

# WISCONSIN'S 2012 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 (Dec. 20, 2011 to March 18, 2012) and during the open water fishery (Ice out; March 24, 2012 to September 30, 2012).

These surveys were designed to estimate angler pressure and harvest, and also the biological characteristics of fish that were caught / harvested. Five fishery types were surveyed.

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

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 ensure the importance of accurate estimates of lake trout harvest, several predominately cool water ports, and the shore fishery, were dropped from the survey to allow more time at ports where lake trout are expected to be a significant portion of the catch. The data (angler pressure and harvest) in this report are considered minimum numbers due to these factors.

## METHODS

### OPEN WATER PRIVATE

In 2012, 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 – Bayfield (Public boat launch), Little Sand Bay (boat launch), Red Cliff (Casino 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 predetermined pressure access sites the creel clerk checked. The sites selected and the amount of time spent at any given location was based on estimates of pressure from previous 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 ports could not be surveyed (i.e. Ashland, Cornucopia / Port Wing, and the December open water fishery). Data (angler trips, angler hours and lake trout harvest) for Ashland were derived by taking the percent change that occurred at Washburn from 2011 to 2012 and applying it to the 2011 data for Ashland (i.e. the last time Ashland was surveyed). Estimates for Cornucopia / Port Wing were derived by using data from 2010 (i.e. the last time Cornucopia / Port Wing was 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.

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. individual 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, yellow 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 (e.g. downriggers or rods) was present. The jurisdiction in which the boat fished was also determined. Saxon Harbor and Superior are considered boundary waters, with Michigan and Minnesota respectively. 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, 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 from Ashland (i.e. Second landing-Long Bridge) through the northern most area of fishing activity (Bayfield / Red Cliff) (Figure 1). Two creel clerks worked two different routes:

One Route: Full Time. Ashland (Second Landing – Long Bridge).

One Route: Full Time. Washburn / Bayfield / Red Cliff ("S" curve / Bono's Creek through the northern most area of fishing, Schooner Bay). Due to budgetary constraints access locations on Madeline Island were not surveyed this year. Due to the variability of the ice conditions, the Western waters of Lake Superior and Saxon area were not surveyed.

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 such as northern pike, walleye, yellow perch. Ice "bobbing" is considered fishing in water deeper than 60 feet or more (mainly for lake trout and lake whitefish). The ice-fishery creel survey ended on March 18, 2012.

Estimates of ice fishing pressure and harvest rates were separated by month, weekend, and weekday, 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 tags were issued through the ALIS license system replacing the old metal tag system.

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The total number of lake trout harvested during the 2012 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 2009-2012. The regression equations are as follows:

$$\begin{aligned} & \text{NATIVE ORIGIN} \\ \text{Ln}(\text{weight grams}) &= -13.12504 + 3.22478(\text{Ln length mm}) \\ \text{Observation} &= 467 \end{aligned}$$

$$\begin{aligned} & \text{HATCHERY ORIGIN} \\ \text{Ln}(\text{weight grams}) &= -12.8865 + 3.1908 (\text{Ln length mm}) \\ \text{Observations} &= 20 \end{aligned}$$

$$\begin{aligned} & \text{NATIVE AND HATCHERY ORIGIN} \\ \text{Ln}(\text{weight grams}) &= -13.12764 + 3.22531 (\text{Ln length mm}) \\ \text{Observations} &= 487 \end{aligned}$$

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 2012, an estimated 29,144 individual angler trips and 146,437 angler hours were spent pursuing cold water species (trout and salmon) on Wisconsin waters of Lake Superior (Table 1). The effort from the six areas surveyed was estimated at 20,447 angler trips and 104,669 angler hours (Table 2). With the exception of Superior, WI effort was higher at all ports compared to the last time surveyed. The higher effort can be contributed to the earlier than normal ice out resulting in anglers fishing several weeks earlier than normal. Washburn recorded the highest effort (6,480 angler trips and 32,105 angler hours) of the six areas surveyed. Washburn's effort was the highest since 2002 (8,463 angler trips and 37,015 angler hours). Bayfield recorded the second highest effort with 3,850 angler trips and 20,659 angler hours. This was slightly more than 2009 (the last time Bayfield was surveyed) with 3,687 angler trips and 18,605 angler hours. 2012 was the first season where Bayfield's new expanded boat launch was open for the entire year. Saxon was third with 2,929 angler trips and 14,847 angler hours. This was slightly more than last year's effort (the lowest since 1992) of 2,387 angler trips and 13,168 angler hours. Superior's effort was fourth with 2,940 angler trips and 14,192 angler hours. This effort is less than half of the effort of previous years. This reduction in effort is likely due to the storms that occurred during mid-June which caused turbidity plumes and poor/unfishable conditions for a large portion of the season. Little Sand Bay was fifth with 2,337 angler trips and 11,493 angler hours. This was higher than 2007 (the last time Little Sand Bay was surveyed) with 1,766 angler trips and 10,463 angler hours. Red Cliff was last with 1,911 angler trips and 11,373 angler hours. Red Cliff's effort has increased steadily in recent years. In 2007 we estimated 759 angler trips and 4,622 angler hours and in 2009 we estimated 1,452 angler trips and 9,355 angler hours (Table 2). 2012 was the first season that the new Red Cliff Casino, with an improved boat launch was available to anglers.

**HARVEST-** An estimated 21,500 fish were harvested in the six areas surveyed (Table 3). Of the six areas surveyed Washburn had the highest overall harvest with 6,757 fish (Table 1). This was the highest since 2000 when Washburn harvested 7,046 fish (Table 4). Bayfield was second with 5,641 fish harvested (Table 1). This estimate of harvest out of Bayfield was higher than the last four times Bayfield was surveyed (2009: 1,851 fish, 2007: 4,357 fish, 2000: 3,258 fish and 1994: 2,660 fish) (Table 5). Saxon was third with 3,196 fish harvested (Table 1). This was the highest harvest out of Saxon since 2005 when 4,333 fish were harvested (Table 6). Little Sand Bay was fourth with 2,362 fish harvested (Table 1). This was higher than the last two times Little Sand Bay was surveyed (2007 2,001 fish and 1994 239 fish) (Table 7). Superior was fifth with 1,884 fish harvested (Table 1). This harvest is down considerably from the last two seasons (2011: 6,203 fish and 2010: 6,350 fish) and is all time low (Table 8). Red Cliff was last with 1,660 fish harvested similar to 2009 harvest of 1,639 fish (Table 9).

Lake trout was the number one species harvested in the six areas surveyed with 11,543 lake trout which accounts for 53.7% of the harvest (Table 3). Lake trout harvest was highest out of Bayfield with 3,062 lake trout, which is more than twice the harvest from 2009 (1,382 lake trout Table 10). Washburn was second with 2,675 lake trout, the highest out of Washburn since 2004 when 2,730 lake trout were harvested (Table 11). Saxon was third with 2,202 lake trout, the highest out of Saxon since 2006 when 2,407 lake trout were harvested (Table 12). Red Cliff was fourth with a harvest of 1,443 lake trout, similar to the 2009 (the last time Red Cliff was surveyed) lake trout harvest of 1,479 (Table 13). Little Sand Bay was fifth with a harvest of 1,326 lake trout, an increase compared to the over 2007 harvest of 1,005 lake trout (Table 14). Superior's lake trout harvest was last with 835. This was the lowest out of this area since 1997, when 743 lake trout were harvested (Table 15).

Harvest of native origin lake trout was highest out of Saxon with 99.4%, followed by Washburn/Bayfield (98.9%), and Superior (81.1%) (Table 16). In this fishery the average size lake trout was 21.8" (native origin average total length 24.1", hatchery origin average total length 21.7").

We separated the estimate of lake trout harvest (15,210) by management zone. 1,933 lake trout were harvested in WI-1 while 13,277 lake trout were harvested in WI-2 (Table 17).

Coho salmon was the second most abundant species harvested (in the six areas surveyed) in this fishery accounting for 31.0% of the harvest (6,673 Coho; Table 3). Washburn had the highest Coho harvest with 2,460 Coho (Table 1). This was up slightly from last year's harvest of 2,022 Coho and the second highest in the last 13 years (Table 11). Bayfield had the

second highest Coho harvest with 2,103 fish (Table 1). This is considerable higher than the last four times Bayfield was surveyed (Table 10). Saxon was third with a Coho harvest of 871 (Table 1). This was the highest Coho harvest out of Saxon since 1999 (1,653 Table 6). Superior was fourth with a Coho harvest of 540 (Table 1) which is considerably lower compared to the last two years (2010:1,914 and 2011: 1,827; Table 15). Little Sand bay was fifth with a Coho harvest of 557, which is up from the 2007 harvest of 341 (Table 14). Red Cliff was last with an estimate of only 142 Coho harvested. The average size Coho in this fishery was 16.7" (Table 1).

Brown trout ranked third with 1,654 fish harvested, which accounted for 7.7% of the harvest in this fishery (Table 3). Washburn had the highest harvest with 837 brown trout (Table 1). This was the highest harvest out of Washburn since 1992 (1,388) (Table 11). Of the 837 brown trout harvested out of Washburn, approximately 70.1 % (587) were hatchery stocked fish. Little Sand bay was second in brown trout harvest with 349 of which 43.0% (150) were hatchery stocked fish. Bayfield was third with a brown trout harvest of 336 of which 50.3% (169) were hatchery stocked fish. The average size brown trout in this fishery was 18.5" (native origin average total length 18.9"; hatchery origin average total length 18.2" (Table 1).

Chinook salmon ranked fourth with 597 fish harvested, accounting for 2.8% of the harvest in this fishery (Table 3). The Superior area accounted for 48.1% (287) of the Chinook salmon harvest in this fishery (Table 1). The average size Chinook in this fishery was 21.6" (Table 1).

**HARVEST RATES-** The highest harvest rate for all species was out of Bayfield (0.27 fish/hour), followed by Saxon (0.22 fish/hour), Little Sand Bay and Washburn (0.21 fish/hour), Red Cliff (0.15 fish/hour) and Superior (0.13 fish/hour). Bayfield's harvest rate was the highest it has been since the 1994, 2000, 2007, and 2009 survey. Saxon's overall harvest rate was the highest since 2004 (0.25 fish/hour). Little Sand Bay was higher from the previous two times surveyed. Washburn was the highest since 1999 (0.30 fish/hour). Red Cliff was down from the previous two times surveyed. Superior was the lowest since 2006 (0.13 fish/hour) (Tables 4-9).

Lake trout harvest rate was the highest out of Saxon and Bayfield with 0.15 LT/hour. This was the highest rate for Saxon since 2005 when Saxon recorded 0.17 LT/hour (Table 6). Bayfield LT harvest rate was the highest since 1994, 2000, 2007 and 2009 survey (Table 5). Red Cliff LT harvest rate was third with 0.13 LT/hour. This was down from the previous two times surveyed (2007 0.17 LT/hour and 2009 0.16 LT/hour) (Table 9). Little Sand Bay was fourth with 0.12 LT/hour, this was similar compared to the last two times surveyed (1994: 0.14 LT/hour and 2007: 0.10 LT/hour) (Table 7). Washburn was fifth with a LT harvest rate of 0.08 LT/hour. This was the highest since 2008 (0.08 LT/hour) (Table 4). Superior was last with a LT harvest rate of 0.06 LT/hour, the lowest since 2004 (0.06 LT/hour) (Table 8).

Lake trout harvest rates (LT/hour) during the months of June-August (the peak of the LT season) was highest out of Saxon (0.19 LT/hour) the highest rate since 2004 (0.24 LT/hour), followed by Washburn 0.13 LT/hour (the highest since 2005; 0.14 LT/hour). Superior was the lowest with 0.02 LT/hour, the lowest rate on record (Table 18).

## **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 ensure accuracy in the lake trout harvest, certain predominately cool water ports could not be surveyed. The cool water data in this report should be considered a minimum estimate due to these factors. The majority of this fishery in the Wisconsin waters of Lake Superior occurs in Chequamegon Bay (out of Ashland). Ashland was not surveyed in 2012; numbers for Ashland in this report are from 2011. Cornucopia / Port Wing was not surveyed in 2012, numbers for this area are from 2010 (the last time surveyed). The cool water effort surveyed out of Saxon occurred from anglers mostly fishing the Bad River; this effort was not included in this report.

**EFFORT-** Of the six areas surveyed in 2012, only Washburn and Superior recorded any cool water fishing activity (Table 1). Washburn had the highest effort with 1,251 angler trips and 5,330 angler hours. This was similar to 2011 effort (1,257 angler trips and 5,865 angler hours) (Table 19). Superior also recorded cool water effort with 2,307 angler trips and 4,677 angler hours. This is the lowest effort recorded in this area (Table 20).

**HARVEST AND HARVEST RATES-** An estimated 659 fish were harvested in the cool water fishery in the Washburn and Superior areas during 2012 (Table 1). Washburn had the highest harvest with 430 fish. This was the highest harvest out of Washburn since 2006 (538) (Table 19). Superior had a harvest of 229 fish, the lowest harvest since 2000 (112) (Table 20). Walleye was the number one species harvested with 276 fish. Superior accounted for 198 walleye and Washburn accounted for 78 walleye. The average size walleye harvested in this fishery was 20.3". Northern pike were the number two species harvested with 275 fish. Washburn had the highest NOP harvest with 272 fish. The average size Northern pike in this fishery was 28.9" (Table 1).

The overall harvest rate was highest out of Washburn with a rate of 0.08 fish/hour. This was the highest out of Washburn since 2006 (0.12 fish/hour) (Table 19). Superior had a harvest rate of 0.05 fish/hour, the lowest rate since 2000 (0.01 fish/hour) (Table 20).

## **ICE FISHERY**

The 2012 ice fishing season began approximately Dec. 16, 2011 in Ashland, in Washburn (coal dock) on Jan 16, 2012 and Bayfield area on Jan 21, 2012. Fishing out of Cornucopia, the Western end Lake Superior and Saxon had very limited to no ice fishing due to poor ice conditions. All fishing activity continued through mid- March. The ice fishery creel survey started on Dec. 20, 2011 and was conducted along the mainland shoreline from Ashland up to Red Cliff. The creel surveyed ended on March 18, 2012. The 2011-2012 winter was extremely mild resulting in no to poor ice conditions in the Apostle islands. 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 COOL WATER**

**ASHLAND-** An estimated effort of 4,168 angler trips and 18,725 angler hours resulted in an estimated harvest of 11,170 fish. Yellow perch (10,405) dominated the harvest accounting for 93.2% of the harvest. Smelt (330) was the second most harvested species followed by northern pike (120) (Table 1). The overall harvest rate in this fishery was 0.60 fish/hour.

**WASHBURN / BAYFIELD-** A limited cool water fishery exists off the Washburn / Bayfield areas. An estimated 46 angler trips and 185 angler hours, resulted in an estimated harvest of 16 fish (all yellow perch) (Table 1). The overall harvest rate in this fishery was 0.09 fish/hour.

The cool water fishery (Chequamegon Bay; Ashland, Washburn, Bayfield) in 2012 compared to 2007 (the last time the entire Bay was surveyed). Effort in 2012 (4,214 angler trips and 18,910 angler hours) was higher than in 2007 when there was 2,394 angler trips and 11,290 angler hours (Table 23). There was more fish harvested in 2012 (11,186) compared to 2007 (8,625) but the harvest rate was lower in 2012 (0.592 fish/hour) compared to 2007 (0.764 fish/hour) (Table 23).

## **ICE SHALLOW WATER**

**ASHLAND-** The ice fishing survey began on Dec 20, 2011 and ended approximately March 18, 2012. An estimated 2,471 angler trips and 13,452 angler hours resulted in an estimated harvest of 4,653 fish (Table 1). This is down from 2007 (the last time surveyed) when the effort was 3,118 angler trips and 17,487 angler hours and the estimated harvest was 8,850 fish (Table 21). Smelt was the number one species harvested with 1,863 fish accounting for 40.0% of the harvest in this fishery. Coho salmon ranked second in harvest with 1,179 fish for 25.3% of the harvest. Yellow perch was third in harvest with 993 fish for 21.3% of the harvest (Table 1).

**WASHBURN / BAYFIELD-** An estimated 1,950 angler trips and 10,312 angler hours resulted in an estimated harvest of 2,929 fish. Smelt (730) was the number one species harvested. Brown trout (621) was second, Coho salmon (595) third, yellow perch (352) fourth and lake whitefish (262) fifth (Table 1). The overall harvest rate in this fishery was 0.28 fish/hour.

The effort in 2012 was down compared to the last two years (2010: 2,395 angler trips 12,591 angler hours; 2011 2,711 angler trips 14,591 angler hours Table 21).

The shallow water ice fishery (Cheq. Bay; Ashland, Washburn, Bayfield) in 2012 compared to 2007 (the last time the entire Bay was surveyed). Effort in 2012 (4,421 angler trips and 23,764 angler hours) was lower than in 2007 (5,972 angler trips and 32,753 angler hours). Harvest and harvest rates were also lower in 2012 than in 2007. In 2012 the harvest was 7,582 fish compared to 13,982 fish in 2007. The harvest rate dropped from 0.43 fish/hour in 2007 to 0.32 fish/hour in 2012 (Table 22).

## **ICE DEEP WATER BOBBING**

Overall, ice conditions/cover for "bobbing" over deep water were terrible. An extremely mild winter with the lack of extensive cold weather created virtually no ice amongst the islands. Anglers had very limited "bobbing" water. The majority of the "bobbing" occurred near the Long Island / South Channel area, off Bayfield and the South end of Basswood Island. There were a few days where anglers ventured out North of Basswood Island but those days were limited.

**ASHLAND-** A few anglers fish off the deeper water areas near Long Island and the South Channel. An estimated 68 angler trips and 340 angler hours resulted in an estimated harvest of 124 fish (76 whitefish, 30 Coho, 18 herring) (Table 1).

**APOSTLE ISLANDS-** An estimated 377 angler trips and 2,368 angler hours resulted in a harvest of 1,010 fish (Table 1). Effort during the 2012 season was the lowest on record and below the average effort since 1994 of 3,130 angler trips and 17,980 angler hours (Table 21). Lake Whitefish were the number one species harvested with 559 fish. Lake herring (152) were second, Coho (132) third, smelt (72) fourth and lake trout (49) fifth (Table 24). The overall harvest rate for this fishery was 0.43 fish/hour. The highest rate on record (back to 1986). The lake trout harvest rate was 0.02 LT/hour the lowest on record (back to 1986) (Table 25).

## **CHARTER FISHERY**

**EFFORT-** Twenty eight (28) licensed charter captains operated on the Wisconsin waters of Lake Superior during the 2012 open water season. This is the second highest number of charter captains since 2000. The total number of anglers (1,285) and angler hours (7,351) were similar to last year's record lows (anglers 1,281 and angler hours 2,336) (Table 26). Ashland / Bayfield / Washburn / Red Cliff had the highest effort with 767 anglers and 4,020.5 angler hours, similar to last year's effort of 786 anglers and 4,324.5 angler hours (Table 27). Saxon had the second highest effort with 258 anglers and 1,594 angler hours, similar to 3 of the last 4 years of effort (Table 28). Cornucopia / Port Wing were third in effort with 130 anglers and 901 angler hours, the highest effort since 2006 (231 anglers and 1,222 angler hours) (Table 29). Superior was last in effort with 130 anglers and 835 angler hours, the lowest effort since 2001 (36 anglers and 181 angler hours) (Table 30).

**HARVEST RATES-** The overall harvest rate for the Charter fishery was 0.38 fish/hour and the lake trout harvest rate was 0.30 LT/hour. Both rates were record highs since reporting began in 1973 (Table 26). Cornucopia / Port Wing had the highest harvest rate with 0.43 fish/hour and was tied for second with a LT harvest rate of 0.30 LT/hour. Both rates out of Cornucopia / Port Wing were the highest since 2008 (0.47 fish/hour and 0.37 LT/hour) (Table 29). Ashland / Bayfield / Washburn / Red Cliff had the second highest harvest rate with 0.42 fish/hour and the highest LT harvest rate with 0.34 LT/hour. Both rates were record highs out of this area (Table 27). Saxon had the third highest harvest rate with 0.32 fish/hour and the second highest LT harvest rate with 0.30 LT/hour. Both rates were the highest since 2004 (0.32 fish/hour and 0.30 LT/hour) (Table 28). Superior had the lowest overall harvest rate with 0.24 fish/hour, yet this is higher than the previous two seasons (2010 0.20 fish/hour and 2011 0.23 fish/hour). Superior's LT harvest rate was the also the lowest with 0.13 LT/hour, the lowest rate since 1997(0.11 LT/hour) (Table 30).

**HARVEST-** The overall harvest in the Charter fishery was 2,813 fish. This is the highest since 2005 when 4,446 fish were harvested. The lake trout harvest of 2,229 fish was the highest since 2009 when 2,393 lake trout were harvested (Table 26). Lake trout remain the number one species harvested and comprise 79.2% of the overall harvest. Coho salmon were a distant second with 408 fish for 14.5% of the harvest. Chinook salmon harvest was third with 85 fish for 3.0% of the harvest (Table 31). Lake trout harvest was highest out of Ashland / Bayfield / Washburn / Red Cliff with 1,371 lake trout, the highest since 2006 (1,444). Saxon was second in lake trout harvest with 480 lake trout, the highest LT harvest since 1994 (487). Cornucopia / Port Wing were third in lake trout harvest with 269, the highest since 2005 (470). Superior was last in lake trout harvest with 109, the lowest since 2001 (43) (Table 27-30).

## **LAKE STURGEON FISHERY**

Very few anglers actually target sturgeon in Wisconsin waters of Lake Superior. However, over the past few years increasing numbers of anglers are targeting sturgeon, especially during the early part of the open water season. The bulk of the harvest is incidental and occurs in Chequamegon Bay when angler pressure is at its height (ice fishery and during the early part of the open water season). Harvest information is obtained from mandatory registration of angler harvested sturgeon. In 2012, four lake sturgeon were registered. These fish had an average total length of 55.25" and an average weight 37.0 pounds. Effort was unknown. The four lake sturgeon were registered during 2012. This was the highest reported harvest since 2004 when four sturgeon were also registered (Table 32).

## **ACKNOWLEDGEMENTS**

I would like to thank the creel clerks. They work hard at obtaining accurate data for the survey, and they also play an important role by having positive interactions with the public. Their efforts are greatly appreciated. The creel clerks involved for this report were: Mark Hanson (Open Water: Bayfield, Little Sand Bay, Red Cliff, Washburn; Winter Creel), Dean Kolpin (Saxon Harbor) and Sean Cummings / Adam Slaminski (Superior). I would also like to thank Jared Myers for reviewing and editing this report.

**TABLE 1. 2012 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	BROOK TROUT	FAT	WF	MEN. WF	HERR	BUR BOT	SMELT	NOP	WAE	YEP	BLK. CRP	SMB	GOBY	RUFFE	CHL CAT	TOTAL HRVST
ASHLAND SHAL.	2,471	13,452		1,179	6	154		12			86		182	137	1,863	28	9	993	4					4,653
ASHLAND COOL	4,168	18,725		60		46	11				5		52	7	330	120	98	10,405			19	17		11,170
ASHLAND-BOBB.	68	340		30							76		18											124
WSHB/BYF SHAL	1,950	10,312	56	595	8	621	159	3			262	28	61	40	730	11	3	352						2,929
WSHB/BYF COOL	46	185																16						16
BOBBING A POS. ISL	377	2,368	49	132		18	7	4		2	559		152	11	72							4		1,010
<b>TOTAL</b>	<b>9,080</b>	<b>45,382</b>	<b>105</b>	<b>1,996</b>	<b>14</b>	<b>839</b>	<b>177</b>	<b>19</b>	<b>0</b>	<b>2</b>	<b>988</b>	<b>28</b>	<b>465</b>	<b>195</b>	<b>2,995</b>	<b>159</b>	<b>110</b>	<b>11,766</b>	<b>4</b>	<b>0</b>	<b>19</b>	<b>21</b>	<b>0</b>	<b>19,902</b>
AVE. LENGTH(INCH)			21.1	14.7	16.1	18.0	19.5	21.5		17.8	18.4	14.3	16.9	20.8	7.1	27.9	20.4	8.5						6.9

CHARTER																									
ASH.BAYF.WASH	767	4,020.5	1,371	280	11	27	3	8										1	7						1,708
CORN. - PORT W.	130	901	269	55	35	25		5																	389
SAXON	258	1,594	480	26	4	1		5			1														517
SUPERIOR	130	835	109	47	35	6		2																	199
<b>TOTAL</b>	<b>1,285</b>	<b>7,350.5</b>	<b>2,229</b>	<b>408</b>	<b>85</b>	<b>59</b>	<b>3</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>2,813</b>						

OPEN WATER COLD *NUMBERS DERIVED FROM PREVIOUS YEARS* (ASHLAND, CORN.-PORT WING, EFFORT AND LAKE TROUT HARVEST ONLY)																									
*ASHLAND*	3,117	15,720	2,189																						2,189
BAYFIELD	3,850	20,659	3,062	2,103	16	336	120	2			2														5,641
*CORN.-PORT W.*	5,580	26,048	1,478																						1,478
L. SAND BAY	2,337	11,493	1,326	557	87	349	12	20			11														2,362
RED CLIFF	1,911	11,373	1,443	142	27	14					34														1,660
SAXON	2,929	14,847	2,202	871	14	76					3							17							3,196
SUPERIOR	2,940	14,192	835	540	287	42		12	3	36													129		1,884
WASHBURN	6,480	32,105	2,675	2,460	166	837	54	64	7	23	374							76	15						6,757
<b>TOTAL</b>	<b>29,144</b>	<b>146,437</b>	<b>15,210</b>	<b>6,673</b>	<b>597</b>	<b>1,654</b>	<b>186</b>	<b>98</b>	<b>10</b>	<b>107</b>	<b>376</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>144</b>	<b>0</b>	<b>25,167</b>						
AVE. LENGTH(INCH)			21.8	16.7	21.6	18.5	18.6	23.7	22.0	23.0	19.6		17.9					29.4	20.2						

OPEN WATER COOL *NUMBERS DERIVED FROM PREVIOUS YEARS* (ASHLAND, CORN.-PORT WING, EFFORT AND LAKE TROUT HARVEST ONLY)																									
*ASHLAND*	7,136	33,222																							0
*CORN.-PORT W.*	124	478																							0
SUPERIOR	2,307	4,677																3	198	6	12	8		2	229
WASHBURN	1,251	5,330																272	78	80					430
<b>TOTAL</b>	<b>10,818</b>	<b>43,707</b>	<b>0</b>	<b>275</b>	<b>276</b>	<b>86</b>	<b>12</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>659</b>														
AVE. LENGTH(INCH)																		28.9	20.3	8.5	10.7	17.3		23.0	

<b>WI - 1 TOTALS</b>	9,640	39,534	2,074	594	323	48	0	15	3	36	0	0	0	0	0	3	327	6	4	0	0	0	0	0	3,433
<b>WI - 2 TOTALS</b>	40,687	203,342.5	15,470	8,483	373	2,504	366	122	7	73	1,365	28	484	195	2,995	525	210	11,846	12	8	19	21	2	45,108	
<b>GRAND TOTAL</b>	<b>50,327</b>	<b>242,876.5</b>	<b>17,544</b>	<b>9,077</b>	<b>696</b>	<b>2,552</b>	<b>366</b>	<b>137</b>	<b>10</b>	<b>109</b>	<b>1,365</b>	<b>28</b>	<b>484</b>	<b>195</b>	<b>2,995</b>	<b>528</b>	<b>537</b>	<b>11,852</b>	<b>16</b>	<b>8</b>	<b>19</b>	<b>21</b>	<b>2</b>	<b>48,541</b>	

<b>AVE. LENGTH (IN)</b>			21.8	16.4	21.6	18.4	19.1	23.4	22.0	22.9	18.7	14.3	17.0	20.8	7.1	28.7	20.3	8.5	10.7	17.3	--	6.9	23.0	
<b>AVE. WEIGHT (LBS)</b>			3.09	1.54	3.52	2.26	2.50	4.94	--	3.91	2.00	0.83	1.33	2.55	0.068	5.20	2.89	0.29	--	--	--	--	--	--
<b>TOTAL WEIGHT</b>			54,211	13,979	2,450	5,768	915	677	--	426	2,730	23	644	497	205	2,746	1,562	3,437	--	--	--	--	--	
<b>SAMPLE SIZE</b>			962	903	97	362	44	16	2	20	239	4	78	12	96	68	91	1136	2	2	--	1	1	

STURGEON: 4 FISH REGISTRATED. EFFORT UNKNOWN.

**TABLE 2**  
**ESTIMATED ANGLER EFFORT(ANGLER TRIPS AND ANGLER HOURS) BY AREA IN WISCONSIN WATERS**  
**OF LAKE SUPERIOR OPEN WATER COLD PRIVATE 1994-2012.**

ANGLER TRIPS AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	AVER- AGE 94-12
ASHLAND	2,941						2,193					4,233		2,869				2,804		3,008
BAYFIELD	3,815						4,818							4,762		3,687			3,850	4,186
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					2,337	1,473
RED CLIFF														759		1,452			1,911	1,374
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	2,929	3,667
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	2,940	5,690
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	6,480	6,594
<b>TOTAL</b>	<b>33,746</b>	<b>25,074</b>	<b>19,660</b>	<b>18,369</b>	<b>22,899</b>	<b>27,041</b>	<b>28,227</b>	<b>18,078</b>	<b>25,108</b>	<b>20,775</b>	<b>23,650</b>	<b>21,076</b>	<b>17,412</b>	<b>22,680</b>	<b>18,046</b>	<b>20,004</b>	<b>22,611</b>	<b>17,044</b>	<b>20,447</b>	

ANGLER HOURS AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	AVER- AGE 94-12
ASHLAND	16,186						11,943					20,556		15,120				13,769		15,515
BAYFIELD	21,528						24,895							27,124		18,605			20,659	22,562
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					11,493	7,767
RED CLIFF														4,622		9,355			11,373	8,450
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	14,847	18,010
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	14,192	28,936
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	32,105	31,394
<b>TOTAL</b>	<b>170,213</b>	<b>121,859</b>	<b>98,321</b>	<b>87,535</b>	<b>100,088</b>	<b>127,007</b>	<b>138,613</b>	<b>85,783</b>	<b>115,276</b>	<b>97,251</b>	<b>113,575</b>	<b>100,159</b>	<b>80,726</b>	<b>120,498</b>	<b>87,849</b>	<b>99,739</b>	<b>113,086</b>	<b>87,779</b>	<b>104,669</b>	

**TABLE 3**

**WISCONSIN'S LAKE SUPERIOR. OPEN WATER COLD PRIVATE ESTIMATED HARVEST 2000 - 2012.**

(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
<b>2000E</b>	14,001	3,596	1,219	1,227	374	101	18	18	150	25	12					138		220		<b>21,099</b>
<b>2001F</b>	9,339	2,230	552	732	158	127			59	9						71		53		<b>13,330</b>
<b>2002</b>	9,954	3,223	1,492	441	87	75			371	12	5	21				63		2,271	102	<b>18,117</b>
<b>D</b>	(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%)	
<b>2003</b>	8,647	1,242	1,012	336	66	51			163	85	34					68		2,474		<b>14,178</b>
<b>D</b>	(61.0%)	(8.8%)	(7.1%)	(2.4%)	(0.5%)	(0.4%)			(1.1%)	(0.6%)	(0.2%)					(0.5%)		(17.4%)		
<b>2004</b>	12,797	2,793	1,231	453	72	132		12	669							26		1,804		<b>19,989</b>
<b>D</b>	(64.0%)	(14.0%)	(6.2%)	(2.3%)	(0.4%)	(0.7%)		(0.1%)	(3.3%)							(0.1%)		(9.0%)		
<b>2005</b>	13,877	2,551	716	271	132	56			61		16					86		793		<b>18,559</b>
<b>G</b>	(74.8%)	(13.7%)	(3.9%)	(1.5%)	(0.7%)	(0.3%)			(0.3%)		(0.1%)					(0.5%)		(4.3%)		
<b>2006</b>	7,204	1,751	368	480	99	97			409	22				33		33		403		<b>10,899</b>
<b>D</b>	(66.1%)	(16.1%)	(3.4%)	(4.4%)	(0.9%)	(0.9%)			(3.8%)	(0.2%)				(0.3%)		(0.3%)		(3.7%)		
<b>2007</b>	11,428	5,595	952	1,634	79	80		20	72		7					18		638		<b>20,523</b>
<b>H</b>	(55.7%)	(27.3%)	(4.6%)	(8.0%)	(0.4%)	(0.4%)		(0.1%)	(0.4%)		(0.0%)					(0.1%)		(3.1%)		
<b>2008</b>	7,948	2,777	925	746	85	56			215		15					34		1,174		<b>13,975</b>
<b>D</b>	(56.9%)	(19.9%)	(6.6%)	(5.3%)	(0.6%)	(0.4%)			(1.5%)		(0.1%)					(0.2%)		(8.4%)		
<b>2009</b>	9,128	1,738	463	728	86	36		16	143	5						13		912		<b>13,268</b>
<b>I</b>	(68.8%)	(13.1%)	(3.5%)	(5.5%)	(0.6%)	(0.3%)		(0.1%)	(1.1%)	(0.0%)						(0.1%)		(6.9%)		
<b>2010</b>	8,335	8,556	916	591	89	116			240	3	15			34		51		518	4	<b>19,468</b>
<b>D</b>	(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%)	
<b>2011</b>	8,204	6,037	423	948	119	82		2	137	22	13					115		142		<b>16,244</b>
<b>G</b>	(50.5%)	(37.2%)	(2.6%)	(5.8%)	(0.7%)	(0.5%)		(0.0%)	(0.8%)	(0.1%)	(0.1%)					(0.7%)		(0.9%)		
<b>2012</b>	11,543	6,673	597	1,654	186	98		10	107	376	19					93		144		<b>21,500</b>
<b>J</b>	(53.7%)	(31.0%)	(2.8%)	(7.7%)	(0.9%)	(0.5%)		(0.0%)	(0.5%)	(1.7%)	(0.1%)					(0.4%)		(0.7%)		

- 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.
- J-BAYFIELD, LITTLE SAND BAY, RED CLIFF, SAXON, SUPERIOR, WASHBURN

**TABLE 4. WASHBURN OPEN WATER COLD PRIVATE EFFORT, HARVEST RATES, LAKE TROUT HARVEST RATES. 1992-2012.**

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL		ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
			FISH HARVEST	FISH / HOUR				
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
2012	6,480	32,105	6,757	0.21	4.75	2,675	0.08	12.00
<b>TOTAL</b>	<b>141,385</b>	<b>680,807</b>	<b>102,869</b>			<b>47,299</b>		
<b>AVE</b>	<b>6,733</b>	<b>32,419</b>	<b>4,899</b>	<b>0.15</b>	<b>6.62</b>	<b>2,252</b>	<b>0.07</b>	<b>14.39</b>

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

**TABLE 8. PORT OF SUPERIOR OPEN WATER COLD PRIVATE EFFORT, HARVEST RATES, LAKE TROUT HARVEST RATES. 1988-2012.**

YEAR	ANGLER TRIPS	ANGLER HOURS	TOTAL		ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
			FISH HARVEST	FISH / HOUR				
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	2,056	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
2011	6,030	32,762	6,203	0.19	5.28	3,673	0.11	8.92
2012	2,940	14,192	1,884	0.13	7.53	835	0.06	17.00
<b>TOTAL</b>	<b>157,390</b>	<b>836,006</b>	<b>120,428</b>			<b>58,221</b>		
<b>AVE</b>	<b>6,558</b>	<b>34,834</b>	<b>5,018</b>	<b>0.14</b>	<b>6.94</b>	<b>2,426</b>	<b>0.07</b>	<b>14.36</b>

\* NOT SURVEYED DURING 2001.

**TABLE 5. BAYFIELD OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 1994, 2000, 2007, 2012.**

YEAR	ANGLER	ANGLER	TOTAL	FISH / HOUR	ANGLR.	# OF	LAKE	ANGLR.
	TRIPS	HOURS	FISH HARVEST		HRS / FISH	LAKE TROUT	TROUT / HOUR	HRS / LKT
1994	3,815	21,528	2,660	0.12	8.09	1,391	0.06	15.48
2000	4,818	24,895	3,204	0.13	7.77	2,341	0.09	10.63
2007	4,762	27,124	4,357	0.16	6.23	2,382	0.09	11.39
2009	3,687	18,605	1,851	0.10	10.05	1,382	0.07	13.46
2012	3,850	20,659	5,641	0.27	3.66	3,062	0.15	6.75
<b>TOTAL</b>	<b>20,932</b>	<b>112,811</b>	<b>17,713</b>			<b>10,558</b>		
<b>AVE</b>	<b>4,186</b>	<b>22,562</b>	<b>3,543</b>	<b>0.16</b>	<b>6.37</b>	<b>2,112</b>	<b>0.09</b>	<b>10.68</b>

**TABLE 6. SAXON HARBOR OPEN WATER COLD PRIVATE. EFFORT, HARVEST RATES, LAKE TROUT HARVEST RATES. 1990-2012.**

YEAR	ANGLER	ANGLER	TOTAL	FISH / HOUR	ANGLR.	# OF	LAKE	ANGLR.
	TRIPS	HOURS	FISH HARVEST		HRS / FISH	LAKE TROUT	TROUT / HOUR	HRS / LKT
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	18,436	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
2011	2,387	13,168	2,658	0.20	4.95	1,761	0.13	7.48
2012	2,929	14,847	3,196	0.22	4.65	2,202	0.15	6.74
<b>TOTAL</b>	<b>82,080</b>	<b>405,315</b>	<b>72,857</b>			<b>54,946</b>		
<b>AVE</b>	<b>3,569</b>	<b>17,622</b>	<b>3,168</b>	<b>0.18</b>	<b>5.56</b>	<b>2,389</b>	<b>0.14</b>	<b>7.38</b>

**TABLE 7. LITTLE SAND BAY OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 1994, 2000, 2007, 2012.**

YEAR	ANGLER	ANGLER	TOTAL	FISH / HOUR	ANGLR.	# OF	LAKE	ANGLR.
	TRIPS	HOURS	FISH HARVEST		HRS / FISH	LAKE TROUT	TROUT / HOUR	HRS / LKT
1994	317	1,345	239	0.18	5.63	191	0.14	7.04
2007	1,766	10,463	2,001	0.19	5.23	1,055	0.10	9.92
2012	2,337	11,493	2,362	0.21	4.87	1,326	0.12	8.67
<b>TOTAL</b>	<b>4,420</b>	<b>23,301</b>	<b>4,602</b>			<b>2,572</b>		
<b>AVE</b>	<b>1,473</b>	<b>7,767</b>	<b>1,534</b>	<b>0.20</b>	<b>5.06</b>	<b>857</b>	<b>0.11</b>	<b>9.06</b>

**TABLE 9. RED CLIFF. OPEN WATER COLD PRIVATE. ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2007, 2009, 2012.**

YEAR	ANGLER	ANGLER	TOTAL	FISH / HOUR	ANGLR.	# OF	LAKE	ANGLR.
	TRIPS	HOURS	FISH HARVEST		HRS / FISH	LAKE TROUT	TROUT / HOUR	HRS / LKT
2007	759	4,622	875	0.19	5.28	788	0.17	5.87
2009	1,452	9,355	1,639	0.18	5.71	1,479	0.16	6.33
2012	1,911	11,373	1,660	0.15	6.85	1,443	0.13	7.88
<b>TOTAL</b>	<b>4,122</b>	<b>25,350</b>	<b>4,174</b>			<b>3,710</b>		
<b>AVE</b>	<b>1,374</b>	<b>8,450</b>	<b>1,391</b>	<b>0.16</b>	<b>6.07</b>	<b>1,237</b>	<b>0.15</b>	<b>6.83</b>

TABLE 10

## WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1994, 2000, 2007, 2009, 2012.

## BAYFIELD

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE	COHO	CHINOOK	BROWN	SPLAKE	RAINB.	ATLAN.	BROOK	FATS	WHITE	MULE	HERR	NOP	WAE	YEP	TOTAL
	TROUT	SALMON	SALMON	TROUT		TROUT	SALMON	TROUT		FISH						
1994	1,391 (52.3%)	1,045 (39.3%)		138 (5.2%)	49 (1.8%)	6 (0.2%)								31 (1.2%)		2,660
2000	2,341 (73.1%)	305 (9.5%)	96 (3.0%)	280 (8.7%)	142 (4.4%)	10 (0.3%)		3 (0.1%)	15 (0.5%)				6 (0.2%)	6 (0.2%)		3,204
2007	2,382 (54.7%)	1,163 (26.7%)	185 (4.2%)	566 (13.0%)	41 (0.9%)			20 (0.5%)								4,357
2009	1,382 (74.7%)	104 (5.6%)		278 (15.0%)	39 (2.1%)	16 (0.9%)		16 (0.9%)	16 (0.9%)							1,851
2012	3,062 (54.3%)	2,103 (37.3%)	16 (0.3%)	336 (6.0%)	120 (2.1%)	2 (0.0%)				2 (0.0%)						5,641

TABLE 13

## WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 2007, 2009, 2012.

## RED CLIFF

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE	COHO	CHINOOK	BROWN	SPLAKE	RAINB.	ATLAN.	BROOK	FATS	WHITE	MULE	HERR	NOP	WAE	YEP	TOTAL
	TROUT	SALMON	SALMON	TROUT		TROUT	SALMON	TROUT		FISH						
2007	788 (90.1%)	87 (9.9%)														875
2009	1,479 (90.2%)	23 (1.4%)		109 (6.7%)	10 (0.6%)				18 (1.1%)							1,639
2012	1,443 (86.9%)	142 (8.6%)	27 (1.6%)	14 (0.8%)					34 (2.0%)							1,660

TABLE 14

## WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1994, 2007, 2012.

## LITTLE SAND BAY

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE	COHO	CHINOOK	BROWN	SPLAKE	RAINB.	ATLAN.	BROOK	FATS	WHITE	MULE	HERR	NOP	WAE	YEP	TOTAL
	TROUT	SALMON	SALMON	TROUT		TROUT	SALMON	TROUT		FISH						
1994	191 (79.9%)	7 (2.9%)	3 (1.3%)	29 (12.1%)					2 (0.8%)					7 (2.9%)		239
2007	1,055 (52.7%)	341 (17.0%)	130 (6.5%)	404 (20.2%)	5 (0.2%)	23 (1.1%)			43 (2.1%)							2,001
2012	1,326 (56.1%)	557 (23.6%)	87 (3.7%)	349 (14.8%)	12 (0.5%)	20 (0.8%)			11 (0.5%)							2,362

**TABLE 11**  
**WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1992 - 2012.**  
**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	4,002	210	180	186	12	25		78			6	8			6,411
1996	2,469	752	237	213	68	8	9		4					12	29	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
2012	2,675 (39.6%)	2,460 (36.4%)	166 (2.5%)	837 (12.4%)	54 (0.8%)	64 (0.9%)		7 (0.1%)	23 (0.3%)	374 (5.5%)		6 (0.1%)	76 (1.1%)	15 (0.2%)		6,757

TABLE 12

**WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1989 - 2012.  
SAXON HARBOR**

(PERCENT OF TOTAL HARVEST PER YEAR IN PARENTHESES)

YEAR	LAKE	COHO	CHINOOK	BROWN	RAINB.		ATLAN.	WHITE		HERR	NOP	WAE	TOTAL HARVEST
	TROUT	SALMON	SALMON	TROUT	SPLAKE	TROUT	SALMON	FATS	FISH				
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	226	37	98	3	13		47		8	6		3,327
1999	2,224	1,653	346	153	3	7		16	9	3		36	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
2012	2,202 (68.9%)	871 (27.3%)	14 (0.4%)	76 (2.4%)				3 (0.1%)		13 (0.4%)	17 (0.5%)		3,196

TABLE 15

**WISCONSIN'S LAKE SUPERIOR. PRIVATE OPEN WATER-COLD FISHERY HARVEST 1988 - 2012.**  
**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	PNK 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	317	1,024	116	26					55							676		3,702
1997	743	333	659	101	2					50							446		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
2011	3,673 (59.2%)	1,827 (29.5%)	322 (5.2%)	121 (2.0%)	29 (0.5%)					89 (1.4%)							142 (2.3%)		6,203
2012	835 (44.3%)	540 (28.7%)	287 (15.2%)	42 (2.2%)	12 (0.6%)			3 (0.2%)		36							129 (6.8%)		1,884

**TABLE 16**  
**PERCENT HARVEST OF NATIVE LAKE TROUT BY AREA, 1990 - 2012.**  
**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	
2012	98.9 B,W	NS	99.4	81.1	

A,B,W = ASHLAND, BAYFIELD, WASHBURN

A,W = ASHLAND, WASHBURN

B,W = BAYFIELD, WASHBURN

W = WASHBURN

NS = NO SURVEY. Corn/Port Wing 2005, 2007, 2009, 2011, 2012.

NS = NO SURVEY. Superior 2001.

# 2003 Superior % derived using 2002 numbers.

**TABLE 17 - 2012 LAKE TROUT EXTRACTION BY MANAGEMENT UNIT BY FISHERY**

	ANGLR	ANGLR	EST. LT	%	EST. #	AVE SIZE	WGHTED		EST #	AVE SIZE	WGHTED	SMPLE
<b>WI-1</b>	TRIPS	HOURS	HARVEST	HATCH.	HATCH.	HATCH.	HATCH.	%NATIVE	NATIVE	NATIVE	NATIVE	SIZE
<b>CHARTER</b>												
CORN.-PORT WING	15	81	32	20.3	6	23.5	152.6	79.7	26	21.7	553.5	
SUPERIOR	130	835	109	18.9	21	21.6	444.3	81.1	88	21.3	1883.6	
<b>TOTAL</b>	145	916	141	19.2	27	22.1	596.9	80.8	114	21.4	2437.1	

<b>OPEN WTR-COLD</b>												
*CORN. - PORT W.*	4,145	19,351	1,098	20.0	220	23.5	5160.6	80.0	878	21.7	19061.28	
SUPERIOR	2,940	14,192	835	18.9	158	21.6	3403.4	81.1	677	21.3	14429.38	164
<b>TOTAL</b>	7,085	33,543	1,933	19.5	377	22.7	8564.0	80.5	1,556	21.5	33490.66	164
<b>OPEN WTR-COOL</b>												
*CORN. - PORT W.*	103	398	0		0	0.0	0.0	0.0	0	0.0	0.00	0
SUPERIOR	2,307	4,677	0		0	0.0	0.0	100.0	0	0.0	0.00	0
<b>TOTAL</b>	2,410	5,075	0		0	0.0	0.0	0.0	0	0.0	0.00	
<b>WI-1 TOTAL</b>	9,640	39,534	2,074	19.5	404	22.7	9160.8	80.5	1,670	21.5	35,927.8	164
<b>WEIGHT (LBS)</b>			6220			3.20	1294			2.95	4926	

<b>WI-2</b>												
<b>ICE</b>												
ASHLD.-SHALLOW	2,471	13,452	0		0		0.0	100.0	0		0.0	
ASHLD.-COOL	4,168	18,725	0		0		0.0	100.0	0		0.0	
ASHLD.-BOBBING	68	340	0		0		0.0	100.0	0		0.0	
WSHB/BYF-SHALW.	1,950	10,312	56	0.0	0		0.0	100.0	56	22.4	1254.4	14
WSHB/BYF-COOLW.	46	185	0		0		0.0	100.0	0		0.0	
BOBBING-APOS ISL.	377	2,368	49	0.0	0		0.0	100.0	49	19.6	960.4	11
<b>TOTAL</b>	9,080	45,382	105	0.0	0		0.0	100.0	105	21.1	2214.8	25

<b>CHARTER</b>												
ASH./BYF./WSH./RC	767	4,020.5	1,371	1.3	18	22.0	389.1	98.7	1,353	21.4	28960.9	
CORN.-PORT WING	115	820	237	3.9	9	18.6	169.7	96.2	228	21.5	4899.3	
SAXON	258	1,594	480	0.6	3	24.5	72.9	99.4	477	21.4	10208.3	
<b>TOTAL</b>	1,140	6,434.5	2,088	1.4	30	21.2	631.7	98.6	2,058	21.4	44068.6	

<b>OPEN WTR-COLD</b>												
*ASHLAND*	3,117	15,720	2,189	3.1	68	21.9	1481.3	96.9	2,121	23.3	49427.7	
BAY FIELD	3,850	20,659	3,062	1.3	40	36.1	1437.0	98.7	3,022	20.3	61350.5	74
*CORNUCOPIA*	1,435	6,697	380	3.9	15	18.6	272.1	96.2	365	21.5	7855.5	
LITTLE SAND BAY	2,337	11,493	1,326	5.4	71	27.3	1947.5	94.6	1,255	21.0	26347.9	58
RED CLIFF	1,911	11,373	1,443	0.0	0		0.0	100.0	1,443	23.5	33910.5	62
SAXON	2,929	14,847	2,202	0.6	13	24.4	322.4	99.4	2,189	21.9	47934.5	358
WASHBURN	6,480	32,105	2,675	18.9	505	22.0	11105.0	81.1	2,170	21.6	46876.9	221
<b>TOTAL</b>	22,059	112,894	13,277	5.4	711	23.3	16565.3	94.6	12,566	21.8	273703.4	773
<b>OPEN WTR-COOL</b>												
*ASHLAND*	7,136	33,222	0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0
*CORNUCOPIA*	21	80	0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0
SAXON	0	0	0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0
WASHBURN	1,251	5,330	0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0
<b>TOTAL</b>	8,408	38,632	0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0

<b>WI-2 TOTAL</b>	40,687	203,342.5	15,470	4.8	741	23.2	17,197	95.2	14,729	21.7	319,987	798
<b>WEIGHT (LBS)</b>			47,630			3.85	2854			3.04	44,776	
<b>WI-1, WI-2 TOT.</b>	50,327	242,876.5	17,544	6.5	1,145	23.0	26358	93.5	16,399	21.7	355915	962
<b>WEIGHT (LBS)</b>			54,147			3.75	4,295			3.04	49,852	

\* = NUMBERS DERIVED FROM PREVIOUS YEARS

**TABLE 18**  
**LAKE TROUT HARVEST RATES (LAKE TROUT PER ANGLER HOUR)**  
**JUNE - AUGUST BY AREA, 1990 - 2012. 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
2012	NO SURVEY	0.19	0.02	0.13

\* WASHBURN AND BAYFIELD ROUTES COMBINED

**TABLE 19. WASHBURN OPEN WATER COOL PRIVATE**

**ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-12.**

YEAR	ANGLER		TOTAL		ANGLR.
	TRIPS	HOURS	FISH HARVEST	FISH / HOUR	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
2012	1,251	5,330	430	0.08	12.40
<b>TOTAL</b>	<b>13,639</b>	<b>55,277</b>	<b>2,982</b>		
<b>AVE</b>	<b>1,049</b>	<b>4,252</b>	<b>229</b>	<b>0.05</b>	<b>18.54</b>

**TABLE 20. PORT OF SUPERIOR OPEN WATER COOL PRIVATE**

**ESTIMATED EFFORT, HARVEST AND HARVEST RATES. 2000-12.**

YEAR	ANGLER		TOTAL		ANGLR.
	TRIPS	HOURS	FISH HARVEST	FISH / HOUR	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
2012	2,307	4,677	229	0.05	20.42
<b>TOTAL</b>	<b>57,970</b>	<b>179,848</b>	<b>27,503</b>		
<b>AVE</b>	<b>4,831</b>	<b>14,987</b>	<b>2,292</b>	<b>0.15</b>	<b>6.54</b>

NOT SURVEYED IN 2001.

TABLE 21

ESTIMATED ANGLER EFFORT (ANGLER TRIPS AND ANGLER HOURS) BY AREA IN WISCONSIN WATERS  
OF LAKE SUPERIOR ICE FISHERY, 1994-2012.

ANGLER TRIPS																			AVERAGE	
AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	1994-2012
ASHLAND SHALLOW WTR														3,118					2,471	2,795
ASHLAND COOL WATER														2,234					4,168	3,201
ASHLAND BOBBING																			68	68
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	1,950	2,816
WASHBURN COOL WATER						192	145	164	185	16	27	187	6	160	30	19	77	109	46	97
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	377	3,130
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
<b>TOTAL</b>	<b>10,926</b>	<b>6,489</b>	<b>3,680</b>	<b>6,979</b>	<b>4,498</b>	<b>11,292</b>	<b>9,267</b>	<b>9,751</b>	<b>3,910</b>	<b>8,320</b>	<b>5,555</b>	<b>9,125</b>	<b>2,419</b>	<b>12,016</b>	<b>8,780</b>	<b>6,914</b>	<b>5,663</b>	<b>4,813</b>	<b>9,080</b>	

ANGLER HOURS																			AVERAGE	
AREA	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	1994-2012
ASHLAND SHALLOW WTR														17,487					13,452	15,470
ASHLAND COOL WATER														10,540					18,725	14,633
ASHLAND BOBBING																			340	340
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	10,312	14,350
WASHBURN COOL WATER						1,097	761	946	812	96	106	528	22	750	152	38	527	545	185	469
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	2,368	17,980
MADELINE 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
<b>TOTAL</b>	<b>58,500</b>	<b>35,351</b>	<b>20,568</b>	<b>39,838</b>	<b>22,069</b>	<b>57,975</b>	<b>47,229</b>	<b>51,567</b>	<b>20,710</b>	<b>45,595</b>	<b>27,905</b>	<b>46,898</b>	<b>12,431</b>	<b>64,143</b>	<b>53,265</b>	<b>42,009</b>	<b>33,503</b>	<b>27,789</b>	<b>45,382</b>	

TABLE 22

WISCONSIN'S LAKE SUPERIOR. ICE SHALLOW WATER ESTIMATED EFFORT, HARVEST AND HARVEST RATES 1976-2012.  
(INCLUDING CHEQUAMEGON BAY, WASHBURN, BAYFIELD)

YEAR	ANGL. TRIPS	ANGL. HOURS	OVERALL	LAKE TROUT	COHO SAL.	CHIN. SAL.	BROWN TROUT	SPLAKE	RBT	BROOK TROUT	FAT	WHITE FISH	MEN WF	MULE WF	LAKE HERR.	ATL. SAL.	BUR BOT	SMELT	NOP	WAE	YEP	RUFFE	BLK CRAP.	other	TOTAL HRVST
			HRVST RATE FISH/HOUR																						
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																								
1997	NO SHALLOW WATER SURVEY																								
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		128		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		80		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	
2012-A	4,421	23,764	0.32	56	1,774	14	775	159	15			348	28		243		177	2,593	39	12	1,345		4	7,582	

A = 1975-1990, 1993, 1994, 2007, 2012 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 23

WISCONSIN'S LAKE SUPERIOR. ICE COOL WATER ESTIMATED EFFORT, HARVEST AND HARVEST RATES 1977-2012.  
(INCLUDING CHEQUAMEGON BAY, WASHBURN, BAYFIELD)

YEAR	ANGL. TRIPS	ANGL. HOURS	OVERALL	LAKE TROUT	COHO SALMON	CHINOOK SALMON	BROWN TROUT	SPLAKE	WHITE FISH	MEN. WF	HERR	BURBT	SMELT	NOP	WAE	YEP	BLK				TOTAL HRVST
			HRVST RATE FISH/HOUR														CRAP.	other	RUFFE	GOBY	
1977	1,542	15,612	0.361											23		5,612					5,635
1978	3,224	16,442	1.085				177									17,668					17,845
1979	2,313	7,107	2.063													14,662					14,662
1980	INSUFFICIENT DATA																				
1981	INSUFFICIENT DATA																				
1982	2,875	N/A	N/A													10,211		1,013			11,224
1983	CHEQUAMEGON BAY NOT SURVEYED																				
1984	CHEQUAMEGON BAY NOT SURVEYED																				
1985	CHEQUAMEGON BAY NOT SURVEYED																				
1986	2,575	10,841	0.915		96			1,433						874		7,515					9,918
1987	3,386	16,163	1.701					110						38		27,342					27,490
1988	2,210	8,743	0.768											290	17	6,408					6,715
1989	2,522	9,129	1.460				8							159	354	12,811					13,332
1990	2,389	8,600	1.708		10		27	198						41	89	14,326					14,691
1991	CHEQUAMEGON BAY NOT SURVEYED																				
1992	CHEQUAMEGON BAY NOT SURVEYED																				
1993	2,252	9,620	0.483		9		124	120						38	8	4,346					4,645
1994	1,040	4,602	0.593				9	11			12	9	214	32	28	2,413					2,728
1995	CHEQUAMEGON BAY NOT SURVEYED																				
1996	CHEQUAMEGON BAY NOT SURVEYED																				
1997	CHEQUAMEGON BAY NOT SURVEYED																				
1998	CHEQUAMEGON BAY NOT SURVEYED																				
1999	CHEQUAMEGON BAY NOT SURVEYED																				
2000	CHEQUAMEGON BAY NOT SURVEYED																				
2001	CHEQUAMEGON BAY NOT SURVEYED																				
2002	CHEQUAMEGON BAY NOT SURVEYED																				
2003	CHEQUAMEGON BAY NOT SURVEYED																				
2004	CHEQUAMEGON BAY NOT SURVEYED																				
2005	CHEQUAMEGON BAY NOT SURVEYED																				
2006	CHEQUAMEGON BAY NOT SURVEYED																				
2007	2,394	11,290	0.764		487		32	5	46		24		224	139	41	7,571	56				8,625
2008	CHEQUAMEGON BAY NOT SURVEYED																				
2009	CHEQUAMEGON BAY NOT SURVEYED																				
2010	CHEQUAMEGON BAY NOT SURVEYED																				
2011	CHEQUAMEGON BAY NOT SURVEYED																				
2012	4,214	18,910	0.592		60		46	11	5		52	7	330	120	98	10,421			17	19	11,186

TABLE 24

## WISCONSIN'S LAKE SUPERIOR ICE FISHERY DEEP WATER "BOBBING"

## (APOSTLE ISLAND'S) ESTIMATED HARVEST 1990-2012.

(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	RUFFE	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	24	22				207	20		11		43	7					1,350
1997	2,755	8	33		52		663	23		96		275	132					4,037
1998	1,620	68	76	51	83	3	10	86		147		167	7					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
2011	1,374 (56.7%)	17 (0.7%)		10 (0.4%)	26 (1.1%)		94 (3.9%)	834 (34.4%)	34 (1.4%)	18 (0.7%)		12 (0.5%)	5 (0.2%)					2,424
2012	49 (4.9%)	132 (13.1%)		18 (1.8%)	7 (0.7%)	4 (0.4%)	2 (0.2%)	559 (55.3%)		152 (15.0%)		11 (1.1%)	72 (7.1%)				4 (0.4%)	1,010

TABLE 25  
ICE BOBBING EFFORT, HARVEST RATES AND LAKE TROUT HARVEST RATES BY AREA 1986-2012.

	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	0.22	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	1,375	0.11	9.20	2011								2011	1,993	12,653	2,424	0.19	1,374	0.11	9.21
2012	377	2,368	1,010	0.43	49	0.02	48.33	2012								2012	377	2,368	1,010	0.43	49	0.02	48.33
TOTAL	74,270	432,409	86,948		54,172			TOTAL	15,787	93,040	14,620		14,416			TOTAL	89,977	525,440	104,080		68,687		
AVE	2,751	16,015	3,220	0.20	2,006	0.13	7.98	AVE	831	4,897	769	0.16	759	0.15	6.45	AVE	3,332	19,461	3,855	0.20	2,544	0.13	7.65

**TABLE 26  
WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST RATES AND LAKE TROUT  
HARVEST RATES, 1973-2012.**

<b>YEAR</b>	<b># OF ACTIVE GUIDES</b>	<b># OF ANGLERS</b>	<b># OF ANGLER HOURS</b>	<b># OF TOTAL FISH</b>	<b>FISH / HOUR</b>	<b>ANGL. HRS / FISH</b>	<b># OF LAKE TROUT</b>	<b>LAKE TROUT / HOUR</b>	<b>ANGLR. HRS / LKT</b>
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
2012	28	1,285	7,351	2,813	0.38	2.61	2,229	0.30	3.30
<b>TOTAL</b>		<b>113,080</b>	<b>698,669.5</b>	<b>176,064</b>			<b>142,935</b>		
<b>AVE.</b>	<b>28</b>	<b>2,827</b>	<b>17,467</b>	<b>4,402</b>	<b>0.25</b>	<b>3.97</b>	<b>3,573</b>	<b>0.20</b>	<b>4.89</b>

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

**TABLE 27**  
**WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.**  
**1988-2012. ASHLAND, BAYFIELD, WASHBURN, RED CLIFF.**

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	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	9,470	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	6,619.5	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	5,004.5	1,453	0.29	3.44	1,206	0.24	4.15
2008	8	676	3,914.5	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
2011	12	786	4,324.5	1,502	0.35	2.88	1,183	0.27	3.66
2012	11	767	4,020.5	1,708	0.42	2.35	1,371	0.34	2.93
<b>TOTAL</b>		<b>33,805</b>	<b>202,811</b>	<b>49,681</b>			<b>42,273</b>		
<b>AVE.</b>	<b>13</b>	<b>1,352</b>	<b>8,112</b>	<b>1,987</b>	<b>0.24</b>	<b>4.08</b>	<b>1,691</b>	<b>0.21</b>	<b>4.80</b>

**TABLE 29**  
**WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.**  
**1988-2012. CORNUCOPIA / PORT WING.**

YEAR	# OF ACTIVE GUIDES	ANGLER TRIPS	ANGLER HOURS	TOTAL FISH HARVEST	FISH / HOUR	ANGLR. HRS / FISH	# OF LAKE TROUT	LAKE TROUT / HOUR	ANGLR. HRS / LKT
1988	7	709	3,995	1,119	0.28	3.57	769	0.19	5.20
1989	5	838	4,785	1,070	0.22	4.47	562	0.12	8.51
1990	7	867	4,823	983	0.20	4.91	718	0.15	6.72
1991	5	673	3,261	826	0.25	3.95	539	0.17	6.05
1992	7	581	2,960	793	0.27	3.73	585	0.20	5.06
1993	5	382	1,923	463	0.24	4.15	342	0.18	5.62
1994	5	474	2,588	552	0.21	4.69	460	0.18	5.63
1995	4	418	2,016	648	0.32	3.11	452	0.22	4.46
1996	4	345	1,747	799	0.46	2.19	383	0.22	4.56
1997	5	287	1,463	491	0.34	2.98	380	0.26	3.85
1998	4	417	2,095	965	0.46	2.17	767	0.37	2.73
1999	4	341	2,033	755	0.37	2.69	511	0.25	3.98
2000	4	280	1,592	735	0.46	2.17	604	0.38	2.64
2001	4	420	2,397	838	0.35	2.86	669	0.28	3.58
2002	4	465	2,698	1,079	0.40	2.50	856	0.32	3.15
2003	4	381	2,198	704	0.32	3.12	635	0.29	3.46
2004	5	354	1,963	615	0.31	3.19	451	0.23	4.35
2005	5	294	1,709	590	0.35	2.90	470	0.28	3.64
2006	4	231	1,222	331	0.27	3.69	258	0.21	4.74
2007	4	116	725	222	0.31	3.27	180	0.25	4.03
2008	4	105	497	236	0.47	2.11	186	0.37	2.67
2009	4	93	530	159	0.30	3.33	147	0.28	3.61
2010	2	90	614	224	0.36	2.74	102	0.17	6.02
2011	2	61	394	133	0.34	2.96	105	0.27	3.75
2012	3	130	901	389	0.43	2.32	269	0.30	3.35
<b>TOTAL</b>		<b>9,352</b>	<b>51,129</b>	<b>15,719</b>			<b>11,400</b>		
<b>AVE.</b>	<b>4</b>	<b>374</b>	<b>2,045</b>	<b>629</b>	<b>0.31</b>	<b>3.25</b>	<b>456</b>	<b>0.22</b>	<b>4.49</b>

**TABLE 28**  
**WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.**  
**1986-2012. 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
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
2011	5	161	1,077.5	325	0.30	3.32	303	0.28	3.56
2012	6	258	1,594	517	0.32	3.08	480	0.30	3.32
<b>TOTAL</b>		<b>4,906</b>	<b>31,772.5</b>	<b>8,198</b>			<b>7,645</b>		
<b>AVE.</b>	<b>3</b>	<b>196</b>	<b>1,271</b>	<b>328</b>	<b>0.26</b>	<b>3.88</b>	<b>306</b>	<b>0.24</b>	<b>4.16</b>

**TABLE 30**  
**WISCONSIN'S LAKE SUPERIOR CHARTER EFFORT, HARVEST AND HARVEST RATES.**  
**1988-2012. 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
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
2011	7	273	1,601	376	0.23	4.26	274	0.17	5.84
2012	8	130	835	199	0.24	4.20	109	0.13	7.66
<b>TOTAL</b>		<b>17,246</b>	<b>105,236.5</b>	<b>27,759</b>			<b>19,488</b>		
<b>AVE.</b>	<b>11</b>	<b>690</b>	<b>4,209</b>	<b>1,110</b>	<b>0.26</b>	<b>3.79</b>	<b>780</b>	<b>0.19</b>	<b>5.40</b>

TABLE 31

## WISCONSIN'S LAKE SUPERIOR CHARTER FISHERY HARVEST 1989 - 2012.

(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	WAL	NORTH. PIKE	BROOK TROUT	YEP	HERR	WF	SUCK.	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	174	178	75	8	4	2	2		47	5							3,848
2001	3,008	229	65	51	14	7				31	3							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%)		1 (0.0%)	1 (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
2012	2,229 (79.2%)	408 (14.5%)	85 (3.0%)	59 (2.1%)	20 (0.7%)	3 (0.1%)				7 (0.2%)	1 (0.0%)			1 (0.0%)				2,813

**TABLE 32**  
**REGISTERED STURGEON SPORT HARVEST IN CHEQUAMEGON BAY, 1983-2012.**

YEAR	ANGLER TAGS ISSUED*	TOTAL REPORTED HARVEST	# HARVESTED ≥ 50"	AVERAGE SIZE(in)	AVERAGE WEIGHT(lb)
1983	unknown	2	2	55.0	unknown
1984	unknown	3	1	47.3	unknown
1985	unknown	5	3	51.8	unknown
1986	unknown	4	1	48.4	28.0
1987	unknown	0	0	--	--
1988	unknown	14	8	49.6	30.6
1989	unknown	11	2	46.6	28.0
1990	unknown	7	2	49.9	33.5
Sturgeon minimum size limit increased from 40" to 50" in 1991.					
1991	unknown	2	2	55.8	44.5
1992	unknown	0	0	--	--
1993	unknown	1	1	64.0	55.0
1994	140	0	0	--	--
1995	unknown	2	2	63.0	59.0
1996	unknown	0	0	--	--
1997	97	1	1	57.8	46.0
1998	92	1	1	54.0	32.0
1999	124	6	6	55.3	40.2
2000	111	0	0	--	--
2001	74	2	2	51.75	--
2002	102	3	3	51.5	--
2003**	93	1**	1	52.0	--
2004	104	4	4	58.6	--
2005 #	unknown	1	1	55.25	34.0
2006	unknown	0	0	--	--
2007	unknown	1	1	51.0	38.0
2008	unknown	2	2	55.5	--
2009	unknown	1	1	52.5	--
2010	unknown	0	0	--	--
2011	unknown	1	1	56.0	54.0
2012	unknown	4	4	55.25	37.0

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

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

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

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

APPENDIX I

**DAILY PRESSURE CHECK**

DATE JUNE 1, 2012

CHECKPOINT WASHBURN

# MINUTES AT CHECKPOINT 420 (7:00 - 14:00)

RESIDENT VEHICLES		NON. RESIDENT VEHICLES		HARBOR BOATS	
INITIAL		INITIAL		INITIAL	
PRESSURE = 6		PRESSURE = 1		PRESSURE = 0	
START FISHING(+)	STOP FISHING(-)	START FISHING(+)	STOP FISHING (-)	START FISHING (+)	STOP FISHING (-)
8:00 = 0.86	10:45 = 0.46	7:30 = 0.93	13:00 = 0.14		
8:45 = 0.75	13:20 = 0.10				
9:37 = 0.63	13:40 = 0.05				
	13:55 = 0.01				
<b>TOTAL START</b>	<b>TOTAL STOP</b>	<b>TOTAL START</b>	<b>TOTAL STOP</b>	<b>TOTAL START</b>	<b>TOTAL STOP</b>
8.24	0.62	1.93	0.14	0	0
<b>TOTAL START - TOTAL STOP</b>		<b>TOTAL START - TOTAL STOP</b>		<b>TOTAL START - TOTAL STOP</b>	
7.62		1.79		0	
<b>TOTAL RESIDENT PRESSURE +</b>		<b>TOTAL NONRESIDENT PRESSURE +</b>		<b>TOTAL HARBOR PRESSURE</b>	
7.62		+ 1.79		+ 0	
<b>TOTAL TIME INTERVAL PRESSURE = 9.41</b>					

**APPENDIX II. 2012 OPEN WATER CREEL ROUTES AND SHIFT TIMES.**

ROUTE/ PORT	START DATES	SHIFT TIMES	NUMBER OF NON-OVERLAPPING SHIFTS	TYPE OF CREEL	COMMENTS
<b>ONE ROUTE: 1/2 TIME WASHBURN.</b> <b>ONE ROUTE: 1/2 TIME</b> (1/3 TIME <b>BAYFIELD</b> -boat launch 1/3 TIME <b>RED CLIFF</b> -casino boat launch 1/3 TIME <b>LITTLE SAND BAY</b> -boat launch	BYF 3/24/12 RC 3/24/12 LSB 3/24/12 WSH 3/28/12	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
<b>ONE ROUTE: SAXON - SAXON HARBOR BOAT LAUNCH AND MARINA. (1/2 TIME).</b>	03/26/2012	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.
<b>ONE ROUTE: SUPERIOR - BARKER'S ISLAND BOAT LAUNCH, LOON'S FOOT BOAT LAUNCH. (FULL TIME).</b>	05/13/2012	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 9/30/12

**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:				
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 IV. 2012 ICE CREEL ROUTES AND SHIFT TIMES.**

ROUTE/ AREA	START DATES	SHIFT TIMES	NUMBER OF NON-OVERLAPPING SHIFTS	TYPE OF CREEL	COMMENTS
<b>ASHLAND-(LONG BRIDGE-2nd LANDING). ONE ROUTE.</b>	12/20/11 - 03/18/2012	9:00am - 5:00pm	1 weekend 1 weekday	stratified 2 counts	2 weekend shifts 3 weekday shifts
<b>WASHBURN-BAYFIELD-RED CLIFF. ("S" CURVE -SCHOONER BAY). ONE ROUTE.</b>	01/05/12 - 03/13/2012				

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						
247	11TH ave E. / WATER ST						
246	TREBAS						
245	PAMIDA PARK						
240	PAMIDA						
234	ANGLER'S ALL						
204	2nd LANDING						
301	LONG BRIDGE						
305	"S" CURVE						
307	THOMPSON PARK						
311	WEST END						
315	WA SHB. 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 VII.**

**2012 LENGTH WEIGHT EQUATIONS**

DATA OBTAINED FROM VARIOUS WI DNR ASSESSMENTS.

**BROWN TROUT (NATIVE + HATCHERY)**

$$\text{LN(WT g)} = -13.4962 + 3.3238 (\text{LN LENGTH mm})$$

Observations = 17

**LAKE WHITEFISH**

$$\text{LN(WT g)} = -13.44210 + 3.28593(\text{LN LGTH mm})$$

Observations = 739

**BURBOT**

$$\text{LN(WT g)} = -13.06603 + 3.20896 (\text{LN LENGTH mm})$$

Observations = 62

**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

**SISCOWET LAKE TROUT (FATS)**

$$\text{LN(WT g)} = -13.80588 + 3.34390 (\text{LN LENGTH mm})$$

Observations = 1,413

**LAKE HERRING**

$$\text{LN(WT g)} = -12.5123 + 3.1170 (\text{LN LENGTH mm})$$

Observation = 245

**CHINOOK SALMON**

WI DNR DATA 1980-2010

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

Observations = 91

**MENOMINEE WF**

$$\text{LN(WT g)} = -15.40722 + 3.61958 (\text{LN LENGTH mm})$$

Observations = 151

**COHO SALMON**

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

Observation = 23

**NORTHERN PIKE**

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

Observations = 48

**LAKE TROUT (NATIVE)**

$$\text{LN(WT g)} = -13.12504 + 3.22478 (\text{LN LENGTH mm})$$

Observations = 467

**SPLAKE**

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

Observations = 181

**LAKE TROUT (HATCHERY)**

$$\text{LN(WT g)} = -12.8865 + 3.1908 (\text{LN LENGTH mm})$$

Observations = 20

**WALLEYE**

$$\text{LN(WT g)} = -11.2835 + 2.9564 (\text{LN LENGTH mm})$$

Observations = 17

**LAKE TROUT (NATIVE AND HATCHERY)**

$$\text{LN(WT g)} = -13.12764 + 3.22531 (\text{LN LENGTH mm})$$

Observations = 487

**YELLOW PERCH**

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

Observations = 59

FIGURE 1. MAJOR PORTS SURVEYED AND WISCONSIN MANAGEMENT UNITS.

