

WISCONSIN'S 2010 LAKE SUPERIOR CREEL SURVEY REPORT

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INTRODUCTION

A creel survey was conducted on Wisconsin waters of Lake Superior during the winter ice fishery (Jan. 9, 2010 to March 18, 2010) and during the open water fishery (Ice-out April 1, 2010 to September 30, 2010).

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 budgetary constraints 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 2010, 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. | ½ Time – Cornucopia / Bark Point / Port Wing |
| | 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 budgetary constraints several routes could not be surveyed including Ashland, Bayfield, Little Sand Bay, Red Cliff 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 2010 and applying it to Ashland and Little Sand Bay data in 2007, the last time those two areas were surveyed. Bayfield and Red Cliff were derived by taking the percent change that occurred for Washburn from 2009 to 2010 and applying it to Bayfield and Red Cliff data in 2009, the last time those two areas were surveyed. 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 budgetary constraints access locations from Madeline Island were 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 (1/09/10). 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 a minimum estimate. The pressure estimate was done by the stratified creel survey method (Appendix V). Two separate vehicle counts were made daily starting 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 2010 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 data collected from the DNR assessments during 2009-2010. The regression equations are as follows:

<p>NATIVE ORIGIN</p> <p>Ln(weight grams) = -12.249 + 3.093(Ln length mm)</p> <p>Observation = 1,126</p>	<p>HATCHERY ORIGIN</p> <p>Ln(weight grams) = -12.449 + 3.125 (Ln length mm)</p> <p>Observations = 177</p>
<p>NATIVE AND HATCHERY ORIGIN</p> <p>Ln(weight grams) = -12.271 + 3.097 (Ln length mm)</p> <p>Observations = 1,303</p>	

Weights for other species were calculated using regression equations from data collected on various DNR assessments. See Appendix VIII for individual species regression equation.

RESULTS

OPEN WATER COLD PRIVATE

EFFORT – During 2010, an estimated 37,907 individual angler trips and 199,269 angler hours were spent pursuing cold water species (trout and salmon) in Wisconsin waters of Lake Superior (Table 1). The effort from the four areas surveyed was estimated at 22,611 angler trips and 113,086 angler hours (Table 2). This effort is consistent with the average from 1992 to present for these four areas surveyed of 22,674 angler trips and 109,777 angler hours (Table 3). Of the four areas surveyed Superior (Barker's Island / Loon's Foot) had the highest pressure with 7,241 angler trips and 36,964 angler hours. The effort out of Superior has increased over the last four years, and is the highest since 1995 (7,745 angler trips and 41,424 angler hours). Washburn's effort was second with 6,292 angler trips and 32,128 angler hours. The effort out of Washburn has increased over the last three years, and is the highest effort since 2002 (8,463 angler trips and 37,015 angler hours). Cornucopia / Port Wing effort was third with 5,580 angler trips and 26,048 angler hours, up from 2008 (the last time this area was surveyed). Cornucopia / Port Wing effort was consistent with the average effort since 1992 (5,745 angler trips and 25,468 angler hours). Saxon's effort was last with 3,498 angler trips and 17,946 angler hours, up from last year's 13 year low (Table 2).

HARVEST – An estimated 19,468 fish were harvested in the four areas surveyed, the highest since 2004 (19,989) and 15.2% above the average harvest from these four areas since 1992 (Table 4). Coho salmon overtook lake trout as the most abundant fish harvested in this fishery. Coho's accounted for 43.9% of the harvest with 8,556 fish. This was the highest Coho harvest in the four areas surveyed since 1999 when the harvest was 8,267 (Table 4). The Coho harvest was highest out of Washburn with 3,581 coho harvested, the highest in this area since 1999 (4,599) (Table 5). Cornucopia / Port Wing was second with 2,202 coho harvested, the highest in this area since 1988 (3,296) (Table 6). Superior was third with 1,914 coho harvested, the highest in this area since 1988 (2,236) (Table 7). Saxon coho harvest was fourth with 859 coho, the highest in this area since 1999 (1,653) (Table 8). The average size coho in this fishery was 19.3" (Table 1).

Lake trout was the second most abundant species harvested (in the four areas surveyed) in this fishery accounting for 42.8% of the harvest with 8,335 lake trout (Table 4). This lake trout harvest was the highest since 2004 (12,797) and consistent with the average since 1992 of 8,837 (Table 3). Lake trout was the highest out of Superior with a harvest of 3,262, followed by Saxon (2,079), Washburn (1,516) and Cornucopia / Port Wing (1,478) (Table 1). Superior's (Port of) lake trout harvest was the fourth year in a row with an increase and the highest since 1993 (3,830) (Table 7). Saxon's lake trout harvest was up from 2009 (1,871) and was the highest since 2006 (2,407) (Table 8). Washburn's lake trout harvest was up from 2009 (1,302) (Table 5). Cornucopia / Port Wing lake trout harvest was the only area surveyed this year with a decline in lake trout harvest from previous years and had its lowest harvest since 1997 (896) (Table 6).

Chinook salmon ranked third with 916 fish harvested accounting for 4.7% of the harvest. The average size Chinook in this fishery was 24.8". Brown trout ranked fourth with 591 fish harvested accounting for 3.0% of harvest. Average size brown trout in this fishery was 21.1". Walleye ranked fifth with 518 fish for 2.7% of the harvest. Of the 518 walleye harvested in this fishery 505 came out of Superior. No other fish species accounted for more than 1.2% of the harvest in this fishery (Table 4).

Harvest of native origin lake trout accounted for 84.6% of the total lake trout harvest in the four areas surveyed in this fishery. Native lake trout harvest was highest out of Saxon Harbor with 99.3%, followed by Washburn (92.3%), Cornucopia / Port Wing (83.4%) and Superior (70.0%) (Table 9). In this fishery the average size lake trout was 21.9" (Native origin average size 21.7", Hatchery origin average size was 22.9").

Separating the estimated lake trout harvest of 16,021 by management zone in this fishery, 4,360 lake trout were harvested in WI-1 and 11,661 lake trout were harvested in WI-2 (Table 10).

HARVEST RATES - The overall harvest rate for all species, in this fishery, of the four areas surveyed was 0.17 fish/hour the highest since 2004 (0.18 fish/hour) and above the average harvest rate since 1992 of 0.15 fish/hour (Table 3). The harvest rate was highest out of Washburn (0.18 fish/hour), followed by Cornucopia / Port Wing (0.17 fish/hour), Saxon (0.17 fish/hour) and Superior (0.17 fish/hour) (Table 11-14). Washburn's overall harvest rate was up from 2009 (0.12 fish/hour) and was the highest since 1999 (0.30 fish/hour) (Table 13). Cornucopia / Port Wing overall harvest rate was down slightly from 2008 (0.18 fish/hour) the last time this area was surveyed and was higher than the average since 1992 of 0.15 fish/hour (Table 12). Saxon's overall harvest rate was the highest since 2005 (0.20 fish/hour) but down slightly from the average overall harvest rate since 1992 (0.18 fish/hour) (Table 11). Superior's overall harvest rate was up from last year (0.14 fish/hour), and higher than the average since 1992 (0.14 fish/hour) (Table 14).

Lake trout harvest rate from the four areas surveyed was 0.07 LT/hour the lowest since 1996 (0.07 LT/hour) and lower than the average from 1992 to present of 0.08 LT/hour (Table 3). The lake trout harvest rate was highest out of Saxon with 0.12 LT/hour, the same as the last two years, but down from the average since 1992 of 0.14 LT/hour (Table 11).

Superior was second with a lake trout harvest rate of 0.09 LT/hour, consistent the last several years (since 2005) and above the average since 1992 (0.07 LT/hour) (Table 14). Cornucopia / Port Wing was third with a lake trout harvest of 0.06 LT/hour the lowest since 1997 (0.06 LT/hour) (Table 12). Washburn's lake trout harvest rate was last at 0.05 LT/hour the lowest rate since 1995 (0.05 LT/hour) (Table 13).

Lake trout harvest rates (LT/angler hour) during the months of June – August (the peak of the LT season) was highest out of Saxon (0.132) followed by Superior (0.089), Washburn (0.085) and Cornucopia / Port Wing (0.068). All areas surveyed were lower than last year's rates (Table 15).

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 budgetary constraints 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 a minimum estimate due to these factors.

EFFORT – During 2010, an estimated 5,568 individual angler trips and 13,657 angler hours were spent pursuing cool water species (walleye, smallmouth bass, northern pike, yellow perch, etc) in the four 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 the Superior entry had the highest cool water effort with 4,555 angler trips and 9,612 angler hours. Angler trips were consistent with previous years while angler hours were down considerable with previous years (Table 19). Washburn's effort was second with 889 angler trips and 3,567 angler hours, down from last year (Table 18). Cornucopia / Port Wing had a minimal cool water fishery with 124 angler trips and 478 angler hours. Consistent with the average since 2000 (119 angler trips and 498 angler hours) (Table 17). The cool water effort surveyed out of Saxon occurred from anglers mostly fishing the Bad River; this effort was not included in this report.

HARVEST and HARVEST RATES – An estimated 858 fish were harvested in the cool water fishery in the four surveyed areas, during 2010. Superior had the highest harvest with 773 fish followed by Cornucopia / Port Wing (54) and Washburn (31) (Table 1). Walleyes were the number one species harvested with 701. Walleye harvest was highest out of Superior with a harvest of 670 (Table 1). The harvest rate was highest out of Cornucopia / Port Wing with a rate of 0.11 fish/hour (Table 17). Superior was second with 0.08 fish/hour, the lowest rate since 2000 (0.01 fish/hour) (Table 19). Washburn was third with 0.01 fish/hour, the same as 2009 and the lowest it's been since 2003 (Table 18).

ICE FISHERY

The 2010 ice fishing season started from various locations off of Ashland on December 11, 2009, approximately December 19, 2009 from the Washburn Coal Dock, and "bobbing" started approx. Jan 9, 2010 out of Red Cliff. Fishing out of Cornucopia, the Western end of Lake Superior and Saxon had limited safe ice conditions but were not surveyed due to budgetary constraints. All fishing activity continued through mid to late March. Overall, ice conditions were very good. However access to deep water locations was limited. Ice formation only made it to the Mainland – North Basswood Island – South Hermit Island – Madeline Island area. The ice fishery creel survey started when lake trout waters were accessible out of Red Cliff / Bayfield (01/09/10) and was conducted along the main shore from the "S" curve access (South of Washburn) north through Bayfield, Red Cliff and Raspberry Bay. Due to budgetary constraints Madeline Island was not surveyed. The data from the shallow water and cool water creel should be considered the minimum estimate due to the creel survey starting approximately 4 weeks after these two fisheries began. 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 ("S" CURVE - RED CLIFF) - An estimated 2,395 angler trips and 12,591 angler hours were recorded in this shallow water fishery. This effort resulted in an estimated harvest of 1,609 fish (Table 1). Whitefish (585) was the number one species harvested; smelt (489) was second, splake (214) third, brown trout (107) fourth and yellow perch (96) fifth and lake trout (61) sixth. The overall harvest rate in this fishery was 0.128 fish/hour (Table 20).

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

ICE COOL WATER

WASHBURN ("S" CURVE - RED CLIFF) - A limited cool water fishery exists off the Washburn / Bayfield areas with anglers targeting mainly yellow perch. An estimated 77 angler trips and 527 angler hours resulted in 429 smelt 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 were very good. However, access to deep water locations was limited. Ice formation only made it to the Mainland – North Basswood Island – South Hermit Island – Madeline Island area. An estimated 3,191 angler trips and 20,385 angler hours resulted in an estimated harvest of 3,173 fish in this deep-water fishery (Table 1). Angler trips and angler hours were both lower than last year's effort (4,192 angler trips and 26,595 angler hours) but similar to the average since 1993 to present (3,278 angler trips and 18,722 angler hours) (Table 21). Whitefish overtook lake trout, for the second time, as the number one fish harvest in this fishery. Whitefish accounted for 52.2% of the harvest with 1,657 whitefish. Lake trout ranked second with 1,285 fish harvested for 40.5% and herring third with 64 fish (2.0%) (Table 22). Overall harvest rate of 0.156 fish per hour was up from last year (0.128 fish/hour), but lower than the average since 1986 of 0.200 fish/hour. The lake trout harvest rate of 0.063 LT / hour declined for the fourth year in a row and tied the record low recorded in 1990 (0.063 LT/hour) (Table 23). The lake trout harvest rate in all areas combined was 0.063 LT / hour the lowest all time (since 1980) (Table 23). The average size lake trout in this fishery for native origin lake trout was 20.4" and for hatchery origin lake trout 21.2" (Table 10).

CORNUCOPIA / BARK BAY (BOBBING) - No / limited fishing pressure, poor ice conditions, not surveyed.

CHARTER FISHERY

EFFORT - Twenty nine (29) licensed charter captains were active during the 2010 open water season on the Wisconsin waters of Lake Superior, the highest number since 1997 (30). The number of anglers (1,399) and angler hours (8,353) were second lowest all time behind 2008 record low of 1,320 anglers and 7,962 angler hours (Table 24). Ashland / Bayfield / Washburn / Red Cliff had the highest effort with 911 angler trips and 5,265 angler hours, their highest effort since 2005 (1,162 angler trips and 6,620 angler hours). Second was Superior with 158 angler trips and 921 angler hours, their lowest effort since 2001 (36 angler trips and 181 angler hours) third was Saxon with 240 angler trips and 1,553 angler hours consistent with previous years and last was Corny / Port Wing with 90 angler trips and 614 angler hours (Table 25-28).

HARVEST RATES - The overall harvest rate was 0.32 fish per hour and the lake trout harvest rate was 0.23 LT / hour. The overall harvest rate was the highest since 2002 (0.32 fish/hour) and was above the average since 1973 of 0.25 fish/hour. The lake trout harvest rate was consistent with previous years and slightly above the average since 1973 of 0.20 LT/hour (Table 24). Cornucopia / Port Wing had the highest overall harvest rate of 0.36 fish / hour. This was above last year's rate and the average since 1988 of 0.30 fish / hour. Cornucopia / Port Wing lake trout harvest rate of 0.17 LT / hour was the lowest since 1991 (0.17 LT/hour). Ashland / Bayfield / Washburn / Red Cliff had the second highest overall harvest rate with 0.35 fish / hour and lake trout harvest rate of 0.24 LT / hour. Ashland / Bayfield / Washburn / Red Cliff overall harvest rate was the highest all time while the LT harvest rate was down from last year 0.30 LT/hour but still above the average since 1986 to present of 0.20 LT/hour. Third was Saxon with 0.31 fish / hour and 0.26 LT / hour. Both of these rates were the highest since 2004 with 0.32 fish / hour and 0.30 LT / hour. Superior was last with 0.20 fish / hour and 0.16 LT / hour. Superior's overall harvest rate was the lowest since 1997 (0.20 fish/hour) and the LT harvest rate was the lowest since 2000 (0.16 LT/hour) (Table 25-28).

HARVEST – The overall harvest of 2,712 fish was highest since 2006 (2,753) but well below the average harvest since 1973 of 4,498 fish. The lake trout harvest of 1,911 the second lowest all time since 1973 and well below the average since 1973 of 3,654 lake trout (Table 29). Lake trout remain the number one harvested fish in this fishery, comprising 70.5% (1,911) of the overall harvest of 2,712 fish. Coho salmon were distant second with 502 fish for 18.5% of the harvest. Chinook salmon harvest was third with 245 chinook for 9.0% of the harvest (Table 29). Lake trout harvest was highest out of Ashland / Bayfield / Washburn / Red Cliff with 1,267 lake trout, Saxon was second with 397, Superior was third with 145 and Cornucopia / Port Wing was last with a lake trout harvest of 102 (Table 25-28).

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 2010, zero sturgeon were registered (Table 30). Effort is unknown.

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TABLE 1. 2010 CREEL SURVEY STATISTICS (ESTIMATED ANGLER TRIPS, ANGLER HOURS AND HARVEST BY FISHERY)

FISHERY TYPE	ANGL. TRIPS	ANGL. HOURS	LKT	COHO	CHIN.	BRWN TROUT	SPLK	RBT	PINK SAL	BROOK TROUT	FATS	WF	MEN WF	HERR	BUR-BOT	SMELT	NOP	WAE	YEP	BLK. CRP	ROCK BASS	CATF	TOTAL HRVST
WSHB/BYF SHAL.	2,395	12,591	61	39		107	214					585		7	6	489	5		96				1,609
WSHB/BYF COOL	77	527																	429				429
BOBBING APOS.ISL.	3,191	20,385	1,285	20		29	26				48	1,657		64	44								3,173
CORNY. SHAL.	0	0																					0
CORNY. COOL	0	0																					0
CORNY. BOBB.	0	0																					0
TOTAL	5,663	33,503	1,346	59	0	136	240	0	0	0	48	2,242	0	71	50	489	5	0	525	0	0	0	5,211
AVE. LENGTH(INCH)			20.4	15.8		22.3	17.7				21.3	18.0		16.8	27.7	6.3	31.2		7.8				

CHARTER																							
ASH.BAYF.WASH.	911	5,265	1,267	304	218	24	8	4											1	1			1,827
CORN. - PORT W.	90	614	102	103	10	9																	224
SAXON	240	1,553	397	67	4	5		1															474
SUPERIOR	158	921	145	28	13														1				187
TOTAL	1,399	8,353	1,911	502	245	38	8	5	0	1	2	0	0	0	2,712								

OPEN WATER COLD																							
** NUMBERS DERIVED FROM PREVIOUS YEARS**																							
* ASHLAND *	5,108	26,298	2,820																				2,820
* BAYFIELD *	5,054	27,739	1,609																				1,609
CORN.-PORT W.	5,580	26,048	1,478	2,202	162	268		20	30		171			14									4,345
* L. SAND BAY *	3,144	18,198	1,535																				1,535
* RED CLIFF *	1,990	13,948	1,722																				1,722
SAXON	3,498	17,946	2,079	859	119	15		4						1									3,077
SUPERIOR	7,241	36,964	3,262	1,914	524	12		58	4		59	3						5	505	4			6,350
WASHBURN	6,292	32,128	1,516	3,581	111	296	89	34			10							46	13				5,696
TOTAL	37,907	199,269	16,021	8,556	916	591	89	116	34	0	240	3	0	15	0	0	51	518	4	0	0	0	27,154
AVE. LENGTH(INCH)			21.9	19.3	24.8	21.1	19.4	22.6	13.3		23.4	12.6		17.6				29.7	20.5	9.3			

OPEN WATER COOL																							
CORN.-PORT W.	124	478																	54				54
SAXON	0	0																					0
SUPERIOR	4,555	9,612																27	670	36	20	4	16
WASHBURN	889	3,567																	31				31
TOTAL	5,568	13,657	0	81	701	36	20	4	16														
AVE. LENGTH(INCH)																		25.8	19.5	10.0	9.5	9.9	18.8

WI - 1 TOTALS	16,248	67,491	4,566	3,302	654	216	0	68	34	0	196	3	0	0	0	0	77	1,176	40	20	4	16	10,372
WI - 2 TOTALS	34,289	187,291	14,712	5,815	507	549	337	53	0	0	92	2,242	0	86	50	489	61	45	525	0	0	0	25,563
GRAND TOTAL	50,537	254,782	19,278	9,117	1,161	765	337	121	34	0	288	2,245	0	86	50	489	138	1,221	565	20	4	16	35,935
AVE. LENGTH (IN)			21.7	19.3	24.9	21.4	18.2	22.7	13.3		23.0	18.0		16.9	27.7	6.3	27.4	19.9	7.9	9.5	9.9	18.8	
AVE. WEIGHT (LBS)			3.19	2.51	5.46	3.82	2.13	4.54			3.75	1.82		1.34	6.39		4.40	2.74	0.23				
TOTAL WEIGHT(LBS)			61,497	22,884	6,339	2,922	718	549			1,080	4,086		115	320		607	3,346	130				
SAMPLE SIZE			1,260	970	136	83	48	19	4		29	216		14	4	19	20	224	25	4	1	3	

STURGEON: NO FISH REGISTERED. EFFORT UNKNOWN.

**TABLE 2
ESTIMATED ANGLER EFFORT(ANGLER TRIPS AND ANGLER HOURS) BY AREA IN WISCONSIN WATERS
OF LAKE SUPERIOR OPEN WATER COLD PRIVATE 1994-2010.**

ANGLER TRIPS																		
AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	AVERAGE
ASHLAND	2,941						2,193					4,233		2,869				3,059
BAYFIELD	3,815						4,818							4,762		3,687		4,271
CORN. - PORT W.	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		5,580	5,719
LITTLE SAND BAY	317													1,766				1,042
RED CLIFF														759		1,452		1,106
SAXON HARBOR	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	3,498	3,785
SUPERIOR	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	7,241	5,840
WASHBURN	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	6,292	6,646
TOTAL	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	22,611	

ANGLER HOURS																		
AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	AVERAGE
ASHLAND	16,186						11,943					20,556		15,120				15,951
BAYFIELD	21,528						24,895							27,124		18,605		23,038
CORN. - PORT W.	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		26,048	25,105
LITTLE SAND BAY	1,345													10,463				5,904
RED CLIFF														4,622		9,355		6,989
SAXON HARBOR	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	17,946	18,481
SUPERIOR	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	36,964	29,618
WASHBURN	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	32,128	31,547
TOTAL	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	113,086	

TABLE 3.

CORNUCOPIA / PORT WING, SAXON, SUPERIOR, WASHBURN. OPEN WATER COLD PRIVATE ESTIMATED EFFORT, HARVEST RATES AND LAKE TROUT HARVEST RATES. 1992-2010.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL	FISH / HOUR	ANGLR.	# OF LAKE TROUT	LAKE	ANGLR.
			FISH HARVEST		HRS / FISH		TROUT / HOUR	HRS / LKT
1992	24,678	128,883	17,808	0.14	7.24	8,488	0.07	15.18
1993	26,892	141,776	19,568	0.14	7.25	9,444	0.07	15.01
1994	26,673	131,154	16,867	0.13	7.78	7,725	0.06	16.98
1995	25,074	121,859	16,752	0.14	7.27	6,528	0.05	18.67
1996	19,660	98,321	11,956	0.12	8.22	6,851	0.07	14.35
1997	18,369	87,535	13,846	0.16	6.32	7,684	0.09	11.39
1998	22,899	127,007	16,063	0.13	7.91	11,528	0.09	11.02
1999	27,041	100,088	22,998	0.23	4.35	9,928	0.10	10.08
2000	21,216	101,775	15,142	0.15	6.72	9,496	0.09	10.72
2001								
2002	25,108	115,276	18,117	0.16	6.36	9,954	0.09	11.58
2003	20,775	97,751	14,178	0.15	6.89	8,647	0.09	11.30
2004	23,650	113,575	19,989	0.18	5.68	12,797	0.11	8.88
2005								
2006	17,412	80,726	10,899	0.14	7.41	7,204	0.09	11.21
2007								
2008	18,046	87,849	13,978	0.16	6.28	7,948	0.09	11.05
2009								
2010	22,611	113,086	19,468	0.17	5.81	8,335	0.07	13.57
TOTAL	47,289	1,646,661	247,629			132,557		
AVE.	22,674	109,777	16,509	0.15	6.65	8,837	0.08	12.42

**TABLE 4
WISCONSIN'S LAKE SUPERIOR. OPEN WATER COLD PRIVATE ESTIMATED HARVEST 1999 - 2010.**

(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%)		
2010	8,335	8,556	916	591	89	116			240	3	15			34		51		518	4	19,468
D	(42.8%)	(43.9%)	(4.7%)	(3.0%)	(0.5%)	(0.6%)			(1.2%)	(0.0%)	(0.1%)			(0.2%)		(0.3%)		(2.7%)	(0.0%)	

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 5
WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1992 - 2010.
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	1,265	584	1,388	294	23	24	15	16				12	6		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
2010	1,516 (26.6%)	3,581 (62.9%)	111 (1.9%)	296 (5.2%)	89 (1.6%)	34 (0.6%)			10 (0.2%)				46 (0.8%)	13 (0.2%)		5,696

TABLE 6
WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1988 - 2010.
CORNUCOUPIA - PORT WING
(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	PINK SALMON	WF	HERR	SMELT	NOP	WAE	TOTAL HARVEST
1988	986	3,296	1,685	182			27		55						13	6,244
1989	1,109	1,739	479	309		58	8								22	3,724
1990	719	509	108	217												1,553
1991	1,101	491	39	72					19						36	1,758
1992	2,292	797	289	186		5	24		92					4	189	3,878
1993	1,591	898	362	111	8	10	8		105			10		11	70	3,184
1994	1,252 (51.7%)	555 (22.9%)	264 (10.9%)	248 (10.2%)		50 (2.1%)	25 (1.0%)		14 (0.6%)					13 (0.5%)		2,421
1995	925 (33.0%)	1,140 (40.6%)	285 (10.2%)	115 (4.1%)			17 (0.6%)		306 (10.9%)						18 (0.6%)	2,806
1996	1,118 (51.1%)	593 (27.1%)	203 (9.3%)	130 (5.9%)		81 (3.7%)		18 (0.8%)	38 (1.7%)						8 (0.4%)	2,189
1997	896 (42.7%)	579 (27.6%)	210 (10.0%)	252 (12.0%)		17 (0.8%)			75 (3.6%)					46 (2.2%)	23 (1.1%)	2,098
1998	3,161 (67.0%)	547 (11.6%)	264 (5.6%)	231 (4.9%)		11 (0.2%)			428 (9.1%)						74 (1.6%)	4,716
1999	2,515 (50.5%)	1,445 (29.0%)	469 (9.4%)	268 (5.4%)		36 (0.7%)			236 (4.7%)						10 (0.2%)	4,979
2000	1,786 (72.8%)	149 (6.1%)	251 (10.2%)	157 (6.4%)		17 (0.7%)	4 (0.2%)		82 (3.3%)						7 (0.3%)	2,453
2001	3,949 (74.3%)	594 (11.2%)	278 (5.2%)	236 (4.4%)	14 (0.3%)	122 (2.3%)			54 (1.0%)					36 (0.7%)	35 (0.7%)	5,318
2002	3,166 (59.3%)	982 (18.4%)	626 (11.7%)	129 (2.4%)		31 (0.6%)			296 (5.5%)					7 (0.1%)	104 (1.9%)	5,341
2003	3,111 (67.8%)	349 (7.6%)	592 (12.9%)	116 (2.5%)		47 (1.0%)			137 (3.0%)						237 (5.2%)	4,589
2004	3,494 (70.7%)	576 (11.7%)	207 (4.2%)	171 (3.5%)		88 (1.8%)			408 (8.3%)							4,944
2005	NO CREEL SURVEY CONDUCTED.															
2006	1,901 (51.3%)	863 (23.3%)	235 (6.3%)	190 (5.1%)	8 (0.2%)	37 (1.0%)			351 (9.5%)	33 (0.9%)	22 (0.6%)				64 (1.7%)	3,704
2007	NO CREEL SURVEY CONDUCTED.															
2008	1,833 (51.4%)	1,112 (31.2%)	150 (4.2%)	241 (6.8%)					184 (5.2%)						45 (1.3%)	3,565
2009	NO CREEL SURVEY CONDUCTED.															
2010	1,478 (34.0%)	2,202 (50.7%)	162 (3.7%)	268 (6.2%)		20 (0.5%)			171 (3.9%)	30 (0.7%)		14 (0.3%)				4,345

TABLE 7
WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1988 - 2010.
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	PNIK SAL.	FATS	HERR	BURBOT	WF	SMELT	MUSKY	NOP	WAE	YEP	TOTAL HARVEST
1988	5,155	2,236	2,461	22	72	13				62							142		10,163
1989	3,920	1,808	1,901	83	139	46		4		67				5			312		8,285
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	1,316	786	33	28	18	9	12		247					9		252		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
2010	3,262 (51.4%)	1,914 (30.1%)	524 (8.3%)	12 (0.2%)	58 (0.9%)				4 (0.1%)	59 (0.9%)			3 (0.0%)			5 (0.1%)	505 (8.0%)	4 (0.1%)	6,350

TABLE 8
WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1989 - 2010.
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	702	80	46					2				3,792
1995	1,631	801	30	20			4	71					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
2010	2,079 (67.6%)	859 (27.9%)	119 (3.9%)	15 (0.5%)		4 (0.1%)				1 (0.0%)			3,077

TABLE 9
PERCENT HARVEST OF NATIVE LAKE TROUT BY AREA, 1990 - 2010.
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	
2002	92.1*	73.1	98.7	63.2	82.1
2003	91.8*	80.1	99.2	60.3#	
2004	95.9*	84.3	99.2	75.7	91.2
2005	98.4	N/A	99.9	75.1	
2006	97.2	85.2	100.0	67.1	89.8
2007	98.4	N/A	99.7	67.1	
2008	98.0*	82.9	98.9	63.1	84.1
2009	98.6	N/A	99.6	67.4	
2010	92.3*	83.4	99.3	70.0	84.6

* Washburn route only.

Corn/Port Wing not surveyed in 2005, 2007, 2009.

Superior not surveyed in 2001.

2003 Superior % derived using 2002 numbers.

TABLE 10 - 2010 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	46	245	61	20.29	12	23.5	290.86	79.71	49	21.7	1055.12	
SUPERIOR	158	921	145	30.02	44	22.6	983.76	69.98	101	21.4	2171.48	
TOTAL	204	1,166	206	27.14	56	22.8	1274.61	72.86	150	21.5	3226.60	

OPEN WTR-COLD												
CORN. - PORT W.	4,145	19,351	1,098	20.00	220	23.5	5160.60	80.00	878	21.7	19061.28	75
SUPERIOR	7,241	36,964	3,262	30.02	979	22.6	22131.10	69.98	2,283	21.4	48850.80	608
TOTAL	11,386	56,315	4,360	27.50	1,199	22.8	27291.70	72.50	3,161	21.5	67912.08	683

OPEN WTR-COOL												
CORN. - PORT W.	103	398	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
SUPERIOR	4,555	9,612	0	0.00	0	0.0	0.00	100.00	0	0.0	0.00	0
TOTAL	4,658	10,010	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	
WI-1 TOTAL	16,248	67,491	4,566	27.48	1,255	22.8	28,566	72.52	3,311	21.5	71,139	683
WEIGHT (LBS)			14899.44			3.72	4667.70			3.09	10231.74	

WI-2												
ICE												
WSHBN/BYFD SHAL.	2,395	12,591	61	3.91	2	22.3	53.19	96.09	59	20.9	1225.05	0
WSHBN COOL	77	527	0	0.00	0	0.0	0.00	100.00	0	0.0	0.00	0
APOS. ISL. BOBB.	3,191	20,385	1,285	3.39	44	21.2	923.50	96.61	1,241	20.4	25325.35	173
CORNY. SHAL.	0	0	0	0.00	0	0.0	0.00	100.00	0	0.0	0.00	0
CORNY. COOL	0	0	0	0.00	0	0.0	0.00	100.00	0	0.0	0.00	0
CORNY. BOBB.	0	0	0	0.00	0	0.0	0.00	100.00	0	0.0	0.00	0
TOTAL	5,663	33,503	1,346	3.41	46	21.3	976.69	96.59	1,300	20.4	26550.40	173

CHARTER												
ASH.-BYF.-WSH.	911	5,265	1,267	2.04	26	25.4	656.51	97.96	1,241	21.8	27057.14	
CORN.-PRT WING	44	369	41	0.00	0	0.0	0.00	100.00	41	21.5	881.50	
SAXON	240	1,553	397	1.01	4	24.8	99.44	98.99	393	21.7	8527.89	
TOTAL	1,195	7,187	1,705	1.75	30	25.3	755.95	98.25	1,675	21.8	36466.53	

OPEN WTR-COLD ** NUMBERS DERIVED FROM PREVIOUS YEARS**												
** ASHLAND **	5,108	26,298	2,820	2.73	77	25.4	1955.44	97.27	2,743	21.9	60072.01	0
** BAYFIELD **	5,054	27,739	1,609	2.73	44	25.4	1115.71	97.27	1,565	21.9	34275.13	0
CORNUCOPIA	1,435	6,697	380	3.85	15	18.6	272.12	96.15	365	21.5	7855.46	26
LITTLE SAND BAY	3,144	18,198	1,535	2.73	42	25.4	1064.40	97.27	1,493	21.9	32698.77	0
** RED CLIFF **	1,990	13,948	1,722	2.73	47	25.4	1194.07	97.27	1,675	21.9	36682.27	0
SAXON	3,498	17,946	2,079	0.72	15	24.8	371.23	99.28	2,064	22.1	45615.09	262
WASHBURN	6,292	32,128	1,516	2.73	41	25.4	1051.22	97.27	1,475	21.9	32294.03	116
TOTAL	26,521	142,954	11,661	2.41	281	25.0	7024.20	97.59	11,380	21.9	249492.74	404

OPEN WTR-COOL												
CORNUCOPIA	21	80	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
SAXON	0	0	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
WASHBURN	889	3,567	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
TOTAL	910	3,647	0		0	0.0	0.00		0	0.0	0.00	0

WI-2 TOTAL	34,289	187,291	14,712	2.42	357	24.6	8,757	97.58	14,355	21.8	312,510	577
WEIGHT (LBS)			47904.00			4.71	1679.66			3.22	46224.33	
WI-1, WI-2 TOT.	50,537	254,782	19,278	8.36	1,611	23.2	37323.15	91.64	17,667	21.7	383648.35	1,260
WEIGHT (LBS)			62496.46			3.92	6316.59			3.18	56179.87	

TABLE 11. SAXON HARBOR OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST, AND HARVEST RATES. 1992-2010.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1992	2,242	10,257	1,474	0.14	6.96	1,240	0.12	8.27
1993	4,020	21,627	2,910	0.13	7.43	2,234	0.10	9.68
1994	4,462	23,423	3,792	0.16	6.18	2,962	0.13	7.91
1995	3,587	17,714	2,557	0.14	6.93	1,631	0.09	10.86
1996	3,015	15,566	2,264	0.15	6.88	1,776	0.11	8.76
1997	4,510	22,653	4,795	0.21	4.72	3,271	0.14	6.93
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
2010	3,498	17,946	3,077	0.17	5.83	2,079	0.12	8.63
TOTAL	70,610	346,058	61,693			46,723		
AVE.	3,716	18,214	3,247	0.18	5.61	2,459	0.14	7.41

TABLE 13. WASHBURN OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST, AND HARVEST RATES. 1992-2010.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1992	9,252	48,185	5,996	0.12	8.04	2,369	0.05	20.34
1993	6,849	36,136	3,838	0.11	9.42	1,789	0.05	20.20
1994	7,925	37,729	7,066	0.19	5.34	1,549	0.04	24.36
1995	7,256	35,750	6,411	0.18	5.58	1,704	0.05	20.98
1996	6,120	26,588	3,801	0.14	7.00	2,469	0.09	10.77
1997	5,967	26,133	4,619	0.18	5.66	2,774	0.11	9.42
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	10.77
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
2010	6,292	32,128	5,696	0.18	5.64	1,516	0.05	21.19
TOTAL	129,082	620,622	91,624			43,101		
AVE.	6,794	32,664	4,822	0.15	6.77	2,268	0.07	14.40

TABLE 12. CORNUCOPIA / PORT WING OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 1992-2010.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1992	5,554	29,707	3,878	0.13	7.66	2,292	0.08	12.96
1993	6,295	25,798	3,184	0.12	8.10	1,591	0.06	16.21
1994	6,646	28,284	2,421	0.09	11.68	1,252	0.04	22.59
1995	6,486	26,971	2,806	0.10	9.61	925	0.03	29.16
1996	4,030	18,493	2,189	0.12	8.45	1,118	0.06	16.54
1997	3,392	15,295	2,098	0.14	7.29	896	0.06	17.07
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*								
2010	5,580	26,048	4,345	0.17	5.99	1,478	0.06	17.62
TOTAL	91,921	407,481	60,530			34,450		
AVE.	5,745	25,468	3,783	0.15	6.73	2,153	0.08	11.83

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

TABLE 14. PORT OF SUPERIOR OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 1992-2010.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH/HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1992	7,630	43,734	6,460	0.15	6.77	2,587	0.06	16.91
1993	9,728	58,125	9,636	0.17	6.03	3,830	0.07	15.18
1994	7,640	41,718	3,588	0.09	11.63	1,962	0.05	21.26
1995	7,745	41,424	4,978	0.12	8.32	2,268	0.05	18.26
1996	6,495	37,674	3,702	0.10	10.18	1,488	0.04	25.32
1997	4,500	23,454	2,334	0.10	10.05	743	0.03	31.57
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
2010	7,241	36,964	6,350	0.17	5.82	3,262	0.09	11.33
TOTAL	110,801	575,734	80,637			38,471		
AVE.	6,156	31,985	4,480	0.14	7.14	2,137	0.07	14.97

* NO CREEL SURVEY CONDUCTED DURING 2001.

TABLE 15

LAKE TROUT HARVEST RATES (LAKE TROUT PER ANGLER HOUR) JUNE - AUGUST, BY AREA, 1990 - 2010. OPEN WATER COLD PRIVATE.

YEAR	CORNUCOPIA/ PORT WING	SAXON HARBOR	SUPERIOR	WASHBURN
1990	0.038	0.201	0.075	0.084*
1991	0.084	0.124	0.063	0.086*
1992	0.097	0.104	0.057	0.080
1993	0.058	0.121	0.064	0.080
1994	0.058	0.145	0.039	0.062
1995	0.043	0.116	0.060	0.085
1996	0.075	0.118	0.041	0.119
1997	0.071	0.171	0.036	0.145
1998	0.127	0.280	0.050	0.139
1999	0.120	0.203	0.066	0.087
2000	0.136	0.172	0.095	0.122
2001	0.168	0.176	NO SURVEY	0.101
2002	0.102	0.141	0.070	0.077
2003	0.111	0.157	0.058	0.078
2004	0.122	0.242	0.063	0.121
2005	NO SURVEY	0.175	0.100	0.136
2006	0.088	0.147	0.083	0.082
2007	NO SURVEY	0.140	0.100	0.079
2008	0.113	0.131	0.078	0.098
2009	NO SURVEY	0.143	0.091	0.088
2010	0.068	0.132	0.089	0.085

* WASHBURN AND BAYFIELD ROUTES COMBINED

**TABLE 16. SAXON HARBOR OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-10.**

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
2010	0	0	0		
TOTAL	63	676	162		
AVE.	6	61	15	0.24	4.17

**TABLE 17. CORN. / PORT WING OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-10.**

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	86.44
2009*					
2010	124	478	54	0.11	8.85
TOTAL	953	3,987	281		
AVE.	119	498	35	0.07	14.19

* NOT SURVEYED 2005, 2007, 2009

**TABLE 18. WASHBURN OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-10.**

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
2010	889	3,567	31	0.01	115.06
TOTAL	11,131	44,082	2,220		
AVE.	1,012	4,007	202	0.05	19.86

**TABLE 19. PORT OF SUPERIOR OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-10.**

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	16,880	2,152	0.13	7.84
2010	4,555	9,612	773	0.08	12.43
TOTAL	52,594	168,174	26,770		
AVE.	5,259	16,817	2,677	0.16	6.28

NOT SURVEYED IN 2001.

TABLE 20

WISCONSIN'S LAKE SUPERIOR. ICE SHALLOW WATER ESTIMATED EFFORT, HARVEST AND HARVEST RATES 1975-2010.

(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 FISH/HOUR					SPLAKE	RBT	TROUT													FAT
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								7	5			717	
1977-A	980	4,060	0.061		8		101	13	74													249	
1978-A	2,816	N/A	N/A	14	27		545	63	73	32												889	
1979-A	N/A	N/A	N/A	39	5		1,189	34	80	346												2,273	
1980-A	N/A	N/A	N/A	797	72		1,219	3,854	51	24												6,029	
1981-A	N/A	N/A	N/A	376	98		1,146	4,635	142	7												6,478	
1982-A	5,199	26,837	0.147	133	139		270	3,342	49	6												3,945	
1983-A	8,433	42,558	0.137	441	641		1,647	2,986	42	23											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								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						87	24	366		6,161	
1990-A	8,138	37,150	0.208	61	222		373	4,959				73						42	67	46		7,717	
1991-BC	2,973	15,105	0.165		65	18	83	702				76						11		14		2,494	
1992-BC	3,422	16,845	0.302		520		2,224	374				69	51			34						5,080	
1993-A	7,682	41,021	0.149	168	114	15	1,951	2,067				265	22					51	25	19	107	6,109	
1994-A	4,768	22,991	0.128	197	119	12	749	788		0		106	24					158	21	21	25	2,942	
1995-B	4,651	25,049	0.463	93	176	13	644	874				85	23					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						54	5,321	14	17	320	7,237
1999-B	5,902	28,423	0.591	424	154		205	1,322		5		678	13					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	48					83	3,687	75	29	292	7,006
2001-B	3,481	16,897	0.189	151	187	16	296	1,058				573	31	8				50	52	8	78	90	3,188
2002-BC	2,497	13,064	0.226	126	204	11	110	467				798	24					37	881			9	2,954
2003-BC	1,681	7,965	0.130	133		25	44	221			11	328	13					46	177				1,035
2004-BC	1,744	7,676	0.055	73	10		25	118				76						15				38	426
2005-BC	2,791	13,266	0.183	195	113		135	500	19	5	6	712	13					25	570			50	2,423
2006-BC	1,351	6,451	0.259	86	50	5	83	365	5			580	5					13	362			93	1,672
2007-A	5,972	32,753	0.427	90	4,777	12	449	876	8	11		1,313	27					91	4,974	9	94	1,038	13,982
2008-BC	2,957	17,248	0.109	82	442		373	396				352						6	152			27	1,876
2009-CD	1,524	8,180	0.111	173	66		61	158				308							59			10	911
2010-BC	2,395	12,591	0.128	61	39		107	214				585						6	489	5		96	1,609

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

other= WAL,NOP,YP

B = 1991, 1992, 1995, 1998-2006, 2008, 2010 ONLY WASHBURN SIDE OF CHEQUAMEGON BAY SURVEYED

C = 2002-2006, 2008-2010 MINIMUM DATA SHALLOW WATER SURVEY STARTED WHEN "BOBBING" BEGAN.

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

TABLE 21

ESTIMATED ANGLER EFFORT(ANGLER TRIPS AND ANGLER HOURS) BY AREA IN WISCONSIN WATERS OF LAKE SUPERIOR ICE FISHERY. 1993-2010.

ANGLER TRIPS																			
AREA	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	AVERAGE
ASHLAND SHALLOW WTR															3,118				3,118
ASHLAND COOL WATER															2,234				2,234
WASHBURN SHALL. WTR			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	2,395	2,881
WASHBURN COOL WATER							192	145	164	185	16	27	187	6	160	30	19	77	101
ASHL.+WSHB. SHAL. WTR	7,682	4,768																	6,225
ASHL.+WSHB. COOL WTR	2,252	1,040																	1,646
APOS. ISL. - BOBBING	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	3,191	3,278
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		1,070	326	1,172	1,546			212	563		1,274	586	138		156	354	1,091		707
WESTERN END		2,280																	2,280
DECEMBER BOATS						133	124	107											121
TOTAL	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	5,663	

ANGLER HOURS																			
AREA	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	AVERAGE
ASHLAND SHALLOW WTR															17,487				17,487
ASHLAND COOL WATER															10,540				10,540
WASHBURN SHALL. WTR			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	12,591	14,603
WASHBURN COOL WATER							1,097	761	946	812	96	106	528	22	750	152	38	527	486
ASHL.+WSHB. SHAL. WTR	41,021	22,991																	32,006
ASHL.+WSHB. COOL WTR	9,620	4,602																	7,111
APOS. ISL. - BOBBING	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	20,385	18,722
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		6,113	1,561	6,881	8,098			1,183	2,918		6,495	3,086	736		764	2,163	6,840		3,903
WESTERN END		14,698																	14,698
DECEMBER BOATS						465	506	385											452
TOTAL	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	33,503	

TABLE 22
WISCONSIN'S LAKE SUPERIOR ICE FISHERY DEEP WATER "BOBBING"
(APOSTLE ISLAND'S) ESTIMATED HARVEST 1990-2010.

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	SPLAKE	RBT	FATS	WHITE FISH	MEN WF	HERR	HOYI	BURBOT	SMELT	NOP	WAE	MULE WF	TOTAL HARVEST
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
1995	1,224	68	8	10	65		62	17		76		65			75		1,670
1996	1,016 (75.3%)	24 (1.8%)	22 (1.6%)				207 (15.3%)	20 (1.5%)		11 (0.8%)		43 (3.2%)	7 (0.5%)				1,350
1997	2,755 (68.2%)	8 (0.2%)	33 (0.8%)		52 (1.3%)		663 (16.4%)	23 (0.6%)		96 (2.4%)		275 (6.8%)	132 (3.3%)				4,037
1998	1,620 (69.9%)	68 (2.9%)	76 (3.3%)	51 (2.2%)	83 (3.6%)	3 (0.1%)	10 (0.4%)	86 (3.7%)		147 (6.3%)		167 (7.2%)	7 (0.3%)				2,318
1999	4,065 (58.5%)	187 (2.7%)	6 (0.1%)	42 (0.6%)	239 (3.4%)		216 (3.1%)	1,487 (21.4%)		216 (3.1%)		244 (3.5%)	240 (3.5%)	3 (0.0%)	7 (0.1%)		6,952
2000	2,857 (47.6%)	88 (1.5%)	3 (0.0%)	18 (0.3%)	73 (1.2%)		174 (2.9%)	2,125 (35.4%)		503 (8.4%)		85 (1.4%)	80 (1.3%)				6,006
2001	5,074 (65.8%)	262 (3.4%)	33 (0.4%)	42 (0.5%)	56 (0.7%)	6 (0.1%)	752 (9.7%)	1,029 (13.3%)		242 (3.1%)		158 (2.0%)	54 (0.7%)			6 (0.1%)	7,714
2002	531 (33.1%)	88 (5.5%)	36 (2.2%)	15 (0.9%)	20 (1.2%)		81 (5.0%)	280 (17.4%)		98 (6.1%)		36 (2.2%)	421 (26.2%)				1,606
2003	2,824 (57.7%)	10 (0.2%)	54 (1.1%)		11 (0.2%)		1,470 (30.0%)	415 (8.5%)		48 (1.0%)	5 (0.1%)	40 (0.8%)	16 (0.3%)				4,893
2004	1,791 (62.1%)	6 (0.2%)					552 (19.2%)	458 (15.9%)		46 (1.6%)		29 (1.0%)					2,882
2005	4,533 (60.6%)	92 (1.2%)		5 (0.1%)	11 (0.1%)		421 (5.6%)	2,020 (27.0%)		258 (3.4%)		127 (1.7%)	13 (0.2%)				7,480
2006	869 (43.8%)	17 (0.9%)		4 (0.2%)	8 (0.4%)		42 (2.1%)	941 (47.5%)		14 (0.7%)		88 (4.4%)					1,983
2007	2,740 (42.3%)	510 (7.9%)		22 (0.3%)	38 (0.6%)		447 (6.9%)	1,688 (26.1%)		598 (9.2%)		43 (0.7%)	386 (6.0%)				6,472
2008	3,971 (69.6%)	231 (4.0%)		16 (0.3%)	28 (0.5%)		123 (2.2%)	1,271 (22.3%)		30 (0.5%)		38 (0.7%)					5,708
2009	2,133 (74.9%)	18 (0.6%)		10 (0.4%)	8 (0.3%)		68 (2.4%)	546 (19.2%)		56 (2.0%)		8 (0.3%)					2,847
2010	1,285 (40.5%)	20 (0.6%)		29 (0.9%)	26 (0.8%)		48 (1.5%)	1,657 (52.2%)		64 (2.0%)		44 (1.4%)					3,173

TABLE 23
ICE BOBBING EFFORT, HARVEST RATES AND LAKE TROUT HARVEST RATES BY AREA 1986-2010.

	APOSTLE ISLANDS							CORNUCOPIA / BARK BAY							TOTAL - ALL AREAS						
	ANGL. TRPS	ANGL. HRS	TOTAL FISH HRVST.	FISH / HOUR	LAKE TROUT HARVEST	LAKE TROUT / HOUR	ANGLR. HRS / LKT	ANGL. TRPS	ANGL. HRS	TOTAL FISH HRVST.	FISH / HOUR	LAKE TROUT HARVEST	LAKE TROUT / HOUR	ANGLR. HRS / LKT	ANGL. TRPS	ANGL. HRS	TOTAL FISH HRVST.	FISH / HOUR	LAKE TROUT HARVEST	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1986	3,050	20,537	4,518	0.220	4,132	0.201	4.970	2,691	16,812	3,836	0.228	3,595	0.214	4.676	5,741	37,349	8,354	0.224	7,727	0.207	4.834
1987	1,935	12,380	1,187	0.096	1,122	0.091	11.034	99	624	125	0.200	125	0.200	4.992	2,034	13,004	1,312	0.101	1,247	0.096	10.428
1988	1,308	7,931	829	0.105	717	0.090	11.061	685	4,085	438	0.107	438	0.107	9.326	1,993	12,016	1,267	0.105	1,155	0.096	10.403
1989	1,221	7,628	751	0.098	733	0.096	10.407	1,508	10,568	1,337	0.127	1,320	0.125	8.006	2,729	18,196	2,088	0.115	2,053	0.113	8.863
1990	1,526	8,604	572	0.066	539	0.063	15.963	1,462	8,724	1,129	0.129	1,129	0.129	7.727	2,988	17,328	1,701	0.098	1,668	0.096	10.388
1991	947	5,403	775	0.143	762	0.141	7.091	791	5,052	521	0.103	521	0.103	9.697	1,738	10,455	1,296	0.124	1,283	0.123	8.149
1992	1,451	8,171	1,366	0.167	1,343	0.164	6.084	63	337	73	0.217	70	0.208	4.814	1,514	8,508	1,439	0.169	1,413	0.166	6.021
1993	1,904	10,382	2,003	0.193	1,766	0.170	5.879								1,904	10,382	2,003	0.193	1,766	0.170	5.879
1994	1,768	10,096	2,066	0.205	1,384	0.137	7.295	1,070	6,113	1,384	0.226	1,198	0.196	5.103	2,838	16,209	3,450	0.213	2,582	0.159	6.278
1995	1,412	9,741	1,670	0.171	1,224	0.126	7.958	326	1,561	237	0.152	184	0.118	8.484	1,738	11,302	1,907	0.169	1,408	0.125	8.027
1996	2,508	13,687	2,237	0.163	1,453	0.106	9.420	1,172	6,881	105	0.015	884	0.128	7.784	3,680	20,568	2,342	0.114	2,337	0.114	8.801
1997	3,576	21,126	4,956	0.235	3,280	0.155	6.441	1,546	8,098	1,371	0.169	1,209	0.149	6.698	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								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								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								4,085	21,882	6,261	0.286	3,108	0.142	7.041
2001	5,525	30,753	7,714	0.251	5,074	0.165	6.061	563	2,918	650	0.223	616	0.211	4.737	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								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	1,274	6,495	1,017	0.157	994	0.153	6.534	6,587	37,419	5,910	0.158	3,918	0.105	9.551
2004	3,178	16,975	2,882	0.170	1,791	0.106	9.478	586	3,086	516	0.167	485	0.157	6.363	3,764	20,061	5,910	0.295	2,276	0.113	8.814
2005	6,008	32,365	7,480	0.231	4,533	0.140	7.140	138	736	139	0.189	125	0.170	5.888	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								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	156	764	23	0.030	19	0.025	40.211	3,636	20,051	6,495	0.324	2,759	0.138	7.267
2008	5,412	33,548	5,708	0.170	3,971	0.118	8.448	354	2,163	414	0.191	414	0.191	5.225	5,766	35,711	6,122	0.171	4,385	0.123	8.144
2009	4,192	26,595	3,397	0.128	2,133	0.080	12.468	1,091	6,840	1,050	0.154	839	0.123	8.153	5,283	33,435	4,447	0.133	2,972	0.089	11.250
2010	3,191	20,385	3,173	0.156	1,285	0.063	15.864								3,191	20,385	3,173	0.156	1,285	0.063	15.864
TOTAL	71,900	417,388	83,514		52,748			15,787	93,040	14,620		14,416		87,607	510,419			67,264			
AVE.	2,876	16,696	3,341	0.200	2,110	0.126	7.913	831	4,897	769	0.157	759	0.155	6.454	3,504	20,417			2,691	0.132	7.588

TABLE 24

WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST RATES AND LAKE TROUT
HARVEST RATES, 1973-2010.

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
2010	29	1,399	8,353	2,712	0.32	3.08	1,911	0.23	4.37
TOTAL		110,514	683,922	170,915			138,841		
AVE.	28	2,908	17,998	4,498	0.25	4.00	3,654	0.20	4.93

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

TABLE 25
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.
1986-2010. 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
2010	11	158	921	187	0.20	4.93	145	0.16	6.35
TOTAL		18,642	113,047.5	30,423			21,748		
AVE.	12	746	4,522	1,217	0.27	3.72	870	0.19	5.20

TABLE 27
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.
1988-2010. 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	5.63
1994	5	474	2,588	552	0.21	4.69	460	0.18	5.62
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	300	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
2010	2	90	614	224	0.36	2.74	102	0.17	6.02
TOTAL		9,161	49,834	15,197			11,026		
AVE.	5	398	2,167	661	0.30	3.28	479	0.22	4.52

TABLE 26
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.
1986-2010. 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
2010	11	911	5,265	1,827	0.35	2.88	1,267	0.24	4.16
TOTAL		34,219	206,795	49,575			42,055		
AVE.	13	1,426	8,616	2,066	0.24	4.17	1,752	0.20	4.92

TABLE 28
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.
1986-2010. 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
2010	5	240	1,553	474	0.31	3.28	397	0.26	3.91
TOTAL		5,165	33,289	8,788			8,104		
AVE.	2	207	1,332	352	0.26	3.79	324	0.24	4.11

TABLE 29

WISCONSIN'S LAKE SUPERIOR CHARTER FISHERY HARVEST 1989 - 2010.

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE	COHO	CHINOOK	BROWN	RAINBOW	SPLAKE	ATL.	PINK	FATS	WALLEYE	NORTH.	BROOK	YEP	HERR	OTHER	TOTAL HARVEST
	TROUT	SALMON	SALMON	TROUT	TROUT		SALMON	SALMON			PIKE	TROUT				
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	228	194	32	6	5	1			47					10	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
2010	1,911 (70.5%)	502 (18.5%)	245 (9.0%)	38 (1.4%)	5 (0.2%)	8 (0.3%)				2 (0.1%)	1 (0.0%)					2,712

**TABLE 30
REGISTERED STURGEON SPORT HARVEST IN CHEQUAMEGON BAY, 1983-
2010.**

YEAR	ANGLER TAGS ISSUED*	TOTAL REPORTED HARVEST	# HARVESTED ≥ 50"	AVERAGE SIZE(in)	AVERAGE WEIGHT(lb)
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	--
2010	unknown	0	0	--	--

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

*Angler tags issued (Ashland, Bayfield, and 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 I.

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 COUNT
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. 2010 OPEN WATER CREEL ROUTES AND SHIFT TIMES.

ROUTE / PORT	START DATES	SHIFT TIMES	NUMBER OF NON-OVERLAPPING SHIFTS	TYPE OF CREEL	COMMENTS
ONE ROUTE: CORNUCOPIA / PORT WING (1/2 TIME) WASHBURN AND MARINA(1/2 TIME)	C/PW 04/01/2010 WASHBURN 04/06/2010	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)	04/11/2010	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 BOAT LAUNCH, LOONS FOOT BOAT LAUNCH (FULL TIME)	05/16/2010	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 9/30/10

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:				
ANGLERS 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, MENWF-71, YEP-76, WAL-78

APPENDIX V. 2010 ICE CREEL ROUTES AND SHIFT TIMES.

ROUTE / PORT	START DATES	SHIFT TIMES	NUMBER OF NON-OVERLAPPING SHIFTS	TYPE OF CREEL	COMMENTS
WASHBURN - BAYFIELD - RED CLIFF - CORNUCOPIA	01/09/2010 03/18/2010	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.

2010 LENGTH WEIGHT EQUATIONS

DATA OBTAINED FROM VARIOUS WI DNR ASSESSMENTS.

BROWN TROUT (NATIVE + HATCHERY)

$$\text{LN(WT g)} = -13.83 + 3.38 (\text{LN LENGTH mm})$$

Observations = 57

BURBOT

$$\text{LN(WT g)} = -12.411 + 3.109 (\text{LN LENGTH mm})$$

Observations = 245

SISCOWET LAKE TROUT (FATS)

$$\text{LN(WT g)} = -12.927 + 3.197 (\text{LN LENGTH mm})$$

Observations = 1,413

LAKE HERRING

$$\text{LN(WT g)} = -12.284 + 3.084 (\text{LN LENGTH mm})$$

Observation = 401

MENOMINEE WF REGRESSION

$$\text{LN(WT g)} = -13.357 + 3.290 (\text{LN LENGTH mm})$$

Observations = 93

NORTHERN PIKE

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

Observations = 48

SPLAKE

$$\text{LN(WT g)} = -13.629 + 3.341 (\text{LN LENGTH mm})$$

Observations = 181

WALLEYE

$$\text{LN(WT g)} = -12.658 + 3.178 (\text{LN LENGTH mm})$$

Observations = 155

YELLOW PERCH

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

Observations = 59

LAKE WHITEFISH

2010 SURVEYS

$$\text{LN(WT g)} = -13.371 + 3.280 (\text{LN LGTH mm})$$

Observations = 656

RAINBOW TROUT

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

$$\text{males } W = 0.00074 L^{2.79248}$$

R Square 0.84

Observations 100

$$\text{females } W = 0.00075 L^{2.78982}$$

Observations 100

CHINOOK SALMON

WI DNR DATA 1980-2010

$$\text{LN(WTg)} = -12.159 + 3.097 (\text{LN length mm})$$

Observations = 91

COHO SALMON

$$\text{LN(WT g)} = -11.670 + 3.020 (\text{LN length mm})$$

Observation = 23

LAKE TROUT (NATIVE)

WI DNR SURVEYS 2009-2010

$$\text{LN(WT g)} = -12.249 + 3.093 (\text{LN LENGTH mm})$$

Observations = 1,126

LAKE TROUT (HATCHERY)

WI DNR SURVEYS 2009-2010

$$\text{LN(WT g)} = -12.449 + 3.125 (\text{LN LENGTH mm})$$

Observations = 177

LAKE TROUT (NATIVE AND HATCHERY)

WI DNR SURVEYS 2009-2010

$$\text{LN(WT g)} = -12.271 + 3.097 (\text{LN LENGTH mm})$$

Observations = 1,303

FIGURE 1. MAJOR PORTS SURVEYED AND WISCONSIN MANAGEMENT UNITS.

