932	321	881	83	43	7	7		122					5	369		4,770
1991	3,235	598	674	194	77	10			125					20	3,553		8,486
1992	2,587	185	896	69	14	67			163					20	2,459		6,460
1993	3,830	741	1,566	203	69	11			165	11	16			71	2,953		9,636
1994	1,962	354	390	34					55					34	759		3,588
1995	2,268 (45.6%)	1,316 (26.4%)	786 (15.8%)	33 (0.7%)	28 (0.6%)	18 (0.4%)	9 (0.2%)	12 (0.2%)	247 (5.0%)				9 (0.2%)		252 (5.1%)		4,978
1996	1,488 (40.2%)	317 (8.6%)	1,024 (27.7%)	116 (3.1%)	26 (0.7%)				55 (1.5%)						676 (18.3%)		3,702
1997	743 (31.8%)	333 (14.3%)	659 (28.2%)	101 (4.3%)	2 (0.1%)				50 (2.1%)						446 (19.1%)		2,334
1998	1,359 (54.9%)	142 (5.7%)	274 (11.1%)	37 (1.5%)	6 (0.2%)		5 (0.2%)		23 (0.9%)						631 (25.5%)		2,477
1999	1,554 (51.0%)	570 (18.7%)	381 (12.5%)	114 (3.7%)	21 (0.7%)				58 (1.9%)					10 (0.3%)	341 (11.2%)		3,049
2000	1,681 (66.9%)	135 (5.4%)	408 (16.2%)	72 (2.9%)	17 (0.7%)				37 (1.5%)					23 (0.9%)	140 (5.6%)		2,513
2001*	NO CREEL SURVEY CONDUCTED DURING 2001.																
2002	2,388 (42.3%)	716 (12.7%)	522 (9.3%)	56 (1.0%)	16 (0.3%)				71 (1.3%)						1,858 (32.9%)	16 (0.3%)	5,643
2003	1,316 (32.2%)	303 (7.4%)	200 (4.9%)	37 (0.9%)					9 (0.2%)					41 (1.0%)	2,186 (53.4%)		4,092
2004	1,730 (38.4%)	336 (7.5%)	424 (9.4%)	24 (0.5%)					216 (4.8%)						1,774 (39.4%)		4,504
2005	3,073 (64.4%)	478 (10.0%)	405 (8.5%)	34 (0.7%)	9 (0.2%)				35 (0.7%)					41 (0.9%)	698 (14.6%)		4,773
2006	1,490 (72.5%)	131 (6.4%)	75 (3.6%)	16 (0.8%)	25 (1.2%)				35 (1.7%)					14 (0.7%)	270 (13.1%)		2,056
2007	2,220 (48.5%)	1,348 (29.4%)	310 (6.8%)	72 (1.6%)	23 (0.5%)		3 (0.1%)		29 (0.6%)						576 (12.6%)		4,581
2008	2,426 (48.9%)	725 (14.6%)	612 (12.3%)	41 (0.8%)	26 (0.5%)				12 (0.2%)					13 (0.3%)	1,107 (22.3%)		4,962
2009	3,094 (62.6%)	430 (8.7%)	348 (7.0%)	106 (2.1%)	17 (0.3%)				30 (0.6%)			5 (0.1%)		3 (0.1%)	906 (18.3%)		4,939

TABLE 5
WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1989 - 2009.
SAXON HARBOR

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	SPLAKE	RAINB. TROUT	ATLAN. SALMON	FATS	WHITE FISH	HERR	NOP	WAE	TOTAL HARVEST
1989	3,327	1,131	37	43		89							4,627
1990	2,525	240	115	5		6							2,891
1991	1,735	527	74	75		5		3					2,419
1992	1,240	188	28	18									1,474
1993	2,234	422	210	25				11		8			2,910
1994	2,962 (78.1%)	702 (18.5%)	80 (2.1%)	46 (1.2%)					2 (0.1%)				3,792
1995	1,631 (63.8%)	801 (31.3%)	30 (1.2%)	20 (0.8%)			4 (0.2%)	71 (2.8%)					2,557
1996	1,776 (78.4%)	294 (13.0%)	64 (2.8%)	15 (0.7%)				109 (4.8%)	6 (0.3%)				2,264
1997	3,271 (68.2%)	1,102 (23.0%)	228 (4.8%)	42 (0.9%)	4 (0.1%)	7 (0.1%)		103 (2.1%)		38 (0.8%)			4,795
1998	2,889 (86.8%)	226 (6.8%)	37 (1.1%)	98 (2.9%)	3 (0.1%)	13 (0.4%)		47 (1.4%)		8 (0.2%)	6 (0.2%)		3,327
1999	2,224 (50.0%)	1,653 (37.1%)	346 (7.8%)	153 (3.4%)	3 (0.1%)	7 (0.2%)		16 (0.4%)	9 (0.2%)	3 (0.1%)		36 (0.8%)	4,450
2000	2,313 (73.9%)	560 (17.9%)	157 (5.0%)	89 (2.8%)	6 (0.2%)			5 (0.2%)					3,130
2001	2,593 (74.1%)	569 (16.3%)	94 (2.7%)	234 (6.7%)				5 (0.1%)				4 (0.1%)	3,499
2002	1,968 (79.6%)	270 (10.9%)	52 (2.1%)	50 (2.0%)		9 (0.4%)		4 (0.2%)	12 (0.5%)	5 (0.2%)		101 (4.1%)	2,471
2003	2,606 (84.6%)	286 (9.3%)	68 (2.2%)	37 (1.2%)				6 (0.2%)	71 (2.3%)	7 (0.2%)			3,081
2004	4,843 (83.6%)	567 (9.8%)	323 (5.6%)	52 (0.9%)		6 (0.1%)							5,791
2005	3,844 (88.7%)	321 (7.4%)	88 (2.0%)	39 (0.9%)		14 (0.3%)		18 (0.4%)		9 (0.2%)			4,333
2006	2,407 (81.8%)	310 (10.5%)	43 (1.5%)	90 (3.1%)	24 (0.8%)	5 (0.2%)		3 (0.1%)				61 (2.1%)	2,943
2007	2,003 (65.5%)	749 (24.5%)	149 (4.9%)	132 (4.3%)		17 (0.6%)				7 (0.2%)			3,057
2008	1,969 (78.3%)	356 (14.1%)	47 (1.9%)	117 (4.7%)	4 (0.2%)					2 (0.1%)	5 (0.2%)	16 (0.6%)	2,516
2009	1,871 (84.2%)	159 (7.2%)	53 (2.4%)	69 (3.1%)		3 (0.1%)		68 (3.1%)					2,223

TABLE 6
WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 2007, 2009.
RED CLIFF
(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	SPLAKE	RAINB. TROUT	ATLAN. SALMON	BROOK TROUT	FATS	WHITE FISH	MULE	HERR	NOP	WAE	YEP	TOTAL HARVEST
2007	788 (90.1%)	87 (9.9%)														875
2009	1,479 (90.2%)	23 (1.4%)		109 (6.7%)	10 (0.6%)				18 (1.1%)							1,639

TABLE 7
WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1994, 2000, 2007, 2009.
BAYFIELD
(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	SPLAKE	RAINB. TROUT	ATLAN. SALMON	BROOK TROUT	FATS	WHITE FISH	MULE	HERR	NOP	WAE	YEP	TOTAL HARVEST
1994	1,391 (52.3%)	1,045 (39.3%)		138 (5.2%)	49 (1.8%)	6 (0.2%)								31 (1.2%)		2,660
2000	2,341 (73.1%)	305 (9.5%)	96 (3.0%)	280 (8.7%)	142 (4.4%)	10 (0.3%)		3 (0.1%)	15 (0.5%)				6 (0.2%)	6 (0.2%)		3,204
2007	2,382 (54.7%)	1,163 (26.7%)	185 (4.2%)	566 (13.0%)	41 (0.9%)			20 (0.5%)								4,357
2009	1,382 (74.7%)	104 (5.6%)		278 (15.0%)	39 (2.1%)	16 (0.9%)		16 (0.9%)	16 (0.9%)							1,851

TABLE 8
WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1992 - 2009.
WASHBURN

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	SPLAKE	RAINB. TROUT	ATLAN. SALMON	BROOK TROUT	FATS	WHITE FISH	MULE	HERR	NOP	WAE	YEP	TOTAL HARVEST
1992	2,369 (39.5%)	1,265 (21.1%)	584 (9.7%)	1,388 (23.1%)	294 (4.9%)	23 (0.4%)	24 (0.4%)	15 (0.3%)	16 (0.3%)				12 (0.2%)	6 (0.1%)		5,996
1993	1,789 (46.6%)	1,280 (33.4%)	298 (7.8%)	338 (8.8%)	28 (0.7%)	3 (0.1%)	10 (0.3%)		44 (1.1%)	12 (0.3%)		30 (0.8%)		3 (0.1%)	3 (0.1%)	3,838
1994	1,549 (21.9%)	4,943 (70.0%)	83 (1.2%)	311 (4.4%)	170 (2.4%)		5 (0.1%)		5 (0.1%)							7,066
1995	1,704 (26.6%)	4,002 (62.4%)	210 (3.3%)	180 (2.8%)	186 (2.9%)	12 (0.2%)	25 (0.4%)		78 (1.2%)			6 (0.1%)	8 (0.1%)			6,411
1996	2,469 (65.0%)	752 (19.8%)	237 (6.2%)	213 (5.6%)	68 (1.8%)	8 (0.2%)	9 (0.2%)		4 (0.1%)					12 (0.3%)	29 (0.8%)	3,801
1997	2,774 (60.1%)	1,107 (24.0%)	137 (3.0%)	199 (4.3%)	331 (7.2%)	24 (0.5%)			19 (0.4%)	6 (0.1%)				10 (0.2%)	12 (0.3%)	4,619
1998	4,199 (75.8%)	527 (9.5%)	144 (2.6%)	175 (3.2%)	205 (3.7%)	35 (0.6%)	11 (0.2%)		110 (2.0%)	3 (0.1%)		11 (0.2%)	91 (1.6%)	32 (0.6%)		5,543
1999	3,635 (34.6%)	4,599 (43.7%)	689 (6.5%)	564 (5.4%)	500 (4.8%)	71 (0.7%)			20 (0.2%)	26 (0.2%)		20 (0.2%)		205 (1.9%)	191 (1.8%)	10,520
2000	3,716 (52.7%)	2,113 (30.0%)	251 (3.6%)	517 (7.3%)	204 (2.9%)	45 (0.6%)	10 (0.1%)	15 (0.2%)	11 (0.2%)	15 (0.2%)		9 (0.1%)	88 (1.2%)	52 (0.7%)		7,046
2001	2,797 (62.0%)	1,067 (23.6%)	180 (4.0%)	262 (5.8%)	144 (3.2%)	5 (0.1%)				9 (0.2%)			17 (0.4%)	32 (0.7%)		4,513
2002	2,432 (52.2%)	1,255 (26.9%)	292 (6.3%)	206 (4.4%)	87 (1.9%)	19 (0.4%)					21 (0.5%)		56 (1.2%)	208 (4.5%)	86 (1.8%)	4,662
2003	1,614 (66.8%)	304 (12.6%)	152 (6.3%)	146 (6.0%)	66 (2.7%)	4 (0.2%)			11 (0.5%)	14 (0.6%)		27 (1.1%)	27 (1.1%)	51 (2.1%)		2,416
2004	2,730 (57.5%)	1,314 (27.7%)	277 (5.8%)	206 (4.3%)	72 (1.5%)	38 (0.8%)		12 (0.3%)	45 (0.9%)				26 (0.5%)	30 (0.6%)		4,750
2005	2,418 (60.8%)	1,078 (27.1%)	169 (4.2%)	157 (3.9%)	92 (2.3%)	20 (0.5%)			8 (0.2%)			7 (0.2%)	7 (0.2%)	21 (0.5%)		3,977
2006	1,406 (64.0%)	447 (20.4%)	15 (0.7%)	184 (8.4%)	67 (3.1%)	30 (1.4%)			20 (0.9%)				19 (0.9%)	8 (0.4%)		2,196
2007	1,042 (34.4%)	1,461 (48.3%)	122 (4.0%)	331 (10.9%)	19 (0.6%)	17 (0.6%)							18 (0.6%)	16 (0.5%)		3,026
2008	1,720 (58.7%)	584 (19.9%)	116 (4.0%)	347 (11.8%)	81 (2.8%)	30 (1.0%)			19 (0.6%)			13 (0.4%)	16 (0.5%)	6 (0.2%)		2,932
2009	1,302 (49.8%)	1,022 (39.1%)	62 (2.4%)	166 (6.3%)	37 (1.4%)				11 (0.4%)				10 (0.4%)	6 (0.2%)		2,616

**TABLE 9
 PERCENT HARVEST OF NATIVE LAKE TROUT BY AREA, 1990 - 2009.
 OPEN WATER COLD PRIVATE.**

YEAR	ASHLAND BAYFIELD WASHBURN	CORNUCOPIA/ PORT WING	SAXON HARBOR	SUPERIOR	TOTAL
1990	62.3	67.2	95.5	27.0	60.7
1991	85.8	36.1	94.9	25.8	66
1992	82.4	66.8	92.0	25.3	64
1993	80.0	49.8	97.4	40.6	64
1994	82.1	49.4	98.0	48.8	76
1995	65.2*	72.1	94.3	46.9	67
1996	80.9*	75.6	98.1	57.0	79
1997	46.0*	44.4	96.9	56.3	68
1998	52.8*	45.6	98.8	57.8	63
1999	72.8*	57.9	96.3	49.4	70
2000	90.3	66.7	96.4	44.4	82.6
2001	88.3*	68.8	99.3	N/A	83.1
2002	92.1*	73.1	98.7	63.2	82.1
2003	91.8*	80.1	99.2	60.3@	84.8
2004	95.9*	84.3	99.2	75.7	91.2
2005	98.4	84.3^	99.9	75.1	91.9
2006	97.2	85.2	100.0	67.1	89.8
2007	98.4	85.2^	99.7	67.1	91.0
2008	98.0*	82.9	98.9	63.1	84.1
2009	98.6	82.9^	99.6	67.4	87.3

* WASHBURN ROUTE ONLY

@ 2003 SUPERIOR % NATIVE DERIVED USING 2002 NUMBERS

^Corn/Port Wing not surveyed in 2005, 2007, 2009 USED PREVIOUS YEARS DATA.

TABLE 10 - 2009 LAKE TROUT EXTRACTION BY MANAGEMENT UNIT BY FISHERY

	ANGLR	ANGLR	EST. LT	%	EST. #	AVE SIZE	WGHTED		EST #	AVE SIZE	WGHTED	SMPLE
WI-1	TRIPS	HOURS	HARVEST	HATCH.	HATCH.	HATCH.	HATCH.	%NATIVE	NATIVE	NATIVE	NATIVE	SIZE
CHARTER												
CORN.-PORT WING	80	428	108	24.21	26	22.6	590.92	75.79	82	21.6	1768.03	
SUPERIOR	354	2,409	640	32.61	209	21.7	4528.88	67.39	431	21.4	9229.73	
TOTAL	434	2,837	748	31.40	235	21.8	5119.79	68.60	513	21.4	10997.76	

OPEN WTR-COLD												
CORN. - PORT W.	3,061	13,650	1,290	24.21	312	22.6	7058.18	75.79	978	21.6	21118.13	0
SUPERIOR	7,075	34,836	3,094	32.61	1009	21.7	21894.29	67.39	2,085	21.4	44620.00	669
TOTAL	10,136	48,486	4,384	30.14	1,321	21.9	28952.47	69.86	3,063	21.5	65738.12	669

OPEN WTR-COOL												
CORN. - PORT W.	0	0	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
SUPERIOR	4,737	16,860	62	20.03	12	17.1	212.36	100.00	62	17.9	1109.80	10
TOTAL	4,737	16,860	62	0.00	12	0.0	212.36	100.00	62	17.9	1109.80	10
WI-1 TOTAL	15,307	68,183	5,194	30.20	1,569	21.9	34,285	70.04	3,638	21.4	77,846	679
WEIGHT (LBS)			15563.50			3.15	4940.88			2.92	10622.63	

WI-2												
ICE												
WSHBN/BYFD SHAL.	1,524	8,180	173	0.00	0	0.0	0.00	100.00	173	20.7	3581.10	17
WSHBN COOL	19	38	0	0.00	0	0.0	0.00	100.00	0	0.0	0.00	0
APOS. ISL. BOBB.	4,192	26,595	2,133	3.13	67	22.0	1468.78	96.87	2,066	23.3	48143.32	212
CORNY. SHAL.	88	356	8	0.00	0	0.0	0.00	100.00	0	19.4	0.00	1
CORNY. COOL	0	0	0	0.00	0	0.0	0.00	100.00	0	0.0	0.00	0
CORNY. BOBB.	1,091	6,840	839	19.66	165	22.3	3678.33	80.34	674	24.7	16649.10	166
TOTAL	6,914	42,009	3,153	7.35	232	22.2	5147.11	92.40	2,913	23.5	68373.52	396

CHARTER												
ASH.-BYF.-WSH.	780	4,172	1,266	1.42	18	21.2	381.12	98.58	1,248	22.4	27955.71	
CORN.-PRT WING	13	102	39	15.00	6	23.5	137.48	85.00	33	21.6	716.04	
SAXON	232	1,569	340	0.42	1	24.6	35.13	99.58	339	22.6	7651.73	
TOTAL	1,025	5,843	1,645	1.54	25	21.9	553.72	98.46	1,620	22.4	36323.48	

OPEN WTR-COLD ** NUMBERS DERIVED FROM PREVIOUS YEARS**												
ASHLAND *	3,726	17,645	2,422	4.01	97	23.5	2282.37	95.99	2,325	22.9	53239.70	0
BAYFIELD	3,687	18,605	1,382	3.02	42	19.9	830.55	96.98	1,340	21.8	29217.75	45
CORNUCOPIA *	1,289	5,747	543	15.00	81	23.5	1914.08	85.00	462	21.6	9969.48	0
LITTLE SAND BAY *	2,294	12,210	1,318	2.02	27	25.1	668.25	97.98	1,291	22.3	28797.69	0
RED CLIFF	1,452	9,355	1,479	0.00	0	0.0	0.00	100.00	1,479	22.8	33721.20	93
SAXON	3,200	15,394	1,871	0.42	8	24.6	193.31	99.58	1,863	22.6	42107.00	249
WASHBURN	4,590	21,549	1,302	1.35	18	24.4	428.88	98.65	1,284	22.7	29156.40	137
TOTAL	20,238	100,505	10,317	2.64	272	23.2	6317.44	97.36	10,045	22.5	226209.23	524

OPEN WTR-COOL												
BAYFIELD	20	113	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
SAXON	12	87	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
WASHBURN	1,047	4,410	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
TOTAL	1,079	4,610	0	0.00	0	0.0	0.00	0.00	0	0.0	0	0

WI-2 TOTAL	29,256	152,967	15,115	3.50	529	22.7	12,018	96.45	14,578	22.7	330,906	920
WEIGHT (LBS)			52598.83			3.53	1868.55			3.48	50730.28	
WI-1, WI-2 TOT.	44,563	221,150	20,309	10.33	2,098	22.1	46302.90	89.69	18,216	22.4	408751.92	1,599
WEIGHT (LBS)			68022.32			3.25	6818.06			3.36	61204.26	

TABLE 11. SAXON HARBOR OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST, AND HARVEST RATES. 1998-2009.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT/HOUR	ANGLR. HRS / LKT
1998	3,454	17,921	3,327	0.19	5.39	2,889	0.16	6.20
1999	3,641	16,196	4,450	0.27	3.64	2,224	0.14	7.28
2000	3,758	18,436	3,130	0.17	5.89	2,313	0.13	7.97
2001	3,391	17,358	3,499	0.20	4.96	2,593	0.15	6.69
2002	3,708	15,791	2,471	0.16	6.39	1,968	0.12	8.02
2003	3,308	16,152	3,081	0.19	5.24	2,606	0.16	6.20
2004	4,976	23,479	5,791	0.25	4.05	4,843	0.21	4.85
2005	4,882	22,185	4,333	0.20	5.12	3,844	0.17	5.77
2006	3,607	17,993	2,943	0.16	6.11	2,407	0.13	7.48
2007	3,882	19,571	3,057	0.16	6.40	2,003	0.10	9.77
2008	3,469	16,396	2,519	0.15	6.51	1,969	0.12	8.33
2009	3,200	15,394	2,223	0.14	6.92	1,871	0.12	8.23
TOTAL	45,276	216,872	40,824			31,530		
AVE.	3,773	18,073	3,402	0.19	5.31	2,628	0.15	6.88

TABLE 12. WASHBURN OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST, AND HARVEST RATES. 1998-2009.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT/HOUR	ANGLR. HRS / LKT
1998	8,257	56,503	5,543	0.10	10.19	4,119	0.07	13.72
1999	12,337	35,275	10,520	0.30	3.35	3,635	0.10	9.70
2000	9,744	48,631	7,046	0.14	6.90	3,716	0.08	13.09
2001	7,774	38,769	4,513	0.12	8.59	2,797	0.07	13.86
2002	8,463	37,015	4,662	0.13	7.94	2,432	0.07	15.22
2003	5,232	24,277	2,416	0.10	10.05	1,614	0.07	15.04
2004	5,812	29,253	4,750	0.16	6.16	2,730	0.09	10.72
2005	5,130	25,849	3,977	0.15	6.50	2,418	0.09	10.69
2006	4,190	20,402	2,196	0.11	9.29	1,406	0.07	14.51
2007	3,534	18,472	3,026	0.16	6.10	1,042	0.06	17.73
2008	4,358	21,978	2,932	0.13	7.50	1,720	0.08	12.78
2009	4,590	21,549	2,616	0.12	8.24	1,302	0.06	16.55
TOTAL	79,421	377,973	54,197			28,931		
AVE.	6,618	31,498	4,516	0.14	6.97	2,411	0.08	13.06

TABLE 13. BAYFIELD OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 1994, 2000, 2007, 2009.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT/HOUR	ANGLR. HRS / LKT
1994	3,815	21,528	2,660	0.12	8.09	1,391	0.06	15.48
2000	4,818	24,895	3,258	0.13	7.64	2,341	0.09	10.63
2007	4,762	27,124	4,357	0.16	6.23	2,382	0.09	11.39
2009	3,687	18,605	1,851	0.10	10.05	1,382	0.07	13.46
TOTAL	17,082	92,152	12,126			7,496		
AVE.	4,271	23,038	3,032	0.13	7.60	1,874	0.08	12.29

TABLE 14. CORNUCOPIA / PORT WING OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 1998-2009.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT/HOUR	ANGLR. HRS / LKT
1998	6,888	26,891	4,716	0.18	5.70	3,161	0.12	8.51
1999	5,792	26,983	4,979	0.18	5.42	2,515	0.09	10.73
2000	3,664	15,489	2,453	0.16	6.31	1,768	0.11	8.76
2001	6,913	29,656	5,318	0.18	5.58	3,949	0.13	7.51
2002	6,351	29,443	5,341	0.18	5.51	3,166	0.11	9.30
2003	6,848	31,888	4,589	0.14	6.95	3,111	0.10	10.25
2004	6,979	31,070	4,944	0.16	6.28	3,494	0.11	8.89
2005*								
2006	6,153	26,068	3,704	0.14	7.04	1,901	0.07	13.71
2007*								
2008	4,350	19,397	3,565	0.18	5.44	1,833	0.09	10.58
2009*								
TOTAL	53,938	236,885	39,609			24,898		
AVE.	5,993	26,321	4,401	0.17	5.98	2,766	0.11	9.51

* NO CREEL SURVEY CONDUCTED IN 2005, 2007, 2009.

TABLE 15. PORT OF SUPERIOR OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 1998-2009.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT/HOUR	ANGLR. HRS / LKT
1998	4,300	25,692	2,477	0.10	10.37	1,359	0.05	18.91
1999	5,271	21,634	3,049	0.14	7.10	1,554	0.07	13.92
2000	4,050	19,219	2,513	0.13	7.65	1,681	0.09	11.43
2001*								
2002	6,586	33,027	5,643	0.17	5.85	2,388	0.07	13.83
2003	5,387	25,434	4,092	0.16	6.22	1,316	0.05	19.33
2004	5,883	29,773	4,504	0.15	6.61	1,730	0.06	17.21
2005	6,831	31,569	4,773	0.15	6.61	3,073	0.10	10.27
2006	3,462	16,263	2,056	0.13	7.91	1,490	0.09	10.91
2007	5,108	25,126	4,581	0.18	5.48	2,220	0.09	11.32
2008	5,869	30,078	4,962	0.16	6.06	2,426	0.08	12.40
2009	7,075	34,826	4,939	0.14	7.05	3,094	0.09	11.26
TOTAL	59,822	292,641	43,589			22,331		
AVE.	5,438	26,604	3,963	0.15	6.71	2,030	0.08	13.10

* NO CREEL CONDUCTED DURING 2001.

TABLE 16. RED CLIFF. OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2007, 2009.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT/HOUR	ANGLR. HRS / LKT
2007	759	4,622	875	0.19	5.28	788	0.17	5.87
2009	1,452	9,355	1,639	0.18	5.71	1,479	0.16	6.33
TOTAL	2,211	13,977	2,514			2,267		
AVE.	1,106	6,989	1,257	0.18	5.56	1,134	0.16	6.17

TABLE 17

LAKE TROUT HARVEST RATES (LAKE TROUT PER ANGLER HOUR) JUNE - AUGUST, BY AREA, 1990 - 2009. OPEN WATER COLD PRIVATE.

YEAR	ASHLAND	BAYFIELD	CORNUCOPIA/	SAXON	SUPERIOR	WASHBURN	TOTAL
			PORT WING	HARBOR			
1990	0.103	N/A	0.038	0.201	0.075	0.084*	0.085
1991	N/A	N/A	0.084	0.124	0.063	0.086*	0.080
1992	0.073	N/A	0.097	0.104	0.057	0.080	0.076
1993	0.115	N/A	0.058	0.121	0.064	0.080	0.075
1994	0.081	0.081	0.058	0.145	0.039	0.062	0.071
1995	N/A	N/A	0.043	0.116	0.060	0.085	0.069
1996	N/A	N/A	0.075	0.118	0.041	0.119	0.078
1997	N/A	N/A	0.071	0.171	0.036	0.145	0.105
1998	N/A	N/A	0.127	0.280	0.050	0.139	0.133
1999	N/A	N/A	0.120	0.203	0.066	0.087	0.101
2000	0.225	0.106	0.136	0.172	0.095	0.122	0.131
2001	N/A	N/A	0.168	0.176	N/A	0.101	0.140
2002	N/A	N/A	0.102	0.141	0.070	0.077	0.091
2003	N/A	N/A	0.111	0.157	0.058	0.078	0.099
2004	N/A	N/A	0.122	0.242	0.063	0.121	0.130
2005	0.253	N/A	0.122^	0.175	0.100	0.136	0.147
2006	N/A	N/A	0.088	0.147	0.083	0.082	0.100
2007	0.155	0.106	0.088^	0.140	0.100	0.079	0.108
2008	N/A	N/A	0.113	0.131	0.078	0.098	0.101
2009	N/A	0.093	0.113^	0.143	0.091	0.088	0.103

* WASHBURN AND BAYFIELD ROUTES COMBINED

^Corn/Port Wing not surveyed in 2005, 2007, 2009 used previous years data.

**TABLE 18. SAXON HARBOR OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-09.**

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL		ANGLR. HRS / FISH
			FISH HARVEST	FISH / HOUR	
2000	15	158	0	0.00	0.00
2001	0	0	0		
2002	36	431	120	0.28	3.59
2003	0	0	0		
2004	0	0	0		
2005	0	0	0		
2006	0	0	0		
2007	0	0	0		
2008	0	0	0		
2009	12	87	42	0.48	2.07
TOTAL	63	676	162		
AVE.	6	68	16	0.24	4.17

**TABLE 21. CORN. /PORT WING OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-09.**

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL		ANGLR. HRS / FISH
			FISH HARVEST	FISH / HOUR	
2000	53	180	0	0.00	0.00
2001	45	129	10	0.08	12.90
2002	21	101	14	0.14	7.21
2003	210	936	71	0.08	13.18
2004	221	1,112	123	0.11	9.04
2005*					
2006	106	273	0	0.00	0.00
2007*					
2008	173	778	9	0.01	0.00
2009*					
TOTAL	829	3,509	227		
AVE.	118	501	32	0.06	15.46

* NOT SURVEYED 2005, 2007, 2009

**TABLE 19. WASHBURN OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-09.**

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL		ANGLR. HRS / FISH
			FISH HARVEST	FISH / HOUR	
2000	1,166	4,675	253	0.05	18.48
2001	789	3,018	502	0.17	6.01
2002	645	2,258	184	0.08	12.27
2003	1,267	5,483	58	0.01	94.53
2004	766	2,508	53	0.02	47.32
2005	885	3,175	171	0.05	18.57
2006	1,197	4,498	538	0.12	8.36
2007	1,755	7,849	248	0.03	31.65
2008	725	2,641	116	0.04	22.77
2009	1,047	4,410	66	0.01	66.82
TOTAL	10,242	40,515	2,189		
AVE.	1,024	4,052	219	0.05	18.51

**TABLE 22. PORT OF SUPERIOR OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-09.**

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL		ANGLR. HRS / FISH
			FISH HARVEST	FISH / HOUR	
2000	4,673	14,674	112	0.01	131.02
2001					
2002	8,877	31,606	6,640	0.21	4.76
2003	5,508	17,813	5,113	0.29	3.48
2004	4,854	15,115	2,457	0.16	6.15
2005	4,300	9,870	1,605	0.16	6.15
2006	5,721	19,015	3,214	0.17	5.92
2007	5,144	18,230	3,017	0.17	6.04
2008	4,225	15,359	1,687	0.11	9.10
2009	4,737	16,860	2,152	0.13	7.83
TOTAL	48,039	158,542	25,997		
AVE.	5,338	17,616	2,889	0.16	6.10

NOT SURVEYED IN 2001.

**TABLE 20. BAYFIELD OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES.**

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL		ANGLR. HRS / FISH
			FISH HARVEST	FISH / HOUR	
1994	168	1,070	57	0.05	18.77
2000	14	60	12	0.20	5.00
2007	126	944	247	0.26	3.82
2009	20	113	0	0.00	0.00
TOTAL	328	2,187	316		
AVE.	82	547	79	0.14	6.92

**TABLE 23. RED CLIFF OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES.**

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL		ANGLR. HRS / FISH
			FISH HARVEST	FISH / HOUR	
2007	0	0	0	0.00	0.00
2009	0	0	0	0.00	0.00
TOTAL	0	0	0		
AVE.	0	0	0	0.00	0.00

TABLE 24

WISCONSIN'S LAKE SUPERIOR. ICE SHALLOW WATER ESTIMATED EFFORT, HARVEST AND HARVEST RATES 1975-2009.

(INCLUDING CHEQUAMEGON BAY, WASHBURN, BAYFIELD)

YEAR	OVERALL			LAKE TROUT	COHO SAL.	CHIN. SAL.	BROWN TROUT	BROOK		WHITE FISH	MEN. WF	MULE WF	LAKE HERR.	ATL. SAL.	BUR BOT	SMELT	NOP	WAE	YEP	other	TOTAL HRVST
	ANGL. TRIPS	ANGL. HOURS	HRVST RATE FSH/HOUR					SPLAKE	RBT												
1975-A	6,807	N/A	N/A		198		11,176	795	144												12,313
1976-A	2,114	10,649	0.067	63	46		410	106	51	7			22				7	5			717
1977-A	980	4,060	0.061		8		101	13	74				53								249
1978-A	2,816	N/A	N/A	14	27		545	63	73	32			135								889
1979-A	N/A	N/A	N/A	39	5		1,189	34	80	346			580								2,273
1980-A	N/A	N/A	N/A	797	72		1,219	3,854	51	24			12								6,029
1981-A	N/A	N/A	N/A	376	98		1,146	4,635	142	7			74								6,478
1982-A	5,199	26,837	0.147	133	139		270	3,342	49	6			6								3,945
1983-A	8,433	42,558	0.137	441	641		1,647	2,986	42	23			5							51	5,836
1984-A	8,215	38,802	0.123	191	375		649	3,319	29	43										159	4,765
1985-A	8,568	41,506	0.170	84	53		1,307	5,272	37	254										53	7,060
1986-A	8,807	45,945	0.135	229	354		188	5,373	11	56											6,211
1987-A	8,792	46,556	0.130	223	701	39	815	3,949	70	34			27				90	6	84		6,038
1988-A	7,875	38,714	0.216	29	2,145		1,839	4,275							14		33	14			8,349
1989-A	10,328	47,884	0.129	143	303		2,738	2,262	115	26		24	58	15			87	24	366		6,161
1990-A	8,138	37,150	0.208	61	222		373	4,959				73	1,874				42	67	46		7,717
1991-BC	2,973	15,105	0.165		65	18	83	702				76	1,525				11		14		2,494
1992-BC	3,422	16,845	0.302		520		2,224	374				69	1,808		34						5,080
1993-A	7,682	41,021	0.149	168	114	15	1,951	2,067				265	1,150	31	124	51	25	19	107		6,109
1994-A	4,768	22,991	0.128	197	119	12	749	788		0		106	641		81	158	21	21	25		2,942
1995-B	4,651	25,049	0.463	93	176	13	644	874				85	2,557		7	7,096	2	19			11,589
1996	NO SHALLOW WATER SURVEY																				0
1997	NO SHALLOW WATER SURVEY																				0
1998-B	2,607	12,174	0.594	108	240	23	135	598		5		103	299		54	5,321	14	17	320		7,237
1999-B	5,902	28,423	0.591	424	154		205	1,322		5		678	422		62	13,263	29	33	192		16,802
2000-B	4,924	24,184	0.290	333	174	15	231	628		6	6	1,271	128		83	3,687	75	29	292		7,006
2001-B	3,481	16,897	0.189	151	187	16	296	1,058				573	590		50	52	8	78	90		3,188
2002-BC	2,497	13,064	0.226	126	204	11	110	467				798	287		37	881			9		2,954
2003-BC	1,681	7,965	0.130	133		25	44	221			11	328	37		46	177					1,035
2004-BC	1,744	7,676	0.055	73	10		25	118				76	71		15				38		426
2005-BC	2,791	13,266	0.183	195	113		135	500	19	5	6	712	80		25	570			50		2,423
2006-BC	1,351	6,451	0.259	86	50	5	83	365	5			580	25		13	362			93		1,672
2007-A	5,972	32,753	0.427	90	4,777	12	449	876	8	11		1,313	213		91	4,974	9	94	1,038		13,982
2008-BC	2,957	17,248	0.109	82	442		373	396				352	46		6	152			27		1,876
2009-CD	1,524	8,180	0.111	173	66		61	158				308	76			59			10		911

A = 1975-1990, 1993,1994,2007 CHEQUAMEGON BAY, WASHBURN, BAYFIELD

B = 1991, 1992, 1995, 1998-2006, 2008 ONLY WASHBURN SIDE OF CHEQUAMEGON BAY SURVEYED

C = 2002-2006, 2008 MINIMUM DATA SHALLOW WATER SURVEY STARTED WHEN "BOBBING" BEGAN.

D= SIOUX RIVER - BAYFIELD - RED CLIFF - RASPBERRY BAY.

other= WAL,NOP,YP

TABLE 25

ESTIMATED ANGLER EFFORT (ANGLER TRIPS AND ANGLER HOURS) BY AREA IN WISCONSIN WATERS OF LAKE SUPERIOR ICE FISHERY. 1992-2009.

ANGLER TRIPS																			
AREA	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	AVERAGE
ASHLAND SHALLOW WTR																3,118			3,118
ASHLAND COOL WATER																2,234			2,234
WASHBURN SHALL. WTR	3,422			4,651		1,857	2,607	5,902	4,924	3,481	2,497	1,681	1,744	2,791	1,351	2,854	2,957	1,524	2,950
WASHBURN COOL WATER								192	145	164	185	16	27	187	6	160	30	19	103
ASHL.+WSHB. SHAL. WTR		7,682	4,768																6,225
ASHL.+WSHB. COOL WTR		2,252	1,040																1,646
APOS. ISL. - BOBBING	1,451	1,904	1,768	1,512	1,695	2,835	1,758	5,074	3,873	5,525	1,228	5,313	3,178	6,008	1,062	3,480	5,412	4,192	3,182
MAD. ISL. - BOBBING					813	741													777
CORNOCUPIA SHALLOW									10			16	8	1		4	11	88	20
CORNOCUPIA COOL									6	8		20	12			10	16		12
CORNOCUPIA - BOBBING	63		1,070	326	1,172	1,546			212	563		1,274	586	138		156	354	1,091	658
WESTERN END			2,280																2,280
DECEMBER BOATS							133	124	107										121
TOTAL	4,936	11,838	10,926	6,489	3,680	6,979	4,498	11,292	9,267	9,751	3,910	8,320	5,555	9,125	2,419	12,016	8,780	6,914	

ANGLER HOURS																			
AREA	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	AVERAGE
ASHLAND SHALLOW WTR																17,487			17,487
ASHLAND COOL WATER																10,540			10,540
WASHBURN SHALL. WTR	16,845			25,049		10,614	12,174	28,423	24,184	16,897	13,064	7,965	7,676	13,266	6,451	15,266	17,248	8,180	14,887
WASHBURN COOL WATER								1,097	761	946	812	96	106	528	22	750	152	38	483
ASHL.+WSHB. SHAL. WTR		41,021	22,991																32,006
ASHL.+WSHB. COOL WTR		9,620	4,602																7,111
APOS. ISL. - BOBBING	8,171	10,382	10,096	8,741	9,414	16,653	9,430	27,949	20,699	30,753	6,834	30,924	16,975	32,365	5,958	19,287	33,548	26,595	18,043
MADLINE ISLAND					4,273	4,473													4,373
CORNOCUPIA SHALLOW									16			50	15	3		8	30	356	68
CORNOCUPIA COOL									17	37		65	47			41	124		55
CORNOCUPIA - BOBBING	337		6,113	1,561	6,881	8,098			1,183	2,918		6,495	3,086	736		764	2,163	6,840	3,629
WESTERN END			14,698																14,698
DECEMBER BOATS							465	506	385										452
TOTAL	25,353	61,023	58,500	35,351	20,568	39,838	22,069	57,975	47,229	51,567	20,710	45,595	27,905	46,898	12,431	64,143	53,265	42,009	

TABLE 26
WISCONSIN'S LAKE SUPERIOR ICE FISHERY DEEP WATER "BOBBING"
(APOSTLE ISLAND'S) ESTIMATED HARVEST 1990-2009.

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE	COHO	CHINOOK	BROWN				WHITE	MEN							MULE	TOTAL
	TROUT	SALMON	SALMON	TROUT	SPLAKE	RBT	FATS	FISH	WF	HERR	HOYI	BURBOT	SMELT	NOP	WAE	WF	
1990	539	9		11	13												572
1991	762			4	9		4										779
1992	1,343						23										1,366
1993	1,766	21	12	12	13		67		14	44		54					2,003
1994	1,385	11					650	5				15					2,066
	(67.0%)	(0.5%)					(31.5%)	(0.2%)				(0.7%)					
1995	1,224	68	8	10	65		62	17		76		65			75		1,670
	(73.3%)	(4.1%)	(0.5%)	(0.6%)	(3.9%)		(3.7%)	(1.0%)		(4.6%)		(3.9%)			(4.5%)		
1996	1,016	24	22				207	20		11		43	7				1,350
	(75.3%)	(1.8%)	(1.6%)				(15.3%)	(1.5%)		(0.8%)		(3.2%)	(0.5%)				
1997	2,755	8	33		52		663	23		96		275	132				4,037
	(68.2%)	(0.2%)	(0.8%)		(1.3%)		(16.4%)	(0.6%)		(2.4%)		(6.8%)	(3.3%)				
1998	1,620	68	76	51	83	3	10	86		147		167	7				2,318
	(69.9%)	(2.9%)	(3.3%)	(2.2%)	(3.6%)	(0.1%)	(0.4%)	(3.7%)		(6.3%)		(7.2%)	(0.3%)				
1999	4,065	187	6	42	239		216	1,487		216		244	240	3	7		6,952
	(58.5%)	(2.7%)	(0.1%)	(0.6%)	(3.4%)		(3.1%)	(21.4%)		(3.1%)		(3.5%)	(3.5%)	(0.0%)	(0.1%)		
2000	2,857	88	3	18	73		174	2,125		503		85	80				6,006
	(47.6%)	(1.5%)	(0.0%)	(0.3%)	(1.2%)		(2.9%)	(35.4%)		(8.4%)		(1.4%)	(1.3%)				
2001	5,074	262	33	42	56	6	752	1,029		242		158	54		6		7,714
	(65.8%)	(3.4%)	(0.4%)	(0.5%)	(0.7%)	(0.1%)	(9.7%)	(13.3%)		(3.1%)		(2.0%)	(0.7%)		(0.1%)		
2002	531	88	36	15	20		81	280		98		36	421				1,606
	(33.1%)	(5.5%)	(2.2%)	(0.9%)	(1.2%)		(5.0%)	(17.4%)		(6.1%)		(2.2%)	(26.2%)				
2003	2,824	10	54		11		1,470	415		48	5	40	16				4,893
	(57.7%)	(0.2%)	(1.1%)		(0.2%)		(30.0%)	(8.5%)		(1.0%)	(0.1%)	(0.8%)	(0.3%)				
2004	1,791	6					552	458		46		29					2,882
	(62.1%)	(0.2%)					(19.2%)	(15.9%)		(1.6%)		(1.0%)					
2005	4,533	92		5	11		421	2,020		258		127	13				7,480
	(60.6%)	(1.2%)		(0.1%)	(0.1%)		(5.6%)	(27.0%)		(3.4%)		(1.7%)	(0.2%)				
2006	869	17		4	8		42	941		14		88					1,983
	(43.8%)	(0.9%)		(0.2%)	(0.4%)		(2.1%)	(47.5%)		(0.7%)		(4.4%)					
2007	2,740	510		22	38		447	1,688		598		43	386				6,472
	(42.3%)	(7.9%)		(0.3%)	(0.6%)		(6.9%)	(26.1%)		(9.2%)		(0.7%)	(6.0%)				
2008	3,971	231		16	28		123	1,271		30		38					5,708
	(69.6%)	(4.0%)		(0.3%)	(0.5%)		(2.2%)	(22.3%)		(0.5%)		(0.7%)					
2009	2,133	18		10	8		68	546		56		8					2,847
	(74.9%)	(0.6%)		(0.4%)	(0.3%)		(2.4%)	(19.2%)		(2.0%)		(0.3%)					

TABLE 27
ICE BOBBING EFFORT, HARVEST RATES AND LAKE TROUT HARVEST RATES BY AREA 1996-2009.

APOSTLE ISLANDS

	ANGL.		TOTAL FISH HRVST.	FISH / HOUR	LAKE TROUT HARVEST	LAKE TROUT / HOUR	ANGLR. HRS / LKT
	TRPS	HRS.					
1996	2,508	13,687	2,237	0.163	1,453	0.106	9.420
1997	3,576	21,126	4,956	0.235	3,280	0.155	6.441
1998	1,758	9,430	2,318	0.246	1,620	0.172	5.821
1999	5,074	27,949	6,952	0.249	4,065	0.145	6.876
2000	3,873	20,699	6,006	0.290	2,857	0.138	7.245
2001	5,525	30,753	7,714	0.251	5,074	0.165	6.061
2002	1,228	6,834	1,606	0.235	531	0.078	12.870
2003	5,313	30,924	4,893	0.158	2,824	0.091	10.950
2004	3,178	16,975	2,882	0.170	1,791	0.106	9.478
2005	6,008	32,365	7,480	0.231	4,533	0.140	7.140
2006	1,062	5,958	1,983	0.333	869	0.146	6.856
2007	3,480	19,287	6,472	0.336	2,740	0.142	7.039
2008	5,412	33,548	5,708	0.170	3,971	0.118	8.448
2009	4,192	26,595	3,397	0.128	2,133	0.080	12.468
TOTAL	52,187	296,130	64,604		37,741		
AVE.	3,728	21,152	4,615	0.218	2,696	0.127	7.846

WESTERN END

	ANGL.		TOTAL FISH HRVST.	FISH / HOUR	LAKE TROUT HARVEST	LAKE TROUT / HOUR	ANGLR. HRS / LKT
	TRPS	HRS.					
1996*							
1997*							
1998*							
1999*							
2000*							
2001*							
2002*							
2003							
2004*							
2005*							
2006*							
2007*							
2008*							
2009*							
TOTAL							

* NO OR LIMITED FISHING PRESSURE / NOT CREELED

CORNUCOPIA / BARK BAY

* NO / LIMITED FISHING PRESSURE
 NOT CREELED

	ANGL.		TOTAL FISH HRVST.	FISH / HOUR	LAKE TROUT HARVEST	LAKE TROUT / HOUR	ANGLR. HRS / LKT
	TRPS	HRS.					
1996	1,172	6,881	1,035	0.150	844	0.123	8.153
1997	1,546	8,098	1,371	0.169	1,209	0.149	6.698
1998*							
1999*							
2000	212	1,183	255	0.216	251	0.212	4.713
2001	563	2,918	650	0.223	616	0.211	4.737
2002*							
2003	1,274	6,495	1,017	0.157	994	0.153	6.534
2004	586	3,086	516	0.167	485	0.157	6.363
2005	138	736	139	0.189	125	0.170	5.888
2006*							
2007	156	764	23	0.030	19	0.025	40.211
2008	354	2,163	414	0.191	414	0.191	5.225
2009	1,091	6,840	1,050	0.154	839	0.123	8.153
TOTAL	7,092	39,164	6,470		5,796		
AVE.	709	3,916	647	0.165	580	0.148	6.757

TOTAL - ALL AREAS

	ANGL.		TOTAL FISH HRVST.	FISH / HOUR	LAKE TROUT HARVEST	LAKE TROUT / HOUR	ANGLR. HRS / LKT
	TRPS	HRS.					
1996	3,680	20,568	3,272	0.159	2,297	0.112	8.954
1997	5,122	29,215	6,327	0.217	4,489	0.154	6.508
1998	1,758	9,430	2,318	0.246	1,620	0.172	5.821
1999	5,074	27,949	6,952	0.249	4,065	0.145	6.876
2000	4,085	21,882	6,261	0.286	3,108	0.142	7.041
2001	6,008	33,671	8,364	0.248	5,690	0.169	5.918
2002	1,228	6,834	1,606	0.235	531	0.078	12.870
2003	6,587	37,419	5,910	0.158	3,918	0.105	9.551
2004	3,764	20,061	5,910	0.295	2,276	0.113	8.814
2005	6,146	33,101	7,619	0.230	4,658	0.141	7.106
2006	1,062	5,958	1,983	0.333	869	0.146	6.856
2007	3,636	20,051	6,495	0.324	2,759	0.138	7.267
2008	5,766	35,711	6,122	0.171	4,385	0.123	8.144
2009	5,283	33,435	4,447	0.133	2,972	0.089	11.250
TOTAL	59,199	335,285	73,586		43,637		
AVE.	4,229	23,949	5,256	0.219	3,117	0.130	7.684

**TABLE 28
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST RATES AND LAKE TROUT
HARVEST RATES, 1973-2009.**

YEAR	# OF ACTIVE GUIDES	# OF ANGLERS	# OF ANGLER HOURS	# OF TOTAL FISH	FISH / HOUR	ANGL. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1973	25	3,907	26,695	4,680	0.18	5.70	4,108	0.15	6.50
1974	24	2,986	19,685	3,263	0.17	6.03	2,423	0.12	8.12
1975	19	3,305	21,765	4,873	0.22	4.47	3,836	0.18	5.67
1976	21	2,566	16,408	2,730	0.17	6.01	2,218	0.14	7.40
1977	19	2,611	16,233	2,977	0.18	5.45	2,442	0.15	6.65
1978	15	2,988	19,691	4,317	0.22	4.56	3,046	0.15	6.46
1979	13	2,711	16,232	4,085	0.25	3.97	3,537	0.22	4.59
1980	14	3,529	22,247	5,836	0.26	3.81	4,798	0.22	4.64
1981	15	2,781	18,019	3,927	0.22	4.59	3,246	0.18	5.55
1982*	18	3,151	20,641	5,860	0.28	3.52	5,302	0.26	3.89
1983*	20	3,377	21,876	6,674	0.31	3.28	5,531	0.25	3.96
1984	29	3,140	20,458	6,084	0.30	3.36	5,355	0.26	3.82
1985	31	3,546	22,817	7,969	0.35	2.86	6,723	0.29	3.39
1986	32	3,173	19,238	5,114	0.27	3.76	3,952	0.21	4.87
1987	42	4,100	25,782	6,603	0.26	3.90	5,423	0.21	4.75
1988	45	4,541	28,190	6,744	0.24	4.18	5,149	0.18	5.47
1989	49	5,174	33,447	7,623	0.23	4.39	4,867	0.15	6.87
1990	50	4,917	30,313	5,270	0.17	5.75	4,098	0.14	7.40
1991	46	4,223	24,937	6,244	0.25	3.99	4,268	0.17	5.84
1992	40	3,337	20,662	4,687	0.23	4.41	3,723	0.18	5.55
1993	38	3,366	19,882	4,550	0.23	4.37	3,635	0.18	5.47
1994	39	3,489	20,800	4,368	0.21	4.76	3,751	0.18	5.55
1995	38	3,120	18,524	4,139	0.22	4.48	3,423	0.18	5.41
1996	35	2,489	14,807	3,466	0.23	4.27	2,780	0.19	5.33
1997	30	2,344	14,350	3,713	0.26	3.86	3,028	0.21	4.74
1998	23	2,289	13,195	3,883	0.29	3.40	3,360	0.25	3.93
1999	26	2,213	13,197	3,860	0.29	3.42	2,931	0.22	4.50
2000	28	2,117	11,928	3,848	0.32	3.10	3,353	0.28	3.56
2001	23	1,794	10,231.5	3,408	0.33	3.00	3,008	0.29	3.40
2002	23	2,374	14,089	4,535	0.32	3.11	3,625	0.26	3.89
2003	26	2,537	14,936	4,170	0.28	3.58	3,425	0.23	4.36
2004	27	2,510	14,614	4,573	0.31	3.20	3,967	0.27	3.68
2005	27	2,435	14,124.5	4,446	0.31	3.18	3,925	0.28	3.60
2006	24	1,774	10,342	2,753	0.27	3.76	2,496	0.24	4.14
2007	25	1,422	8,572	2,368	0.28	3.62	1,972	0.23	4.35
2008	22	1,320	7,962	2,061	0.26	3.86	1,813	0.23	4.39
2009	25	1,459	8,680	2,502	0.29	3.47	2,393	0.28	3.63
TOTAL		109,115	675,569	168,203			136,930		
AVE.	28	2,949	18,259	4,546	0.25	4.02	3,701	0.20	4.93

* 1982 AND 1983 FIGURES INCLUDE SOME MINNESOTA AND MICHIGAN TRIPS LANDING IN WISCONSIN PORTS.

TABLE 29
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.
1986-2009. SUPERIOR.

YEAR	# OF ACTIVE GUIDES	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH / HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1986	14	677	3,644	882	0.24	4.13	661	0.18	5.51
1987	20	1,122	6,603	2,357	0.36	2.80	1,982	0.30	3.33
1988	26	1,406	8,145	2,720	0.33	2.99	2,133	0.26	3.82
1989	28	1,694	10,305	3,010	0.29	3.42	1,742	0.17	5.92
1990	26	1,505	9,138	2,061	0.23	4.43	1,467	0.16	6.23
1991	24	1,159	6,905	2,224	0.32	3.10	1,263	0.18	5.47
1992	18	853	5,305	1,296	0.24	4.09	927	0.17	5.72
1993	15	1,045	5,843	1,517	0.26	3.85	974	0.17	6.00
1994	19	956	5,868	1,236	0.21	4.75	986	0.17	5.95
1995	15	714	4,188	847	0.20	4.94	518	0.12	8.08
1996	11	566	3,590	799	0.22	4.49	505	0.14	7.11
1997	9	683	4,613	937	0.20	4.92	518	0.11	8.91
1998	6	513	3,415	775	0.23	4.41	525	0.15	6.50
1999	7	595	3,830	831	0.22	4.61	521	0.14	7.35
2000	7	289	1,884	464	0.25	4.06	307	0.16	6.14
2001	5	36	181	72	0.40	2.51	43	0.24	4.21
2002	4	652	4,521	1,401	0.31	3.23	986	0.22	4.59
2003	6	874	5,367.5	1,599	0.30	3.36	1,029	0.19	5.22
2004	6	854	5,279	1,585	0.30	3.33	1,352	0.26	3.90
2005	5	753	4,359	1,351	0.31	3.23	1,119	0.26	3.90
2006	5	541	3,116	655	0.21	4.76	596	0.19	5.23
2007	6	341	1,607	462	0.29	3.48	367	0.23	4.38
2008	6	302	2,011	494	0.25	4.07	442	0.22	4.55
2009	6	354	2,409	661	0.27	3.64	640	0.27	3.76
TOTAL		18,484	112,126.5	30,236			21,603		
AVE.	12	770	4,672	1,260	0.27	3.71	900	0.19	5.19

TABLE 30
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.
1988-2009. CORNUCOPIA / PORT WING.

YEAR	# OF ACTIVE GUIDES	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH / HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1988	7	709	3,995	1,119	0.28	3.57	769	0.19	5.20
1989	5	838	4,785	1,070	0.22	4.47	562	0.12	8.51
1990	7	867	4,823	983	0.20	4.91	718	0.15	6.72
1991	5	673	3,261	826	0.25	3.95	539	0.17	6.05
1992	7	581	2,960	793	0.27	3.73	585	0.20	5.06
1993	5	382	1,923	463	0.24	4.15	342	0.18	5.62
1994	5	474	2,588	552	0.21	4.69	460	0.18	5.63
1995	4	418	2,016	648	0.32	3.11	452	0.22	4.46
1996	4	345	1,747	799	0.46	2.19	383	0.22	4.56
1997	5	287	1,463	491	0.34	2.98	380	0.26	3.85
1998	4	417	2,095	965	0.46	2.17	767	0.37	2.73
1999	4	341	2,033	755	0.37	2.69	511	0.25	3.98
2000	4	280	1,592	735	0.46	2.17	604	0.38	2.64
2001	4	420	2,397	838	0.35	2.86	669	0.28	3.58
2002	4	465	2,698	1,079	0.40	2.50	856	0.32	3.15
2003	4	381	2,198	704	0.32	3.12	635	0.29	3.46
2004	5	354	1,963	615	0.31	3.19	451	0.23	4.35
2005	5	294	1,709	590	0.35	2.90	470	0.28	3.64
2006	4	231	1,222	331	0.27	3.69	258	0.21	4.74
2007	4	116	725	222	0.31	3.27	180	0.25	4.03
2008	4	105	497	236	0.47	2.11	186	0.37	2.67
2009	4	93	530	159	0.30	3.33	147	0.28	3.61
TOTAL		9,071	49,220	14,973			10,924		
AVE.	5	412	2,237	681	0.30	3.29	497	0.22	4.51

TABLE 31
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.
1986-2009. ASHLAND, BAYFIELD, WASHBURN.

YEAR	# OF ACTIVE GUIDES	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH / HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1986	14	1,967	12,329	3,104	0.25	3.97	2,336	0.19	5.28
1987	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1988	10	2,194	14,449	2,476	0.17	5.84	1,868	0.13	7.74
1989	14	2,372	16,581	3,050	0.18	5.44	2,127	0.13	7.80
1990	15	2,233	14,647	1,895	0.13	7.73	1,590	0.11	9.21
1991	15	2,208	13,448	2,864	0.21	4.70	2,158	0.16	6.23
1992	13	1,758	11,455	2,312	0.20	4.95	1,938	0.17	5.91
1993	16	1,755	10,800	2,243	0.21	4.81	2,012	0.19	5.37
1994	13	1,761	10,404	2,068	0.20	5.03	1,818	0.17	5.72
1995	17	1,708	10,434	2,225	0.21	4.69	1,891	0.18	5.52
1996	18	1,418	8,470	1,865	0.22	4.54	1,655	0.20	5.12
1997	14	1,250	7,502	2,059	0.27	3.64	1,908	0.25	3.93
1998	10	1,126	6,322	1,751	0.28	3.61	1,683	0.27	3.76
1999	13	1,121	6,234	2,003	0.32	3.11	1,650	0.26	3.78
2000	15	1,365	7,360	2,342	0.32	3.14	2,146	0.29	3.43
2001	13	1,248	7,089.5	2,341	0.33	3.03	2,146	0.30	3.30
2002	14	1,196	6,529	1,975	0.30	3.31	1,711	0.26	3.82
2003	14	1,151	6,498.5	1,649	0.25	3.94	1,550	0.24	4.19
2004	14	1,133	6,224	2,002	0.32	3.11	1,823	0.29	3.41
2005	14	1,162	6,620	2,153	0.33	3.07	1,989	0.30	3.33
2006	12	855	5,043	1,566	0.31	3.22	1,444	0.29	3.49
2007	11	871	5,005	1,453	0.29	3.44	1,206	0.24	4.15
2008	8	676	3,915	1,012	0.26	3.87	873	0.22	4.48
2009	11	780	4,172	1,340	0.32	3.11	1,266	0.30	3.30
TOTAL		33,308	201,530	47,748			40,788		
AVE.	13	1,448	8,762	2,076	0.24	4.22	1,773	0.20	4.94

TABLE 32
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.
1986-2009. SAXON HARBOR.

YEAR	# OF ACTIVE GUIDES	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH / HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1986	4	529	3,265	1,127	0.35	2.90	955	0.29	3.42
1987	2	149	923	305	0.33	3.03	287	0.31	3.22
1988	2	232	1,601	429	0.27	3.73	379	0.24	4.22
1989	2	270	1,840	523	0.28	3.52	436	0.24	4.22
1990	2	312	1,705	331	0.19	5.15	314	0.18	5.43
1991	2	183	1,323	333	0.25	3.97	308	0.23	4.30
1992	2	145	943	286	0.30	3.30	273	0.29	3.45
1993	2	184	1,316	323	0.25	4.07	307	0.23	4.29
1994	2	298	1,940	512	0.26	3.79	487	0.25	3.98
1995	2	280	1,886	419	0.22	4.50	382	0.20	4.94
1996	2	160	1,000	262	0.26	3.82	237	0.24	4.22
1997	2	124	772	226	0.29	3.42	222	0.29	3.48
1998	2	233	1,363	389	0.29	3.50	385	0.28	3.54
1999	2	156	1,100	271	0.25	4.06	249	0.23	4.42
2000	2	183	1,093	307	0.28	3.56	296	0.27	3.69
2001	1	90	564	157	0.28	3.59	150	0.27	3.76
2002	1	61	341	80	0.23	4.26	72	0.21	4.74
2003	2	131	872	218	0.25	4.00	211	0.24	4.13
2004	2	169	1,148	371	0.32	3.09	341	0.30	3.37
2005	3	226	1,437	352	0.24	4.08	347	0.24	4.14
2006	3	147	961	201	0.21	4.78	198	0.21	4.85
2007	4	194	1,235	231	0.19	5.35	219	0.18	5.64
2008	4	237	1,539	319	0.21	4.82	312	0.20	4.93
2009	4	232	1,569	342	0.22	4.59	340	0.22	4.61
TOTAL		4,925	31,736	8,314			7,707		
AVE.	2	205	1,322	346	0.26	3.82	321	0.24	4.12

TABLE 33
WISCONSIN'S LAKE SUPERIOR CHARTER FISHERY HARVEST 1989 - 2009.

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	RAINBOW TROUT	SPLAKE	ATL. SALMON	PINK SALMON	FATS	WALLEYE	NORTH. PIKE	BROOK TROUT	YEP	HERR	OTHER	TOTAL HARVEST
1989	4,867	1,761	684	145	92	31	12			15					5	7,612
1990	4,098	459	452	125	25	10	5			69					27	5,270
1991	4,268	848	333	131	20	6	9		4	616					9	6,244
1992	3,723	312	305	135	13	10	8		3	170					8	4,687
1993	3,635	269	400	73	7	4	4		1	145					12	4,550
1994	3,751	331	111	45	10	22	1			88					9	4,368
1995	3,243	536	213	72	7	10	2			45					11	4,139
1996	2,780	368	196	33	3	19				63					4	3,466
1997	3,028	280	266	41	9	11	2		13	60					1	3,711
1998	3,360 (86.5%)	228 (5.9%)	194 (5.0%)	32 (0.8%)	6 (0.2%)	5 (0.1%)	1 (0.0%)			47 (1.2%)					10 (0.3%)	3,883
1999	2,931 (75.9%)	542 (14.0%)	219 (5.7%)	61 (1.6%)	23 (0.6%)	30 (0.8%)	7 (0.2%)			35 (0.9%)					12 (0.3%)	3,860
2000	3,353 (87.1%)	174 (4.5%)	178 (4.6%)	75 (1.9%)	8 (0.2%)	4 (0.1%)	2 (0.1%)	2 (0.1%)		47 (1.2%)	5 (0.1%)					3,848
2001	3,008 (88.3%)	229 (6.7%)	65 (1.9%)	51 (1.5%)	14 (0.4%)	7 (0.2%)				31 (0.9%)	3 (0.1%)					3,408
2002	3,625 (79.9%)	425 (9.4%)	249 (5.5%)	69 (1.5%)	31 (0.7%)	9 (0.2%)	3 (0.1%)			123 (2.7%)		1 (0.0%)				4,535
2003	3,425 (82.1%)	86 (2.1%)	164 (3.9%)	41 (1.0%)	8 (0.2%)	6 (0.1%)	1 (0.0%)		4 (0.1%)	429 (10.3%)	3 (0.1%)	2 (0.0%)			1 (0.0%)	4,170
2004	3,967 (86.7%)	208 (4.5%)	242 (5.3%)	48 (1.0%)	16 (0.3%)	4 (0.1%)	3 (0.1%)		1 (0.0%)	81 (1.8%)	2 (0.0%)		1 (0.0%)			4,573
2005	3,925 (88.3%)	197 (4.4%)	175 (3.9%)	67 (1.5%)	18 (0.4%)	4 (0.1%)				54 (1.2%)	4 (0.1%)				2 (0.0%)	4,446
2006	2,496 (90.7%)	99 (3.6%)	67 (2.4%)	42 (1.5%)	8 (0.3%)	8 (0.3%)	2 (0.1%)		4 (0.1%)	26 (0.9%)	1 (0.0%)					2,753
2007	1,972 (83.3%)	252 (10.6%)	54 (2.3%)	60 (2.5%)	9 (0.4%)	6 (0.3%)				13 (0.5%)	2 (0.1%)					2,368
2008	1,813 (88.0%)	134 (6.5%)	46 (2.2%)	46 (2.2%)	7 (0.3%)	9 (0.4%)			1 (0.0%)	4 (0.2%)					1 (0.0%)	2,061
2009	2,393 (95.6%)	58 (2.3%)	21 (0.8%)	26 (1.0%)	1 (0.0%)	1 (0.0%)					1 (0.0%)			1 (0.0%)		2,502

**TABLE 34
REGISTERED STURGEON SPORT HARVEST IN CHEQUAMEGON BAY, 1983-2009.**

YEAR	ANGLER TAGS ISSUED*	TOTAL REPORTED HARVEST	# HARVESTED ? 50"	AVERAGE SIZE(in)	AVERAGE WEIGHT(lb)
1983	unknown	2	2	55.0	unknown
1984	unknown	3	1	47.3	unknown
1985	unknown	5	3	51.8	unknown
1986	unknown	4	1	48.4	28.0
1987	unknown	0	0	--	--
1988	unknown	14	8	49.6	30.6
1989	unknown	11	2	46.6	28.0
1990	unknown	7	2	49.9	33.5
Sturgeon minimum size limit increased from 40" to 50" in 1991.					
1991	unknown	2	2	55.8	44.5
1992	unknown	0	0	--	--
1993	unknown	1	1	64.0	55.0
1994	140	0	0	--	--
1995	unknown	2	2	63.0	59.0
1996	unknown	0	0	--	--
1997	97	1	1	57.8	46.0
1998	92	1	1	54.0	32.0
1999	124	6	6	55.3	40.2
2000	111	0	0	--	--
2001	74	2	2	51.75	--
2002	102	3	3	51.5	--
2003**	93	1**	1	52.0	--
2004	104	4	4	58.6	--
2005 #	unknown	1	1	55.25	34.0
2006	unknown	0	0	--	--
2007	unknown	1	1	51.0	38.0
2008	unknown	2	2	55.5	--
2009	unknown	1	1	52.5	--

Sturgeon minimum size limit increased from 40" to 50" in 1991.

*Angler tags issued (Ashland, Bayfield, Washburn area only).

** The Sturgeon Harvested in 2003 was reported during Dec. 2004.

= Starting 1/1/05 hook and line Sturgeon angler tags issued through the ALIS license system replacing the metal tags.

APPENDIX 1.

LAKE SUPERIOR CREEL SURVEY TIME INTERVAL COUNT RANDOMIZATION
 ROUTE = "PORT WING" MONTH = 'JULY' DAYTIME = 'WEEKEND' SHIFT = 'AM'

DATE (MM/DD/YY): _____ / ____ / ____

N=5

WEEKDAY (1) WEEKEND/HOLIDAY (2)

TIME	LOCATION	CODE	TIME ARRIVED	TIME DEPARTED	WEIGHTED COI
7:00	TRAVEL				
7:07	CORNUCOPIA	520	_____ : _____	_____ : _____	_____ : _____
8:56	TRAVEL				
9:11	BARK POINT	540	_____ : _____	_____ : _____	_____ : _____
9:46	TRAVEL				
9:54	HERBSTER	545	_____ : _____	_____ : _____	_____ : _____
10:05	TRAVEL				
10:17	PORT WING	555	_____ : _____	_____ : _____	_____ : _____
13:32	TRAVEL				
14:00	END OF SHIFT		_____ : _____	_____ : _____	_____ : _____

APPENDIX III. 2009 OPEN WATER CREEL ROUTES AND SHIFT TIMES.

ROUTE / PORT	START DATES	SHIFT TIMES	NUMBER OF NON-OVERLAPPING SHIFTS	TYPE OF CREEL	COMMENTS
ONE ROUTE: 1/4 TIME BAYFIELD 1/4 TIME RED CLIFF 1/2 TIME WASHBURN (AND MARINA)	BYF 4/28/09 RC 4/28/09 WASHBURN 04/27/2009	APRIL, SEPT: AM SHIFT 7am-2pm, PM SHIFT 2pm-8pm. MAY-AUG: AM SHIFT 7am-2pm PM SHIFT 2pm-9pm.	2 WEEKEND 2 WEEKDAY	SINGLE LOOP TIME INTERVAL	BOTH WEEKEND DAYS THREE RANDOM WEEKDAYS
ONE ROUTE: SAXON (1/2 TIME)	04/16/2009	WEEKEND: 7am-9pm(8pm April) WEEKDAY: 7am-10:30am 10:30am-2pm; 2pm-5:30pm 5:30pm-9pm(8pm April)	2 WEEKEND 4 WEEKDAY	TIME INTERVAL ONE SITE	ONE WEEKEND DAY, 2 or 3 WEEKDAYS.
ONE ROUTE: SUPERIOR (BARKER'S ISLAND) (FULL TIME)	05/01/2009	5:30am-1:30pm 1:30am-9:30pm	2 WEEKEND 2 WEEKDAY	SINGLE LOOP TIME INTERVAL	BOTH WEEKENDS DAYS TWO RANDOM WEEKDAYS

OPEN WATER CREEL ENDED 9/30/09

APPENDIX IV. INTERVIEW FORM.

CHECK POINT _____ DATE _____ / _____ / _____ WEEKDAY - 1 WEEKEND - 2
MONTH DAY YEAR

1 - OPEN COLD WTR	4 - ICE COOL WTR	7 - PLEASURE	FISHED IN:		TRIP:				
2 - OPEN COOL WTR	5 - ICE BOBBING	8 - SHORE ANGLER	1 - WI	4 - WI / MN	1 - COMPLETE	2 - INCOMPLETE			
3 - ICE SHALLOW WTR	6 - STREAM	9 - TRIBAL	2 - MN	5 - WI / MI	AREA FISHED:				
ANGERS IN PARTY _____			3 - MI		TIME START _____				
SUCCESSFUL ANGLERS _____			1 - RESIDENT 2 - NONRESIDENT		TIME END _____				
FISH SPECIES _____			# LEGAL _____		# SUBLEGAL _____				
RELEASED SPECIES _____			# LEGAL _____		# SUBLEGAL _____				
SPECIES	CODE	LENGTH	FINCLIP	TAG/COLOR	SPECIES	CODE	LENGTH	FINCLIP	TAG/COLOR

TOTAL # FISH KEPT _____ COMMENTS _____

FIN CLIP CODES: NO CLIP - 00, ADIPOSE - 01, ADLR - 02, ADRR - 03, ADLF - 04, ADRF - 05, LR - 06, RR - 07, LF - 08, RF - 09, BR - 10, RFLR - 11, BRAD - 12, D - 13, LFRR, 15, RFD - 17, LFLR - 20, DAD - 21, LFD - 23, LRD - 24, HATCHERY - 25, NO CHECK - 40, BF - 96.
SPECIES CODE: BLKCRP-005, BROOK-006, BURBOT-011, HERRING-033, FAT-34, LT-35, SPLAKE-36, NOP-43, BROWN-45, RBT-46, ROCK BASS-047, CHINOOK-48, COHO-49, PINK-51, ATL. SAL-52, SMELT-60, STURGEON-62, LMB-66, SMB-67, WF-70, MENW F-71, YEP-76, WAL-78

APPENDIX V. 2009 ICE CREEL ROUTES AND SHIFT TIMES.

ROUTE / PORT	START DATES	SHIFT TIMES	NUMBER OF NON-OVERLAPPING SHIFTS	TYPE OF CREEL	COMMENTS
WASHBURN - BAYFIELD - MADELINE ISLAND - RED CLIFF - CORNUCOPIA	01/15/09 - 03/23/2009	9:00am - 5:00pm	1 weekend 1 weekday	stratified 2 counts	2 weekend shifts 3 weekday shifts

APPENDIX VI. VEHICLE PRESSURE

DATE _____ / _____ / _____
MONTH DAY YEAR

WEATHER: _____
 TIME _____

DAY TYPE: (1) WEEK DAY
 (2) WEEKEND/HOLIDAY

AIR TEMP _____

PRECIP. _____

SITE #	LOCATION	TIME	VEHICLES				COMMENTS
			RESIDENT		NON-RESIDENT		
305	"S" CURVE						
307	THOMPSON PARK						
311	WEST END						
315	WASHB. MARINA						
319	WASHB. COAL DK						
321	MEMORIAL PARK						
331	BODIN RESORT						
341	SIOUX RIVER						
343	ONION R. BEACH						
345	ONION R. MOUTH						
351	PIKES BAY						
355	PORT SUPERIOR						
363	BAYFIELD						
366	ROY'S POINT						
370	RED CLIFF						
380	PAG. GROUNDS						
390	RASPBERRY BAY						
204	2nd LANDING						
234	ASH. BOAT CLUB						
246	TREBAS						
256	REIS COAL DOCK						
258	KREHER PARK						
270	HOT POND						
282	BELL SLIP						
289	SAND BAR						
401	K'PUNKY BAY						
410	JACK STEWART						
420	KRON BEACH						
440	NE TIP MAD. ISL.						
450	RUSSEL BAY						
470	ICE ROAD						
471	O'BREINS						
480	LaPOINTE PARK						
515	MARTENSON RD.						
520	CORNUCOPIA						
530	ROMAN POINT						
540	BARK POINT						

APPENDIX VIII. LENGTH WEIGHT EQUATIONS

DATA OBTAINED FROM VARIOUS WI DNR ASSESSMENTS INCLUDING:

SPRING INDEX 2002-2009

1 HOUR GILL NET 2004-2005

SUMMER INDEX 2001-2009

DIET WORK 1998-2000

BROWN TROUT (NATIVE + HATCHERY)

$LN(WT\ g) = -12.427 + 3.162 (LN\ LENGTH\ mm)$

Observations = 47

BURBOT

$LN(WT\ g) = -12.307 + 3.090 (LN\ LENGTH\ mm)$

Observations = 247

SISCOWET LAKE TROUT (FATS)

$LN(WT\ g) = -12.902 + 3.190 (LN\ LENGTH\ mm)$

Observations = 954

LAKE HERRING

$LN(WT\ g) = -12.492 + 3.118 (LN\ LENGTH\ mm)$

Observation = 401

MENOMINEE WF REGRESSION

$LN(WT\ g) = -12.989 + 3.229 (LN\ LENGTH\ mm)$

Observations = 68

NORTHERN PIKE

$LN(WT\ g) = -16.09087 + 3.6193782 (LN\ LENGTH\ mm)$

Observations = 48

SPLAKE

$LN(WT\ g) = -13.596 + 3.335 (LN\ LENGTH\ mm)$

Observations = 153

WALLEYE

$LN(WT\ g) = -12.792 + 3.195 (LN\ LENGTH\ mm)$

Observations = 152

YELLOW PERCH

$LN(WT\ g) = -11.951 + 3.130 (LN\ LENGTH\ mm)$

Observations = 59

LAKE WHITEFISH

SPRING INDEX 2008 + 2009

$LN(WT\ g) = -12.618 + 3.158 (LN\ LGTH\ mm)$

Observations = 1294

RAINBOW TROUT

Fish Mgmt. Report No. 123. Migratory Brown Trout and Rainbow Trout Populations of the Brule River, Wisconsin (1984).

males $W = 0.00074 L^{2.79248}$

R Square 0.84

Observations 100

females $W = 0.00075 L^{2.78982}$

Observations 100

CHINOOK SALMON

Minnesota DNR Investigational Report # 382, Growth and Fecundity of Chinook Salmon in Western Lake Superior (July 1985)

$LN(WTg) = -12.67 + 3.18 (LN\ length\ mm)$

COHO SALMON

$LN(WT\ g) = -11.742 + 3.033 (LN\ length\ mm)$

Observation = 21

RAINBOW SMELT

$LN(WT\ g) = -5.545 + LN(LENGTH\ mm) 3.119$

LAKE TROUT (NATIVE)

SPRING INDEX 2008 + 2009 SUMMER INDEX 2008 + 2009

$LN(WT\ g) = -12.115 + 3.065 (LN\ LENGTH\ mm)$

Observations = 938

LAKE TROUT (HATCHERY)

SPRING INDEX 2008 + 2009 SUMMER INDEX 2008 + 2009

$LN(WT\ g) = -12.721 + 3.162 (LN\ LENGTH\ mm)$

Observations = 166

LAKE TROUT (NATIVE AND HATCHERY)

SPRING INDEX 2008 + 2008, SUMMER INDEX 2008 + 2009

$LN(WT\ g) = -12.208 + 3.080 (LN\ LENGTH\ mm)$

Observations = 1104

FIGURE 1. MAJOR PORTS CREELED AND WISCONSIN MANAGEMENT UNITS.

