

WISCONSIN'S 2011 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. 2, 2011 to March 26, 2011) and during the open water fishery (Ice-out April 2, 2011 to September 30, 2011).

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 2011, 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 four different areas (Figure 1):

- One Route: Full Time. ½ Time – Washburn (West End Park boat launch, Washburn Marina and Marina launch).
½ Time – Ashland (Kreher Park boat launch, Ashland Marina and Second Landing boat 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 Bayfield, Cornucopia / Port Wing, Little Sand Bay, Red Cliff and the December open water fishery. Data (angler trips, angler hours and lake trout harvest) for Bayfield were derived by taking the percent change that occurred for Washburn from 2009(July – Sept.) to 2011(July – Sept.) and applying it to Bayfield in 2009 (July – Sept.), the last time Bayfield was surveyed. Data from July – Sept. was used because the Bayfield boat launch was closed in 2011 from April – June. Cornucopia / Port Wing data was derived by using last year's (2010) data. Little Sand Bay data was derived by taking the percent change that occurred for Washburn from 2007 to 2011 and applying it to Little Sand Bay data in 2007, the last time that area was surveyed. Data for the Red Cliff boat launch was not calculated because the Red Cliff boat launch was closed due to the new casino construction. 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.

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 I.

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

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 III.

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. Due to the variability of the fishery the western waters of Lake Superior and Saxon area were not surveyed. The ice fishery creel survey started when lake trout waters were accessible out of Bayfield (1/02/11). Due to this start date, several weeks of the shallow water and cool water fishery were missed; and therefore, 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 IV). 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 V. 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 Creel surveyed ended on 3/26/11.

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 VI).

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 2011 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:

NATIVE ORIGIN	HATCHERY ORIGIN
$\text{Ln}(\text{weight grams}) = -12.249 + 3.093(\text{Ln length mm})$	$\text{Ln}(\text{weight grams}) = -12.449 + 3.125(\text{Ln length mm})$
Observation = 1,126	Observations = 177
NATIVE AND HATCHERY ORIGIN	
$\text{Ln}(\text{weight grams}) = -12.271 + 3.097(\text{Ln length mm})$	
Observations = 1,303	

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

RESULTS

OPEN WATER COLD PRIVATE

EFFORT – During 2011, an estimated 28,618 individual angler trips and 145,806 angler hours were spent pursuing cold water species (trout and salmon) on Wisconsin waters of Lake Superior (Table 1). The effort from the four areas surveyed was estimated at 17,044 angler trips and 87,779 angler hours (Table 2). All areas surveyed recorded less effort than the last time they were surveyed. The Port of Superior recorded the highest effort (6,030 angler trips and 32,762 angler hours) of the four areas surveyed and the only area that recorded higher effort than the average since 1994. Washburn recorded the second highest effort (5,823 angler trips and 28,080 angler hours) down from last year and from the average effort since 1994. Ashland had the third highest effort with 2,804 angler trips and 13,769 angler hours consistent with 2007 (the last time surveyed) effort of 2,869 angler trips and 15,120 angler hours. Saxon had the lowest effort of the four areas surveyed with 2,387 angler trips and 13,168 angler hours. This was the lowest effort from Saxon since 1992 when the effort was 2,242 angler trips and 10,257 angler hours.

HARVEST – An estimated 16,244 fish were harvested in the four areas surveyed. This was down slightly from 2005 (the last time these four areas were surveyed) when the harvest was 18,559 (Table 3). Of the four areas surveyed Superior had the highest overall harvest with 6,203 fish. This was down slightly from last year (6,350) but still the second highest since 1993 (9,636) (Table 4). Washburn was second highest overall fish harvest with 4,488 fish. Down from last year (5,696) but still the second highest harvest since 2004 (4,750) (Table 5). Ashland was third with an overall fish harvest of 2,895 fish down from 2005 (5,476) and 2007 (4,357), the last two times Ashland was surveyed (Table 6). Saxon had the least overall fish harvest with 2,658 fish. Down from last year's harvest of 3,077 fish and below the average since 1988 of 3,249 fish (Table 7).

Lake trout was the number one species harvested in the four areas surveyed with 8,204 fish for 50.5% of the harvest. This is considerably lower than the 13,877 lake trout harvested in 2005, the last time these four areas were surveyed (Table 3). Lake trout harvest was highest out of Superior with 3,673 lake trout. This was the highest lake trout harvest in this area since 1993 (3,830) (Table 4). Saxon had the second highest lake trout harvest with 1,761 lake trout. This was the lowest lake trout harvest in this area since 1996 (1,776) (Table 7). Washburn was third with a lake trout harvest of 1,523. Consistent harvest with previous years (Table 5). Ashland had the lowest lake trout harvest with 1,247 lake trout, down from 2007 (1,938) and 2005 (4,543) (Table 6).

Harvest of native origin lake trout was highest out of Saxon Harbor with 99.7%, followed by Ashland/Washburn (97.2%), and Superior (74.6%) (Table 8). In this fishery the average size lake trout was 23.0" (Native origin average size 22.8", Hatchery origin average size was 24.3").

Separating the estimated lake trout harvest of 12,157 by management zone in this fishery, 4,771 lake trout were harvested in WI-1 and 7,386 lake trout were harvested in WI-2 (Table 9).

Coho salmon was the second most abundant species harvested (in the four areas surveyed) in this fishery accounting for 37.2% of the harvest (6,037 coho; Table 3). In 2005, the last year these four areas were surveyed, 2,551 coho were harvested (Table 3). Washburn had the highest coho harvest with 2,022 coho. This was down from last year's banner harvest of 3,581 coho but still the second highest harvest since 2000 (2,113) (Table 10). Superior had the second highest coho harvest with 1,827 fish, down from last year (1,914), but still the second highest harvest since 1988 (2,236) (Table 11). Ashland was third with a coho harvest of 1,422. This was the highest coho harvest out of Ashland since 1988 with 1,400 fish (Table 12). Saxon had the lowest coho harvest with 766 fish, down from last year (859) (Table 13). The average size coho in this fishery was 16.8" (Table 1).

Brown trout ranked third with 948 fish harvested accounting for 5.8% of the harvest (Table 3). Washburn had the highest harvest with 586 brown trout. This was the highest harvest out of Washburn since 1992 (1,388) (Table 10). Of the 586 brown trout harvested out of Washburn, approximately 65.6% (385) were hatchery stocked fish. The average size brown trout in this fishery was 18.8" (Table 1).

Chinook salmon ranked fourth with 423 fish harvested, accounting for 2.6% of the harvest in this fishery (Table 3). The Superior area accounted for 76.1% (322) of the total Chinook salmon harvest in this fishery (Table 1). The average size Chinook in this fishery was 24.1" (Table 1).

HARVEST RATES – The highest harvest rate for all species was in the Ashland area (0.21 fish/hour), followed by Saxon (0.20 fish/hour), Superior (0.19 fish/hour) and Washburn (0.16 fish/hour). Ashland overall harvest rate was down from 2005 (0.27 fish/hour) and 2007 (0.29 fish/hour) the last two times this area was surveyed. Saxon overall harvest rate was the highest since 2005 (0.20 fish/hour). Superior overall harvest record of 0.19 fish/hour was the highest on record. Washburn overall harvest rate of 0.16 fish/hour was down since last year (0.18 fish/hour) and slightly above the average since 1992 of 0.15 fish/hour (Table 4-7).

Lake trout harvest rate was the highest out of the Saxon area (0.13 LT/hour). This was up slightly from last year's harvest rate of 0.12 LT/hour and almost identical to the average harvest rate since 1988 (Table 7). Superior was second with 0.11 LT/hour the highest on record (Table 4). Ashland was third with 0.09 LT/hour down from 2005 (0.22 LT/hour) and 2007 (0.13 LT/hour) the last two times Ashland was surveyed (Table 6). Washburn had the lowest harvest rate (0.05 LT/hour), the same as last year, but below the average since 1992 of 0.07 LT/hour (Table 5).

Lake trout harvest rates (LT/angler hour) during the months of June – August (the peak of the LT season) was highest out of Saxon (0.17) the highest rate since 2005 (0.18), followed by Superior (0.11), the highest on record. Washburn was the lowest with 0.09 LT/hour consistent with the last two years (Table 14).

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 2011, an estimated 11,462 individual angler trips and 46,084 angler hours, not including estimated angler trips and hours from Cornucopia-Port Wing, 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 Ashland had the highest cool water effort with 7,136 angler trips and 33,222 angler hours. Angler trips and angler hours were consistent with 2005 (7,577 angler trips, 35,983 angler hours) and 2007 (6,303 angler trips, 29,008 angler hours) the last two times Ashland was surveyed (Table 15). Superior's effort was second with 3,069 angler trips and 6,997 angler hours, the lowest effort on record (Table 16). Washburn's effort was third with 1,257 angler trips and 5,865 angler hours, the highest effort since 2007 (1,755 angler trips and 7,849 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 (Table 18).

HARVEST and HARVEST RATES – An estimated 4,529 fish were harvested in the cool water fishery in the four surveyed areas during 2011 (Table 1). Ashland had the highest harvest with 3,693 fish (Table 15). Superior had the second highest cool water harvest with 504 fish (Table 16). This is the lowest harvest in the Superior area since 2000 with 112 fish harvested and well below the average harvest since 2000 of 2,479 fish (Table 16). Washburn was third with 332 fish, the highest out of Washburn since 2006 (538) (Table 17). Yellow perch was the number one species harvested with 2,481 fish. The Ashland area accounted for 95% (2,363 fish) of the total yellow perch harvest in this fishery (Table 1). Walleyes were the number two species harvested with 1,519 fish. Walleye harvest was highest out of Ashland with a harvest of 982 followed by Superior with 411 walleye (Table 1).

The overall harvest rate was highest out of Ashland with a rate of 0.11 fish/hour, the highest rate from the last three years Ashland was surveyed (2000 - 0.06 fish/hour, 2005 - 0.09 fish/hour and 2007 - 0.08 fish/hour; Table 15). Superior was second with 0.07 fish/hour, down from 2010 (0.08 fish/hour) and the lowest rate since 2000 (0.01 fish/hour) (Table 16). Washburn was third with 0.06 fish/hour, up from the last two years of 0.01 fish/hour (Table 17).

ICE FISHERY

The 2011 ice fishing season started off of Ashland on December 03, 2010, off Washburn on December 18, 2010, and "bobbing" began on Jan 9, 2011 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. The ice fishery creel survey started on Jan 2, 2011 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 - RASPBERRY BAY) - An estimated 2,711 angler trips and 14,591 angler hours were recorded in this shallow water fishery. This is the highest total in this fishery since 2008 (2,957 angler hours and 17,248 angler hours; Table 19). This effort resulted in an estimated harvest of 2,815 fish, the highest total since 2002 (2,954) (Table 20). Brown trout was the number one species harvested with 651 fish, whitefish (628) was second, splake (530) was third, coho (357) fourth and yellow perch (255) fifth. Of the 651 brown trout that were harvested approximately 82.5% were of hatchery origin. The overall harvest rate in this fishery was 0.19 fish/hour; the third highest rate since 2002 (0.23) (Table 20).

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 109 angler trips and 545 angler hours resulted harvest of 599 fish. Yellow perch accounted for 74.5% (446) of the harvest in this fishery (Table 1).

ICE DEEP WATER BOBBING

APOSTLE ISLANDS (NOT INCL. MADELINE ISLAND) - Overall, ice conditions were fair to good. However, access to deep water locations was limited. An estimated 1,993 angler trips and 12,653 angler hours resulted in an estimated harvest of 2,424 fish in this deep-water fishery (Table 1). Angler trips and angler hours were the lowest since 2006 (1,062 angler trips and 5,958 angler hours; Table 19). An estimated 2,424 fish were harvested in this fishery, the lowest total since 2006 (1,983; Table 21). Lake trout was the primary species harvested with 1,374 fish and greater than last year's lake trout harvest of 1,285 (Table 21). Whitefish accounted for 34.4% (834 fish) of the harvest in this fishery, down from the 2010 harvest of 1,657 fish (Table 22). The harvest rate for all fish species for the Apostle Islands was 0.19 fish/hour, the highest since 2007 (0.34 fish/hour), but lower than the average since 1986 of 0.20 fish/hour. The lake trout harvest rate of 0.11 LT / hour was the highest since 2008 (0.12 LT/hour), but still lower than the average since 1986 (0.13 LT/hour; Table 21). The average size lake trout in this fishery for native origin lake trout was 21.9" and for hatchery origin lake trout 20.9" (Table 9).

CHARTER FISHERY

EFFORT - Twenty six (26) licensed charter captains were active during the 2011 open water season on the Wisconsin waters of Lake Superior, down from 29 in 2010. The total number of anglers (1,281) and angler hours (7,397) represents the lowest pressure recorded since reporting began in 1973 (Table 23). Ashland / Bayfield / Washburn / Red Cliff had the highest effort with 786 angler trips and 4,324.5 angler hours, the third lowest effort since 1988 (Table 24). Second was Superior with 273 angler trips and 1,601 angler hours, higher than last years effort of 158 angler trips and 921 angler hours but well below the average since 1988 of 713 angler trips and 4,350 angler hours (Table 25). Third was Saxon with 161 angler trips and 1,077.5 angler hours, down from last year's effort of 240 angler trips and 1,553 angler hours (Table 26). Corny / Port Wing had the lowest effort with 61 angler trips and 394 angler hours, their lowest effort on record (Table 27).

HARVEST RATES - The overall harvest rate was 0.32 fish / hour and the lake trout harvest rate was 0.25 LT / hour. The overall harvest rate was the same as last year and 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 higher than last year's rate of 0.23 LT/hour but consistent with previous years and above the average since 1973 of 0.20 LT/hour (Table 23). Ashland / Bayfield / Washburn / Red Cliff had the highest overall harvest rate with 0.35 fish/hour the same as last year and tied with last year for the highest on record (Table 24). Cornucopia / Port Wing had the second highest overall harvest rate of 0.34 fish / hour. This was down from last year's rate of 0.36 fish/hour, but still higher than the average overall harvest rate since 1988 of 0.31 fish/hour (Table 27). Saxon had the third highest overall harvest rate of 0.30 fish/hour down slightly from last year 0.31 fish/hour but still third highest on record (Table 26). Superior has the lowest overall harvest rate of 0.23 fish/hour but higher than last years rate of 0.20 fish/hour (Table 25).

Saxon had the highest LT harvest rate of 0.28 LT/hour, the highest since 2004 (0.30 LT/hour; Table 26). Cornucopia / Port Wing and Ashland / Bayfield / Washburn / Red Cliff were tied for second with a lake trout harvest rate of 0.27 LT / hour and both were above last year's rates and the average rates since 1988 (A/B/W/RC - 0.21 LT/hour; C/PW - 0.22 LT/hour) (Table 27,24). Superior had the lowest lake trout harvest rate with 0.17 LT/ hour up from last year rate of 0.16 LT / hour, but still the second lowest since 2000 (0.16 LT/hour; Table 25).

HARVEST – The overall harvest of 2,336 fish was lower than last year of 2,712 fish and well below the average harvest since 1973 of 4,442 fish. The lake trout harvest of 1,865 the second lowest all time since 1973 and well below the average since 1973 of 3,608 lake trout (Table 23). Lake trout remain the number one harvested fish in this fishery, comprising 79.8% (1,865) of the overall harvest of 2,336 fish. Coho salmon were distant second with 364 fish for 15.6% of the harvest. Brown trout harvest was third with 62 fish for 2.7% of the harvest (Table 28). Lake trout harvest was highest out of Ashland / Bayfield / Washburn / Red Cliff with 1,183 lake trout, Saxon was second with 303, Superior was third with 274 and Cornucopia / Port Wing was last with a lake trout harvest of 105 (Table 24-27).

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 2011, one sturgeon was registered, 56.0", 54 pounds (Table 29). Effort is unknown.

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TABLE 1. 2011 CREEL SURVEY STATISTICS (ESTIMATED ANGLER TRIPS, ANGLER HOURS AND HARVEST BY FISHERY)

FISHERY TYPE	ANGL. TRIPS	ANGL. HOURS	ICE			BRWN			BROOK			MEN			BUR-			BLK.		ROCK		TOTAL HRVST		
			LKT	COHO	CHIN.	TROUT	SPLK	RBT	TROUT	FATS	WF	WF	HERR	BOT	SMELT	NOP	WAE	YEP	CRP	BASS	BLG		CATF	RUFFE
WSHB/BYF SHAL.	2,711	14,591	76	357		651	530	19	6		628	20	161	4	90	13		255				5	2,815	
WSHB/BYF COOL	109	545		52		68					16		8			9		446					599	
BOBBING APOS.ISL.	1,993	12,653	1,374	17		10	26				94	834	34	18	12	5							2,424	
CORNY. SHAL.	0	0																					0	
CORNY. COOL	0	0																					0	
CORNY. BOBB.	0	0																					0	
TOTAL	4,813	27,789	1,450	426	0	729	556	19	6	94	1,478	54	187	16	95	22	0	701	0	0	0	0	5	5,838
AVE. LENGTH(INCH)			21.9	14.7		16.7	18.0	19.3		22.2	17.7	11.9	17.0	25.3	7.1	27.2		8.7						

CHARTER																								
ASH.BAYF.WASH.	786	4,324.5	1,183	261	5	42	7	1	2									1						1,502
CORN. - PORT W.	61	394	105	10	7	9		2																133
SAXON	161	1,077.5	303	20	2																			325
SUPERIOR	273	1,601	274	73	14	11		2								2								376
TOTAL	1,281	7,397	1,865	364	28	62	7	5	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	2,336

OPEN WATER COLD																								
ASHLAND	2,804	13,769	1,247	1,422		172				32						22								2,895
BAYFIELD *	3,084	16,074	933																					933
CORN.-PORT W. *	5,580	26,048	1,478																					1,478
L. SAND BAY *	2,910	15,905	1,542																					1,542
RED CLIFF *	0	0	0																					0
SAXON	2,387	13,168	1,761	766	27	69	2	9		16			8											2,658
SUPERIOR	6,030	32,762	3,673	1,827	322	121		29		89							142							6,203
WASHBURN	5,823	28,080	1,523	2,022	74	586	117	44	2		22		5			93								4,488
TOTAL	28,618	145,806	12,157	6,037	423	948	119	82	2	137	22	0	13	0	0	115	142	0	0	0	0	0	0	20,197
AVE. LENGTH(INCH)			23.0	16.8	24.1	18.8	17.6	24.0	17.4	22.0	18.6		16.7			29.7	22.0							

OPEN WATER COOL																								
ASHLAND	7,136	33,222				10										188	982	2,363	17	91	42			3,693
CORN.-PORT W. *	124	478																						0
SAXON	0	0																						0
SUPERIOR	3,069	6,997														29	411	58	2			4		504
WASHBURN	1,257	5,865								5						141	126	60						332
TOTAL	11,586	46,562	0	0	0	10	0	0	0	0	5	0	0	0	0	358	1,519	2,481	19	91	42	4	0	4,529
AVE. LENGTH(INCH)						15.7										28.2	18.7	8.4	10.5	10.1		22.0		

WI - 1 TOTALS	13,639	61,191	5,079	1,903	340	132	0	32	0	89	0	0	0	0	29	553	58	2	0	0	4	0	8,221	
WI - 2 TOTALS	32,659	166,363	10,393	4,924	111	1,617	682	74	10	142	1,505	54	200	16	95	468	1,109	3,124	17	91	42	0	5	24,679
GRAND TOTAL	46,298	227,554	15,472	6,827	451	1,749	682	106	10	231	1,505	54	200	16	95	497	1,662	3,182	19	91	42	4	5	32,900
AVE. LENGTH (IN)			22.8	16.7	23.9	17.9	17.9	23.2	18.7	22.1	17.7	11.9	17.0	25.3	7.1	28.5	19.0	8.5	10.5	10.1		22.0		
AVE. WEIGHT (LBS)			3.72	1.62	4.81	2.09	2.01	4.82		3.30	1.73	0.50	1.37	4.82		5.07	2.37	0.29						
TOTAL WEIGHT(LBS)			57,556	11,060	2,169	3,655	1,371	511		762	2,604	27	274	77		2,520	3,939	923						
SAMPLE SIZE			1,324	783	67	270	101	17	1	44	214	15	43	4	9	44	155	129	2	7		1		

STURGEON: ONE (1) FISH REGISTERED. EFFORT UNKNOWN.

* = NUMBERS DERIVED FROM PREVIOUS YEARS - SEE METHODS.

**TABLE 2
ESTIMATED ANGLER EFFORT (ANGLER TRIPS AND ANGLER HOURS) BY AREA IN WISCONSIN WATERS
OF LAKE SUPERIOR OPEN WATER COLD PRIVATE 1994-2011.**

ANGLER TRIPS																			AVER- AGE
AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	94-11
ASHLAND	2,941						2,193					4,233		2,869				2,804	3,008
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	2,387	3,708
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	6,030	5,851
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	5,823	6,600
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	17,044	

ANGLER HOURS																			AVER- AGE
AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	94-11
ASHLAND	16,186						11,943					20,556		15,120				13,769	15,515
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	13,168	18,186
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	32,762	29,803
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	28,080	31,355
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	87,779	

TABLE 3

WISCONSIN'S LAKE SUPERIOR. OPEN WATER COLD PRIVATE ESTIMATED HARVEST 2000 - 2011.

(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
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%)	
2011	8,204	6,037	423	948	119	82		2	137	22	13					115		142		16,244
G	(50.5%)	(37.2%)	(2.6%)	(5.8%)	(0.7%)	(0.5%)		(0.0%)	(0.8%)	(0.1%)	(0.1%)					(0.7%)		(0.9%)		

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. PORT OF SUPERIOR OPEN WATER COLD PRIVATE. EFFORT, HARVEST RATES, LAKE TROUT HARVEST RATES. 1988-2011.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH / HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1988	10,537	58,693	10,163	0.17	5.78	5,155	0.09	11.39
1989	9,770	56,602	8,285	0.15	6.83	3,920	0.07	14.44
1990	8,420	45,988	4,770	0.10	9.64	2,932	0.06	15.68
1991	8,892	51,945	8,486	0.16	6.12	3,235	0.06	16.06
1992	7,630	43,734	6,460	0.15	6.77	2,587	0.06	16.91
1993	9,728	58,215	9,636	0.17	6.04	3,830	0.07	15.20
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	2,066	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
2011	6,030	32,762	6,203	0.19	5.28	3,673	0.11	8.92
TOTAL	154,450	821,814	118,544			57,386		
AVE.	6,715	35,731	5,154	0.14	6.93	2,495	0.07	14.32

* NOT SURVEYED DURING 2001.

TABLE 6. ASHLAND OPEN WATER COLD PRIVATE. EFFORT, HARVEST RATES, LAKE TROUT HARVEST RATES. 1990, 1992, 1993, 1994, 2000, 2005, 2007, 2011.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH / HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1990 A	3,956	17,191	1,219	0.07	14.10	889	0.05	19.34
1992 B	3,467	16,658	1,645	0.10	10.13	844	0.05	19.74
1993 A	1,021	5,940	701	0.12	8.47	656	0.11	9.05
1994 A	2,941	16,186	1,910	0.12	8.47	824	0.05	19.64
2000 B	2,193	11,943	2,432	0.20	4.91	1,843	0.15	6.48
2005 A	4,233	20,556	5,476	0.27	3.75	4,543	0.22	4.52
2007 A	2,869	15,120	4,357	0.29	3.47	1,938	0.13	7.80
2011 A	2,804	13,769	2,895	0.21	4.76	1,247	0.09	11.04
TOTAL	23,484	117,363	20,635			12,784		
AVE.	2,936	14,670	2,579	0.18	5.69	1,598	0.11	9.18

A - KREHER PARK, ASHLAND MARINA, SECOND LANDING.

B - KREHER PARK, ASHLAND MARINA.

TABLE 5. WASHBURN OPEN WATER COLD PRIVATE. EFFORT, HARVEST RATES, LAKE TROUT HARVEST RATES. 1992-2011.

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	10.69
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
2010	6,292	32,128	5,696	0.18	5.64	1,516	0.05	21.19
2011	5,823	28,080	4,488	0.16	6.26	1,523	0.05	18.44
TOTAL	134,905	648,702	96,112			44,624		
AVE.	6,745	32,435	4,806	0.15	6.75	2,231	0.07	14.54

*1988-1991 DATA COMBINES BOTH BAYF. AND WASH.

TABLE 7. SAXON HARBOR OPEN WATER COLD PRIVATE. EFFORT, HARVEST RATES, LAKE TROUT HARVEST RATES. 1988-2011.

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH / HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1988	4,364	20,703	3,676	0.18	5.63	2,384	0.12	8.68
1989	4,765	24,744	4,627	0.19	5.35	3,327	0.13	7.44
1990	2,898	14,085	2,891	0.21	4.87	2,525	0.18	5.58
1991	3,256	17,157	2,419	0.14	7.09	1,735	0.10	9.89
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	18,486	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
2011	2,387	13,168	2,658	0.20	4.95	1,761	0.13	7.48
TOTAL	88,280	435,915	77,964			58,455		
AVE.	3,678	18,163	3,249	0.18	5.59	2,436	0.13	7.46

TABLE 8
PERCENT HARVEST OF NATIVE LAKE TROUT BY AREA, 1990 - 2011.
OPEN WATER COLD PRIVATE.

YEAR	ASHLAND BAYFIELD WASHBURN	CORNUCOPIA/ PORT WING	SAXON HARBOR	SUPERIOR	TOTAL
1990	62.3 A,B,W	67.2	95.5	27.0	60.7
1991	85.8 W	36.1	94.9	25.8	66
1992	82.4 A,W	66.8	92.0	25.3	64
1993	80 A,W	49.8	97.4	40.6	64
1994	82.1 A,B,W	49.4	98.0	48.8	76
1995	65.2 W	72.1	94.3	46.9	67
1996	80.9 W	75.6	98.1	57.0	79
1997	46.0 W	44.4	96.9	56.3	68
1998	52.8 W	45.6	98.8	57.8	63
1999	72.8 W	57.9	96.3	49.4	70
2000	90.3 A,B,W	66.7	96.4	44.4	82.6
2001	88.3 W	68.8	99.3	NS	
2002	92.1 W	73.1	98.7	63.2	82.1
2003	91.8 W	80.1	99.2	60.3#	
2004	95.9 W	84.3	99.2	75.7	91.2
2005	98.4 A,W	NS	99.9	75.1	
2006	97.2 W	85.2	100.0	67.1	89.8
2007	98.4 A,B,W	NS	99.7	67.1	
2008	98.0 W	82.9	98.9	63.1	84.1
2009	98.6 B,W	NS	99.6	67.4	
2010	92.3 W	83.4	99.3	70.0	84.6
2011	97.2 A,W	NS	99.7	74.6	

A,B,W = ASHLAND, BAYFIELD, WASHBURN
A,W = ASHLAND, WASHBURN
B,W = BAYFIELD, WASHBURN
W = WASHBURN
NS = Corn/Port Wing not surveyed in 2005, 2007, 2009, 2011.
NS = Superior not surveyed in 2001.
2003 Superior % derived using 2002 numbers.

TABLE 9 - 2011 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	19	82	34	20.29	7	23.5	162.12	79.71	27	21.7	588.10	
SUPERIOR	273	1,601	274	26.98	74	24.0	1774.20	73.02	200	22.8	4561.71	
TOTAL	292	1,683	308	26.24	81	24.0	1936.32	73.76	227	22.7	5149.81	

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	
SUPERIOR	6,030	32,762	3,673	24.49	900	24.5	22038.18	75.51	2,773	22.7	62958.05	486
TOTAL	10,175	52,113	4,771	23.46	1,119	24.3	27198.78	76.54	3,652	22.5	82019.33	486
OPEN WTR-COOL												
CORN. - PORT W. *	103	398	0		0	0.0	0.00	0.00	0	0.0	0.00	0
SUPERIOR	3,069	6,997	0		0	0.0	0.00	100.00	0	0.0	0.00	0
TOTAL	3,172	7,395	0		0	0.0	0.00	0.00	0	0.0	0.00	
WI-1 TOTAL	13,639	61,191	5,079	23.63	1,200	24.3	29,135	76.37	3,879	22.5	87,169	486
WEIGHT (LBS)			17771.14			4.53	5435.73			3.18	12335.41	

WI-2												
ICE												
WSHBN/BYFD SHAL.	2,711	14,591	76	0.92	1	24.2	16.92	99.08	75	19.4	1460.84	13
WSHBN COOL	109	545	0		0		0.00	100.00	0		0.00	
APOS. ISL. BOBB.	1,993	12,653	1,374	1.25	17	20.9	358.96	98.75	1,357	21.9	29714.47	307
CORNY. SHAL.	0	0			0		0.00	100.00	0		0.00	
CORNY. COOL	0	0			0		0.00	100.00	0		0.00	
CORNY. BOBB.	0	0			0		0.00	100.00	0		0.00	
TOTAL	4,813	27,789	1,450	1.23	18	21.0	375.88	98.77	1,432	21.8	31175.30	320

CHARTER												
ASH.-BYF.-WSH.	786	4,324.5	1,183	2.69	32	22.6	719.19	97.31	1,151	22.8	26246.84	
CORN.-PRT WING	42	312	71	3.85	3	18.6	50.84	96.15	68	21.5	1467.73	
SAXON	161	1,077.5	303	0.39	1	21.8	25.76	99.61	302	22.7	6851.28	
TOTAL	989	5,714	1,557	2.30	36	22.3	795.80	97.70	1,521	22.7	34565.85	

OPEN WTR-COLD												
ASHLAND	2,804	13,769	1,247	3.09	39	21.9	843.86	96.91	1,208	23.3	28157.30	64
BAYFIELD *	3,084	16,074	933	2.36	22	21.9	482.21	97.64	911	23.3	21225.86	
CORNUCOPIA *	1,435	6,697	380	3.85	15	18.6	272.12	96.15	365	21.5	7855.46	
LITTLE SAND BAY *	2,910	15,905	1,542	2.36	36	21.9	796.97	97.64	1,506	23.3	35080.69	
RED CLIFF *	0	0	0		0		0.00	100.00	0		0.00	
SAXON	2,387	13,168	1,761	0.22	4	21.8	84.46	99.78	1,757	23.0	40413.89	339
WASHBURN	5,823	28,080	1,523	2.36	36	23.4	841.06	97.64	1,487	22.4	33310.08	115
TOTAL	18,443	93,693	7,386	2.05	151	21.9	3320.67	97.95	7,235	23.0	166043.27	518
OPEN WTR-COOL												
ASHLAND	7,136	33,222	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
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	1,257	5,865	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0
TOTAL	8,414	39,167	0	0.00	0	0.0	0.00	0.00	0	0.0	0.00	0

WI-2 TOTAL	32,659	166,363	10,393	1.97	205	21.9	4,492	98.03	10,188	22.8	231,784	838
WEIGHT (LBS)			38218.35			2.55	522.75			3.70	37695.59	
WI-1, WI-2 TOT.	46,298	227,554	15,472	9.08	1,405	23.9	33627	90.92	14,067	22.7	318954	1,324
WEIGHT (LBS)			57231.47			4.19	5886.71			3.65	51344.76	

* = NUMBERS DERIVED FROM PREVIOUS YEARS

TABLE 10

WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1992 - 2011.

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	1,280	298	338	28	3	10		44	12		30		3	3	3,838
1994	1,549	4,943	83	311	170		5		5							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
2011	1,523 (33.9%)	2,022 (45.1%)	74 (1.6%)	586 (13.1%)	117 (2.6%)	44 (1.0%)		2 (0.0%)		22 (0.5%)		5 (0.1%)	93 (2.1%)			4,488

TABLE 11

WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1988 - 2011.

PORT OF SUPERIOR

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE	COHO	CHINOOK	BROWN	RAINB.	ATLAN.	SPLAKE	BROOK	PNIK	FATS	HERR	BURBOT	WF	SMELT	MUSKY	NOP	WAE	YEP	TOTAL HARVEST
	TROUT	SALMON	SALMON	TROUT	TROUT	SAL.		TROUT	SAL.										
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	317	1,024	116	26					55							676		3,702
	(40.2%)	(8.6%)	(27.7%)	(3.1%)	(0.7%)					(1.5%)							(18.3%)		
1997	743	333	659	101	2					50							446		2,334
	(31.8%)	(14.3%)	(28.2%)	(4.3%)	(0.1%)					(2.1%)							(19.1%)		
1998	1,359	142	274	37	6		5			23							631		2,477
	(54.9%)	(5.7%)	(11.1%)	(1.5%)	(0.2%)		(0.2%)			(0.9%)							(25.5%)		
1999	1,554	570	381	114	21					58						10	341		3,049
	(51.0%)	(18.7%)	(12.5%)	(3.7%)	(0.7%)					(1.9%)						(0.3%)	(11.2%)		
2000	1,681	135	408	72	17					37						23	140		2,513
	(66.9%)	(5.4%)	(16.2%)	(2.9%)	(0.7%)					(1.5%)						(0.9%)	(5.6%)		
2001*	NO CREEL SURVEY CONDUCTED DURING 2001.																		
2002	2,388	716	522	56	16					71							1,858	16	5,643
	(42.3%)	(12.7%)	(9.3%)	(1.0%)	(0.3%)					(1.3%)							(32.9%)	(0.3%)	
2003	1,316	303	200	37						9						41	2,186		4,092
	(32.2%)	(7.4%)	(4.9%)	(0.9%)						(0.2%)						(1.0%)	(53.4%)		
2004	1,730	336	424	24						216							1,774		4,504
	(38.4%)	(7.5%)	(9.4%)	(0.5%)						(4.8%)							(39.4%)		
2005	3,073	478	405	34	9					35						41	698		4,773
	(64.4%)	(10.0%)	(8.5%)	(0.7%)	(0.2%)					(0.7%)						(0.9%)	(14.6%)		
2006	1,490	131	75	16	25					35						14	270		2,056
	(72.5%)	(6.4%)	(3.6%)	(0.8%)	(1.2%)					(1.7%)						(0.7%)	(13.1%)		
2007	2,220	1,348	310	72	23		3			29							576		4,581
	(48.5%)	(29.4%)	(6.8%)	(1.6%)	(0.5%)		(0.1%)			(0.6%)							(12.6%)		
2008	2,426	725	612	41	26					12						13	1,107		4,962
	(48.9%)	(14.6%)	(12.3%)	(0.8%)	(0.5%)					(0.2%)						(0.3%)	(22.3%)		
2009	3,094	430	348	106	17					30			5			3	906		4,939
	(62.6%)	(8.7%)	(7.0%)	(2.1%)	(0.3%)					(0.6%)			(0.1%)			(0.1%)	(18.3%)		
2010	3,262	1,914	524	12	58				4	59			3			5	505	4	6,350
	(51.4%)	(30.1%)	(8.3%)	(0.2%)	(0.9%)				(0.1%)	(0.9%)			(0.0%)			(0.1%)	(8.0%)	(0.1%)	
2011	3,673	1,827	322	121	29					89							142		6,203
	(59.2%)	(29.5%)	(5.2%)	(2.0%)	(0.5%)					(1.4%)							(2.3%)		

TABLE 12

WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1988 - 2011.

ASHLAND

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	RAINB. TROUT	ATLAN SALMON	SPLAKE	BROOK TROUT	FATS	WHITE FISH	HERR	NOP	SMB	WAE	YEP	TOTAL HARVEST
1988	604	1,400	245	152			153					68				2,622
A	(23.0%)	(53.4%)	(9.3%)	(5.8%)			(5.8%)					(2.6%)				
1989	1,223	566	164	156	4		74					17	9	4	47	2,264
B	(54.0%)	(25.0%)	(7.2%)	(6.9%)	(0.2%)		(3.3%)					(0.8%)	(0.4%)	(0.2%)	(2.1%)	
1990	889	206	37	69		6	12									1,219
A	(72.9%)	(16.9%)	(3.0%)	(5.7%)		(0.5%)	(1.0%)									
1992	844	159	104	454		15	7					27		35		1,645
B	(51.3%)	(9.7%)	(6.3%)	(27.6%)		(0.9%)	(0.4%)					(1.6%)		(2.1%)		
1993	656	19		26												701
A	(93.6%)	(2.7%)		(3.7%)												
1994	824	779	103	81	28		59		8	19		9				1,910
A	(43.1%)	(40.8%)	(5.4%)	(4.2%)	(1.5%)		(3.1%)		(0.4%)	(1.0%)		(0.5%)				
2000	1,843	334	56	112	12	4	22			10	3	21		15		2,432
B	(75.8%)	(13.7%)	(2.3%)	(4.6%)	(0.5%)	(0.2%)	(0.9%)			(0.4%)	(0.1%)	(0.9%)		(0.6%)		
2005	4,543	674	54	41	13		40					38		74		5,477
A	(82.9%)	(12.3%)	(1.0%)	(0.7%)	(0.2%)		(0.7%)					(0.7%)		(1.4%)		
2007	1,938	446	56	129			11							46		2,626
A	(73.8%)	(17.0%)	(2.1%)	(4.9%)			(0.4%)							(1.8%)		
2011	1,247	1,422		172					32			22				2,895
A	(43.1%)	(49.1%)		(5.9%)					(1.1%)			(0.8%)				

A- Kreher Park Boat Launch, Ashland Marina, Second Landing.

B- Kreher Park Boat Launch, Ashland Marina.

TABLE 13

**WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1989 - 2011.
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	294	64	15				109	6				2,264
1997	3,271	1,102	228	42	4	7		103		38			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
2011	1,761 (66.3%)	766 (28.8%)	27 (1.0%)	69 (2.6%)	2 (0.1%)	9 (0.3%)		16 (0.6%)		8 (0.3%)			2,658

TABLE 14

**LAKE TROUT HARVEST RATES (LAKE TROUT PER ANGLER HOUR)
JUNE - AUGUST BY AREA, 1990 - 2011. OPEN WATER COLD PRIVATE.**

YEAR	CORNUCOPIA/ PORT WING	SAXON HARBOR		
			SUPERIOR	WASHBURN
1990	0.04	0.20	0.08	0.08*
1991	0.08	0.12	0.06	0.09*
1992	0.10	0.10	0.06	0.08
1993	0.06	0.12	0.06	0.08
1994	0.06	0.15	0.04	0.06
1995	0.04	0.12	0.06	0.09
1996	0.08	0.12	0.04	0.12
1997	0.07	0.17	0.04	0.15
1998	0.13	0.28	0.05	0.14
1999	0.12	0.20	0.07	0.09
2000	0.14	0.17	0.10	0.12
2001	0.17	0.18	NO SURVEY	0.10
2002	0.10	0.14	0.07	0.08
2003	0.11	0.16	0.06	0.08
2004	0.12	0.24	0.06	0.12
2005	NO SURVEY	0.18	0.10	0.14
2006	0.09	0.15	0.08	0.08
2007	NO SURVEY	0.14	0.10	0.08
2008	0.11	0.13	0.08	0.10
2009	NO SURVEY	0.14	0.09	0.09
2010	0.07	0.13	0.09	0.09
2011	NO SURVEY	0.17	0.11	0.09

* WASHBURN AND BAYFIELD ROUTES COMBINED

**TABLE 15. ASHLAND OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-11.**

YEAR	ANGLER		TOTAL	FISH / HOUR	ANGLR.
	TRIPS	HOURS	FISH HARVEST		HRS / FISH
2000	2,422	11,348	640	0.06	17.73
2001					
2002					
2003					
2004					
2005	7,577	35,983	3,235	0.09	11.12
2006					
2007	6,303	29,008	2,390	0.08	12.14
2008					
2009					
2010					
2011	7,136	33,222	3,693	0.11	9.00
TOTAL	23,438	109,561	9,958		
AVE.	5,860	27,390	2,490	0.09	11.00

NOT SURVEYED 2001-2004,2006,2008-2010.

**TABLE 16. PORT OF SUPERIOR OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-11.**

YEAR	ANGLER		TOTAL	FISH / HOUR	ANGLR.
	TRIPS	HOURS	FISH HARVEST		HRS / FISH
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
2011	3,069	6,997	504	0.07	13.88
TOTAL	55,663	175,171	27,274		
AVE.	5,060	15,925	2,479	0.16	6.42

NOT SURVEYED IN 2001.

**TABLE 17. WASHBURN OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-11.**

YEAR	ANGLER		TOTAL	FISH / HOUR	ANGLR.
	TRIPS	HOURS	FISH HARVEST		HRS / FISH
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
2011	1,257	5,865	332	0.06	17.67
TOTAL	12,388	49,947	2,552		
AVE.	1,032	4,162	213	0.05	19.57

**TABLE 18. SAXON HARBOR OPEN WATER COOL PRIVATE.
ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-11.**

YEAR	ANGLER		TOTAL	FISH / HOUR	ANGLR.
	TRIPS	HOURS	FISH HARVEST		HRS / FISH
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		
2011	0	0	0		
TOTAL	63	676	162		
AVE.	5	56	14	0.24	4.17

TABLE 19

**ESTIMATED ANGLER EFFORT(ANGLER TRIPS AND ANGLER HOURS) BY AREA IN WISCONSIN WATERS
OF LAKE SUPERIOR ICE FISHERY. 1994-2011.**

ANGLER TRIPS																			AVERAGE
AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	1994-2011
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	2,711	2,870
WASHBURN COOL WATER						192	145	164	185	16	27	187	6	160	30	19	77	109	101
ASHL.+WSHB. SHAL. WTR	4,768																		4,768
ASHL.+WSHB. COOL WTR	1,040																		1,040
APOS. ISL. - BOBBING	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	1,993	3,283
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	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	4,813	

ANGLER HOURS																			AVERAGE
AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	1994-2011
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	14,591	14,602
WASHBURN COOL WATER						1,097	761	946	812	96	106	528	22	750	152	38	527	545	491
ASHL.+WSHB. SHAL. WTR	22,991																		22,991
ASHL.+WSHB. COOL WTR	4,602																		4,602
APOS. ISL. - BOBBING	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	12,653	18,848
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	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	27,789	

TABLE 20
WISCONSIN'S LAKE SUPERIOR. ICE SHALLOW WATER ESTIMATED EFFORT, HARVEST AND HARVEST RATES 1976-2011.
(INCLUDING CHEQUAMEGON BAY, WASHBURN, BAYFIELD)

YEAR	ANGL. TRIPS	ANGL. HOURS	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	RUFFE	other	TOTAL HRVST
			HRVST RATE FISH/HOUR						TROUT	FAT													
1976-A	2,114	10,649	0.07		63	46		410	106	51	7			22				7	5				717
1977-A	980	4,060	0.06			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	0.15		133	139		270	3,342	49	6			6									3,945
1983-A	8,433	42,558	0.14		441	641		1,647	2,986	42	23			5								51	5,836
1984-A	8,215	38,802	0.12		191	375		649	3,319	29	43											159	4,765
1985-A	8,568	41,506	0.17		84	53		1,307	5,272	37	254											53	7,060
1986-A	8,807	45,945	0.14		229	354		188	5,373	11	56												6,211
1987-A	8,792	46,556	0.13		223	701	39	815	3,949	70	34			27				90	6	84			6,038
1988-A	7,875	38,714	0.22		29	2,145		1,839	4,275						14			33	14				8,349
1989-A	10,328	47,884	0.13		143	303		2,738	2,262	115	26	24		58	15			87	24	366			6,161
1990-A	8,138	37,150	0.21		61	222		373	4,959			73		1,874				42	67	46			7,717
1991-BC	2,973	15,105	0.17			65	18	83	702			76		1,525				11		14			2,494
1992-BC	3,422	16,845	0.30			520		2,224	374			69	51	1,808		34							5,080
1993-A	7,682	41,021	0.15		168	114	15	1,951	2,067			265	22	1,150	31	124	51	25	19	107			6,109
1994-A	4,768	22,991	0.13		197	119	12	749	788		0	106	24	641		81	158	21	21	25			2,942
1995-B	4,651	25,049	0.46		93	176	13	644	874			85	23	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	0.59		108	240	23	135	598		5	103		299		54	5,321	14	17	320			7,237
1999-B	5,902	28,423	0.59		424	154		205	1,322		5	678	13	422		62	13,263	29	33	192			16,802
2000-B	4,924	24,184	0.29		333	174	15	231	628		6	6	1,271	48		83	3,687	75	29	292			7,006
2001-B	3,481	16,897	0.19		151	187	16	296	1,058			573	31	8	590		50	52	8	78	90		3,188
2002-BC	2,497	13,064	0.23		126	204	11	110	467			798	24	287		37	881			9			2,954
2003-BC	1,681	7,965	0.13		133		25	44	221		11	328	13	37		46	177						1,035
2004-BC	1,744	7,676	0.06		73	10		25	118			76		71		15				38			426
2005-BC	2,791	13,266	0.18		195	113		135	500	19	5	6	712	13		25	570			50			2,423
2006-BC	1,351	6,451	0.26		86	50	5	83	365	5		580	5	25		13	362			93			1,672
2007-A	5,972	32,753	0.43		90	4,777	12	449	876	8	11	1,313	27	213		91	4,974	9	94	1,038			13,982
2008-BC	2,957	17,248	0.11		82	442		373	396			352		46		6	152			27			1,876
2009-CD	1,524	8,180	0.11		173	66		61	158			308		76			59			10			911
2010-BC	2,395	12,591	0.13		61	39		107	214			585		7		6	489	5		96			1,609
2011-BC	2,711	14,591	0.19		76	357		651	530	19	6	628	20	161		4	90	13		255	5		2,815

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

other= WAL,NOP,YP

B = 1991, 1992, 1995, 1998-2006, 2008, 2010, 2011 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
ICE BOBBING EFFORT, HARVEST RATES AND LAKE TROUT HARVEST RATES BY AREA 1986-2011.

	APOSTLE ISLANDS							CORNUCOPIA / BARK BAY							TOTAL - ALL AREAS								
	ANGL.	ANGL.	TOTAL	FISH /	LAKE	LAKE	ANGLR.	ANGL.	ANGL.	TOTAL	FISH /	LAKE	LAKE	ANGLR.	ANGL.	ANGL.	TOTAL	FISH /	LAKE	LAKE	ANGLR.		
	TRPS	HRS	FISH	HRVST.	TROUT	TROUT /	HRS /			TRPS	HRS	FISH	FISH /	TROUT			TROUT /	HRS /	TRPS	HRS	FISH	FISH /	TROUT
1986	3,050	20,537	4,518	0.22	4,132	0.20	4.97	1986	2,691	16,812	3,836	0.23	3,595	0.21	4.68	1986	5,741	37,349	8,354	0.22	7,727	0.21	4.83
1987	1,935	12,380	1,187	0.10	1,122	0.09	11.03	1987	99	624	125	0.20	125	0.20	4.99	1987	2,034	13,004	1,312	0.10	1,247	0.10	10.43
1988	1,308	7,931	829	0.10	717	0.09	11.06	1988	685	4,085	438	0.11	438	0.11	9.33	1988	1,993	12,016	1,267	0.11	1,155	0.10	10.40
1989	1,221	7,628	751	0.10	733	0.10	10.41	1989	1,508	10,568	1,337	0.13	1,320	0.12	8.01	1989	2,729	18,196	2,088	0.11	2,053	0.11	8.86
1990	1,526	8,604	572	0.07	539	0.06	15.96	1990	1,462	8,724	1,129	0.13	1,129	0.13	7.73	1990	2,988	17,328	1,701	0.10	1,668	0.10	10.39
1991	947	5,403	775	0.14	762	0.14	7.09	1991	791	5,052	521	0.10	521	0.10	9.70	1991	1,738	10,455	1,296	0.12	1,283	0.12	8.15
1992	1,451	8,171	1,366	0.17	1,343	0.16	6.08	1992	63	337	73	0.22	70	0.21	4.81	1992	1,514	8,508	1,439	0.17	1,413	0.17	6.02
1993	1,904	10,382	2,003	0.19	1,766	0.17	5.88	1993								1993	1,904	10,382	2,003	0.19	1,766	0.17	5.88
1994	1,768	10,096	2,066	0.20	1,384	0.14	7.29	1994	1,070	6,113	1,384	0.23	1,198	0.20	5.10	1994	2,838	16,209	3,450	0.21	2,582	0.16	6.28
1995	1,412	9,741	1,670	0.17	1,224	0.13	7.96	1995	326	1,561	237	0.15	184	0.12	8.48	1995	1,738	11,302	1,907	0.17	1,408	0.12	8.03
1996	2,508	13,687	2,237	0.16	1,453	0.11	9.42	1996	1,172	6,881	105	0.02	884	0.13	7.78	1996	3,680	20,568	2,342	0.11	2,337	0.11	8.80
1997	3,576	21,126	4,956	0.23	3,280	0.16	6.44	1997	1,546	8,098	1,371	0.17	1,209	0.15	6.70	1997	5,122	29,215	6,327	0.22	4,489	0.15	6.51
1998	1,758	9,430	2,318	0.25	1,620	0.17	5.82	1998								1998	1,758	9,430	2,318	0.25	1,620	0.17	5.82
1999	5,074	27,949	6,952	0.25	4,065	0.15	6.88	1999								1999	5,074	27,949	6,952	0.25	4,065	0.15	6.88
2000	3,873	20,699	6,006	0.29	2,857	0.14	7.25	2000	212	1,183	255	0.22	251	0.21	4.71	2000	4,085	21,882	6,261	0.29	3,108	0.14	7.04
2001	5,525	30,753	7,714	0.25	5,074	0.16	6.06	2001	563	2,918	650	0.22	616	0.21	4.74	2001	6,008	33,671	8,364	0.25	5,690	0.17	5.92
2002	1,228	6,834	1,606	0.24	531	0.08	12.87	2002								2002	1,228	6,834	1,606	0.24	531	0.08	12.87
2003	5,313	30,924	4,893	0.16	2,824	0.09	10.95	2003	1,274	6,495	1,017	0.16	994	0.15	6.53	2003	6,587	37,419	5,910	0.16	3,918	0.10	9.55
2004	3,178	16,975	2,882	0.17	1,791	0.11	9.48	2004	586	3,086	516	0.17	485	0.16	6.36	2004	3,764	20,061	5,910	0.29	2,276	0.11	8.81
2005	6,008	32,365	7,480	0.23	4,533	0.14	7.14	2005	138	736	139	0.19	125	0.17	5.89	2005	6,146	33,101	7,619	0.23	4,658	0.14	7.11
2006	1,062	5,958	1,983	0.33	869	0.15	6.86	2006								2006	1,062	5,958	1,983	0.33	869	0.15	6.86
2007	3,480	19,287	6,472	0.34	2,740	0.14	7.04	2007	156	764	23	0.03	19	0.02	40.21	2007	3,636	20,051	6,495	0.32	2,759	0.14	7.27
2008	5,412	33,548	5,708	0.17	3,971	0.12	8.45	2008	354	2,163	414	0.19	414	0.19	5.22	2008	5,766	35,711	6,122	0.17	4,385	0.12	8.14
2009	4,192	26,595	3,397	0.13	2,133	0.08	12.47	2009	1,091	6,840	1,050	0.15	839	0.12	8.15	2009	5,283	33,435	4,447	0.13	2,972	0.09	11.25
2010	3,191	20,385	3,173	0.16	1,285	0.06	15.86	2010								2010	3,191	20,385	3,173	0.16	1,285	0.06	15.86
2011	1,993	12,653	2,424	0.19	1,374	0.11	9.21	2011								2011	1,993	12,653	2,424	0.19	1,374	0.11	9.21
TOTAL	73,893	430,041	85,938		54,122			TOTAL	15,787	93,040	14,620		14,416			TOTAL	89,600	523,072	103,070		68,638		
AVE.	2,842	16,540	3,305	0.20	2,082	0.13	7.95	AVE.	831	4,897	769	0.16	759	0.15	6.45	AVE.	3,446	20,118	3,964	0.20	2,640	0.13	7.62

TABLE 22

**WISCONSIN'S LAKE SUPERIOR ICE FISHERY DEEP WATER "BOBBING"
(APOSTLE ISLAND'S) ESTIMATED HARVEST 1990-2011.**

(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	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	24	22				207	20		11		43	7				1,350	
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%)						
2010	1,285	20		29	26		48	1,657		64		44					3,173	
	(40.5%)	(0.6%)		(0.9%)	(0.8%)		(1.5%)	(52.2%)		(2.0%)		(1.4%)						
2011	1,374	17		10	26		94	834	34	18		12	5				2,424	
	(56.7%)	(0.7%)		(0.4%)	(1.1%)		(3.9%)	(34.4%)	(1.4%)	(0.7%)		(0.5%)	(0.2%)					

TABLE 23

WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST RATES AND LAKE TROUT
 HARVEST RATES, 1973-2011.

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
2011	26	1,281	7,397	2,336	0.32	3.17	1,865	0.25	3.97
TOTAL		111,795	691,319	173,251			140,706		
AVE.	28	2,867	17,726	4,442	0.25	3.99	3,608	0.20	4.91

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

TABLE 28

WISCONSIN'S LAKE SUPERIOR CHARTER FISHERY HARVEST 1989 - 2011.

(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	228	194	32	6	5	1			47					10	3,883
1999	2,931	542	219	61	23	30	7			35					12	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
2011	1,865 (79.8%)	364 (15.6%)	28 (1.2%)	62 (2.7%)	5 (0.2%)	7 (0.3%)				1 (0.0%)	2 (0.1%)	2 (0.1%)				2,336

TABLE 29
REGISTERED STURGEON SPORT HARVEST IN CHEQUAMEGON BAY, 1983-2011.

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	--	--
2011	unknown	1	1	56.0	54.0

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

DAILY PRESSURE CHECK

DATE _____

CHECKPOINT _____

MINUTES AT CHECKPOINT _____

RESIDENT VEHICLES		NON. RESIDENT VEHICLES		HARBOR BOATS	
INITIAL PRESSURE =		INITIAL PRESSURE =		INITIAL PRESSURE =	
START FISHING(+)	STOP FISHING(-)	START FISHING(+)	STOP FISHING (-)	START FISHING (+)	STOP FISHING (-)
TOTAL START	TOTAL STOP	TOTAL START	TOTAL STOP	TOTAL START	TOTAL STOP
TOTAL START - TOTAL STOP		TOTAL START - TOTAL STOP		TOTAL START - TOTAL STOP	
TOTAL RESIDENT PRESSURE + TOTAL NONRESIDENT PRESSURE + TOTAL HARBOR PRESSURE					
TOTAL TIME INTERVAL PRESSURE =					

APPENDIX II. 2011 OPEN WATER CREEL ROUTES AND SHIFT TIMES.

ROUTE/ PORT	START DATES	SHIFT TIMES	NUMBER OF NON-OVERLAPPING SHIFTS	TYPE OF CREEL	COMMENTS
ONE ROUTE: ASHLAND (1/2 TIME) SECON LANDING, K REHER PARK, ASHLAND MARINA. ONE ROUTE: WASHBURN AND MARINA(1/2 TIME)	04/19/2011 04/18/2011	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)	04/02/2011	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)	05/18/2011	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 III. 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:					
			3 - MI						
ANGLERS IN PARTY _____			1 - RESIDENT	TIME START _____					
SUCCESSFUL ANGLERS _____			2 - NONRESIDENT						
			3 - RES. / NON RES.	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 IV. 2011 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	01/02/2011 03/26/2011	9:00am - 5:00pm	1 weekend 1 weekday	stratified 2 counts	2 weekend shifts 3 weekday shifts

APPENDIX V.

ICE CREEL PRESSURE SHEET

DATE ____ / ____ / ____
 Month Day Year

**DAY TYPE: 1 - WEEKDAY
 2 - WEEKEND**

TIME _____
 AIR TEMP. _____
 WINDS _____
 PRECIP. _____

SITE #	LOCATION	TIME	VEHICLES				COMMENTS
			RESIDENT		NON RESIDENT		
289	MASLOWSKI BEACH						
282	PIG IRON DOCK						
256	REIS COAL DOCK						
258	KREHER PARK + MARINA						
246	TREBAS						
245	PAMIDA PARK						
240	PAMIDA						
234	ANGLER'S ALL						
204	2nd LANDING						
305	"S" CURVE						
307	THOMPSON PARK						
311	WEST END						
315	WASHB. MARINA						
319	WAHSB. COAL DOCK						
321	MEM. 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	PAGENT GROUNDS						
390	RASPBERRY BAY						
470	ICE ROAD						
401	K'PUNKY BAY						
410	JACK STEWART						
420	KRON BEACH						
440	NE TIP MAD. ISL						
450	RUSSEL BAY						
471	O'BRIENS						
480	LaPOINTE PARK						
515	MARTENSON ROAD						
520	CORNUCOPIA						
530	ROMAN POINT						
540	BARK POINT						

APPENDIX VI. SPORT TROLLING LICENSE MONTHLY REPORT FORM (#9400-249).

The shaded areas must be filled out within 1/2 hour after completing each trip, after returning to dock or shore. The unshaded areas must be filled out prior to midnight of the day of each trip.

State of Wisconsin
Department of Natural Resources

Sport Trolling License Monthly Report
Form 9400-249 (R 7/04)
Page 1 of 2

Notice: Completion of this form is mandatory. Failure to complete and submit this form may result in a maximum forfeiture of \$100.00 plus assessments and costs pursuant to s. 29.514(2) Wis. Stats. Personally identifiable information on this form will be used to administer the sports trolling program and for research purposes. Wisconsin's Open Records Law s. 19.31-19.39, Wis. Stats., requires the Department to provide this information upon request.

Day	Grid Number (4 Digits)	Number of Anglers		Total Fish Harvested	AM, PM, EVE (Circle One)	Fishing Port							Month	Year	Number Lamprey Attached			
		Resident	Non Resident			Number of Lines	Hours Fished	Lake Trout	Coho Salmon	Brown Trout	Rainbow Trout	Chinook Salmon			Other Identify	Tag Numbers (6 Digits)	Chinook	Lakers
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										
						AM	PM	EVE										

I hereby certify that the above information is true and accurate. I have read and understand the reporting requirements on the reverse side.

Prepared By _____ Date Signed _____

DNR COPY

APPENDIX VII.

2011 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.

