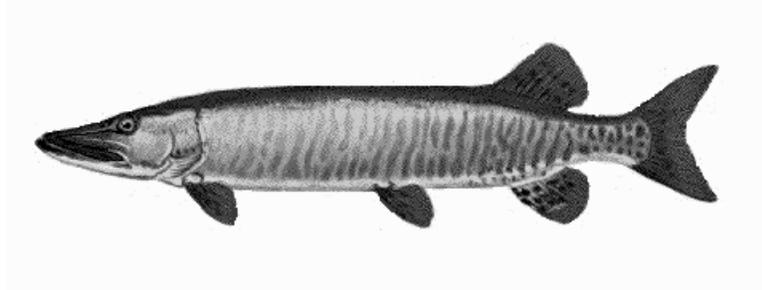


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2007-2008 Ceded Territory
Fishery Assessment Report



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Walleye illustration Virgil Beck



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INTRODUCTION

The northern portion of Wisconsin, encompassing 22,400 square miles and including all or parts of 30 counties, was ceded by the Lake Superior Chippewa Tribes to the United States in the Treaties of 1837 and 1842 (Figure 1). Although the lands were ceded to the United States, the Chippewa Tribes retained hunting, fishing, and gathering rights throughout this area (USDI 1991). The Wisconsin Ceded Territory contains 77% of Wisconsin's lakes accounting for 53% of the total inland lake surface acreage in Wisconsin (Staggs et al. 1990). Of lakes within the Ceded Territory, over 900 contain walleye (*Sander vitreus*) and more than 600 contain musky (*Esox masquinongy*), and the vast majority of naturally reproducing walleye and musky populations are found within the Ceded Territory.



Figure 1. Map of Wisconsin showing the Ceded Territory (shaded).

Walleye and muskellunge are tremendously popular with Wisconsin anglers and are important economically. Chippewa tribal members rely on these same fisheries for preservation of their cultural heritage and as a food source. In 1983, the United States Court of Appeals for the Seventh Circuit affirmed the rights of six Wisconsin Chippewa Bands (Bad River, Lac Courte Oreilles, Lac du Flambeau, Sokaogon, Red Cliff, and St. Croix) to fish off-reservation waters in the Wisconsin Ceded Territory. Tribal fishing uses traditional methods (e.g. spearing and netting) as determined by Treaties of 1837 and 1842 between the Bands and the United States government. Since affirmation of tribal fishing rights in 1983 the Wisconsin Department of Natural Resources (WDNR) has worked to integrate tribal harvest opportunities with sport fisheries in the Ceded Territory.

To facilitate and manage shared tribal and recreational angler harvest, an intensive data collection and analysis effort began in 1987. The program evolved as knowledge of unique aspects of the Ceded Territory shared fisheries increased, and developed into the current program in 1990. The primary goal is to collect information essential to protecting Ceded Territory fish populations from over-exploitation by the combined tribal and recreational fisheries.

As part of this effort WDNR works with the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) to establish safe harvest quotas for walleye and muskellunge and to monitor the shared fisheries throughout the Ceded Territory. The majority of tribal harvest occurs during spring while walleye and muskellunge are congregated in shallow water to spawn and are readily taken by spear. A smaller number are harvested throughout the remainder of the year with a variety of capture methods including spearing, gill netting, fyke netting, set-lining, and angling. Netting and spearing are highly efficient methods and, unlike low efficiency methods such as angling, are not self-regulating (Beard et al. 1997, Hansen et al. 2000). Based on the inclusion of high efficiency tribal harvest in these fisheries, over-exploitation is a strong possibility in the absence of intensive management and could result in long-lasting and potentially irreversible damage.

Wisconsin DNR gathers data from a representative sample of lakes throughout the Ceded Territory each year in order to assess abundance and stability of walleye populations. Walleye populations are evaluated by WDNR using three primary methods: spring adult and total population estimates, fall age-0 (young-of-year) relative abundance estimates, and creel surveys of angler catch and

harvest. When combined, these methods provide information on the current harvestable population, an indication of the future harvestable population, and the degree of exploitation in the walleye fishery. Wisconsin DNR also conducts muskellunge and black bass *Micropterus* spp. population estimates each year and estimates harvest of these species via creel surveys; WDNR does not quantify recruitment of these species via young-of-year (YOY) surveys.

Population estimates are critical to the management of Ceded Territory fisheries. Accurate population estimates allow calculation of “safe harvest” levels that allow harvest while minimizing the potential of jeopardizing a species’ future abundance or persistence.

Creel surveys provide vital information about the use of fisheries by recreational anglers, including angling effort, catch, and harvest; Estimates from surveyed lakes can be extrapolated across larger areas (e.g. Ceded Territory). When coupled with population estimates, creel harvest data can be used to estimate angler exploitation for individual species. The WDNR treaty fisheries program focuses primarily on game species (walleye, muskellunge, largemouth *Micropterus salmoides* and smallmouth *Micropterus dolomieu* bass, and northern pike *Esox lucius*), but creel information on all species is recorded.

In support of this effort, data is collected and provided by GLIFWC and the United States Fish and Wildlife Service (USFWS) which conduct spring adult population estimates and fall age-0 surveys on additional lakes each year. Tribal harvest data is made available by GLIFWC which censuses open-water tribal harvest of all species and conducts periodic creel surveys to assess harvest of muskellunge through ice.

This annual report summarizes WDNR efforts related to management of the shared Ceded Territory fishery from early 2007 through early 2008. In doing so, it reports on one ‘annual cycle’ of work related to management of these fisheries. The typical annual cycle begins with establishment of safe harvest levels prior to spring spearing activities, includes conducting creel surveys, population estimates, and YOY walleye surveys on selected lakes, and results in summarization of tribal and angler exploitation rates for Ceded Territory lakes¹.

¹ For the purposes of this report ‘Tribal’ refers to catch and harvest by traditional methods used by tribal fishers (e.g. spearing and netting); ‘Angler’ indicates catch and harvest by hook and line, and may include tribal members angling during open seasons if interviewed during creel surveys.

METHODS

Estimation of Population Size

With more than 900 walleye lakes and 600 muskellunge lakes in the Wisconsin Ceded Territory it is logistically impossible to obtain precise population estimates from all lakes in a single year. In addition fish populations in general and walleye populations in particular are extremely variable and can change dramatically from year to year. Therefore, WDNR selects a number of lakes each year for walleye population estimates and corresponding nine-month creel surveys². The lakes sampled by the WDNR within the Ceded Territory during 2007-08 were chosen using a stratified random design considering size, historic level of tribal harvest, and primary walleye recruitment source. Of the lakes sampled each year, four are 'trend lakes' which are evaluated every three years to provide meaningful data on temporal trends within walleye populations; trend lakes sampled in 2007 were Lipsett (Burnett Co.), Middle Eau Claire (Bayfield Co.), Lake Metonga (Forest Co.) and Trout (Vilas Co.) lakes. In addition, at least one large lake or lake chain is chosen to be surveyed each year; in 2007 the Moen and Twin lake chains (Oneida and Vilas Cos., respectively) were surveyed in addition to other large (e.g. >1,000 acres) lakes.

The continuing randomized survey of lakes throughout the history of this program (Appendix A) provides data necessary for successful management of the shared fisheries. Data from lake surveys is used to estimate walleye population size and derive safe harvest levels, estimate tribal and angler harvest and exploitation rates, examine temporal and spatial trends in walleye populations and angler effort, and maintain up to date characterizations of population status for each lake.

Walleye

Walleye spawning population estimates³ for various lakes in the Ceded Territory were made using a standard mark-recapture methodology. Walleyes were initially captured for marking using fyke nets shortly after ice out. Each fish was measured (total length; inches and tenths) and marked with one

² Creel surveys are conducted from the first Saturday in May through early March and correspond to the Wisconsin open season for game fish species. The month of November was excluded from analyses due to poor ice conditions and low angler effort.

³ Spawning population estimates may be less than adult population sizes if all adults do not spawn in every year. The degree to which this occurs in Wisconsin is currently unknown and may vary by lake.

of two lake specific fin clip; two clips were used in each lake to classify fish as either 'adult' or 'juvenile'. Adult (mature) walleyes were defined as all fish 15" or longer and all fish for which sex could be determined (regardless of length). Walleye of unknown sex less than 15" long were classified as juvenile (immature). In lakes where previous estimates of walleye spawner abundance were available, the goal was to mark 10% of the anticipated spawning population. Where no preliminary abundance estimate was available, at least one walleye per acre of lake surface area was targeted for marking. Marking continued until the target number was reached or spent females began appearing in the fyke nets.

Two electrofishing recapture runs were conducted in each lake and the data used to estimate abundance of the spawning or total walleye population. Due to rapid dispersal and decreased vulnerability of adult walleye following spawning, only mark-recapture results from the first electrofishing recapture run were used to estimate spawning walleye abundance; results from the second electrofishing recapture run were used to augment those results when estimating total walleye population abundance.

Walleyes were initially recaptured with AC electrofishing gear within one week (typically 1-4 days) after netting and marking were completed. In each lake the entire shoreline (including islands) was sampled to ensure equal vulnerability of marked and unmarked walleyes to capture. All walleyes in the captured were measured and examined for marks; in most lakes any unmarked walleyes collected in the first electrofishing run were fin clipped accordingly for the lake and fish maturity. A second whole-shore electrofishing recapture run was conducted approximately 1-4 weeks after the first electrofishing run.

Based on electrofishing recapture data, population estimates were calculated with the Chapman modification of the Petersen Estimator as:

$$N = \frac{(M + 1)(C + 1)}{(R + 1)}$$

where N was the population estimate, M was the number of fish marked and released, C was the total number of fish captured and examined for marks in the recapture sample, and R was the total number of marked fish observed in C.

The Chapman Modification method was used because it provides more accurate population estimates in cases when R is relatively small (Ricker 1975). Walleye population and variance estimates were calculated by length-class ($\leq 11.9"$, $12-14.9"$, $15-19.9"$, and $\geq 20.0"$) and summed accordingly to

estimate adult and total walleye abundance. If spearing occurred after the start of the marking period, the number of marked walleyes speared was subtracted from the number of marked fish at large during the recapture period. These fish were added back to the estimated number of fish present at the time of marking for the populations of interest (e.g. adult or total populations).

All population estimates were reviewed by a Technical Working Group (TWG) for reliability. Factors considered in determining reliability of estimates included numbers of fish marked and/or recaptured by sex and in total and coefficients of variation associated with derived estimates. In cases where population estimates are not deemed reliable by the TWG, estimates are rejected for use in setting safe harvest levels. For consistency across data groups, any population estimates rejected by the TWG for other purposes were also excluded from comparative statistical analyses.

Due to sample size restrictions, separate analyses were conducted to evaluate differences in spawner population size across (1) primary recruitment source (natural, stocked, or remnant; refer to Appendix C) and (2) restrictive angling regulations in 2007⁴. Statistical comparisons were made for spawner density (fish/acre) which provides a better comparative measure across lakes of varying size (relative to spawner abundance).

Fish population size structure was described using proportional stock density (PSD) and relative stock density (RSD) as reviewed by Anderson et al. (1996). Walleye size data were analyzed to compare proportions of both quality (PSD) and preferred (RSD) length fish gathered in spring surveys (April and May); data were limited to spring surveys to minimize bias associated with fish growth throughout the year and to best characterize the size structure of walleye populations near the outset of the harvest seasons. For the purpose of this report stock, quality and preferred walleye lengths were set at 12, 15 and 18 inches, respectively. Walleye length data were taken from WDNR statewide PSD/RSD database. Proportional stock density (PSD) is calculated as:

$$PSD = \frac{\text{number of fish } \geq 15 \text{ inches}}{\text{number of fish } \geq 12 \text{ inches}} \times 100$$

⁴ Lake size classes are small (<500 ac.) or large (≥500 ac.); Population recruitment source is either natural, stocked, or remnant; 2007 state regulations for surveyed lakes included a 15" minimum size limit, one fish larger than 14", and one fish larger than 28".

Relative stock density (RSD) is calculated as:

$$RSD = \frac{\text{number of fish} \geq 18 \text{ inches}}{\text{number of fish} \geq 12 \text{ inches}} \times 100$$

Muskellunge

Muskellunge population estimates were conducted over a two-year period, with marking in year-1 and recapture in year-2. In year-1, muskellunge were marked during fyke netting and electrofishing efforts throughout the sampling season. All muskellunge 20" and larger were given a primary fin clip (the same clip given to adult walleye and bass). Muskellunge less than 20" long were given an alternate fin-clip (generally top caudal). In year-2, muskellunge were recaptured using fyke nets in mid-May, to coincide with the muskellunge spawning season. Adult muskellunge population estimates (considered all fish larger than the smallest sexable fish observed) were made by sex (male, female, unknown) and for the total population using Chapman-Petersen estimates:

$$N = \frac{(M + 1)(C + 1)}{(R + 1)}$$

Where N is the estimated adult population size; M is the total number of muskellunge marked in the lake in year-1 equal to or larger in length than the smallest sexable fish; C is the number of muskellunge recaptured in year-2, excluding fish smaller than the minimum length counted in year-1 plus 2 inches; and R is the number of marked fish recaptured (Wisconsin Technical Working Group 1999; Margenau and AveLallemant 2000).

Largemouth and Smallmouth Bass

In a subset of sampled lakes designated as "comprehensive survey" lakes, largemouth *Micropterus salmoides* and smallmouth *Micropterus dolomieu* bass encountered during fish surveys were marked by fin clips. Bass larger than 12.0" were given the same primary (adult) fin-clip as was given to walleye in the same lake; bass 8.0- 11.9" were given the secondary (juvenile) fin-clip for the lake. In these lakes, fyke nets were set just after ice-out in the spring and again after the first electrofishing recapture run. A total of four electrofishing surveys were conducted in each lake. The first electrofishing run was conducted within a week of pulling the early fyke nets. The second run was conducted

approximately two weeks after the first electrofishing run. Third and fourth electrofishing runs were conducted at approximately weekly intervals thereafter between mid-late May and mid-June. The entire shoreline of the lake (including islands) was sampled. Bass populations were estimated after both the third and fourth runs. For each bass species population estimates were calculated for various size classes (8.0-13.9", 14.0-17.9" and ≥ 18.0 ") using the same Chapman modification of the Petersen estimator as described for walleyes. The recapture run yielding the population estimate with the lowest coefficient of variation is reported.

Establishment of Safe Harvest

The Wisconsin joint fishery is managed by calculating total allowable catch for walleye and muskellunge on a lake-by-lake basis. "Safe harvest" is set such that the risk of exceeding 35% exploitation for walleye or 27% for muskellunge is less than 1-in-40 (Hansen 1989; Hansen et al. 1991). This risk-management system differs from a quota system, which would potentially close fisheries once a harvest cap was reached.

Safe harvest levels are set on all Ceded Territory walleye and muskellunge lakes using the most accurate population estimates available. The most reliable estimates are clearly taken from mark-recapture estimates performed in the same year for which safe harvest is calculated. However, because the temporal overlap of the spearing season and spring population estimate sampling make this logistically impossible, these population estimates are used to estimate abundance for the following two years. In addition, given the year-to-year variability associated with fish populations, safety factors are incorporated to account for the largest potential decrease between years (Hansen et al. 1991).

Population estimates older than two years are not considered to accurately represent a lake's current population and are not directly used to set safe harvest. In this case, an estimate is calculated from a regression model using lake acreage as a predictor of population abundance (Hansen 1989). Each year new population estimates are incorporated into the regression model but no estimates are removed. Lakes with multiple population estimates are averaged before being entered into the regression model.

Three regression models are used depending on the primary source of walleye recruitment in the lake (Nate et al. 2000). Separate models are used for: (A) lakes sustained primarily by natural

reproduction (NR; Figure 2), (B) lakes sustained primarily through stocking efforts (ST; Figure 3), and (C) lakes with low density populations maintained through intermittent natural reproduction (REM; Figure 4). Refer to Appendix C for a complete description of recruitment code designations used for lakes throughout the Wisconsin Ceded Territory. These models are used to set safe harvest yearly for the majority of the walleye lakes in the Ceded Territory.

A similar method is employed to set safe harvest for muskellunge. Because muskellunge mark-recapture surveys are conducted over a two year period, a population estimate for a given lake is employed to directly set safe harvest only once. In the absence of a recent population estimate, a regression model is used to make an estimate of muskellunge abundance. As with walleye, population predictions in this model are based on lake acreage, but a single model is used for all muskellunge waters in the Ceded Territory (Figure 5).

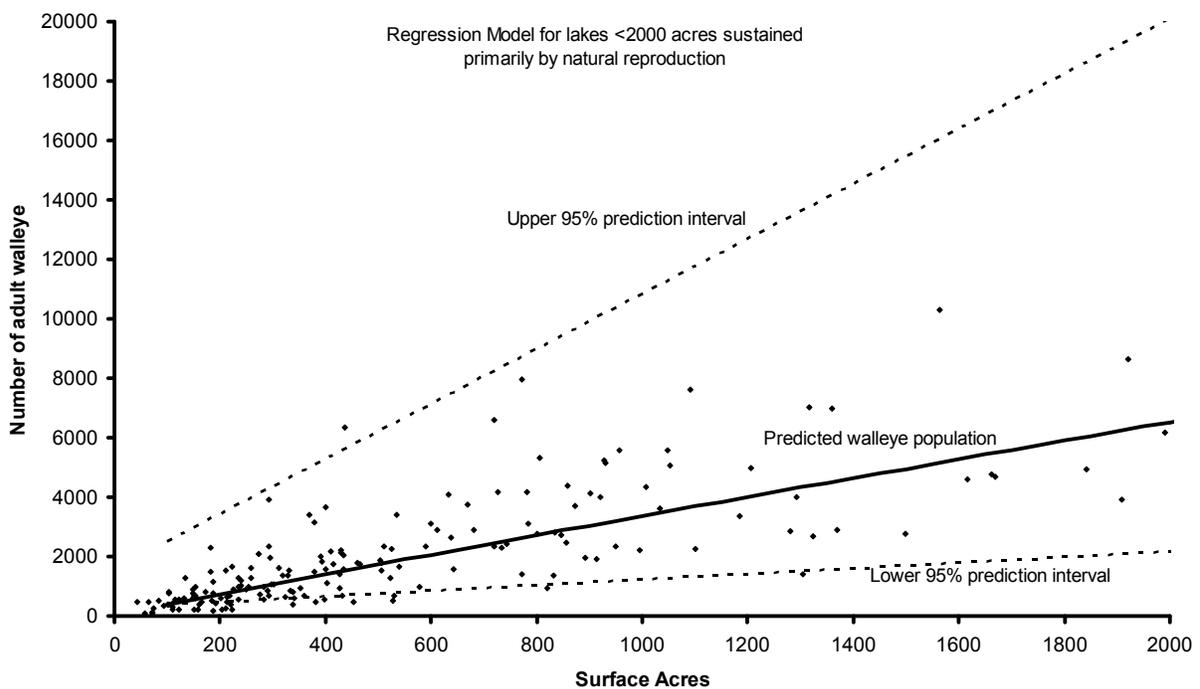


Figure 2. Regression model used to set 2007 safe harvest levels for lakes sustained primarily by natural reproduction (applies to all lake sizes; only lakes <2000 acres are shown for illustrative clarity).

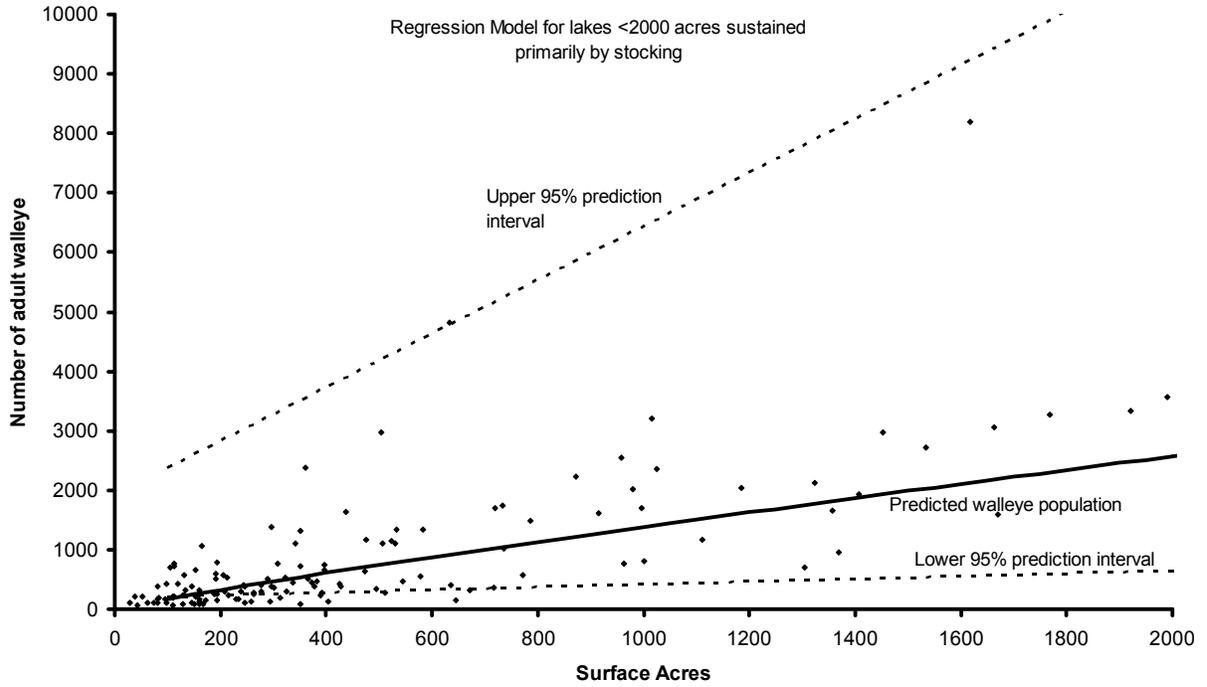


Figure 3. Regression model used to set 2007 safe harvest levels for lakes <2000 acres sustained primarily by stocking (applies to all lakes; only lakes <2000 ac. are shown for illustrative clarity).

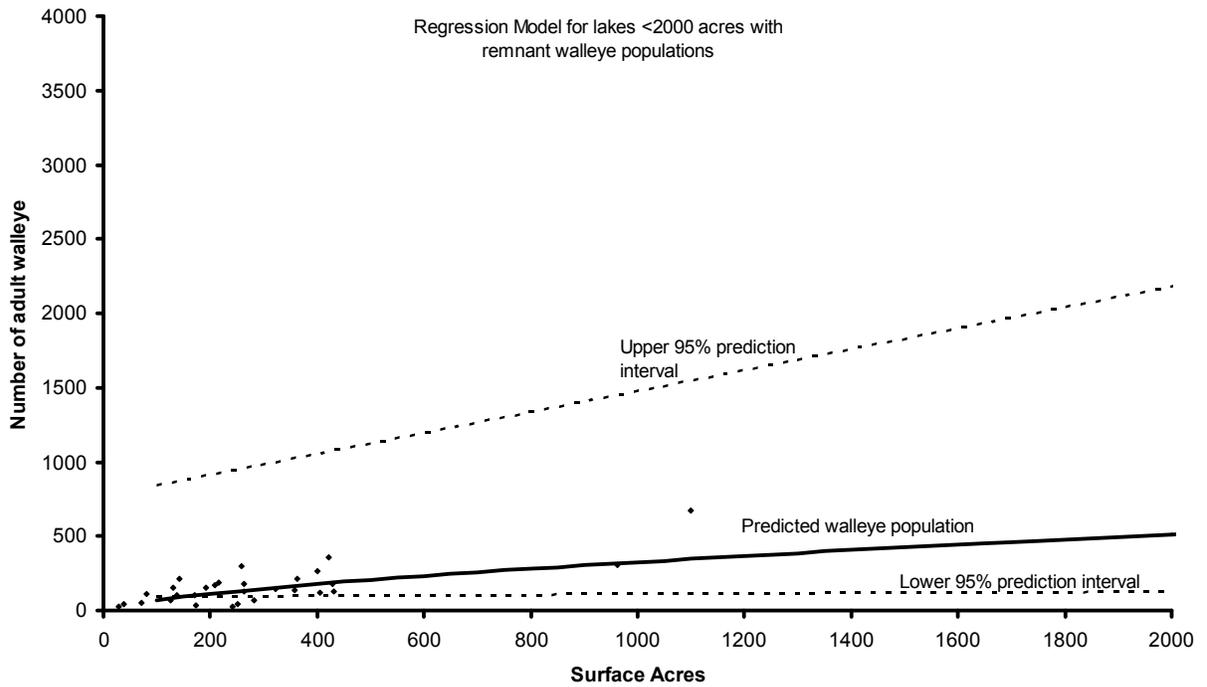


Figure 4. Regression model used to set 2007 safe harvest levels for lakes <2000 acres with remnant walleye populations (applies to all lakes; only lakes <2000 acres are shown for illustrative clarity).

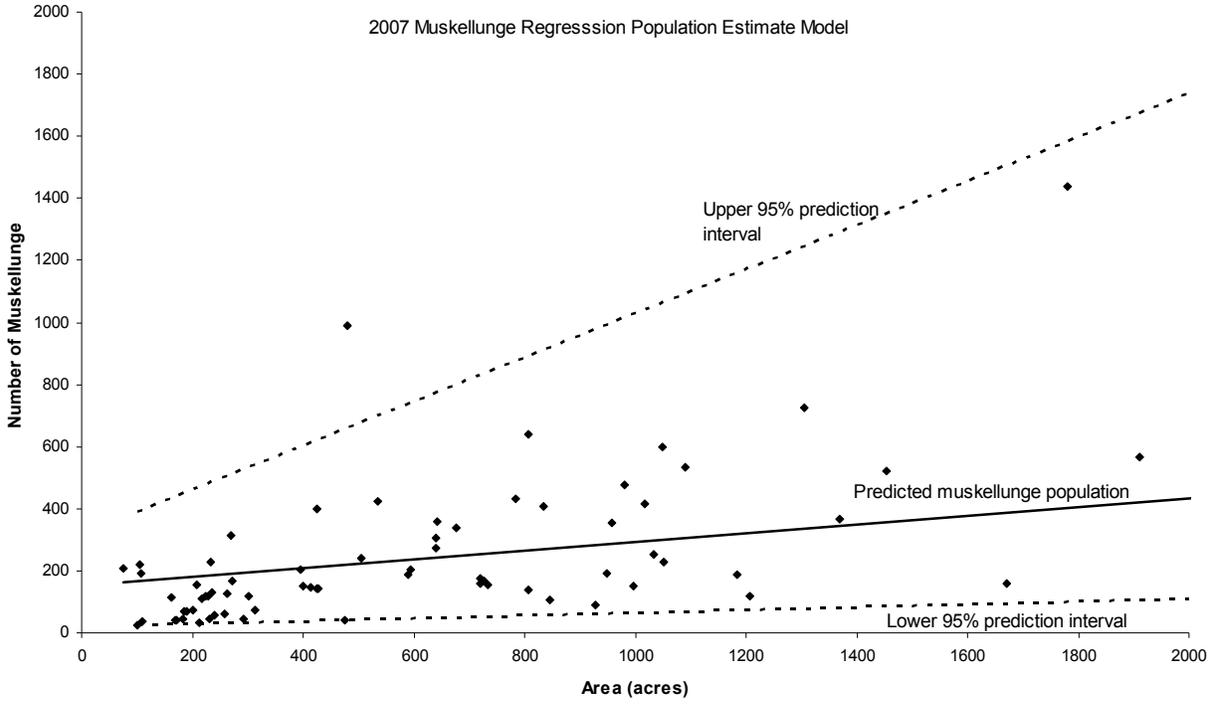


Figure 5. Regression model used to set 2007 safe harvest levels for muskellunge populations in lakes <2000 acres (applies to all lakes; only lakes <2000 acres are shown for illustrative clarity).

Estimating Fishing Effort and Harvest

Tribal Harvest and Exploitation

In lakes where current walleye population estimates are available, tribal harvest numbers are used in conjunction with population estimates to estimate tribal exploitation of walleye populations. Tribal harvest numbers for individual lakes are supplied to WDNR by GLIFWC and encompass all tribal harvest methods used (e.g. spring or winter spearing, netting). Tribal exploitation is estimated by dividing the total tribal walleye harvest within each lake by the estimated adult walleye population size for that same lake.

Angler Harvest and Exploitation - Creel Surveys

Creel surveys are generally conducted each year in the same lakes in which a walleye population estimate is done. Coordinating efforts in this way allows for year-long recovery in the creel of fish marked during spring population estimates, and subsequently allows for estimation of angler exploitation of walleye. Angler bag limits ranging between 1 and 5 walleye/day in the Ceded Territory are set on an annual basis using a “sliding bag-limit” system in which bags are determined based upon tribal declarations and harvest (Appendix B).

WDNR creel surveys use a random stratified roving access design (Beard et al. 1997; Rasmussen et al. 1998). The surveys were stratified by month and day-type (weekend / holiday or weekday), and creel clerks conducted their interviews at random within these strata. Surveys were conducted on all weekends and holidays, and two to three randomly chosen weekdays per week. Angler effort was recorded twice daily based on instantaneous counts of angler activity.

Clerks counted the number of anglers and recorded effort, catch, harvest, and targeted species from anglers completing their fishing trip. Clerks also measured harvested fish and recorded any fin-clips observed. Only completed-trip interview information was used for analyses. Information from interviews was expanded over the appropriate stratum to provide an estimate of total effort, catch, and harvest of each species in each lake for the year. Creel data were summarized according to lake size, population recruitment source and current state regulations (Appendix D). In cases where lakes were connected (as

either defined or undefined chains), creel clerks were not necessarily present at each individual lake on a given day; however, during the interview clerks collected information specific to lakes within the chain thereby enabling creel related estimates to be determined for individual lakes.

Angling effort was estimated for each stratum and summed across all strata to estimate total angler effort for each lake (angler hours/lake). Angler catch and harvest (hours/fish) rates were calculated for each gamefish species encountered, giving an indication of average angler success and providing an index of the relative abundance of each species. Species-specific catch and harvest rates were calculated using only species-specific fishing effort. General catch and harvest rates were calculated using total angler effort, regardless of the species targeted.

Tribal and angler walleye exploitation rates were calculated in lakes where adult population estimates and creel surveys were conducted. Angler exploitation rates for adult walleye were calculated by dividing the estimated number of marked fish harvested by the total number of marked fish present in the lake (R/M; Ricker 1975). Although anglers are able to harvest immature walleye in some waters, only adult walleye exploitation rates were calculated. Tribal exploitation was calculated as the total number of adult walleyes harvested divided by the adult population estimate (C/N; Ricker 1975). Total adult walleye exploitation rates were calculated by summing angling and tribal exploitation.

Young-of-Year Walleye Surveys

Electrofishing for YOY walleyes was done after sunset in early autumn, beginning when water temperatures had fallen below 70° F. In most cases, the entire shoreline of a lake was electrofished and all sub-adult walleyes were examined and measured. Two-sample t-tests were used to test various hypotheses: that YOY density (fish/mile shocked) observed in natural and stocked model lakes was equal during 2007, that within each recruitment model the YOY density observed in 2007 did not differ from the average over the previous 17 years (1990-2006), and that in stocked model lakes YOY density did not differ between those lakes that were stocked and those that were not stocked during 2007. A general linear model was used to evaluate the effects of recruitment model (natural or stocked), year, and the year*model interaction on YOY walleye/mile over time. The interaction term was evaluated as indicative of significant trends over time in YOY walleye/mile for lakes within one or both recruitment models.

Hansen et al. (2004) updated a previous analysis by Serns (1982) to establish a relationship between the number of YOY walleyes collected per mile of shoreline electrofished and their lake-wide density (#/acre) where:

$$Density = 0.0345 * (Catch\ per\ mile)^{1.564}$$

The Hansen et al. (2004) metric of YOY density is used in evaluation of differences between various lake classes (e.g. Natural or Stocked recruitment model lakes). Use of the Hansen et al. metric for this purpose began with the 2006-2007 annual report; In years prior to 2006 the Serns index was used for the same purpose.

To assess any potential for natural reproduction, a portion of lakes classified as 'stocked', 'remnant', or where the primary component of year class strength is uncertain were selected to receive fish with an internal oxytetracycline (OTC) otolith mark. A proportion of the YOY fish sampled from these lakes in the fall were sacrificed to assess the relevant contribution of stocking to the number of surviving YOY fish and to provide evidence of any contribution by natural reproduction.

RESULTS AND DISCUSSION

Spawning Adult Walleye Abundance

In 2007, spawning walleye populations were estimated in 34 lakes or chains, ranging in size from 146 to 11,905 acres and representing a range of walleye recruitment categorizations and angler regulations (Table 1). Spawning adult walleye abundance was estimable in each of the 34 Ceded Territory lakes in which walleye population estimates were attempted during 2007 (Table 1). Adult spawning walleye abundance estimates averaged 2.262 walleye (3.5/acre) across all lakes surveyed during 2007. Average abundance estimates for natural-model lakes (mean 2,517; range 276-10,430) were greater than in stocked- (mean 2,231; range 146-11,905) or remnant-model (mean 485; range 225-822) lakes during 2007 (Appendix E). Spawning walleye abundance was lowest (146) in Bass/Long Lakes, Lincoln County, and highest in Trout Lake, Vilas County (11,905; Table 1).

Spawning walleye density (walleye/acre) estimates averaged 3.5 adults/acre across all lakes surveyed during 2007. Average density estimates for natural-model lakes (mean 4.7; range 1.1-13.1) were greater than in stocked- (mean 1.4; range 0.5-3.1) or remnant-model (mean 1.6; range 0.8-2.3) lakes during 2007. Adult walleye density was lowest (1.1/acre) in Lake Owen, Bayfield County, and highest in Fifth Lake, Oneida County (13.1/acre; Table 1).

As in most previous years, differences observed during 2007 in walleye spawner density between lakes in different recruitment classes (natural, stocked, or remnant) were significant (General Linear Model, $P=0.002$). Spawner densities observed in 2007 were greater in lakes dominated by natural recruitment than in stocked lakes; no significant difference was found between remnant-model lakes and either natural or stocked-model lakes (Figure 8). Natural-model lakes had a significantly higher population densities than stocked -model lakes (Tukey-Kramer LS Means, $P=0.002$). Remnant-model lakes had average spawning adult walleye densities comparable to but slightly higher than stocked-model lakes in 2007 (Figure 8) although this value did not differ significantly from either natural or stocked-model waters ($P=0.07$ and 0.84 , respectively).

Table 1. Lakes surveyed by WDNR sampling crews in spring 2007 with corresponding information on adult and total walleye populations abundance and density.

WBIC ¹	County	Lake	Acres	Size Limit (in) ²	Recruitment code	Recruitment Model	Adult Pop. Estimate	Adult Density (#/Acre)
2742500	Bayfield	Bony	191	No min., 1>14	C-NR	natural	575	3.01
2900200	Bayfield	L Owen	1323	15	C-NR	natural	1,495	1.13
2741600	Douglas	Lower Eau Claire	802	15	C-NR	natural	1,994	2.49
2742100	Bayfield	Middle Eau Claire	902	No min., 1>14	C-NR	natural	5,925	6.57
2306300	Iron	Spider	352	No min., 1>14	NR	natural	550	1.56
2936200	Ashland	Spillerberg	75	none	C-NR	natural	386	5.14
672900	Florence	Keyes	202	15	C-NR	natural	358	1.77
1482400	Lincoln	Tug	151	15	C-	natural	801	5.31
1610700	Oneida	Big Fork	690	14-18 Slot	C-NR	natural	4,040	5.85
1612200	Oneida	Big Stone	548	14-18 Slot	C-NR	natural	1,400	2.56
1571100	Oneida	Fifth	240	No min., 1>14	NR	natural	3,153	13.14
1610800	Oneida	Fourmile	218	14-18 Slot, 1>18	C-NR	natural	276	1.27
1572000	Oneida	Fourth	258	No min., 1>14	NR	natural	1,160	4.49
1610600	Oneida	Little Fork	354	14-18 Slot, 1>18	C-NR	natural	895	2.53
1611700	Oneida	Medicine	372	14-18 Slot, 1>18	C-NR	natural	1,293	3.48
968800	Vilas	Anvil	398	14-18 Slot, 1>18	NR	natural	2,171	5.46
2338800	Vilas	Big Crooked	682	none	NR	natural	1,724	2.53
2339900	Vilas	Escanaba	293	28	NR	natural	3,244	11.07
716800	Vilas	Kentuck	957	No min., 1>14	C-NR	natural	7,520	7.86
1545300	Vilas	Little Arbor Vitae	534	No min., 1>14	C-NR	natural	4,360	8.16
1623800	Vilas	North & South Twin	3430	15	C-NR	natural	10,430	3.04
2336100	Vilas	Wolf	393	15	NR	natural	1,633	4.16
2706800	Burnett	Big Mckenzie	1185	15	C-ST	stocked	1,096	0.92
2678100	Burnett	Lipsett	393	15	ST	stocked	207	0.53
2624600	Polk	Magnor	231	15	ST	stocked	169	0.73
2393200	Sawyer	Sand	928	28	C-ST	stocked	2,639	2.84
2618000	Polk	Wapogasset	1186	15	C-ST	stocked	1,575	1.33
394400	Forest	Metonga	1,991	15	C-ST	stocked	1,675	0.84
969600	Lincoln	Bass/Long	232	15	ST	stocked	146	0.63
417400	Oconto	Archibald	393	15	C-ST	stocked	671	1.71
2331600	Vilas	Trout	3,816	15	C-ST	stocked	11,905	3.12
677100	Florence	Fay	282	15	0-ST	remnant	225	0.80
691800	Forest	Howell	177	15	NR-2	remnant	408	2.31
1573800	Oneida	Moen	460	No min., 1>14	NR-2	remnant	822	1.79

1 - WBIC is a Water Body Identification Code unique to each lake.

2 - Size limits reflect 2005-2006 minimum and slot length harvest regulations for each lake.

Regulation classifications were significantly related to walleye spawning population density (GLM $P=0.003$). Regulation classifications included in 2007 analyses include 'exempt' (includes no minimum and no minimum, 1>14" regulations), 14-18" no-harvest slot limit, and 15 and 18" minimum size limits. Lakes with "exempt" regulation classifications had higher spawning walleye densities than those with a 15-inch minimum size limit (Tukey-Kramer LS Means, $P=0.003$); Differences in walleye spawner density between other regulation class combinations evaluated were not significant. There have been no statistically significant trends in walleye spawner density in natural- (GLM, $P=0.797$) or stocked-model ($P=0.199$) walleye waters in the Ceded Territory since 1995⁵ (Figure 6 and Figure 7).

Excluding the three WDNR research lakes (Escanaba, Big Crooked, and Wolf, Vilas Co.), 23 lakes sampled in 2007 had at least one historic WDNR adult walleye population estimate (Table 2). Of the 14 lakes or chains sampled in 2006 with historic population estimates in the natural recruitment model, seven had increased in populations and seven had decreased populations since the prior survey. Kentuck Lake (Vilas Co.) showed the greatest increase of 929 percent since 1998; Little Fork Lake (Oneida Co.) showed the greatest decrease of 68 percent since 1994. Of four lakes or chains sampled in 2007 with historic population estimates in the stocked recruitment model, two had increased in populations and two had decreased populations since the previous survey. Trout Lake (Vilas Co.) showed the greatest population increase of 83 percent since 2004; Bass/Long lakes (Lincoln Co.) showed the greatest population decrease of 42 percent since 2000. No remnant-model lakes sampled during 2007 had prior population estimates available for comparison.

Information in Table 2 is intended to present current walleye population levels concurrently with past observations, but is not suitable or intended for defining or illustrating trends in walleye populations. Fish populations in general and walleye populations in particular are extremely variable and can change dramatically from year to year making interpretation of values in Table 2 difficult at best. This inherent variability in walleye populations is readily evident in that most of the lakes with more than two estimates show both positive and negative changes in population levels over time; Middle Eau Claire, North/South Twin, Lipsett, Metonga and Trout lakes each show increases and decreases with time (Table 2).

⁵ Data prior to 1995 was excluded due to a difference in the protocol used to select lakes for assessment (Hewett No Date)

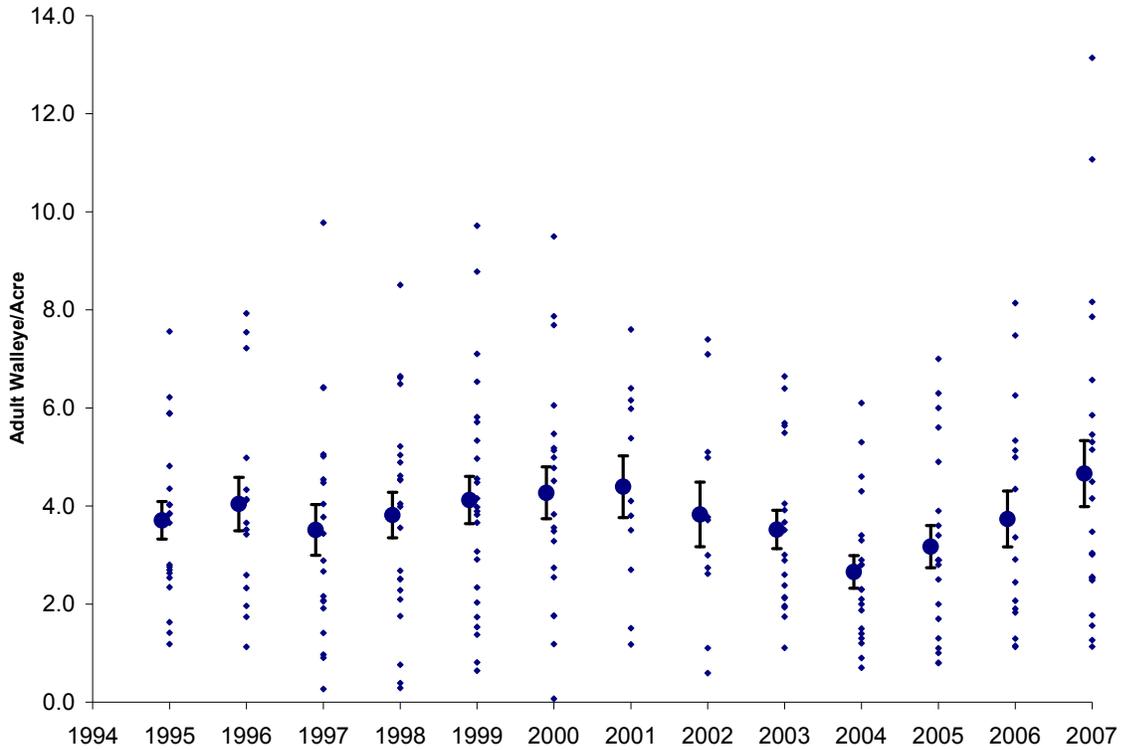


Figure 6. Adult walleye population density estimates recorded in Wisconsin Ceded Territory Lakes with populations sustained primarily by natural reproduction, 1990 – 2007. Small circles represent individual lakes; Large circles represent yearly means (\pm SE).

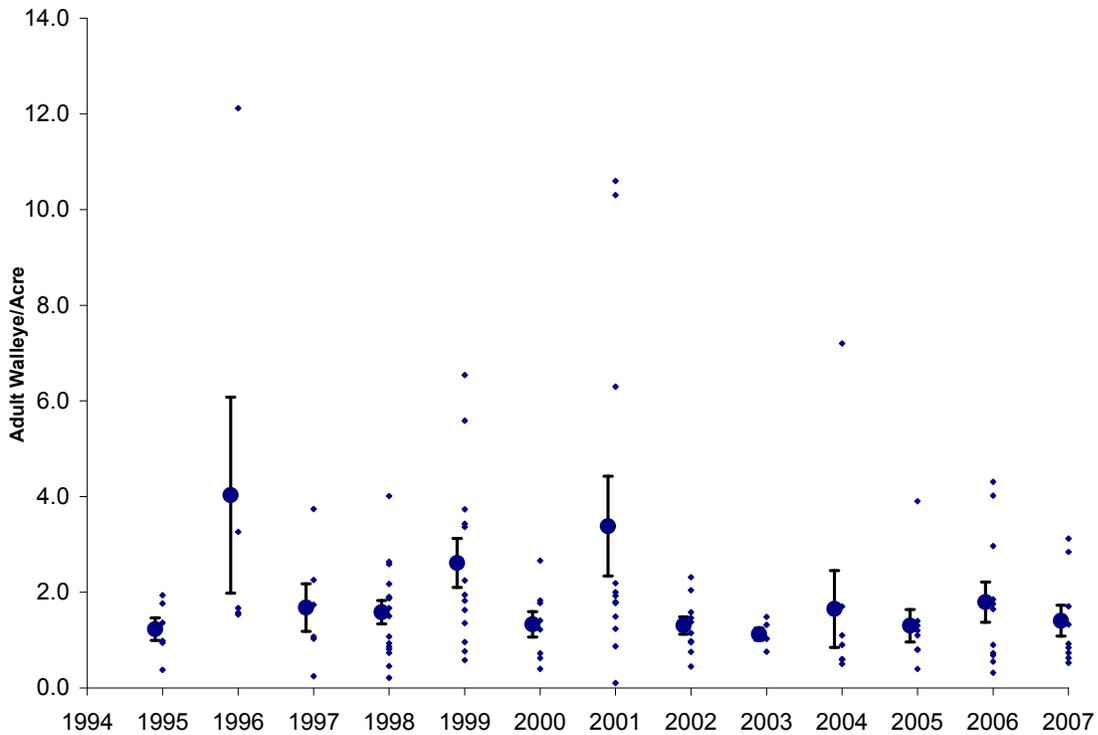


Figure 7. Adult walleye population density estimates recorded in Wisconsin Ceded Territory Lakes with populations sustained primarily by stocking, 1995 – 2007. Small circles represent individual lakes; Large circles represent yearly means (\pm SE).

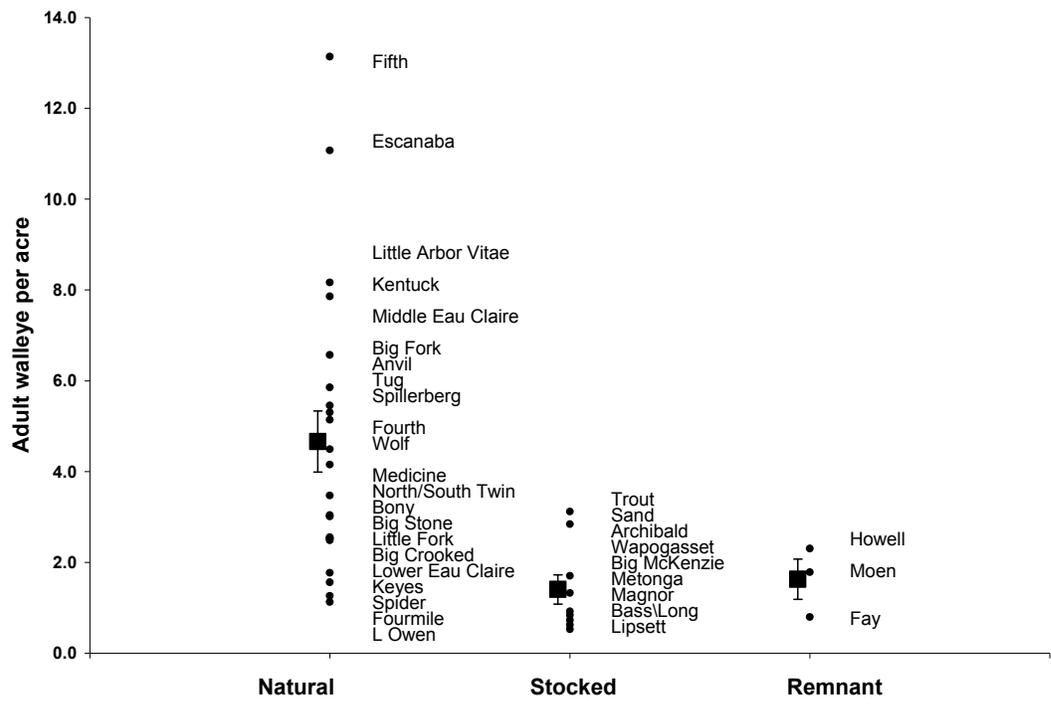


Figure 8. Adult walleye density estimates for lakes sampled by WDNR in spring 2007 based on primary population recruitment source.

Table 2. Comparison of current and historic walleye population estimates and percent change by recruitment model for lakes surveyed during 2007.

County	Lake	Acres	Year	Recruit. Code	Adult PE	Density (#/acre)	Percent Change
Natural Recruitment Lakes							
Bayfield	Middle Eau Claire	902	2007	C-NR	5,925	6.6	44
			2004	C-NR	4,128	4.6	1
			1998	C-NR	4,099	4.5	-10
			1993	C-NR	4,577	5.1	
Bayfield	Bony	191	2007	C-NR	575	3.0	33
			2004	C-NR	432	2.3	
Bayfield	Lake Owen	1,323	2007	C-NR	1,495	1.1	-27
			1994	C-	2,050	1.6	
Douglas	Lower Eau Claire	802	2007	C-NR	1,994	2.5	-2
			1995	C-NR	2,036	2.5	-32
			1993	NR	3,006	3.8	
Florence	Keyes	202	2007	C-NR	358	1.8	1
			2000	NR	355	1.8	81
			1997	NR	196	1.0	
Iron	Spider	352	2007	NR	550	1.6	-42
			1998	NR	943	5.0	
Oneida	Fourth/Fifth*	498	2007	NR	4,313	8.7	74
			1991	NR	2,477	3.7	
Oneida	Little Fork	354	2007	C-NR	895	2.5	-68
			1994	NR	2,801	7.9	
Oneida	Big Fork/Fourmile*	908	2007	C-NR	4,316	4.8	31
			1994	NR	3,288	3.6	
Oneida	Big Stone	548	2007	C-NR	1,400	2.6	-7
			1994	NR	1,513	2.8	
Vilas	Kentuck	957	2007	C-NR	7,520	7.9	929
			1998	NR	731	0.8	
Vilas	Anvil	398	2007	NR	2,171	5.5	-51
			1991	NR	4,453	11.7	
			2007	C-NR	4,360	8.2	8
Vilas	Little Arbor Vitae	534	1996	NR	4,028	7.5	67
			1990	NR	2,405	4.5	
			2007	C-NR	10,430	3.0	-26
Vilas	North/South Twin	3,430	1996	C-NR	14,121	4.1	123
			1991	C-NR, NR	6,337	1.8	
			2007	C-NR	11,905	3.1	83
Stocked Recruitment Lakes							
Burnett	Lipsett	393	2007	ST	207	0.5	-16
			2004	ST	245	0.6	-42
			1997	C-ST	420	1.1	175
			1994	C-ST	153	0.4	
Forest	Metonga	1,991	2007	C-ST	1,675	0.8	40
			2004	C-ST	1,199	0.6	-66
			2001	C-ST	3,518	1.8	
Lincoln	Bass/Long	232	2007	ST	146	0.6	-42
			2000	O	252	1.1	
Vilas	Trout	3,816	2007	C-ST	11,905	3.1	83
			2004	C-ST	6,520	1.7	-16
			2001	C-ST	7,785	2.0	-20
			1994	C-ST	9,673	2.5	

* In 2007 separate estimates were made for each lake and were combined here for comparative purposes; In prior surveys one estimate was made for both lakes combined.

Spawning Adult walleye size structure

Spawning adult walleye populations were estimated for each lake by length class in both natural (Figure 9) and stocked (Figure 10) production model lakes. Natural model lakes generally had higher walleye spawner densities than stocked model lakes, although the size structure sampled in stocked lakes tended to be larger relative to that in natural model lakes.

In natural model lakes spawning walleye abundance and size structures were highly variable (Figure 9). The majority of natural model lakes sampled had overall densities between 2 and 6 fish/acre. Five sampled lakes had walleye densities exceeding 6 fish/acre; of those 5 lakes, all have specialized harvest regulations in place (Escanaba Lake=28" minimum; Middle Eau Claire, Fifth, Kentuck, and Little Arbor Vitae=no minimum and only 1 fish>14"). Walleye spawning in the 7-11.9 inch category were limited in relative abundance in most natural production lakes sampled. Lakes that had substantial proportions of the overall walleye population made up of smaller fish tended to be those with specialized regulations although it is unclear if this is directly related to the harvest regulations or other factors (e.g. sporadic recruitment).

In stocked model lakes spawning walleye abundance and size structures were less variable than that observed in natural model lakes (Figure 10). With the exception of Sand and Trout lakes (Sawyer and Vilas Co., respectively) where the walleye spawner density approached 3 fish/acre, walleye densities observed in stocked model lakes were less than 2 fish/acre. Despite lower fish densities than those observed in natural model lakes, stocked model lakes generally had a high percentage (e.g. >50%) of the spawning population made up of relatively large fish (>15") available for angler harvest under general statewide regulations.

Data were available for calculation of PSD and RSD-18 for 21 natural, nine stocked, and three remnant model lakes sampled in 2007 (Table 3). Given that the majority of walleye regulations in the Ceded Territory lakes involve a 15" minimum size limit, calculating PSD as the percent of stock sized fish over 15" essentially makes this value a comparative tool to evaluate the percentage of harvestable fish across lakes.

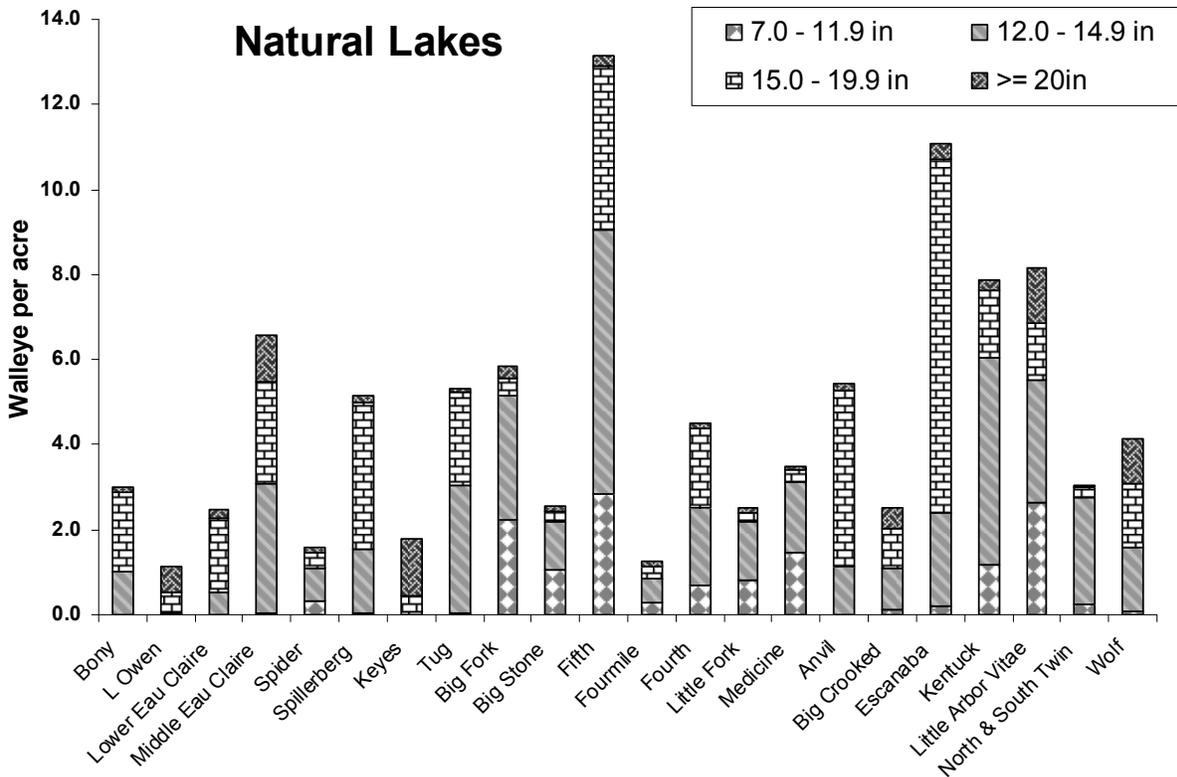


Figure 9. Size distribution of spawning walleye sampled in natural production model lakes during 2007.

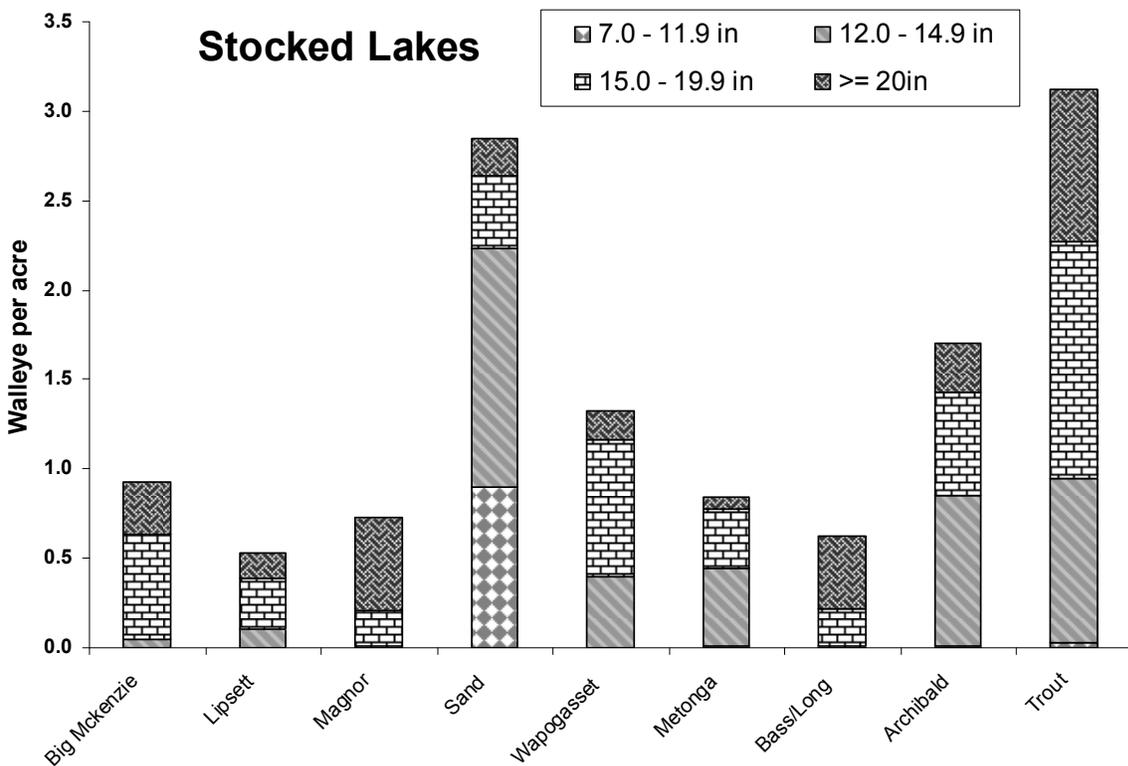


Figure 10. Size distribution of spawning walleye sampled in stocked production model lakes during 2007.

In natural model lakes observed PSD and RSD-18 values were highly variable, with PSDs ranging from 18 to 99 percent and RSD-18s ranging from 2 to 77 percent. In both stocked and remnant model lakes observed PSD values showed less variability than was noted in natural model lakes although RSDs in these lakes were more variable than PSDs. PSDs in stocked model lakes typically exceeded 50 percent with a single exception (30 in Sand Lake, Sawyer Co.). PSDs in remnant model lakes exceeded 90 percent in two of three surveyed lakes; in Howell Lake, Forest Co., the observed PSD was 62 percent. RSD-18s in stocked and remnant model lakes ranged from 13-63 and 32-66 percent, respectively.

In 2007, average size structure was generally largest in remnant model lakes, intermediate in stocked lakes, and smallest in natural model lakes (Figure 11). Mean PSDs for stocked, remnant and natural model lakes were 61, 81 and 50, respectively. Mean RSD-18s for stocked, remnant and natural model lakes were 30, 43 and 22, respectively. Differences in PSD and RSD-18 values across lakes in various recruitment models could be caused by an increase in the relative abundance of quality (PSD, $\geq 15''$) or preferred (RSD, $\geq 18''$) sized fish, a decrease in the relative abundance of stock sized fish ($\geq 12''$), or some combination of these two factors.

Mean annual PSD values have increased over time in natural model lakes⁶ (Figure 12). Observed PSD and RSD-18 values were found to be highly correlated over time for both natural ($r^2=0.80$) and stocked ($r^2=0.71$) lakes, so only PSD values are discussed here. The observed trend in PSD in natural recruitment lakes is statistically significant and indicates an average annual increase of approximately 1.1 percent/year (Linear Regression, slope 1.07, $P=0.04$). In stocked recruitment lakes the PSD trend is not significant ($P=0.54$) and has a slope well under 1 percent/year (Slope 0.38). The trend in PSD within natural model lakes illustrates an apparent increase in the overall walleye population size structure since 1995 that could be caused by an increase in the relative abundance of quality sized fish ($\geq 15''$), a decrease in the relative abundance of stock sized fish ($\geq 12''$), or some combination of these two factors.

⁶ Only data points with a minimum of three associated lake observations were included in this analysis. This precluded inclusion of earlier (pre-1995) data and that from remnant model lakes.

Table 3. Walleye Proportional and Relative Stock Density values for lakes surveyed in spring, 2007.

County	Lake	Acres	Recruitment Code	Walleye Regulation	PSD	RSD-18
Natural Recruitment Lakes						
Bayfield	Bony	191	C-NR	No Min.; 1>14	63	18
Bayfield	L Owen	1323	C-NR	15	95	77
Bayfield	Middle Eau Claire	902	C-NR	No Min.; 1>14	49	12
Chippewa	Wissota	6300	NR	No Min.; 1>14	73	36
Douglas	Amnicon	426	C-NR	15	18	11
Douglas	Lower Eau Claire	802	C-NR	15	86	27
Florence	Keyes	202	C-NR	15	99	91
Iron	Spider	352	NR	No Min.; 1>14	21	5
Oneida	Big Fork	690	C-NR	15	20	9
Oneida	Big Stone	548	C-NR	15	30	21
Oneida	Fourmile	218	C-NR	15	42	12
Oneida	Fourth	258	NR	No Min.; 1>14	35	8
Oneida	Hat Rapids Fl.	650	NR	15	54	18
Oneida	Little Fork	354	C-NR	15	39	19
Oneida	Medicine	372	C-NR	15	19	9
Price	Pixley Fl.	334	NR	15	45	10
Vilas	Anvil	380	NR	No Min.; 1>14	79	18
Vilas	Helen	111	NR	15	94	69
Vilas	Kentuck	957	C-NR	15	26	5
Vilas	Little Arbor Vitae	534	C-NR	No Min.; 1>14	58	35
Vilas	North Twin	2788	C-NR	15	12	2
Stocked Recruitment Lakes						
Burnett	Lipsett	393	ST	15	77	50
Burnett	Mckenzie	1185	C-ST	15	95	63
Forest	Metonga	1991	C-ST	15	50	18
Iron	Cedar	193	C-ST	No Min.; 1>14	58	26
Oconto	Archibald	393	C-ST	15	53	39
Oneida	Booth	207	ST	15	60	17
Polk	Wapogasset	1186	C-ST	15	80	30
Sawyer	Sand	928	C-ST	28	30	13
Vilas	Trout	3816	C-ST	15	60	27
Remnant Population Lakes						
Florence	Fay	247	0-ST	15	96	66
Forest	Howell	177	NR-2	15	62	40
Oneida	Moen	460	NR-2	No Min.; 1>14	92	32

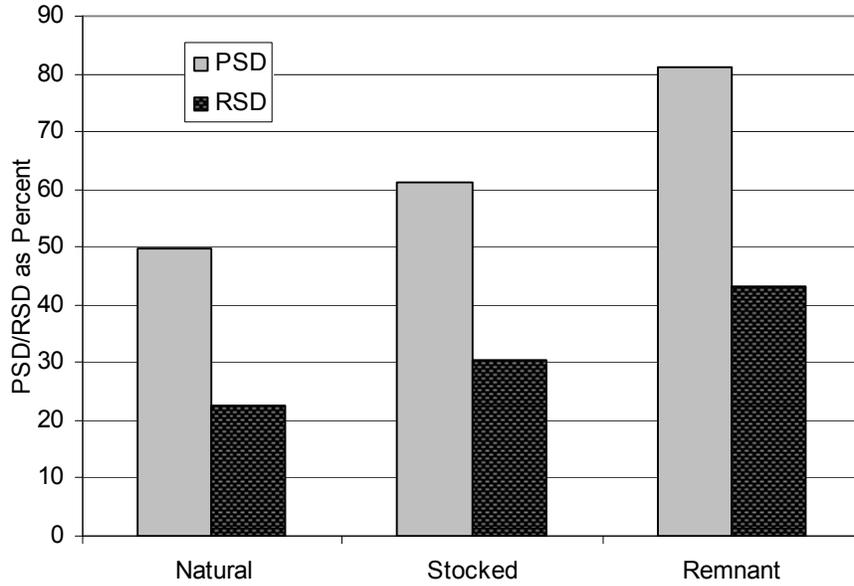


Figure 11. Comparison of mean PSD and RSD-18 values across lakes in various walleye recruitment models.

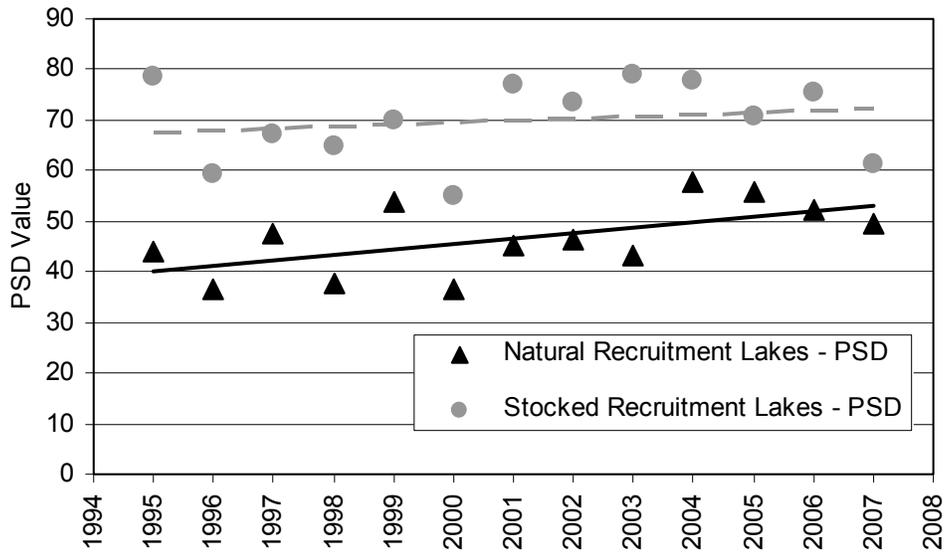


Figure 12. Trends in PSD values observed for walleye in Ceded Territory lakes since 1995.

Muskellunge Abundance

Adult muskellunge population and density estimates were completed in fourteen Ceded Territory lakes or lake groups during spring 2007 (Table 4, Appendix F). Single estimates were made for the Twin Lake Chain (North and South Twin) and for the Mud/Callahan system (Sawyer Co.) during 2007.

Population estimates completed in 2007 reflect 2006 population numbers because of the two-year mark-recapture time span used to derive estimates. Muskellunge densities averaged 0.43 adult fish/acre and ranged between 0.05 and 1.81 adult fish/acre; the majority of lakes had densities less than 0.5 adult fish/acre (10 of 14 estimates). Adult muskellunge densities did not appear to be related to lake size or angler regulations (Table 4).

Table 4. Adult muskellunge population estimates completed in 2007 in the Wisconsin Ceded Territory. Regulations presented are for 2007.

County	Lake	Angler Regulation (inches)	Acres	Minimum length in PE (inches)		Adult PE	CV(%)	Total per acre
				Male	Female			
Ashland	Mineral	34	225	17.5	27.5	11	16.7	0.05
Burnett	Twenty Six	40	230	27.5	33.0	78	10.2	0.34
Chippewa	Wissota	34	6,300	24.0	29.0	740	21.9	0.12
Douglas	Amnicon	34	426	24.5	24.5	771	18.0	1.81
Lincoln	Seven Island	34	132	21.0	31.5	88	13.3	0.67
Lincoln	Somo	34	472	21.5	30.0	192	18.7	0.41
Oneida	Buckskin	40	634	27.5	31.0	192	22.8	0.30
Oneida	North Nokomis	34	476	21.5	28.5	244	28.5	0.51
Sawyer	Grindstone	50	3,111	24.0	28.5	290	18.0	0.09
Sawyer	Mud/Callahan	28	586	21.5	22.0	508	17.6	0.87
Sawyer	Spider	34	1,454	18.0	21.0	495	12.3	0.34
Vilas	Lac Vieux Desert	40	4,300	25.0	27.0	851	25.0	0.20
Vilas	North/South Twin	34	3,430	27.0	31.5	495	15.6	0.14
Vilas	Plum	34	1,033	24.0	31.5	138	14.0	0.13

Bass Abundance

Population estimates were made for smallmouth bass in seven lakes and largemouth bass in nine lakes in 2007 (Table 5). Smallmouth bass densities averaged 2.8 fish/acre and ranged from 0.7 fish/acre (Lake Metonga, Forest County) to 8.2 fish/acre (Mildred Lake, Oneida County). Density estimates of smallmouth bass in most lakes were less than 2 fish/acre (Table 5). Largemouth bass density averaged 5.4 fish/acre and ranged from 1.4 fish/acre in Anvil Lake (Vilas Co.) to 15.0 fish/acre in Bass/Long lakes (Lincoln Co.). Wapogasset and Magnor lakes in Polk County also had relatively high largemouth bass density (8.7 and 7.6 bass/acre, respectively). Largemouth bass densities in other lakes surveyed were all less than 4 fish/acre (Table 5).

The size structure of both largemouth and smallmouth bass was dominated by 8.0-14" fish in nearly all lakes sampled (Figure 13 and Figure 14). Larger fish (>14") however did make up substantial portions of the largemouth bass populations in Keyes, Bass/Long, Otter, Magnor and Wapogasset lakes and the smallmouth bass populations in Keyes, Metonga, Anvil and Kentuck lakes.

Table 5. Bass population estimates for lakes sampled in the Wisconsin Ceded Territory in spring 2007.

County	Lake	Acres	Angler Regulation	Total PE	CV	Total /acre	8.0-13.9" /acre	14.0-17.9" /acre	18.0"+ /acre
Smallmouth Bass									
Florence	Keyes	202	14"	311	0.34	1.54	0.97	0.41	0.17
Forest	Metonga	1,991	14"	1,392	0.24	0.70	0.31	0.33	0.06
Oneida	Clear	846	14"	4,987	0.14	5.90	5.29	0.61	0.00
Oneida	Mildred	191	14"	1,569	0.27	8.23	7.76	0.46	0.01
Oneida	Two Sisters	719	14"	701	0.19	0.97	0.86	0.11	0.01
Vilas	Anvil	398	14"	500	0.26	1.26	0.80	0.43	0.02
Vilas	Kentuck	957	18" 1/day	1,025	0.14	1.07	0.39	0.67	0.02
Largemouth Bass									
Florence	Keyes	202	14"	797	0.26	3.94	2.53	1.39	0.02
Langlade	Greater Bass	258	18" 1/day	708	0.31	2.75	2.55	0.19	0.01
Lincoln	Bass/Long	232	14"	3,469	0.16	14.95	11.24	3.69	0.02
Lincoln	Otter	34	14"	114	0.27	3.35	1.86	1.40	0.09
Oneida	Clear	846	14"	2,492	0.17	2.95	2.89	0.05	0.00
Oneida	Mildred	191	14"	544	0.25	2.86	2.39	0.45	0.01
Polk	Magnor	231	14"	1,750	0.27	7.58	1.74	4.72	1.12
Polk	Wapogasset	1,186	14"	10,338	0.11	8.72	6.48	2.22	0.02
Vilas	Anvil	398	14"	567	0.20	1.43	0.90	0.51	0.01

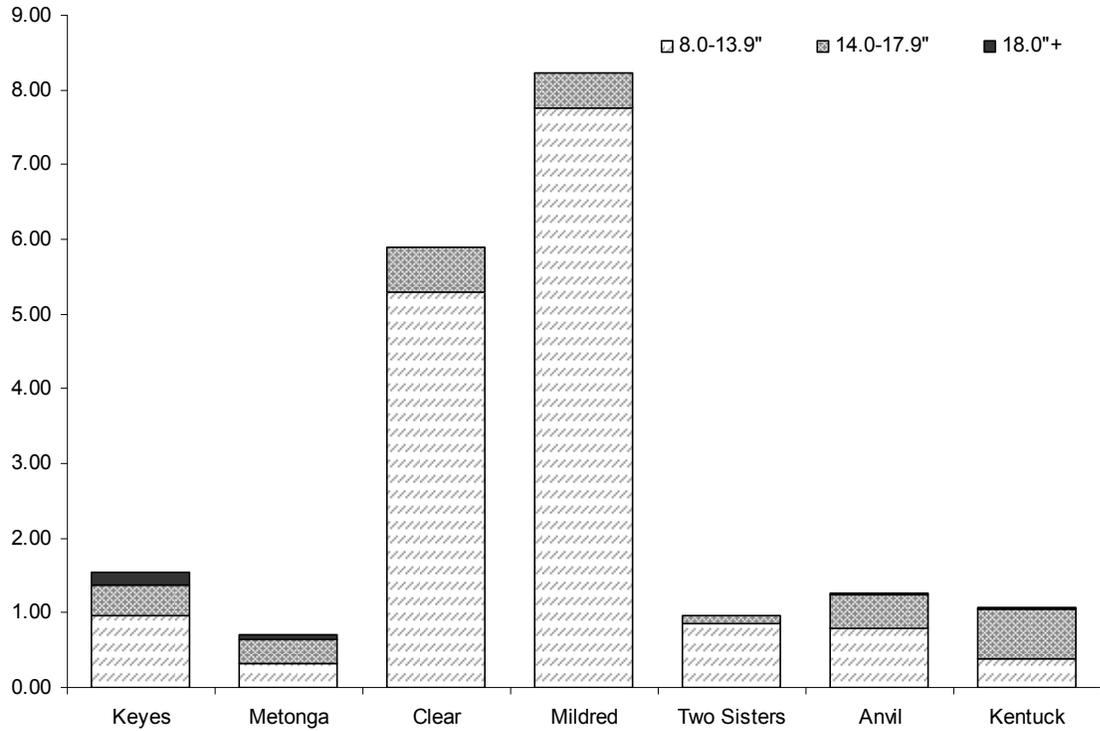


Figure 13. Smallmouth bass population densities (fish ≥ 8.0") by size range for lakes sampled in the Wisconsin Ceded Territory in spring 2007.

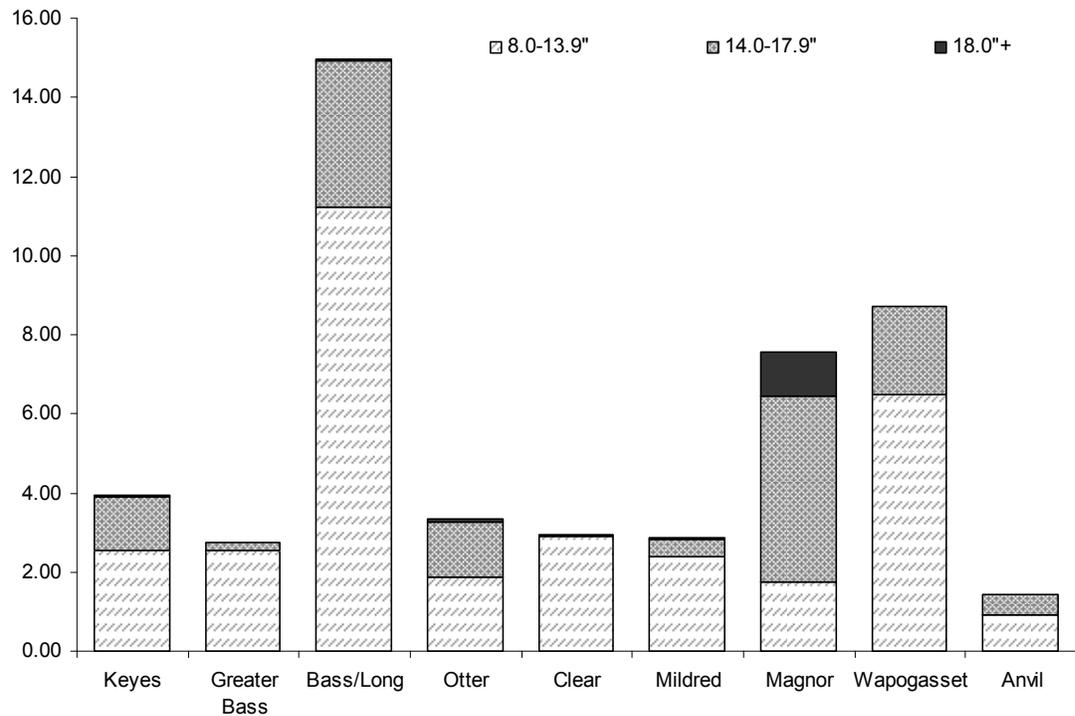


Figure 14. Largemouth bass population densities (fish ≥ 8.0") by size range for lakes sampled in the Wisconsin Ceded Territory in spring 2007.

Creel Surveys

In 2007-2008 (May through March), creel surveys were conducted in 21 lakes in 11 counties for which walleye population estimates were made during spring 2007 (Appendix D). Creel surveyed lakes ranged in size from 131 to 3,816 acres (Cranberry Lake-Bayfield Co. and Trout Lake-Vilas Co., respectively) within the Ceded Territory.

Overall Angler Effort

The mean total angler effort per acre in lakes 500 acres and larger (25.5 hours/acre) did not statistically differ from the effort recorded on lakes smaller than 500 acres (34.0 hours/acre) in 2007-2008 (t-test-equal variances $t = -1.07$, $df = 17$, $P = 0.30$). Since 1995 when random lake selection began, mean total angler effort has been significantly lower in large lakes (26.2 hours/ acre) than in small lakes (37.7 hours/ acre; t-test-unequal variances $t = -3.63$, $df = 174$, $P < 0.01$). No trend in total angler effort has been observed since 1995 across all lakes (GLM: $F_{(1, 256)} = 0.06$, $p = 0.81$). This finding is consistent with other studies and evaluations on angling pressure in Ceded Territory lakes (Cichosz 2009, Hansen 2008, Deroba et al. 2007, Hennessy 2005; Figure 15).

Walleye Effort, Catch and Exploitation

Directed effort is defined as hours reported by anglers fishing for a specific species, and averaged 8.85 hours per acre for walleye in surveyed lakes during the 2007-08 angling season. Directed walleye fishing pressure in surveyed lakes was highly variable, so although directed effort in lakes sustained by natural reproduction (10.9 hours/ acre) appeared to be higher than in those lakes sustained by stocking (6.0 hours/ acre), the observed difference was not statistically significant (t-test-unequal variances, $t = 1.52$, $df = 12$, $P = 0.15$). Directed effort was also comparable in large (≥ 500 ac., 9.37 hours/ acre) and small lakes (< 500 ac., 8.27 hours/ acre; t-test-equal variances $t = 0.29$, $df = 17$, $P = 0.78$) surveyed during the 2007-08 angling season. Overall directed angler effort (hours/acre) for walleye has declined since 1995 (Slope = -0.34, $F_{(1,256)} = 8.37$, $P < 0.01$; Figure 16).

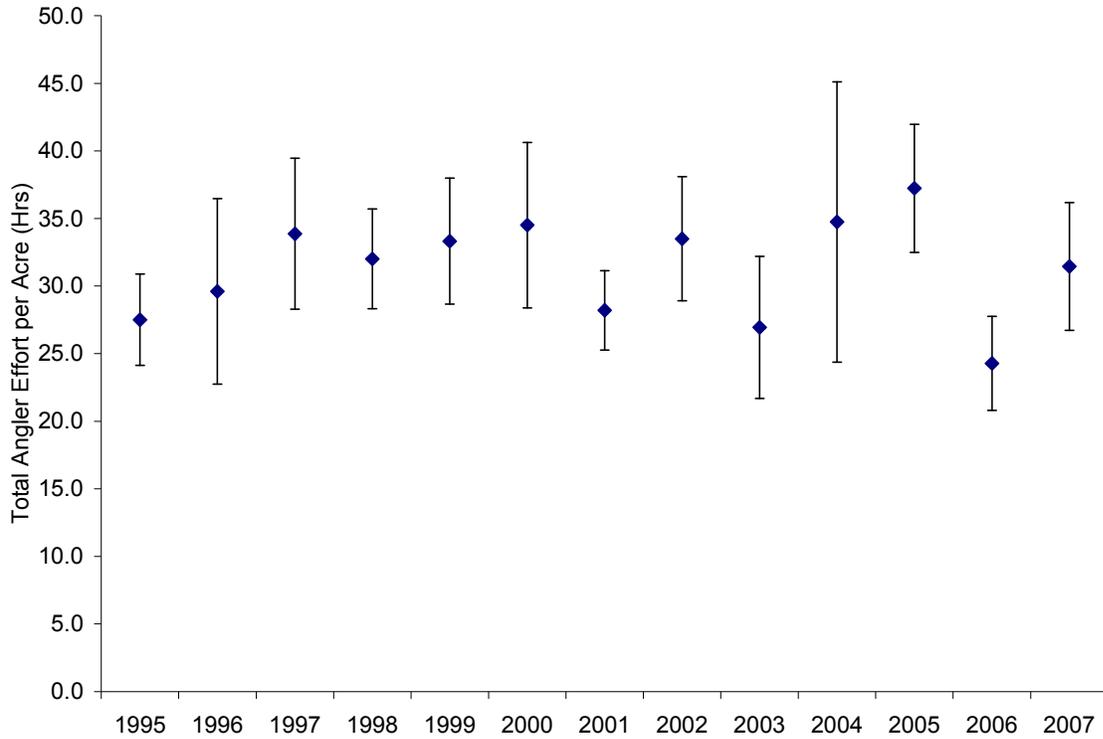


Figure 15. Average total angler effort per acre (\pm SE) in Wisconsin Ceded Territory lakes where WDNR conducted creel surveys, 1995-2007.

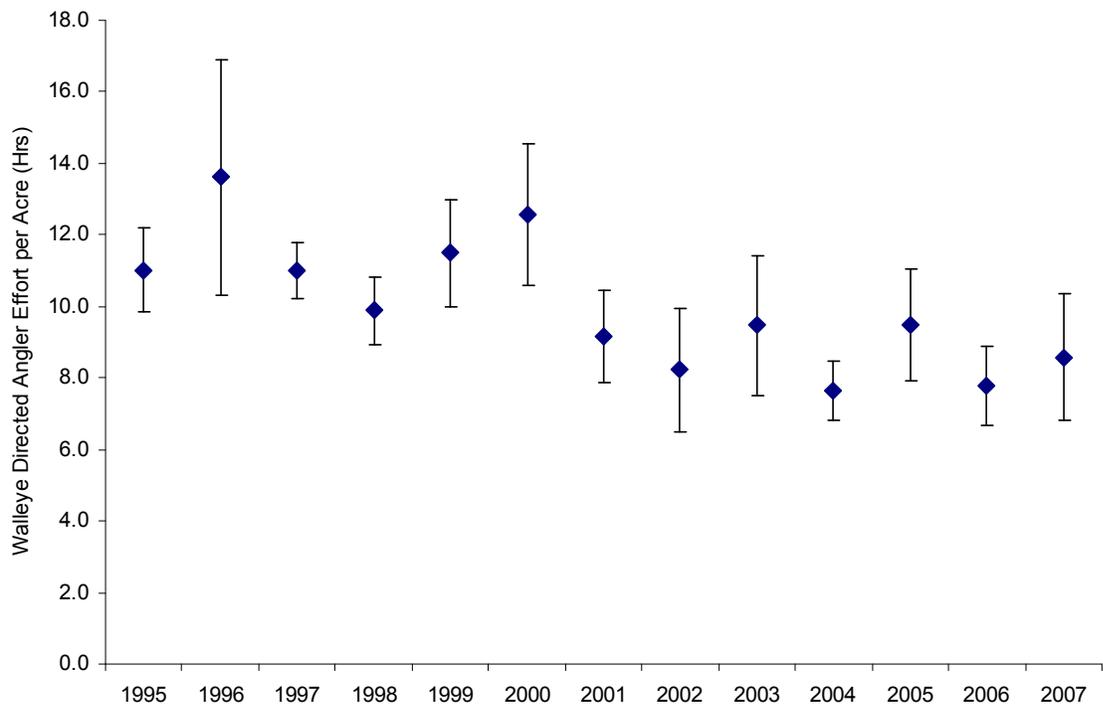


Figure 16. Directed angler effort per acre (\pm SE) for walleye in Wisconsin Ceded Territory lakes where WDNR conducted creel surveys, 1995-2007.

In 2007-08 the mean specific catch rates (SCR) was 0.19 walleye/hour of directed effort (1 fish per 5.2 hours). In lakes with naturally sustained or stocked populations, respectively, mean SCR were 0.19 walleye per hour (5.3 hours directed effort/ walleye caught) and 0.21 walleye/ hour (1 fish caught per 4.8 hours of directed effort). Specific harvest rates averaged 0.058walleye/hour of directed effort (17.2 hours/walleye harvested) and ranged between 0.00 and 0.15 walleye/hour for individual lakes surveyed (Appendix D). Based on creel survey results, anglers harvested approximately 30% of all walleye caught during the 2007-08 season which is very near the average annual percentage estimated between 1995 and 2006 (29%).

Between 1995 and 2007 a statistically relevant downward trend in SCR was observed (Figure 17; Slope = -0.011, $F_{(1, 256)} = 6.75$, $P = 0.01$). Although statistically relevant this trend appears driven by relatively high catch rates estimated in 1996 and 1997; with a slope very near zero, there is likely no biological or other relevance to this trend. No discernable trend was noted for specific harvest rate by year since 1995 ($F_{(1, 256)} = 1.15$, $P = 0.28$) for walleye in the Wisconsin Ceded Territory (Figure 17).

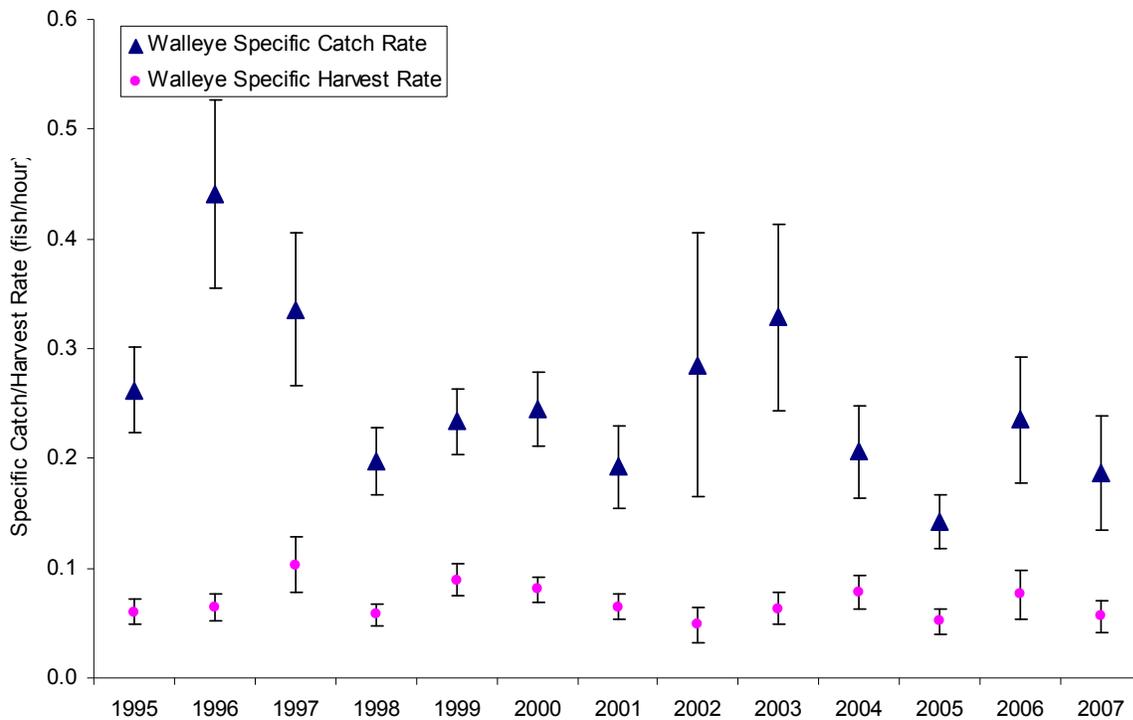


Figure 17. Specific catch and harvest rates (\pm SE) for walleye in surveyed lakes in the Wisconsin Ceded Territory, 1995-2007. Specific catch or harvest rate is number of walleye caught or harvested divided by time spent fishing specifically for walleye.

Walleye exploitation rates were estimated for 19 lakes during 2007-08 (Table 6; Appendix H). Estimated total (angler + tribal) exploitation of walleye ranged from 0% to 38%. Angler exploitation of walleyes in various size classes showed a similar range with exploitation of walleye 14" or longer ranging from 0% to 29% and that of walleyes 20" or longer ranged from 0.0% to 28%. Tribal exploitation of walleyes ranged from 0.0% to 20% across all lakes and exceeded the estimate of angler exploitation in six of 19 lakes surveyed (L. Owen, Big McKenzie, Lipsett, Lower Eau Claire, Metonga and Sand; Table 6). Based on 2007-08 survey results angler exploitation of walleye populations was estimated as zero in six of 19 lakes surveyed; Eight of the 19 lakes surveyed incurred no tribal exploitation of walleye.

The total exploitation rate of walleye in Lake Owen was estimated at 38% and was the only lake surveyed in 2007 with an estimate exceeding 35%. Safe harvest limits are set so that over time there is less than a 1-in-40 chance that exploitation will exceed 35% in any given year on any single lake.

Table 6. Adult walleye exploitation rates by lake and harvest type for 2007, with comparison to 1995-2006 mean exploitation rates.

Lake	County	Acres	Angler exploitation	Angler expl. ≥14"	Angler expl. ≥20"	Tribal expl.*	Total adult exploitation
Bony	Bayfield	191	0.0000	0.0000	0.0000	0.0000	0.0000
L Owen	Bayfield	1,323	0.1781	0.1853	0.2774	0.2020	0.3801
Middle Eau Claire	Bayfield	902	0.0887	0.0987	0.0746	0.0500	0.1387
Big Mckenzie	Burnett	1,185	0.0418	0.0420	0.0473	0.0675	0.1093
Lipsett	Burnett	393	0.0567	0.0597	0.0000	0.1353	0.1920
Lower Eau Claire	Douglas	802	0.0462	0.0482	0.0000	0.0933	0.1395
Fay	Florence	282	0.0000	0.0000	0.0000	0.0000	0.0000
Metonga	Forest	1,991	0.0276	0.0377	0.1020	0.0639	0.0915
Spider	Iron	352	0.1278	0.2752	--- **	0.0000	0.1278
Tug	Lincoln	151	0.1675	0.2192	0.0000	0.0000	0.1675
Fourth\Fifth	Oneida	498	0.0586	0.0679	0.0000	0.0000	0.0586
Moen\Second\Third	Oneida	674	0.0000	0.0000	0.0000	0.0000	0.0000
Bear Trap	Polk	241	0.0000	0.0000	0.0000	0.0000	0.0000
Magnor	Polk	231	0.0000	0.0000	0.0000	0.0000	0.0000
Wapogasset	Polk	1,186	0.1901	0.2070	0.0849	0.0451	0.2351
Sand	Sawyer	928	0.0000	0.0000	0.0000	0.0197	0.0197
Little Arbor Vitae	Vilas	534	0.1182	0.1263	0.0412	0.0266	0.1449
Trout	Vilas	3,816	0.1045	0.1311	0.1925	0.0162	0.1207
Twin L Chain	Vilas	3,430	0.0976	0.2914	0.0000	0.0672	0.1648
2007 mean			0.0686	0.0942	0.1042	0.0414	0.1100
1995-2006 mean			0.0853	0.1042	0.1314	0.0468	0.1319

* Tribal harvest data used to calculate tribal exploitation provided by the Great Lakes Indian Fish and Wildlife Commission (Ngu 1995, Ngu 1996, Krueger 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008).

** Value is not estimable due to sampling/estimation errors.

Muskellunge Effort and Catch

Of the 18 lakes and chains surveyed in 2007, 14 are classified as musky waters. Creel clerks recorded at least one musky caught from 14 of the 18 lakes surveyed (Appendix D). For the purpose of analyses and summarization of catch and effort, lakes not classified as musky waters and those without directed fishing effort were excluded even if limited numbers of musky were reported in creel surveys.

In general, the “action classification” assigned to lakes (WDNR 1996) is a better predictor of musky catch and effort than recruitment source or lake size to describe variability in catch and effort (Simonson and Hewett 1999). Analysis of variance was used to evaluate differences in angler catch/acre, specific catch rate, and directed effort across action classifications and timelines (2007 versus prior 10 year averages; Table 7). Angler catch, catch rate, and directed effort were all similar in 2007 to the prior 10 year averages for each lake classification (Table 7). Based on analyses of variance, no significant differences were observed for angler catch ($F = 1.16, P = 0.28$), specific catch rate ($F = 0.24, P = 0.63$), and directed effort ($F = 2.57, P = 0.11$) between 2007 values and those averaged across the previous 10 years. There has been no observed trend in muskellunge directed effort (Linear regression; $F_{(1, 198)} = 0.96, P = 0.33$) or catch rates ($F_{(1, 198)} = 0.03, P = 0.86$) in the Ceded Territory since 1995 (Figure 18).

Table 7. Comparison of muskellunge catch and effort rates in 2007 and average values from 1997-2006, by musky lake classification.

Class	Class Description	Lakes sampled	Angler catch/ acre	Specific catch rate (fish/ hour)	Directed effort (hours/ acre)	Mean density (PEs in sample)
2007						
A1	Trophy waters	2	0.05	0.020	1.92	0.11 (2)
A2	Action waters	8	0.49	0.048	8.44	0.95 (2)
B	Intermediate action/ size	2	0.05	0.020	3.41	--- (0)
C	Low importance	2	0.05	0.025	0.78	--- (0)
Total		14	0.30	0.036	5.70	0.53 (4)
1997-2006 Averages (Prior 10 years)						
A1	Trophy waters	61	0.24	0.028	7.26	0.22 (21)
A2	Action waters	69	0.66	0.040	12.89	0.53 (16)
B	Intermediate action/ size	19	0.23	0.038	5.19	0.32 (6)
C	Low importance	9	0.02	0.005	0.94	--- (0)
Total		158	0.41	0.033	9.11	0.35 (43)

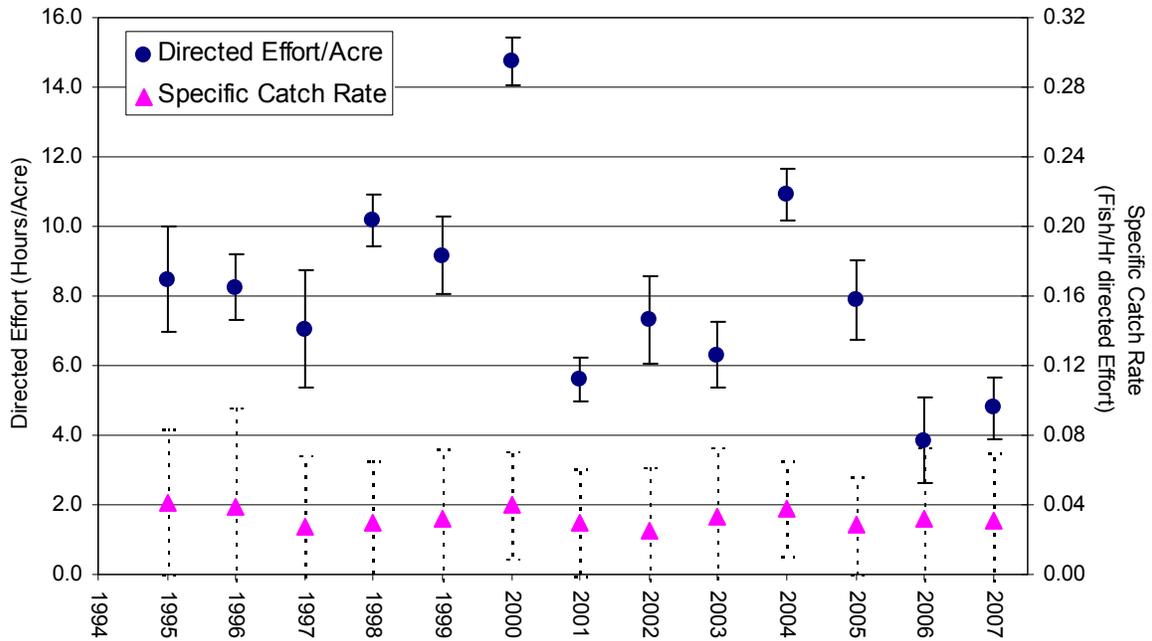


Figure 18. Directed angler effort per lake surface acre and specific catch rate (\pm SE) for muskellunge in surveyed lakes in the Wisconsin Ceded Territory, 1995-2007.

Northern Pike Effort and Catch

During the 2007-08 angling season both directed effort for and catches of northern pike were recorded for all 21 lakes surveyed (Appendix D). Of the 21 creel surveyed lakes with northern pike recorded, eleven were smaller than 500 acres and ten were 500 acres or larger (Table 8). Although differences in mean values appeared substantial for some variables, there were no significant differences between large and small lakes with regard to directed angler effort, specific catch rate, angler catch per acre, or specific harvest rate of northern pike during the 2007-08 angling season (Table 8). For northern pike no significant differences were found between 2007 creel values and the corresponding prior 10 year averages (1997 -2006) for any of the variables evaluated in Table 8.

Estimates of angler effort directed toward northern pike have been highly variable across years (Figure 19), and since 1995 there has not been a statistically detectable trend in directed angler effort for northern pike ($F_{(1, 240)} = 0.58, P = 0.45$). Similarly, specific catch rates of northern pike show no significant trend since 1995 ($F_{(1, 240)} = 3.28, P = 0.07$); the trend in specific catch rates was reported to be

significantly declining through 2006 (Cichosz 2009) although recent increases in northern pike catch rates have negated that significance.

Table 8. Mean estimates calculated from 2007 and 1997-2006 northern pike creel survey data.

Year	Lake Size	N	Catch/ Acre	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	Directed Effort/ Acre
2007*							
	< 500 acres	10	2.38	0.41	0.23	0.06	5.77
	> 500 acres	11	1.57	0.29	0.16	0.06	2.69
	All lakes	21	2.00	0.35	0.19	0.06	4.37
1997-2006*							
	< 500 acres	89	2.49	0.40	0.19	0.05	5.76
	> 500 acres	108	2.19	0.33	0.19	0.04	3.72
	All lakes	197	2.33	0.36	0.19	0.04	4.30

* No significant differences exist between large and small lakes for any parameter for the 2007-08 angling season (T-test, $p > 0.05$).

** No significant differences exist between 2007 values and the corresponding prior 10 yr. average for any listed variable or lake size combination (T-test, $p > 0.05$).

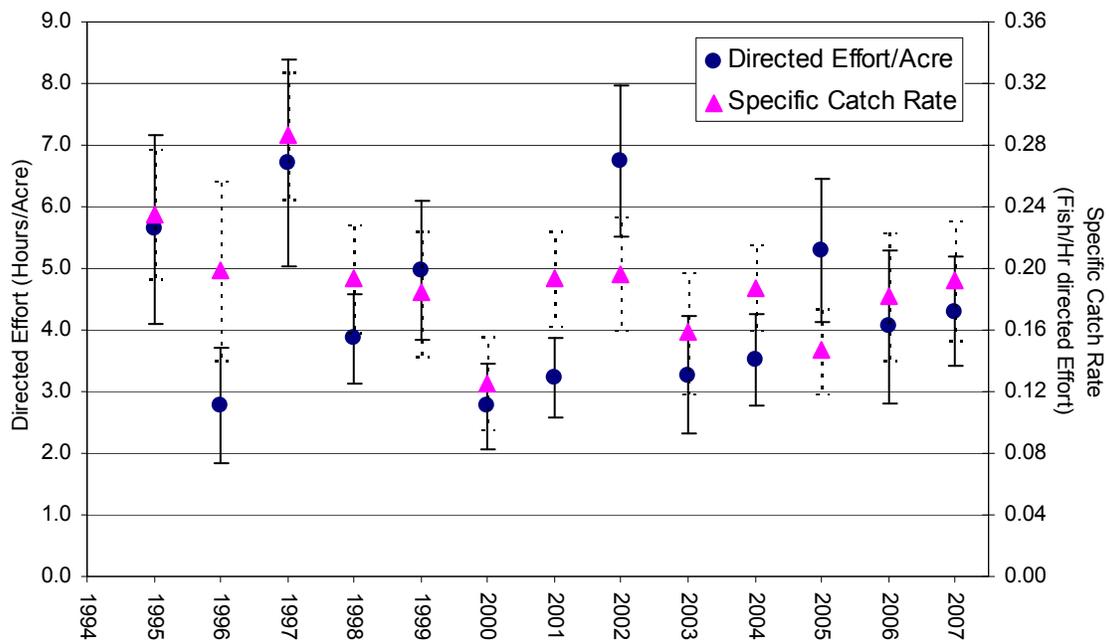


Figure 19. Directed angler effort per lake surface acre and specific catch rate (\pm SE) for northern pike in surveyed lakes in the Wisconsin Ceded Territory, 1995-2007.

Largemouth Bass Effort and Catch

Catches of largemouth bass were reported for 20 of the 21 lakes surveyed in 2007 (exception was Bony Lake, Bayfield Co.). Twenty of 21 lakes also had at least some level of directed effort reported for largemouth bass (exception Spider Lake, Iron Co.; Appendix D). Of surveyed lakes with largemouth bass catch, ten were smaller than 500 acres and ten were 500 acres or larger (Table 9). In 2007, there were no significant differences between large and small lakes with regard to directed (toward largemouth bass) angler effort, nor angler catch or harvest numbers or rates (T-tests, equal variance, $P > 0.05$). During the 2007-08 angling season both directed effort and specific catch rates for largemouth bass in Ceded Territory lakes were the third highest observed since 1995 (Figure 20). Of creel metrics evaluated no significant differences were found between 2006 values and the prior 10 year averages for either small, large, or all lakes combined (Table 9).

Both directed effort and specific catch rates of largemouth bass anglers in the Ceded Territory have been variable over time, and average directed effort and specific catch rates in surveyed lakes during 2007-08 were generally similar to values in other recent years. Since 1995 when a randomized lake selection process was instituted there has been a statistically detectable increase in specific catch rates ($F_{(1, 234)} = 16.64$, $P < 0.01$) in largemouth bass fishing in Wisconsin Ceded Territory lakes; there has been no detectable trend in directed angler effort over the same time period ($F_{(1, 234)} = 3.35$, $P = 0.07$; Figure 20).

Table 9. Mean estimates calculated from 2007 and 1997-2006 largemouth bass creel survey data.

Year	Lake Size	N	Catch/ Acre	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	Directed Effort/ Acre
2007*							
Small	< 500 acres	11	7.61	0.24	0.43	0.04	4.86
Large	> 500 acres	10	5.55	0.42	0.41	0.03	5.67
	All lakes	21	6.63	0.32	0.42	0.03	5.28
1997-2006**							
Small	< 500 acres	89	3.50	0.13	0.33	0.01	4.69
Large	> 500 acres	104	3.70	0.18	0.31	0.01	3.78
	All lakes	193	3.61	0.15	0.32	0.01	4.21

* No significant differences exist between large and small lakes for any parameter for the 2007-08 angling season (T-test, $p > 0.05$).

** No 2007 values differ significantly (T-test, $p \geq 0.05$) from corresponding 10 yr. averages.

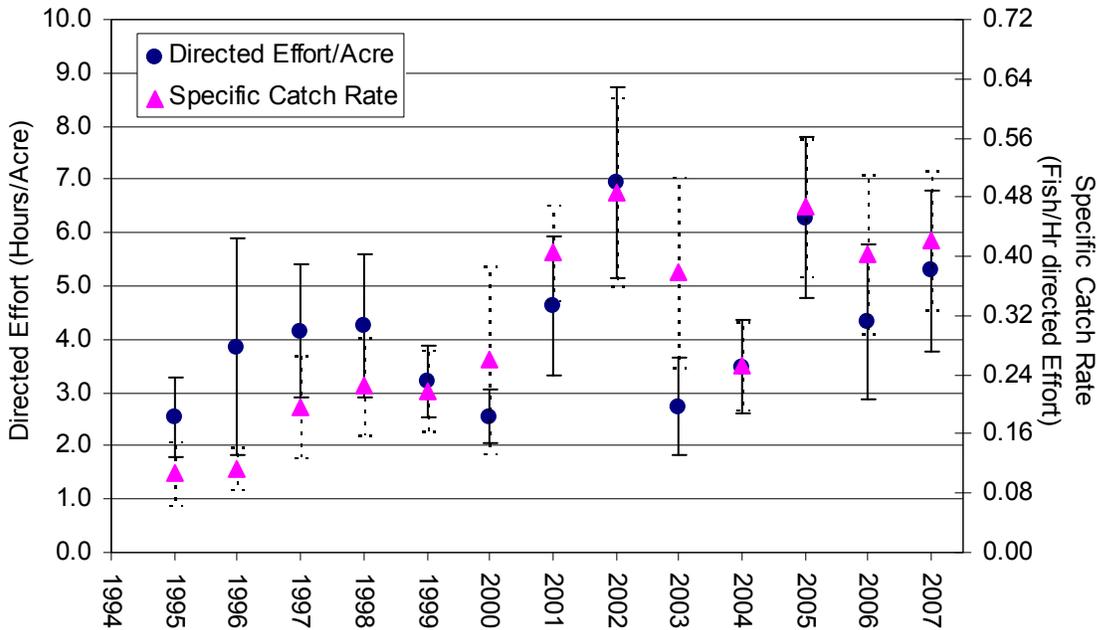


Figure 20. Directed angler effort per lake surface acre and specific catch rate (\pm SE) for largemouth bass in surveyed lakes in the Wisconsin Ceded Territory, 1995-2007.

Smallmouth Bass Effort and Catch

Catches of smallmouth bass were reported for 19 of the 21 lakes surveyed in 2007, with 18 of those having at least some level of directed effort for smallmouth bass (Appendix D). Of the 19 surveyed lakes with smallmouth bass catch in 2007, nine were classified as 'small' (<500 ac.) and ten as 'large' (\geq 500 ac.; Table 10). There were no significant differences in directed angler effort, catch/acre, harvest/acre, specific catch rate or specific harvest rate (T-test, $P > 0.05$) between large or small lakes in 2007 (Table 10). In large lakes, no creel metrics differed significantly from the prior 10 year averages; in small lakes both catch/acre and harvest/acre were significantly less than the prior 10 year average (T-test, $P < 0.05$; Table 10).

Both directed effort and specific catch rates of smallmouth bass anglers in the Ceded Territory have been variable over time, and average directed effort and specific catch rates in surveyed lakes during 2007-08 were generally similar to values in most other years since 1995 (Figure 21). However, since 1995 when a randomized lake selection process was instituted there have been no statistically

detectable trends in directed angler effort/acre ($F_{(1, 231)} = 0.09, P = 0.77$) or specific catch rates ($F_{(1, 231)} = 2.67, P = 0.10$) in smallmouth bass fishing in Wisconsin Ceded Territory lakes (Figure 21).

Table 10. Mean estimates calculated from 2007 and 1998-2006 smallmouth bass creel survey data.

Year	Lake Size	N	Catch/Acre	Angler Harvest/Acre	Specific Catch Rate	Specific Harvest Rate	Directed Effort/Acre
2007*							
Small	< 500 acres	9	0.94**	0.01**	0.37	0.01	1.86
Large	> 500 acres	10	1.89	0.07	0.34	0.01	3.01
	All lakes	19	1.44	0.04	0.36	0.01	2.47
1998-2006							
Small	< 500 acres	86	2.34	0.07	0.29	0.01	3.99
Large	> 500 acres	104	1.94	0.08	0.34	0.02	3.04
	All lakes	190	2.12	0.07	0.32	0.02	3.48

* No significant differences exist between large and small lakes for any parameter for the 2007-08 angling season (T-test, $p > 0.05$).

** 2007 values differ significantly (T-test, $p \leq 0.05$) from corresponding 10 yr. averages.

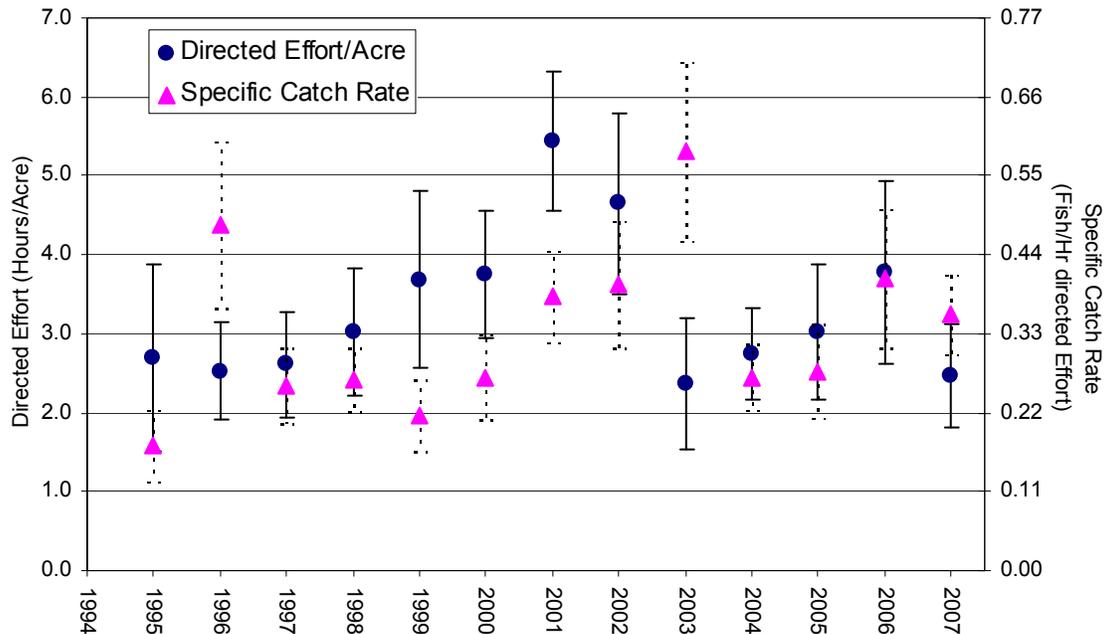


Figure 21. Directed angler effort per lake surface acre and specific catch rate (\pm SE) for smallmouth bass in surveyed lakes in the Wisconsin Ceded Territory, 1995-2007.

Safe Harvest

Safe harvest calculated for the 2007 harvest season was 93,857 walleye and 4,786 musky across the entire Wisconsin Ceded Territory (Table 11). Safe harvest of both walleye and musky has been shown to be highly correlated to the surface acreage of water found in each county (Linear regression, $r^2 > 0.9$; Cichosz 2009). For both walleye and musky the greatest total safe harvest numbers for individual counties were observed in Vilas (21,387 walleye, 1,356 musky), Oneida (18,150 walleye, 936 musky), Sawyer (10,667 walleye, 504 musky) and Iron (7,876 walleye, 340 musky) counties, respectively. When totaled, safe harvest from these four counties accounted for 62 percent of overall walleye and 66 percent of overall musky safe harvest for the Wisconsin Ceded Territory during 2007. Safe harvest numbers for individual lakes are listed in Appendix I.

Walleye Young-of-Year Surveys

Young of the year (YOY) surveys provide an index of the abundance and survival of the current year class of walleyes from hatching or stocking to their first fall. These surveys provide fisheries managers with insight into potential adult population changes in the near future. Early indication of these potential changes allows fisheries managers to develop management strategies to accommodate expected changes in adult populations. Although YOY relative abundance gives some indication of possible future adult abundance it does not necessarily correspond directly, as survival to adulthood varies (Hansen et al. 1998).

During 2007 WDNR completed 107 fall surveys encompassing 107 different lakes in the Wisconsin Ceded Territory; some lakes had multiple fall surveys conducted (Appendix G). Of the lakes sampled, 42 had walleye populations classified as sustained by naturally reproduction (recruitment codes NR, C-NR, or C-), and 41 as sustained by stocking (ST or C-ST), 18 as remnant or newly established populations (REM, O-ST, NR-2; Appendix C). Six lakes were classified as having no known walleye population (NONE/0). Water temperatures during 2007 YOY walleye surveys ranged from 48 - 71° F; mean and median water temperatures during YOY surveys were 61° and 62° F, respectively. Young-of-year walleye lengths ranged from 3.3 to 9.9 inches across all lakes and dates surveyed in 2007 (Appendix G).

Table 11. Calculated safe harvest levels and corresponding ranks for walleye and musky by county for the 2007 harvest season.

County	Lake Acreage*	Total Calculated Safe Harvest		Ranks (1 = Greatest #)	
		Walleye	Musky	Walleye	Musky
Ashland	2,861	438	92	20	22
Barron	13,160	1,895	38	8	11
Bayfield	12,885	3,847	137	9	8
Burnett	11,512	1,717	106	10	12
Chippewa	14,418	4,257	155	7	6
Clark	320	21	5	26	26
Douglas	6,116	1,512	47	15	14
Dunn	1,752	659		22	18
Eau Claire	2,571	640	31	21	19
Florence	1,713	313		23	24
Forest	10,897	1,709	53	12	13
Iron	24,722	7,876	340	4	4
Langlade	4,859	457	50	17	21
Lincoln	15,564	5,116	190	5	5
Marathon	9,442	2,035	53	13	10
Marinette	3,178	753	19	18	17
Oconto	3,083	465	22	19	20
Oneida	60,215	18,150	936	2	2
Polk	11,419	1,197	167	11	16
Portage	74	6		27	27
Price	9,117	2,724	230	14	9
Rusk	5,633	1,512	122	16	14
Sawyer	47,787	10,667	504	3	3
St. Croix	1,100	423	20	25	23
Taylor	1,221	221	23	24	25
Vilas	70,725	21,387	1,356	1	1
Washburn	15,136	3,860	90	6	7
Grand Total	361,480	93,857	4,786	---	---

* Sum for lakes declared for potential harvest of one or both species; does not include total county-wide lake acreage.

Differences in mean YOY walleye density between natural and stocked recruitment categories was highly significant during 2007 (t-test-unequal variance, $t = 3.17$, $df = 43$, $P = 0.0028$). Consistent with all previous years since 1990, lakes sustained primarily by natural reproduction had higher mean walleye YOY density (mean = 25.3/mile of shoreline shocked, range = 0.0–223.3) than lakes sustained by stocking (mean = 2.2/mile, range = 0.0–36.0) during 2007 (Figure 22). The mean YOY walleye density observed in natural recruitment lakes during 2007 (25.3/mile) was slightly below the average across the previous 17 years studied (33.3/mile from 1990-2006) although this difference was not significant (t-test equal variance, $t = -1.06$, $df = 937$, $P = 0.29$). In contrast, the mean YOY walleye density observed in

stocked lakes during 2007 (2.2/mile) was less than all previous 17 years studied since 1990 and was significantly less than the long term average (6.4/mile from 1990-2006; t-test-unequal variance, $t = -3.39$, $df = 88.7$, $P = 0.001$; Figure 22).

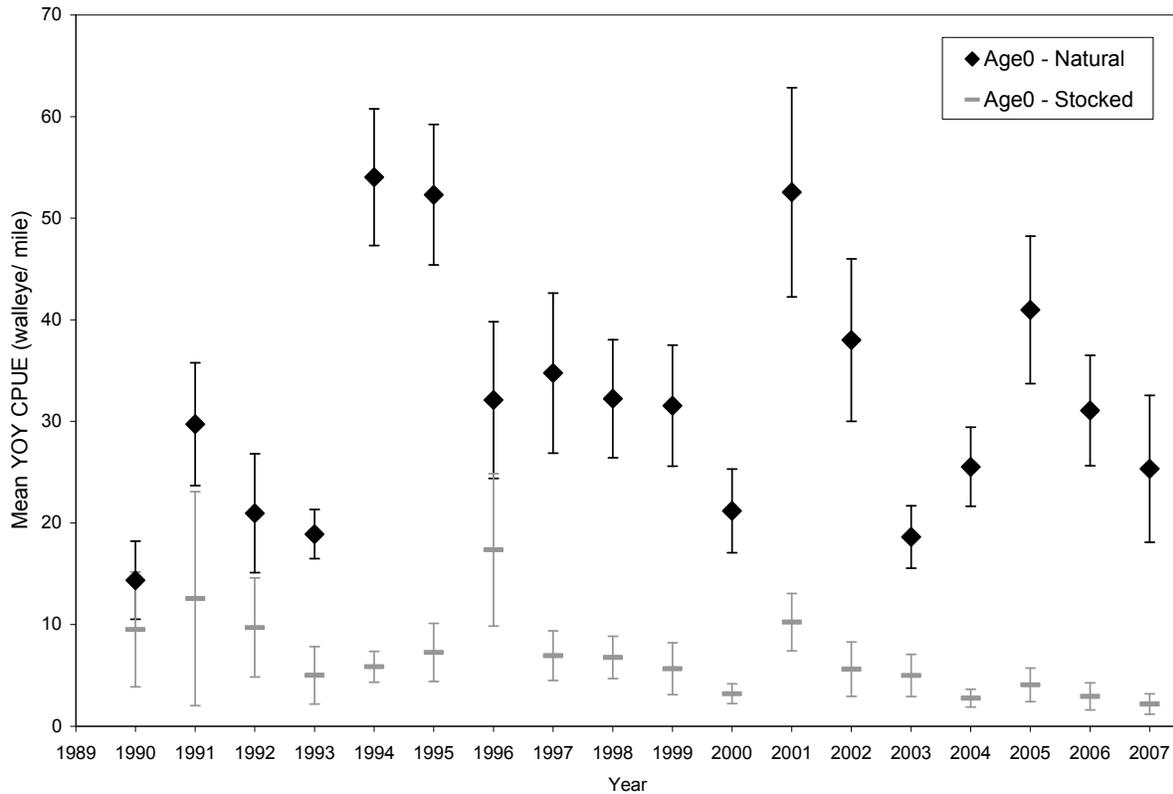


Figure 22. Comparison of mean YOY walleye density (\pm SE) observed in fall electrofishing surveys since 1990 in lakes dominated by natural recruitment or stocking.

It appears that within the Wisconsin Ceded Territory there may be region-wide annual effects on walleye recruitment since mean recruitment varies dramatically from year to year when data from all lakes are combined (Figure 22); In the absence of an annual regional effect one might expect annual percentages to be similar across years. Lack of recruitment in a given lake for one or more years is natural and not necessarily alarming. Sporadic recruitment is common for walleye populations both within and among individual lakes. It is common to have almost complete lack of recruitment in 25% or more of lakes with natural reproduction, and year class failures are even more common in lakes with populations

maintained by stocking. Generally, successful recruitment occurs in a given lake every 3-4 years a fact that may reduce competition between year classes of walleye (Li et al. 1996).

A general linear model used to assess the impact of year and/or recruitment model on YOY walleye density was significant ($p < 0.0001$; Table 12). The significance of the model was driven by differences in YOY density between years ($p = 0.0017$), recruitment models (natural or stocked; $p < 0.0001$) and the interaction of year*recruitment model ($p = 0.0382$). Based on the significance of the year*recruitment model interaction term, regressions were done to evaluate trends independently for natural and stocked model lakes. No significant trend was noted for YOY densities over time in natural model lakes ($p = 0.64$; see Figure 22). YOY walleye densities have declined significantly over time in stocked model lakes since 1990 (slope = -0.48, $p = 0.002$; see Figure 22).

Table 12. GLM results comparing YOY walleye density across years and primary walleye recruitment source.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	35	402239	11493	7.97	<0.0001
Error	1,516	2187117	1443		
		Type III SS	Mean Square	F Value	Pr > F
Year	17	56933	3348	2.32	<0.0001
Recruitment Model^a	1	184126	184126	127.63	0.0017
Year x Recruitment Model	17	41477	2439	1.69	0.0382

a –Recruitment Models compared are ‘natural’ and ‘stocked’.

The percentages of natural-model lakes with greater than 25 YOY walleye per mile and greater than 100 YOY walleye per mile are also used to indicate strong annual year classes in the Wisconsin Ceded Territory. These values are less affected by large values for individual lakes than the mean number of YOY walleye caught per mile. In 2007, 12/42 natural model lakes (29%) had YOY indices > 25 per mile, and three NR lakes (7%) had YOY walleye indices > 100 per mile (Appendix G). The proportion of lakes with YOY catch rates greater than 25 fish per mile in 2007 was less than the 1990-2006 average proportion (38%). The proportion of lakes with YOY catch rates greater than 100 fish per mile in 2007 was similar to the 1990-2006 average proportion (8%).

In lakes categorized as being sustained primarily by stocking, the mean number of YOY walleye captured per mile in lakes that were stocked (1.7 YOY/ mile) with fry or small fingerlings was not significantly different than in lakes that were not stocked (2.4 YOY/ mile) in 2007 (t-test equal variance, $t = 0.28$, $df = 39$, $P = 0.78$; Table 13). The mean value for un-stocked lakes was artificially inflated by three abnormally high values in Sand Lake, Sawyer County (11.4 YOY/mi), Island Lake, Iron County (36.0 YOY/mi) and Trout Lake, Vilas County (18.9 YOY/mi). Each of these three lakes are in the C-ST recruitment class which includes some known natural production which would have accounted for YOY walleye found during 2007 surveys. Although this seems to contradict previous findings about natural recruitment of walleye during 2007 (generally found to be below average), the relatively high contribution of naturally produced walleye in some C-ST lakes supports the prior finding that in at least some lakes a strong natural year class of walleye was produced in 2007.

Table 13. Young-of-the-year indices in lakes categorized as being sustained primarily by stocking (ST or C-ST), separated by whether or not the lake was stocked in 2007.

	Stocked in 2007	Not Stocked in 2007
No. Lakes	10	31
Mean YOY walleye/ mile	1.7	2.4
Q1/Median/Q3	0.5 / 0.8 / 1.8	0.0 / 0.0 / 0.2
Lakes with 0 YOY/ mile	2 (20%)	22 (71%)
Lakes with <5 YOY/ mile	8 (80%)	28 (90%)
Lakes with <10 YOY/ mile	10 (100%)	28 (90%)

The Hansen et al (2004) index of lake-wide YOY walleye density (fish/acre) for natural-model lakes ranged from 0.0–106.0 with a mean of 8.4 during 2007. In stocked-model lakes, the same index ranged from 0.0–3.4 YOY walleye/acre with a mean of 0.24. Within stocked-model lakes, those stocked prior to fall surveys inexplicably had a lower average Serns' value than lakes that were not stocked (0.03 Vs. 0.28, respectively). This is consistent with findings based on counts of YOY/mile observed in surveys and discussed above and generally indicates greater levels of recruitment in natural model lakes relative to stocked model lakes; within stocked model lakes recruitment in un-stocked waters appeared slightly higher than in stocked waters during 2007 although this difference was not significant.

In 2007, 15 surveys were conducted on 14 lakes that were previously stocked with oxytetracycline marked walleyes; Sparkling Lake in Vilas Co. was sampled both in the spring and fall (Table 14). In ten cases surveys were conducted in fall to examine age-0 walleye stocked or spawned in 2007; In the remaining 5 cases surveys were conducted in spring to examine age-1 walleye stocked or spawned in 2006. Most stocking events took place in the month of June. Unlike most years the percent contribution of stocked (marked) fish observed in 2007 did not tends to align well with recruitment code designations for monitored lakes. The majority of lake surveyed had 100% contribution of stocked fish despite having differing recruitment codes (ST, C-ST and C-NR). Coincidentally, of three lakes with 50% or less contribution of stocked fish noted during 2007 surveys, one lake was in each of the same three recruitment codes.

It is important to note that since numbers of fish examined for OTC marks from any individual lake during any year is often limited, the percent contribution of marked fish observed does not always appear to align completely with a designated recruitment code. Therefore OTC sampling itself is not indicative of recruitment code designations, and is not considered in the designation process unless a minimum of 30 individual fish are sampled from the water body in question.

Table 14. Lakes stocked with oxytetracycline (OTC) marked fish sampled in 2007, number of sampled fish where OTC marks were noted on the otolith, and percent contribution of stocked fish to the total sample.

County	Lake	Recruit Code*	WBIC	With OTC	Without OTC	Total	% Contrib.
Barron	Lower Turtle **	C-ST	2079700	76	0	76	100.0
Marathon	Pike **	ST	1406300	0	0	0	0.0
Oneida	L Julia ** (Rhinelanders)	C-NR	995000	55	0	55	100.0
Polk	Magnor **	ST	2624600	9	9	18	50.0
Vilas	Sparkling **	C-ST	1881900	49	0	49	100.0
Barron	L Chetek	C-ST	2094000	4	2	6	66.7
Barron	Pokegama	C-ST	2094300	15	15	30	50.0
Barron	Prairie	ST	2094100	1	0	1	100.0
Bayfield	Diamond	C-NR	2897100	34	0	34	100.0
Florence	Keyes	C-NR	672900	50	0	50	100.0
Oneida	Booth	ST	1537800	50	0	50	100.0
Oneida	Two Sisters	C-NR	1588200	11	30	41	26.8
Vilas	Ballard	C-NR	2340700	5	0	5	100.0
Vilas	Sparkling	C-ST	1881900	50	0	50	100.0
Washburn	Silver	ST	2496900	3	0	3	100.0

* Recruitment codes C-ST& ST are lakes in the stocked model. Recruitment code C-NR is in the natural model (Appendix C).

** Lakes were sampled in spring and examined age 1 walleye stocked/spawned the prior year.

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APPENDICES

Appendix A. WDNR Lake Sampling Rotation 2007-2012.

YEAR	TREATY UNIT	MWBC	COUNTY	LAKE	AREA	CURRENT MODEL	# LAKES	ROTATION
2007	Spooner	2678100	BURNETT	LIPSETT	393	S	1	TREND
2007	Spooner	2742100	BAYFIELD	MIDDLE EAU CLAIRE	902	N	1	TREND
2007	Spooner	2900200	Bayfield	L Owen	1,323	S	1	Spatial
2007	Spooner		Douglas	Lower Eau Claire/Cranberry	860	N	2	Spatial
2007	Spooner	2393200	Sawyer	Sand	928	S	1	Spatial
2007	Spooner	2706800	Burnett	Big McKenzie	1,185	S	1	Spatial
2007	Spooner	2306300	Iron	Spider	352	N	1	Spatial
2007	Spooner	2624600	Polk	Magnor	224	S	1	Spatial
2007	Spooner	2618000	Polk	Wapogasset	1,186	S	1	Spatial
TOTAL	Spooner				7,353		10	
2007	Woodruff	394400	FOREST	L METONGA	1,991	S	1	TREND
2007	Woodruff	2331600	VILAS	TROUT	3,816	S	1	TREND
2007	Woodruff		Vilas	Twin L Chain	3,430	N	2	Spatial
2007	Woodruff	1482400	Lincoln	Tug	151	N	1	Spatial
2007	Woodruff	1545300	Vilas	Little Arbor Vitae	534	N	1	Spatial
2007	Woodruff		Oneida	Moen Chain	1,172	N	5	Spatial
2007	Woodruff	677100	Florence	Fay	247	S	1	Spatial
TOTAL	Woodruff				11,341		12	
2007	TOTAL				18,694		22	
2008	Spooner	2949200	IRON	PINE	312	N	1	TREND
2008	Spooner	2620600	POLK	BALSAM	2,054	S	1	TREND
2008	Spooner		Burnett	Yellow/Little Yellow	2,635	N	2	Spatial
2008	Spooner	2704200	Sawyer	Nelson	2,503	S	1	Spatial
2008	Spooner	2105100	Barron	Bear	1,358	S	1	Spatial
2008	Spooner	2882300	Bayfield	Siskiwit	330	N	1	Spatial
2008	Spooner	2693700	Douglas	Bond	292	N	1	Spatial
2008	Spooner	2435700	Sawyer	Spider	1,454	S	1	Spatial
TOTAL	Spooner				10,938		9	
2008	Woodruff	1588200	ONEIDA	TWO SISTERS	719	N	1	TREND
2008	Woodruff		VILAS	BIG ARBOR VITAE	1,090	N	1	TREND
2008	Woodruff	1528300	Oneida	Willow Fl	5,135	N	1	Spatial
2008	Woodruff	1605800	Oneida	Sevenmile	503	S	1	Spatial
2008	Woodruff	2954800	Vilas	Oxbow	511	N	1	Spatial
2008	Woodruff		Vilas	Cisco Chain	1,539	N	3	Spatial
2008	Woodruff	683000	Forest	Stevens	297	S	1	Spatial
2008	Woodruff	439800	Oconto	Wheeler	293	N	1	Spatial
TOTAL	Woodruff				10,087		10	
2008	TOTAL				21,025		19	

YEAR	TREATY UNIT	MWBC	COUNTY	LAKE	AREA	CURRENT MODEL	# LAKES	ROTATION
2009	Spooner	2897100	BAYFIELD	DIAMOND	341	S	1	TREND
2009	Spooner	2391200	SAWYER	GRINDSTONE	3,111	N	1	TREND
2009	Spooner	2294900	Iron	Turtle-Flambeau	13,545	N	1	Spatial
2009	Spooner	2295200	Iron	Trude	781	N	1	Spatial
2009	Spooner	2676800	Burnett	Big Sand	1,400	0-ST	1	Spatial
2009	Spooner	1881100	Barron	Silver	337	N	1	Spatial
2009	Spooner	2747300	Douglas	Upper St. Croix	855	N	1	Spatial
TOTAL	Spooner				20,370		7.0	
2009	Woodruff	1018500	VILAS	SNIPE	239	N	1	TREND
2009	Woodruff	1592400	VILAS	PLUM	1,033	N	1	TREND
2009	Woodruff		Oneida	Tomahawk/Minocqua Chain	5,805	S	5	Spatial
2009	Woodruff		Vilas	Palmer/Tenderfoot	1,072	S / N	2	Spatial
2009	Woodruff	1515400	Lincoln	L Mohawksin	1,910	N	1	Spatial
TOTAL	Woodruff				10,059		10	
2009	TOTAL				30,429		17	
2010	Spooner	2678100	BURNETT	LIPSETT	393	S	1	TREND
2010	Spooner	2742100	BAYFIELD	MIDDLE EAU CLAIRE	902	N	1	TREND
2010	Spooner		Bayfield	Pike Lake Chain	714	N	4	Spatial
2010	Spooner		Sawyer	Round/Little Round	3,283	N	2	Spatial
2010	Spooner	2492100	Douglas	Red	258	0-ST	1	Spatial
2010	Spooner	2382300	Sawyer	Barber	238	S	1	Spatial
2010	Spooner	2393500	Sawyer	Sissabagama	719	N	1	Spatial
2010	Spooner	2303500	Iron	Long	396	S	1	Spatial
2010	Spooner	1884100	Washburn	Stone	523	N	1	Spatial
TOTAL	Spooner				7,426		13	
2010	Woodruff	394400	FOREST	L METONGA	1,991	S	1	TREND
2010	Woodruff	2331600	VILAS	TROUT	3,816	S	1	TREND
2010	Woodruff	1595300	Oneida	Rainbow Fl	2,035	N	1	Spatial
2010	Woodruff		Vilas	Turtle Chain	945	N	2	Spatial
2010	Woodruff	1855900	Vilas	Jag	158	N	1	Spatial
2010	Woodruff	1569600	Oneida	George	435	N	1	Spatial
2010	Woodruff	1564200	Oneida	Crescent	612	N	1	Spatial
TOTAL	Woodruff				9,992		8	
2010	TOTAL				17,418		21	

YEAR	TREATY UNIT	MWBC	COUNTY	LAKE	AREA	CURRENT MODEL	# LAKES	ROTATION
2011	Spooner	2949200	IRON	PINE	312	N	1	TREND
2011	Spooner	2620600	POLK	BALSAM	2,054	S	1	TREND
2011	Spooner	2399700	Sawyer	L Chippewa	15,300	N	1	Spatial
2011	Spooner	1841300	Sawyer	Clear	77	0-ST	1	Spatial
2011	Spooner	2046500	Sawyer	Windfall	102	N	1	Spatial
2011	Spooner	2767100	Bayfield	Long	263	S	1	Spatial
2011	Spooner	2914800	Ashland	English	244	S	1	Spatial
TOTAL	Spooner				18,352		7	
2011	Woodruff	1588200	ONEIDA	TWO SISTERS	719	N	1	TREND
2011	Woodruff		VILAS	BIG ARBOR VITAE	1,090	N	1	TREND
2011	Woodruff	1579900	Oneida	Pelican	3,585	N	1	Spatial
2011	Woodruff		Oneida	Rhineland Chain	2,059	N	4	Spatial
2011	Woodruff	1591100	Vilas	Big St. Germain	1,617	S	1	Spatial
2011	Woodruff		Vilas	Ballard Chain	1,025	N	3	Spatial
2011	Woodruff	417400	Oconto	Archibald	430	S	1	Spatial
2011	Woodruff	1630100	Vilas	Black Oak	584	S	1	Spatial
TOTAL	Woodruff				11,109		13	
2011	TOTAL				29,461		20	
2012	Spooner	2897100	BAYFIELD	DIAMOND	341	S	1	TREND
2012	Spooner	2391200	SAWYER	GRINDSTONE	3,111	N	1	TREND
2012	Spooner		Barron	L Chetek Chain	3,763	S	4	Spatial
2012	Spooner	2627400	Polk	Big Round	1,015	S	1	Spatial
2012	Spooner		Rusk	Island Lake Chain	1,222	N	4	Spatial
2012	Spooner	2691500	Washburn	L Nancy	772	S	1	Spatial
2012	Spooner	2351400	Chippewa	Long	1,052	N	1	Spatial
2012	Spooner	2856400	Douglas	Lyman	403	NR-2	1	Spatial
2012	Spooner	2661100	Barron	Sand	322	S	1	Spatial
TOTAL	Spooner				12,001		15	
2012	Woodruff	1018500	VILAS	SNIPE	239	N	1	TREND
2012	Woodruff	1592400	VILAS	PLUM	1,033	N	1	TREND
2012	Woodruff		Lincoln/Oneida	Nokomis/Rice Chain	3,916	N	3	Spatial
2012	Woodruff	1595600	Oneida	Muskellunge	284	N	1	Spatial
2012	Woodruff	1623400	Vilas	Pioneer	427	S	1	Spatial
2012	Woodruff		Vilas	Presque Isle Chain	1,571	N	3	Spatial
2012	Woodruff		Vilas	Upper/Lower Buckatabon	846	S	2	Spatial
2012	Woodruff	2328700	Vilas	Papoose	428	N	1	Spatial
TOTAL	Woodruff				8,744		13	
2012	TOTAL				20,745		28	

Appendix B. Reduced daily bag limits for walleye angling, based on Tribal Declarations as percentage of safe harvest. Reprinted from Wisconsin Administrative Code (NR 20.36).

Daily bag limit	Current population estimate	Population estimate made 1-2 years ago	Population estimate made 3 years ago or more or regression model
4	1-7	1-14	1-20
3	8-18	15-39	21-54
2	19-36	40-76	55-84
1	37-68	77-94	85-94
0	69 or more	95 or more	95 or more

Appendix C. Walleye Recruitment Code Descriptions (primary source of walleye recruitment; U.S. Department of the Interior, 1991).

Recruitment Code ¹	Recruitment Model ²	Description
blank	None	unknown
NONE/ O	None	No walleye are present
REM	Remnant	Stocking provides the only source of recruitment but was discontinued. The stock is expected to disappear at some time in the future.
0-ST	Remnant	Stocking provides the only source of recruitment but was initiated only recently and has not yet resulted in a harvestable population of adults.
ST	Stocked	Stocking provides the only source of recruitment and is consistent enough to result in a multi-year class adult population.
C-ST	Stocked	Stocking provides the primary source of recruitment but some natural reproduction occurs and may augment the adult population.
C-	Natural	Natural reproduction and stocking provide more or less equal recruitment to the adult population.
C-NR	Natural	Natural reproduction is adequate to sustain the population even though the lake is being stocked.
NR	Natural	Natural reproduction only; consistent enough to result in multi-year class adult populations.
NR-2	Remnant	Natural reproduction only; inconsistent, results in missing year classes.

1 Recruitment Code = Designation of the *primary* recruitment source and done by a technical working group.

2 Recruitment Model is used for data analysis and groups various recruitment codes into one of three categories.

Appendix D. Creel Survey Summaries.

Walleye

County	Lake	MWBIC	Acres	WAE Recruit Code	Initial WEBag	Final WEBag	WESz	Adult PE	Adult PE/ Acre	Angler Catch	Angler Catch/ Acre	Angler Harvest	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	# Fish Measured	Mean Length	General Catch Rate	General Harvest Rate
Bayfield	Bony	2742500	191	C-NR	5	5	1>14	575	3.01	0	0.00	0	0.00	0.00	0.00	0		0.00	0.00
Bayfield	Middle Eau Claire	2742100	902	C-NR	2	2	1>14	5925	6.57	1861	2.06	1140	1.26	0.18	0.11	232	15.97	0.09	0.06
Bayfield	L Owen	2900200	1323	C-NR	2	2	15	1495	1.13	432	0.33	250	0.19	0.06	0.04	46	20.59	0.01	0.01
Burnett	Big Mckenzie	2706800	1185	C-ST	3	3	15	1096	0.92	165	0.14	145	0.12	0.03	0.02	21	20.02	0.01	0.01
Burnett	Lipsett	2678100	393	ST	3	3	15	207	0.53	126	0.32	51	0.13	0.08	0.03	8	18.20	0.01	0.00
Douglas	Lower Eau Claire	2741600	802	C-NR	2	2	15	1994	2.49	551	0.69	279	0.35	0.10	0.05	63	17.94	0.03	0.01
Iron	Spider	2306300	352	NR	2	3	1>14	550	1.56	809	2.30	269	0.76	0.26	0.08	18	16.37	0.09	0.03
Polk	Bear Trap	2618100	241	REM	5	5	15	71	0.29	27	0.11	5	0.02	0.03	0.01	1	15.90	0.00	0.00
Polk	Magnor	2624600	231	ST	3	3	15	169	0.73	214	0.93	0	0.00	0.03	0.00	0		0.01	0.00
Polk	Wapogasset	2618000	1186	C-ST	3	3	15	1575	1.33	1157	0.98	538	0.45	0.10	0.05	65	17.21	0.02	0.01
Sawyer	Sand	2393200	928	C-ST	1	1	28	2639	2.84	2148	2.31	1	0.00	0.94	0.00	1	16.00	0.16	0.00
Florence	Fay Lake	677100	282	ST	2	3	15	225	0.80	46	0.16	25	0.09	0.02	0.01	4	17.43	0.00	0.00
Forest	Metonga Lake	394400	1991	C-ST	2	2	15	1675	0.84	1616	0.81	444	0.22	0.11	0.03	69	16.99	0.04	0.01
Lincoln	Tug Lake	1482400	151	C-NR	5	5	15	801	5.30	1058	7.01	211	1.40	0.23	0.05	79	15.85	0.16	0.03
Oneida	Fourth Lake	1572000	498	NR	2	5	1>14	4313	8.66	1323	2.66	572	1.15	0.50	0.23	114	13.49	0.13	0.06
Oneida	Second Lake	1572300	214	NR	5	5	1>14			4	0.02	4	0.02	0.00	0.00	1	17.50	0.00	0.00
Oneida	Moen Lake	1573800	460	NR	2	3	1>14	822	1.79	49	0.11	24	0.05	0.02	0.02	10	19.11	0.01	0.00
Vilas	Little Arbor Vitae Lake	1545300	534	NR	3	3	15	4360	8.16	3413	6.39	2332	4.37	0.21	0.15	614	13.60	0.14	0.09
Vilas	North Twin Lake	1623800	3430	C-NR	3	3	15	10430	3.04	22051	6.43	3802	1.11	0.50	0.09	243	15.93	0.23	0.04
Vilas	Trout Lake	2331600	3816	C-ST	3	3	15	11905	3.12	6694	1.75	3012	0.79	0.33	0.15	529	17.83	0.23	0.10
Bayfield	Cranberry Lake	2741700	131	O	5	5	15			0	0.00	0	0.00	0.00	0.00	0		0.00	0.00

Musky

County	Lake	MWBIC	Acres	Musky Recruit Code	Size Limit	Angler Catch	Angler Catch/ Acre	Angler Harvest	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	# Fish Measured	Mean Length	General Catch Rate	General Harvest Rate
Bayfield	Bony	2742500	191	NR	40	0	0.00	0	0.00	0.00	0.00	0		0.00	0.00
Bayfield	Middle Eau Claire	2742100	902	C-	40	59	0.07	0	0.00	0.02	0.00	0		0.00	0.00
Burnett	Big Mckenzie	2706800	1185	ST	34	83	0.07	19	0.02	0.02	0.01	1	41.00	0.00	0.00
Burnett	Lipsett	2678100	393	0-ST	34	35	0.09	0	0.00	0.05	0.00	0		0.01	0.00
Douglas	Lower Eau Claire	2741600	802	C-	40	81	0.10	0	0.00	0.04	0.00	0		0.00	0.00
Iron	Spider	2306300	352	C-	34	369	1.05	11	0.03	0.09	0.00	2	36.55	0.05	0.00
Polk	Bear Trap	2618100	241	O	34	53	0.22	0	0.00	0	0.00	0		0.01	0.00
Polk	Wapogasset	2618000	1186	O	34	319	0.27	0	0.00	0.02	0.00	0		0.01	0.00
Sawyer	Sand	2393200	928	ST	34	444	0.48	10	0.01	0.05	0.00	2	34.20	0.03	0.00
Forest	Metonga Lake	394400	1991	O	34	0	0.00	0	0.00	0	0.00	0		0.00	0.00
Lincoln	Tug Lake	1482400	151	ST	34	0	0.00	0	0.00	0	0.00	0		0.00	0.00
Oneida	Fourth Lake	1572000	498	NR	34	277	0.56	10	0.02	0.05	0.00	1	39.50	0.03	0.00
Oneida	Second Lake	1572300	214	NR	34	206	0.96	0	0.00	0.1	0.00	0		0.05	0.00
Oneida	Moen Lake	1573800	460	NR	34	105	0.23	6	0.01	0.03	0.00	1	45.50	0.01	0.00
Vilas	Little Arbor Vitae Lake	1545300	534	C-	34	220	0.41	13	0.02	0.02	0.00	3	35.60	0.01	0.00
Vilas	North Twin Lake	1623800	3430	C-	34	591	0.17	26	0.01	0.02	0.00	2	43.75	0.01	0.00
Vilas	Trout Lake	2331600	3816	C-NR	45	92	0.02	0	0.00	0.02	0.00	0		0.00	0.00
Bayfield	Cranberry Lake	2741700	131	O	34	0	0.00	0	0.00	0.00	0.00	0		0.00	0.00

Northern Pike

County	Lake	MWBIC	Acres	Angler Catch	Angler Catch/ Acre	Angler Harvest	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	# Fish Measured	Mean Length	General Catch Rate	General Harvest Rate
Bayfield	Bony	2742500	191	482	2.52	0	0.00	0.18	0.00	0		0.16	0.00
Bayfield	Middle Eau Claire	2742100	902	2233	2.48	235	0.26	0.22	0.08	64	22.34	0.11	0.01
Bayfield	L Owen	2900200	1323	2448	1.85	384	0.29	0.21	0.07	89	23.20	0.08	0.00
Burnett	Big Mckenzie	2706800	1185	2923	2.47	484	0.41	0.19	0.04	46	22.59	0.11	0.02
Burnett	Lipsett	2678100	393	2351	5.98	416	1.06	0.44	0.10	86	21.62	0.19	0.03
Douglas	Lower Eau Claire	2741600	802	2943	3.67	497	0.62	0.35	0.10	105	22.36	0.15	0.02
Iron	Spider	2306300	352	157	0.45	23	0.07	0.12	0.12	2	21.00	0.03	0.01
Polk	Bear Trap	2618100	241	591	2.45	61	0.25	0.09	0.03	7	22.89	0.03	0.00
Polk	Magnor	2624600	231	267	1.16	119	0.52	0.06	0.03	30	25.95	0.01	0.01
Polk	Wapogasset	2618000	1186	3246	2.74	438	0.37	0.18	0.05	64	24.53	0.07	0.01
Sawyer	Sand	2393200	928	376	0.41	28	0.03	0.05	0.01	4	33.05	0.03	0.00
Florence	Fay Lake	677100	282	1281	4.54	345	1.22	0.29	0.09	134	20.46	0.13	0.04
Forest	Metonga Lake	394400	1991	1099	0.55	445	0.22	0	0.00	46	24.82	0.00	0.00
Lincoln	Tug Lake	1482400	151	284	1.88	12	0.08	0.19	0.03	5	20.18	0.05	0.00
Oneida	Fourth Lake	1572000	498	379	0.76	45	0.09	0.25	0.05	12	21.76	0.04	0.00
Oneida	Second Lake	1572300	214	253	1.18	6	0.03	0	0.00	0		0.00	0.00
Oneida	Moen Lake	1573800	460	293	0.64	59	0.13	0.09	0.05	24	25.80	0.30	0.01
Vilas	Little Arbor Vitae Lake	1545300	534	484	0.91	222	0.42	0.18	0.11	62	25.14	0.02	0.01
Vilas	North Twin Lake	1623800	3430	2214	0.65	880	0.26	0.17	0.10	40	23.88	0.02	0.01
Vilas	Trout Lake	2331600	3816	40	0.01	4	0.00	0	0.00	1	24.70	0.00	0.00
Bayfield	Cranberry Lake	2741700	131	606	4.63	131	1.00	0.78	0.16	28	19.70	0.51	0.11

Smallmouth Bass

County	Lake	MWBIC	Acres	Angler Catch	Angler Catch/ Acre	Angler Harvest	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	# Fish Measured	Mean Length	General Catch Rate	General Harvest Rate
Bayfield	Bony	2742500	191	720	3.77	0	0.00	0.54	0.00	0		0.34	0.00
Bayfield	Middle Eau Claire	2742100	902	2439	2.70	63	0.07	0.51	0.00	7	17.63	0.16	0.00
Bayfield	L Owen	2900200	1323	9284	7.02	357	0.27	0.47	0.02	32	15.73	0.30	0.01
Burnett	Big Mckenzie	2706800	1185	190	0.16	0	0.00	0.49	0.00	0		0.02	0.00
Burnett	Lipsett	2678100	393	4	0.01	0	0.00	0.04	0.00	0		0.00	0.00
Douglas	Lower Eau Claire	2741600	802	589	0.73	54	0.07	0.16	0.04	6	17.43	0.04	0.00
Iron	Spider	2306300	352	213	0.61	10	0.03	0.06	0.00	1	14.20	0.03	0.00
Polk	Bear Trap	2618100	241	49	0.20	0	0.00	0.09	0.00	0		0.01	0.00
Polk	Magnor	2624600	231	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Polk	Wapogasset	2618000	1186	659	0.56	4	0.00	0.15	0.00	0		0.02	0.00
Sawyer	Sand	2393200	928	241	0.26	0	0.00	0.10	0.00	0		0.02	0.00
Florence	Fay Lake	677100	282	11	0.04	0	0.00			0		0.00	0.00
Forest	Metonga Lake	394400	1991	6451	3.24	271	0.14	0.60	0.03	53	16.94	0.24	0.01
Lincoln	Tug Lake	1482400	151	335	2.22	2	0.01	0.30	0.00	1	17.30	0.11	0.00
Oneida	Fourth Lake	1572000	498	360	0.72	3	0.01	0.30	0.00	1	14.90	0.04	0.00
Oneida	Second Lake	1572300	214	19	0.09	0	0.00	1.00	0.00	0		0.02	0.00
Oneida	Moen Lake	1573800	460	365	0.79	16	0.03	0.66	0.06	2	15.65	0.05	0.00
Vilas	Little Arbor Vitae Lake	1545300	534	1861	3.49	54	0.10	0.43	0.02	12	15.42	0.09	0.00
Vilas	North Twin Lake	1623800	3430	497	0.14	12	0.00	0.11	0.01	1	14.30	0.01	0.00
Vilas	Trout Lake	2331600	3816	2156	0.56	16	0.00	0.42	0.00	4	17.15	0.08	0.00
Bayfield	Cranberry Lake	2741700	131	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Largemouth Bass

County	Lake	MWBIC	Acres	Angler Catch	Angler Catch/ Acre	Angler Harvest	Angler Harvest/ Acre	Specific Catch Rate	Specific Harvest Rate	# Fish Measured	Mean Length	General Catch Rate	General Harvest Rate
Bayfield	Bony	2742500	191	0	0.00	0	0.00	0	0.00	0		0.00	0.00
Bayfield	Middle Eau Claire	2742100	902	508	0.56	6	0.01	0.21	0.00	1	20.50	0.03	0.00
Bayfield	L Owen	2900200	1323	11369	8.59	612	0.46	0.61	0.04	66	15.05	0.37	0.02
Burnett	Big Mckenzie	2706800	1185	14487	12.23	3437	2.90	0.82	0.20	189	12.88	0.55	0.13
Burnett	Lipsett	2678100	393	8189	20.84	373	0.95	1.38	0.07	80	14.39	0.65	0.03
Douglas	Lower Eau Claire	2741600	802	877	1.09	79	0.10	0.15	0.03	10	16.66	0.05	0.00
Iron	Spider	2306300	352	12	0.03	0	0.00			0		0.01	0.00
Polk	Bear Trap	2618100	241	10412	43.20	195	0.81	1.04	0.02	16	15.40	0.48	0.01
Polk	Magnor	2624600	231	3464	15.00	156	0.68	0.55	0.03	36	16.04	0.18	0.01
Polk	Wapogasset	2618000	1186	36990	31.19	810	0.68	1.42	0.03	90	15.00	0.75	0.02
Sawyer	Sand	2393200	928	111	0.12	0	0.00	0.14	0.00	0		0.01	0.00
Florence	Fay Lake	677100	282	281	1.00	7	0.02	0.28	0.01	1	20.50	0.04	0.00
Forest	Metonga Lake	394400	1991	102	0.05	0	0.00	0.01	0.00	0		0.00	0.00
Lincoln	Tug Lake	1482400	151	202	1.34	0	0.00	0.19	0.00	0		0.05	0.00
Oneida	Fourth Lake	1572000	498	45	0.09	0	0.00	0.02	0.00	0		0.01	0.00
Oneida	Second Lake	1572300	214	95	0.44	10	0.05	0.36	0.18	1	15.80	0.04	0.00
Oneida	Moen Lake	1573800	460	38	0.08	0	0.00	0.11	0.00	0		0.01	0.00
Vilas	Little Arbor Vitae Lake	1545300	534	815	1.53	10	0.02	0.33	0.01	2	17.20	0.04	0.00
Vilas	North Twin Lake	1623800	3430	561	0.16	20	0.01	0.15	0.02	1	15.30	0.01	0.00
Vilas	Trout Lake	2331600	3816	60	0.02	4	0.00	0.26	0.00	1	19.00	0.01	0.00
Bayfield	Cranberry Lake	2741700	131	217	1.66	15	0.11	0.39	0.04	1	17.1	0.20	0.01

Appendix E. Walleye Population Estimates.

MWBC	County	Lake	Acres	Angler Reg	Recruit Code	PE - Males	CV Male PE	PE - Females	CV Female PE	M:F Ratio	Adult PE
2618100	Polk	Bear Trap Big	241	15	REM	20	0.17	21	0.34	0.95	71
2706800	Burnett	Mckenzie	1185	15	C-ST	740	0.09	371	0.24	1.99	1096
2742500	Bayfield	Bony	191	1>14	C-NR	390	0.16	208	0.47	1.87	575
2678100	Burnett	Lipsett	393	15	ST	154	0.07	55	0.20	2.81	207
2900200	Bayfield	L Owen Lower Eau	1323	15	C-NR	588	0.16	672	0.20	0.87	1495
2741600	Douglas	Claire	802	15	C-NR	1510	0.09	575	0.25	2.63	1994
2624600	Polk	Magnor Middle Eau	231	15	ST	104	0.26	75	0.36	1.38	169
2742100	Bayfield	Claire	902	1>14	C-NR	3963	0.09	2396	0.36	1.65	5925
2393200	Sawyer	Sand	928	28	C-ST	2292	0.12	362	0.28	6.33	2639
2306300	Iron	Spider	352	1>14	NR	398	0.05	316	0.39	1.26	550
2936200	Ashland	Spillerberg	75	none	C-NR	289	0.15	130	0.60	2.23	386
2618000	Polk	Wapogasset	1186	15	C-ST	1332	0.09	344	0.33	3.87	1575
677100	Florence	Fay	282	15	0-ST	130	0.06	110	0.23	1.17	225
672900	Florence	Keyes	202	15	C-NR	161	0.13	356	0.48	0.45	358
691800	Forest	Howell	177	15	NR-2	297	0.09	134	0.45	2.21	408
394400	Forest	Metonga	1991	15	C-ST	1395	0.19	185	0.38	7.54	1675
969600	Lincoln	Bass/Long	232	15	ST	93	0.06	48	0.00	1.93	146
1482400	Lincoln	Tug	151	15	C-	581	0.07	280	0.25	2.08	801
417400	Oconto	Archibald	393	15	C-ST	552	0.10	139	0.42	3.97	671
1610700	Oneida	Big Fork	690	14-18 Slot	C-NR	3393	0.09	795	0.36	4.27	4040
1612200	Oneida	Big Stone	548	14-18 Slot	C-NR	1164	0.19	222	0.32	5.25	1400
1571100	Oneida	Fifth	240	1>14	NR	2455	0.24	543	0.45	4.52	3153
1610800	Oneida	Fourmile	218	14-18 Slot	C-NR	147	0.17	136	0.35	1.08	276
1572000	Oneida	Fourth	258	1>14	NR	793	0.15	414	0.45	1.92	1160
1610600	Oneida	Little Fork	354	14-18 Slot	C-NR	658	0.27	110	0.28	5.98	895
1611700	Oneida	Medicine	372	14-18 Slot	C-NR	1114	0.10	163	0.29	6.86	1293
1573800	Oneida	Moen	460	1>14	NR-2	429	0.32	357	0.56	1.20	822
968800	Vilas	Anvil	398	14-18 Slot	NR	1639	0.09	603	0.38	2.72	2171
2338800	Vilas	Big Crooked	682	none	NR	1168	0.11	499	0.42	2.34	1724
2339900	Vilas	Escanaba	293	28	NR	1557	0.23	836	0.21	1.86	3244
716800	Vilas	Kentuck Little Arbor	957	1>14	C-NR	6721	0.05	1010	0.37	6.65	7520
1545300	Vilas	Vitae North &	534	1>14	C-NR	3498	0.14	714	0.33	4.90	4360
1623800	Vilas	South Twin	3430	15	C-NR	8745	0.06	3071	0.42	2.85	10430
2331600	Vilas	Trout	3816	15	C-ST	5012	0.10	10935	0.31	0.46	11905
2336100	Vilas	Wolf	393	15	NR	963	0.16	595	0.39	1.62	1633

Appendix F. Muskellunge Population Estimates.

Muskellunge population estimates were conducted over two years and completed in spring 2007; They represent 2006 population sizes. In year one, all sexable fish plus unknowns ≥ 30 " are counted. In year two, all sexable fish plus unknowns ≥ 32 " are counted, except take the lesser of 30" or the smallest half-inch group observed for each sex in the first year; for the second year, do not count sexable fish less than this minimum length plus 2", or plus a different growth correction derived from the data for the lake. No stratification by length or sex is used, and the Chapman correction of the Petersen estimator is used, $(M+1)(C+1)/(R+1)$.

MWBC	County	Lake	Acres	Angler Regulation (Min Size)	Recruit Code	Adult PE	CV of PE	Density #/Acre
2916900	Ashland	Mineral	225	34"	NR	11	16.7	0.05
2672500	Burnett	Twenty Six	230	40"	ST	78	10.2	0.34
2152800	Chippewa	Wissota	6,300	34"	C-	740	21.9	0.12
2858100	Douglas	Amnicon	426	34"	C-	771	18.0	1.81
1490300	Lincoln	Seven Island	132	34"	NR	88	13.3	0.67
1547700	Lincoln	Somo	472	34"	C-	192	18.7	0.41
2272600	Oneida	Buckskin	634	40"	ST	192	22.8	0.30
1595800	Oneida	North Nokomis	476	34"	C-ST	244	28.5	0.51
2391200	Sawyer	Grindstone	3,111	50"	ST	290	18.0	0.09
2434800	Sawyer	Mud/Callahan	586	28"	NR	508	17.6	0.87
2435700	Sawyer	Spider	1,454	34"	C-NR	495	12.3	0.34
1631900	Vilas	Lac Vieux Desert	4,300	40"	C-	851	25.0	0.20
1623800	Vilas	North/South Twin	3,430	34"	C-	495	15.6	0.14
1592400	Vilas	Plum	1,033	34"	C-	138	14.0	0.13

Appendix G. YOY Walleye Survey Summaries.

		Walleye																								
Lake	County	WBC	Acres	Recruit Code	Model	Date	Temp	Totshore	ShockMI	PerShock	ShockR	Age0	Age0MinL	Age0MaxL	Age0Mod	Age0Hr	Age0Mi	Serns	Hansen	Age1	Age1MinL	Age1MaxL	Age1Mod	Age1Hr	Age1Mi	
Gordon	Ashland	2406500	142 NR	natural		10/01/2007 57		4.3	3.3	77	1.7	8	6.0	7.4 7.0-7.4	4.71	2.42	N/A	N/A	31	7.5	9.9 8.0-8.4	18.24	9.39			
Spillerberg	Ashland	2936200	75 NR	natural		10/02/2007 60		1.5	1.5	100	0.5	176	4.4	8.1	5.0	352.00	117.33	N/A	N/A	24	9.7	11.9 10.4	48.00	16.00		
Red Cedar	Barron	2109600	1841 C-NR	natural		10/16/2007 56-58		15.9	12.1	76	5.1	321	4.5	8.4 5.5-5.9	62.94	26.53	N/A	N/A	19	8.5	10.4 9.5-9.9	3.73	1.57			
Silver	Barron	1881100	337 C-NR	natural		10/04/2007 61		4.4	4.4	100	2.4	34	4.5	7.9 5.5-5.9	14.17	7.73	1.81	0.84	14	8.5	10.9 9.5-9.9	5.83	3.18			
Bony	Bayfield	2742500	191 C-NR	natural		10/03/2007 60		2.7	2.5	93	1.1	49	3.9	7.1 4.3-5.1	44.55	19.60	4.59	3.62	15	8.2	10.5 None	13.64	6.00			
Crystal	Bayfield	2897300	111 C-NR	natural		10/09/2007 59		2.5	2.5	100	1.0	2	7.7	7.9 NONE	2.00	0.80	0.19	0.02	0			0.00	0.00			
Diamond	Bayfield	2897100	341 C-NR	natural		10/10/2007 57		5.0	5.0	100	1.7	34	5.0	7.2	5.2	20.00	6.80	1.59	0.69	0			0.00	0.00		
L Owen	Bayfield	2900200	1323 C-NR	natural		10/04/2007 61-63		25.0	25.0	100	8.8	44	5.1	7.4	5.8	5.00	1.76	0.41	0.08	1	9.6	9.6 None	0.11	0.04		
Middle Eau Claire	Bayfield	2742100	902 C-NR	natural		09/25/2007 62		11.0	7.7	70	3.1	1719	3.3	8.2	5.0	554.52	223.25	N/A	N/A	93	8.3	10.8 None	30.00	12.08		
Upper Eau Claire	Bayfield	2742700	996 C-NR	natural		10/01,02/2007 60,61		11.1	11.1	100	4.0	86	5.2	7.4	6.2	21.50	7.75	N/A	N/A	37	7.8	11.1 None	9.25	3.33		
Lower Eau Claire	Douglas	2741600	802 C-NR	natural		09/26/2007 62-64		7.8	7.8	100	2.5	116	3.6	6.6	5.1	46.40	14.87	3.48	2.35	157	6.9	10.8 9.4	62.80	20.13		
Lake Of The Falls	Iron	2298300	338 C-	natural		10/03/2007 57		6.7	3.8	57	1.6	0				0.00	0.00	N/A	N/A	1	9.0	9.4 None	0.63	0.26		
Pine	Iron	2949200	312 NR	natural		09/19/2007 64		6.0	6.0	100	2.5	176	4.1	6.4	5.1	70.40	29.33	6.86	6.80	140	6.5	8.5 6.8	56.00	23.33		
Spider	Iron	2306300	352 NR	natural		09/27/2007 59-62		7.3	7.3	100	2.9	72	5.3	8.6	7.3	24.83	9.86	2.31	1.24	---->						
Spirit Reservoir	Lincoln	1506800	1,664 C-NR	natural		09/27/2007 62		50.3	2.2	4	1.1	24	4.3	6.0	5.0	22.51	10.91	N/A	N/A	6	9.0	10.0	5.63	2.73		
Tug Lake	Lincoln	1482400	151 C-	natural		09/26/2007 63		2.7	2.7	100	1.7	138	4.5	7.4	5.1	82.63	51.11	11.96	16.22	6	7.6	8.5 7.7	3.59	2.22		
Fifth Lake	Oneida	1571100	240 NR	natural		09/26/2007 63		4.5	4.5	100	1.5	8	6.2	7.0	5.22	1.78	0.42	0.08	13	8.7	10.3	8.48	2.89			
Fourth Lake	Oneida	1572000	258 NR	natural		09/26/2007 63		2.6	2.6	100	1.1	9	5.7	8.4	8.57	3.46	0.81	0.24	14	8.9	10.3	13.33	5.38			
Hat Rapids - Wise R	Oneida	1179900	100 NR	natural		10/17/2007 53		2.6	1.3	50	0.7	5	6.7	7.9		7.32	3.91	N/A	N/A	0			0.00	0.00		
Hat Rapids Flowage	Oneida	1567325	650 NR	natural		10/17/2007 53		12.5	6.2	50	3.1	11	5.9	7.7		3.57	1.76	N/A	N/A	6	8.3	8.9	1.95	0.96		
Indian	Oneida	1598900	397 NR	natural		10/03/2007 60		5.1	5.1	100	2.6	11	5.5	6.3	5.9	4.26	2.16	0.50	0.11	0			0.00	0.00		
Pelican Lake	Oneida	1579900	3,585 C-NR	natural		10/24/2007 48		16.7	16.7	100	7.6	159	4.9	8.9	6.3	20.80	9.52	2.23	1.17	40	9.1	10.9 9.7, 10.6	5.23	2.40		
Swamsauger Lake	Oneida	1528700	141 C-NR	natural		10/04/2007 60		3.4	3.4	100	1.4	16	5.1	7.4	5.8	11.43	4.71	1.10	0.39	16	8.4	9.1 8.7	11.43	4.71		
Two Sisters	Oneida	1588200	719 C-NR	natural		09/19/2007 63		9.3	9.3	100	3.7	41	5.2	7.6	6.6	11.18	4.39	1.03	0.35	0			0.00	0.00		
Pipe	Polk	2490500	284 C-NR	natural		09/25/2007 63		5.0	4.1	82	1.9	1	6.0	6.4 NONE	0.53	0.24	N/A	N/A	0			0.00	0.00			
Turner	Price	2268500	149 C-	natural		10/11/2007 54		2.6	2.6	100	1.2	4	6.2	8.3 NONE	3.33	1.54	0.36	0.07	5	10.0	10.9 None	4.17	1.92			
Grindstone	Sawyer	2391200	3111 C-NR	natural		10/01/2007 61-62		10.5	10.5	100	4.3	934	4.4	7.8 6.1-6.2	217.21	88.95	20.81	38.57	152	8.0	11.4 9.9	35.35	14.48			
Hayward	Sawyer	2725500	247 C-NR	natural		10/04/2007 58-59		8.6	6.3	73	2.3	0			0.00	0.00	N/A	N/A	2	10.0	10.9 None	0.87	0.32			
L Chippewa	Sawyer	2399700	15300 C-NR	natural		09/24,26/2007 62-63		232.9	8.3	4 NA		33	5.0	6.9 5.5-5.9	NA	3.98	N/A	N/A	---->							
Lac Courte Oreilles	Sawyer	2390800	5039 C-NR	natural		09/10/2007 68		25.4	4.9	19	1.4	0			0.00	0.00	N/A	N/A	0			0.00	0.00			
Cedar	St. Croix	2615100	1100 NR	natural		10/03/2007 64		6.3	4.3	68	4.6	272	6.6	9.1 8.0-8.1	59.13	63.26	N/A	N/A	0							
Anvil Lake	Vilas	0968800	398 NR	natural		10/08/2007 63		4.8	4.5	94	2.0	32	5.4	7.7	6.8	16.00	7.11	1.66	0.74	0			0.00	0.00		
Ballard Lake	Vilas	2340700	505 C-NR	natural		10/01/2007 60		5.5	5.3	96	2.4	0				0.00	0.00	0.00	0.00	0			0.00	0.00		
Big Arbor Vitae	Vilas	1545600	1,090 NR	natural		10/16/2007 56		7.8	7.8	100	4.0	492	4.9	8.1		124.56	63.08	14.76	22.53	39	9.1	10.7	9.87	5.00		
Big Crooked	Vilas	2338800	682 NR	natural		09/10/2007 66		5.0	5.0	100	3.0	191	4.6	8.9	7.4	63.67	38.20	8.94	10.28	0			0.00	0.00		
Escanaba	Vilas	2339900	293 NR	natural		09/11/2007 57		5.2	5.2	100	2.6	54	3.7	7.1	5.6	20.93	10.34	2.42	1.33	22	7.8	9.6	8.53	4.21		
Lac Vieux Desert	Vilas	1631900	4,300 C-NR	natural		10/11/2007 53		16.5	4.4	27	3.1	0			0.00	0.00	N/A	N/A	0			0.00	0.00			
Little Arbor Vitae	Vilas	1545300	534 C-NR	natural		10/17/2007 54		7.1	7.1	100	2.3	3	7.9	8.2		1.29	0.42	0.10	0.01	1	9.5	9.9	0.43	0.14		
North & South Twin	Vilas	1623800	3,430 C-NR	natural		09/25/2007 62		14.1	14.1	100	5.5	427	4.6	8.2	6.6	78.35	30.28	7.09	7.15	5	8.5	10.9	0.92	0.35		
Plum	Vilas	1592400	1,033 C-NR	natural		09/20/2007 62		14.5	14.5	100	6.3	367	4.1	8.0	5.8	57.95	25.31	5.92	5.40	62	8.1	10.0 9.2	9.79	4.28		
Snipe	Vilas	1018500	239 NR	natural		09/17/2007 58		3.5	3.5	100	1.7	594	5.4	8.3	7.1	342.76	169.71	39.71	105.95	0			0.00	0.00		
White Birch Lake	Vilas	2340500	117 C-NR	natural		10/01/2007 60		2.3	2.3	100	1.1	0			0.00	0.00	0.00	0.00	0			0.00	0.00			
Little Sissabagam	Sawyer	2394100	299 NONE	none		09/19/2007 63		6.7	3.9	58	1.5	0			0.00	0.00	N/A	N/A	0			0.00	0.00			
Harmon	Washburn	1852500	96 NONE	none		09/10/2007 69		3.8	2.6	68	1.0	0			0.00	0.00	N/A	N/A	0			0.00	0.00			
Echo	Barron	2630200	161 0-ST	remnant		10/03/2007 62		2.9	2.9	100	1.1	0			0.00	0.00	0.00	0.00	0			0.00	0.00			
Buffalo	Bayfield	1837700	179 0-ST	remnant		09/25/2007 62		3.3	3.0	91	1.4	0			0.00	0.00	N/A	N/A	0			0.00	0.00			
Taylor	Bayfield	2734100	94 REM	remnant		09/24/2007 67		1.7	0.5	29	0.2	0			0.00	0.00	N/A	N/A	0			0.00	0.00			
Fay Lake	Florence	0677100	282 0-ST	remnant		09/17/2007 59		4.5	4.5	100	1.2	4	5.0	7.1		3.43	0.89	0.21	0.03	0			0.00	0.00		
Halsey Lake	Florence	0679300	517 0-ST	remnant		10/03/2007 62		4.1	2.0	49	0.7	24	6.2	8.8	6.8	34.29	12.00	N/A	N/A	0			0.00	0.00		
Bear Lake	Forest	0552100	68 REM	remnant		09/19/2007 64		1.7	1.7	100	0.7	0			0.00	0.00	0.00	0.00	0			0.00	0.00			

Walleye																												
Lake	County	WBIC	Acres	Recruit Code	Model	Date	Temp	Totshore	ShockMi	PerShock	ShockHr	Age0	Age0MinL	Age0MaxL	Age0Mod	Age0Hr	Age0Mi	Serns	Hansen	Age1	Age1MinL	Age1MaxL	Age1Mod	Age1Hr	Age1Mi			
Lower Post Lake	Langlade	0397100	378	REM	remnant	09/25/2007	64	8.4	8.4	100	4.3	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Summit	Langlade	1445600	282	O-ST	remnant	09/17/2007	58	3.3	3.3	100	1.7	0				0.00	0.00	0.00	0.00	28	7.3	10.2	9.1		16.97	8.48		
Waubee Lake	Oconto	0439500	124	O-ST	remnant	09/27/2007	64	3.3	3.3	100	1.2	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Maple Lake	Oncida	1609900	144	O-ST	remnant	10/01/2007	62	2.3	2.3	100	1.4	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Moen, Second, Third	Oncida	1573800	674	NR-2	remnant	09/26/2007	64	8.4	6.0	71	1.8	0				0.00	0.00	N/A	N/A	0					0.00	0.00		
Bear Trap	Polk	2618100	241	REM	remnant	10/03/2007	63	3.5	3.5	100	1.0	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Black	Sawyer	2401300	129	O-ST	remnant	10/01/2007	61	3.0	2.5	83	1.1	4	6.3			3.64	1.60	N/A	N/A	0					0.00	0.00		
Black Dan	Sawyer	2381900	128	O-ST	remnant	10/11/2007	58	3.0	2.8	93	0.9	32	5.0			8.9	6.0-6.4	35.56	11.43	N/A	N/A	0			0.00	0.00		
Fawn	Sawyer	2435900	23	NR-2	remnant	09/20/2007	61	0.9	0.9	100	0.4	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Island	Sawyer	2381800	67	O-ST	remnant	10/11/2007	57	1.5	1.5	100	0.5	13	5.0			7.4	NONE	26.00	6.67	2.03	1.01	0			0.00	0.00		
Little Lac Courte Oreilles	Sawyer	2300500	240	O-ST	remnant	09/10/2007	69	3.5	2.0	57	0.7	14	4.5			8.4	5.5-5.9	20.00	7.00	N/A	N/A	0			0.00	0.00		
Adelaide Lake	Vilas	1831700	60	REM	remnant	10/03/2007	61	2.5	2.5	100	1.2	1	7.5			7.9		0.87	0.40	0.09	0.01	0			0.00	0.00		
Potter	Ashland	2917200	29	ST	stocked	10/02/2007	60	0.9	0.9	100	0.4	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Big Moon	Barron	2079000	191	C-ST	stocked	09/26/2007	64	3.2	3.2	100	1.4	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
L Chetek	Barron	2094000	770	C-ST	stocked	10/09/2007	59	7.7	6.0	78	2.3	6	6.5			7.9	7.5-7.9	2.61	1.00	N/A	N/A	5	8.5	9.9	9.5-9.9	2.17	0.83	
Pokegama	Barron	2094300	506	C-ST	stocked	10/08/2007	63	11.3	8.0	71	3.0	45	5.5			9.9	7.0-7.4	15.00	5.63	N/A	N/A	7	10.5	12.9	None	2.33	0.88	
Prairie	Barron	2094100	1534	ST	stocked	10/11/2007	54-56	25.4	10.3	41	4.3	1	7.5			7.9	NONE	0.23	0.10	N/A	N/A	18	8.0	9.9	9.5-9.9	4.19	1.75	
Big Mckenzie	Burnett	2706800	1185	C-ST	stocked	10/03/2007	62	7.1	7.1	100	2.8	2	6.0			8.1	NONE	0.71	0.28	0.07	0.00	2	10.9	12.9	None	0.71	0.28	
Lipssett	Burnett	2678100	393	ST	stocked	09/19/2007	62	3.5	3.5	100	1.3	0				0.00	0.00	N/A	N/A	6	10.5	12.4	12.0-12.4	4.62	1.71			
Cedar	Iron	2309700	193	C-ST	stocked	09/12/2007	60-63	4.4	3.2	73	1.5	21	4.5			8.4	NONE	14.00	6.56	N/A	N/A	--->			0.00	0.00		
Fisher	Iron	2307300	410	ST	stocked	09/26/2007	60	10.9	4.3	39	1.5	0				0.00	0.00	N/A	N/A	29	9.0	11.4	9.5-9.9	19.33	6.74			
Island	Iron	2945500	352	C-ST	stocked	09/25/2007	60	7.4	5.2	70	2.1	187	5.0			7.9	6.0-6.4	89.05	35.96	N/A	N/A	52	8.5	11.4	10.0-10.4	24.76	10.00	
Rose	Langlade	0494200	112	C-ST	stocked	09/20/2007	65	7.3	7.3	100	1.4	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Upper Post Lake	Langlade	0399200	757	C-ST	stocked	09/25/2007	63	7.6	7.6	100	3.3	0				0.00	0.00	0.00	0.00	12	8.4	11.0			3.69	1.58		
Bass & Long Lake	Lincoln	0969600	233	ST	stocked	09/24/2007	63	8.7	8.7	100	3.6	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Peshtic	Lincoln	1481600	146	ST	stocked	09/26/2007	63	2.3	2.1	91	0.8	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Pine Lake	Lincoln	1012100	134	ST	stocked	09/19/2007	61	2.7	2.6	96	1.1	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Seven Island	Lincoln	1490300	132	C-ST	stocked	09/27/2007	62	4.0	2.5	62	1.1	0				0.00	0.00	N/A	N/A	0					0.00	0.00		
Sono	Lincoln	1547700	472	C-ST	stocked	09/20/2007	61	14.2	5.0	35	2.1	0				0.00	0.00	N/A	N/A	0					0.00	0.00		
Squaw	Lincoln	1564400	79	ST	stocked	09/19/2007	64	2.6	2.6	100	1.3	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Lake Tomahawk	Oncida	1542700	3,392	C-ST	stocked	10/11/2007	58	30.2	18.6	62	7.0	1	7.0			7.9		0.14	0.05	N/A	N/A	0			0.00	0.00		
Pier Lake	Oncida	1529700	257	C-ST	stocked	10/08/2007	63	5.0	5.0	100	2.4	0				0.00	0.00	0.00	0.00	1	9.5	9.9			0.41	0.20		
Shishebogama	Oncida	1539600	716	C-ST	stocked	09/27/2007	61	10.2	10.2	100	4.8	2	6.8			7.5		0.41	0.20	0.05	0.00	0			0.00	0.00		
Balsam	Polk	2620600	2054	C-ST	stocked	10/02/2007	58-63	22.7	22.7	100	6.9	0				0.00	0.00	N/A	N/A	31	8.6	11.4	None	4.49	1.37			
Big Butternut	Polk	2641000	378	ST	stocked	09/27/2007	62	3.4	3.4	100	1.3	6	5.5			7.9	NONE	4.62	1.76	0.41	0.08	0			0.00	0.00		
Magnor	Polk	2624600	231	ST	stocked	09/27/2007	64	2.6	2.6	100	0.9	0				0.00	0.00	N/A	N/A	5	12.0	13.9	None	5.56	1.92			
Wapogasset	Polk	2618000	1186	C-ST	stocked	10/03/2007	60-63	9.9	9.1	92	2.8	1	7.3			7.3	NONE	0.36	0.11	N/A	N/A	0			0.00	0.00		
Ward	Polk	2598400	91	ST	stocked	09/26/2007	64	2.3	2.3	100	0.7	0				0.00	0.00	0.00	0.00	3	11.0	12.4	None	4.29	1.30			
Whitcomb	Price	2286100	44	ST	stocked	10/09/2007	59	1.7	1.7	100	0.7	0				0.00	0.00	N/A	N/A	11	8.1	10.2	None	15.71	6.47			
Ghost	Sawyer	2423000	372	C-ST	stocked	10/08/2007	64	7.3	2.7	37	1.1	2	7.8			8.4	NONE	1.82	0.74	N/A	N/A	5	10.9	11.9	None	4.55	1.95	
Lower Clam	Sawyer	2429300	203	C-ST	stocked	10/10/2007	55	4.2	4.0	95	1.6	0				0.00	0.00	N/A	N/A	7	9.9	11.8	None	4.38	1.75			
Sand	Sawyer	2393200	928	C-ST	stocked	09/25/2007	63	5.1	5.1	100	2.1	58	5.3			7.9		7.1	27.62	11.37	2.66	1.55	134	8.3	10.4	9.4	63.81	26.27
Spider	Sawyer	2435700	1454	ST	stocked	09/13/20/2007	59-64	20.8	6.9	33	2.3	0				0.00	0.00	N/A	N/A	6	8.5	10.4	None	2.61	0.87			
Whitefish	Sawyer	2392000	786	C-ST	stocked	09/12/2007	66-68	8.1	8.1	100	3.4	0				0.00	0.00	N/A	N/A	1	9.5	9.9	None	0.29	0.12			
Black Oak Lake	Vilas	1630100	584	C-ST	stocked	10/16/2007	53	7.4	6.1	82	2.3	16	5.1			7.8		6.87	2.62	0.61	0.16	2	10.6	10.7	0.86	0.33		
Gunlock	Vilas	1539700	250	ST	stocked	09/27/2007	61	4.6	4.6	100	2.6	2	6.8			7.5		0.77	0.43	0.10	0.01	0			0.00	0.00		
Long	Vilas	1602300	872	C-ST	stocked	09/27/2007	60	8.2	7.8	95	2.8	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Sparkling	Vilas	1881900	154	C-ST	stocked	09/26/2007	63	2.4	2.4	100	1.2	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Trout	Vilas	2331600	3,816	C-ST	stocked	10/04/2007	60	17.9	17.9	100	9.0	339	4.3			7.9		5.8	37.87	18.94	4.43	3.43	7	9.0	10.4	0.78	0.39	
White Sand	Vilas	2339100	734	C-ST	stocked	10/22/2007	53	5.5	4.7	86	2.9	14	5.0			7.9		7.2	4.80	2.98	0.70	0.19	26	9.0	10.9	10.7	8.91	5.53
Big Bass	Washburn	2453300	203	ST	stocked	10/10/2007	59	2.4	2.4	100	0.7	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Ripley	Washburn	2492600	190	ST	stocked	09/25/2007	63	2.5	2.5	100	1.1	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Silver	Washburn	2496900	188	ST	stocked	09/19/2007	64	3.2	3.2	100	1.3	3	5.0			5.8	NONE	2.31	0.94	0.22	0.03	0			0.00	0.00		
Lost Lake	Florence	0588000	92	0	#N/A	10/03/2007	62	1.5	1.5	100	0.6	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Deer Lake	Forest	0548700	57	0	#N/A	09/19/2007	66	1.1	1.1	100	0.4	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Mary Lake	Langlade	0496300	156	0	#N/A	09/20/2007	62	2.0	2.0	100	1.0	0				0.00	0.00	0.00	0.00	0					0.00	0.00		
Kekegama	Washburn	2106200	110	0	#N/A	09/10/2007	69-71	3.2	3.2	100	1.1	0				0.00	0.00	N/A	N/A	0					0.00	0.00		

Appendix H. Walleye Exploitation Rates.

H-1. Information on fin clipped fish in population (prior to creel) and those observed in angler creels used to estimate angler harvest and exploitation rates.

Year	WBIC	County	Lake	Acres	Recruit. Code	Size Limit	Clips Given Prior to Creel				Clips Observed in Creel					
							Clip Given	# Clips Given	#Clips ≥14"	#Clips ≥20"	# Clips Observed	# Clips Projected	# Clips Obs. ≥14"	# Clips Proj. ≥14"	# Clips Obs. ≥20"	# Clips Proj. ≥20"
2007	394400	Forest	Metonga	1,991	C-ST	15	RV,TC	543	398	49	3	15	3	15	1	5
2007	677100	Florence	Fay	282	0-ST	15	LV,TC	184	183	58	0	0	0	0	0	0
2007	1482400	Lincoln	Tug	151	C-	15	LV,TC	573	438	9	36	94	36	96	0	0
2007	1545300	Vilas	Little Arbor Vitae	534	C-NR	1>14	LV,TC	981	475	170	31	116	16	60	2	7
2007	1623801	Vilas	Twin L Chain*	3,430	C-NR/NR	15	LV,TC	2,992	1,002	45	14	292	14	292	0	0
2007	2306300	Iron	Spider	352	NR	1>14	RV,TC	399	139	11	3	44	3	38	1	15
2007	2331600	Vilas	Trout	3,816	C-ST	15	LP,TC	2,057	1,640	322	39	215	39	215	12	66
2007	2393200	Sawyer	Sand	928	C-ST	28	RV,TC	1,075	515	109	0	0	0	0	0	0
2007	2618000	Polk	Wapogasset	1,186	C-ST	15	LV,TC	805	739	106	17	153	17	153	1	9
2007	2618100	Polk	Bear Trap	241	REM	15	RV,TC	24	23	6	0	0	0	0	0	0
2007	2624600	Polk	Magnor	231	ST	15	LV,TC	92	92	78	0	0	0	0	0	0
2007	2678100	Burnett	Lipsett	393	ST	15	RP,TC	141	134	44	1	8	1	8	0	0
2007	2706800	Burnett	Big Mckenzie	1,185	C-ST	15	LP,TC	526	524	148	3	22	3	22	1	7
2007	2741600	Douglas	Lower Eau Claire	802	C-NR	15	LP,TC	887	851	72	9	41	9	41	0	0
2007	2742100	Bayfield	Middle Eau Claire	902	C-NR	1>14	LP,TC	1,578	1,206	67	25	130	22	119	1	5
2007	2742500	Bayfield	Bony	191	C-NR	1>14	TC, BC	238	201	15	0	0	0	0	0	0
2007	2900200	Bayfield	L Owen	1,323	C-NR	15	LP,TC	511	491	274	12	91	12	91	10	76
2007	1572000/ 1571100	Oneida	Fourth\Fifth	498	NR	1>14	RP,TC/RV, TC	1,007	501	32	14	59	8	34	0	0
2007	1573800/ 1572300/ 1572200	Oneida	Moen\Second\Third	674	NR-2	1>14	LV,TC	210	204	28	0	0	0	0	0	0

* Creel done on N. Twin only.

H-2. Estimated angler and tribal harvest and associated walleye exploitation rates for lakes surveyed during the 2007/2008 fishing season.

County	Lake	Acres	Adult PE	Total PE	Angler Harvest	Tribal Harvest	Total Harvest	Angler Exploitation	Angler Exploitation ≥14"	Angler Exploitation ≥20"	Tribal Exploitation	Total Exploitation
Forest	Metonga	1,991	1,675	--	444	107	551	0.0276	0.0377	0.1020	0.0639	0.0915
Florence	Fay	282	225	--	17	0	17	0.0000	0.0000	0.0000	0.0000	0.0000
Lincoln	Tug	151	801	--	212	0	212	0.1675	0.2192	0.0000	0.0000	0.1675
Vilas	Little Arbor Vitae	534	4360	--	2331	116	2,447	0.1182	0.1263	0.0412	0.0266	0.1449
Vilas	Twin L Chain	3,430	10,430	--	3820	701	4,521	0.0976	0.2914	0.0000	0.0672	0.1648
Iron	Spider	352	550	--	268	0	268	0.1278	0.2752	1.1591	0.0000	0.1278
Vilas	Trout	3,816	11,905	--	3012	193	3,205	0.1045	0.1311	0.1925	0.0162	0.1207
Sawyer	Sand	928	2,639	--	1	52	53	0.0000	0.0000	0.0000	0.0197	0.0197
Polk	Wapogasset	1,186	1,575	--	539	71	610	0.1901	0.2070	0.0849	0.0451	0.2351
Polk	Bear Trap	241	71	--	5	0	5	0.0000	0.0000	0.0000	0.0000	0.0000
Polk	Magnor	231	169	--	0	0	0	0.0000	0.0000	0.0000	0.0000	0.0000
Burnett	Lipsett	393	207	--	51	28	79	0.0567	0.0597	0.0000	0.1353	0.1920
Burnett	Big Mckenzie	1,185	1,096	--	143	74	217	0.0418	0.0420	0.0473	0.0675	0.1093
Douglas	Lower Eau Claire	802	1,994	--	280	186	466	0.0462	0.0482	0.0000	0.0933	0.1395
Bayfield	Middle Eau Claire	902	5,925	--	1138	296	1,434	0.0887	0.0987	0.0746	0.0500	0.1387
Bayfield	Bony	191	575	449	0	0	0	0.0000	0.0000	0.0000	0.0000	0.0000
Bayfield	L Owen	1,323	1,495	--	250	302	552	0.1781	0.1853	0.2774	0.2020	0.3801
Oneida	Fourth\Fifth	498	4,313	--	572	0	572	0.0586	0.0679	0.0000	0.0000	0.0586
Oneida	Moen\Second\Third	674	822	--	28	0	28	0.0000	0.0000	0.0000	0.0000	0.0000

Appendix I. Safe harvest of walleye and musky calculated for individual lakes within the Wisconsin Ceded Territory during 2007.

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Ashland	Augustine L	2410400	166			Other	6
Ashland	Bear L	2403200	204	Other	85	Other	7
Ashland	Beaver Dam L	2916700	118			Other	5
Ashland	Beaver L	2935400	25			Other	2
Ashland	Cub L	1842600	31			Other	2
Ashland	Day L	2430300	641			Other	14
Ashland	E Twin L	2429000	110			Other	5
Ashland	English L	2914800	244	Other	33	Other	8
Ashland	Eureka L	2935600	39			Other	2
Ashland	Gordon L	2406500	142	Other	60	Other	5
Ashland	L Galilee	2935500	213	Other	12	Other	7
Ashland	Meder L	2935300	135	Other	19		
Ashland	Mineral L	2916900	225	1-2 Year Pe	111	Other	7
Ashland	Moquah L	2918200	50			Other	3
Ashland	Pelican L	2404800	46	Other	20	Other	3
Ashland	Potter L	2917200	29	Other	5		
Ashland	Spider L	2918600	103	Other	7	Other	4
Ashland	Spillerberg L	2936200	75	Other	32	Other	4
Ashland	Tea L	2922700	50	Other	22		
Ashland	Torrey L	2406700	29			Other	2
Ashland	Upper Clam L	2429600	165	Other	23	Other	6
Ashland	Zielke L	2406900	21	Other	9		
Barron	Bass L	1832800	118	Other	8		
Barron	Bear L	2105100	1358	Other	153		
Barron	Beaver Dam L	2081200	1112	1-2 Year Pe	93		
Barron	Big Dummy L	1835100	111	Other	16		
Barron	Big Moon L	2079000	191	Other	27	Other	7
Barron	Duck L	2100300	100	Other	43		
Barron	Echo L	2630200	161	Other	10		
Barron	Granite L	2100800	154	1-2 Year Pe	64		
Barron	Horseshoe L	2469800	115	Other	17		
Barron	Horseshoe L	2630100	377	Other	17		
Barron	L Chetek	2094000	770	Other	93		
Barron	L Montanis	2103200	200	Other	28		
Barron	Little Sand L	2661600	101			Other	4
Barron	Loon L	2478600	94	Other	14		
Barron	Lower Devils L	1864000	162	Other	68		
Barron	Lower Turtle L	2079700	276	Other	37		
Barron	Lower Vermillion L	2098200	208	Other	29		
Barron	Mud L	2094600	577	Other	72		
Barron	Pokegama L	2094300	506	Other	64		
Barron	Poskin L	2098000	150	Other	21		
Barron	Prairie L	2094100	1534	Other	171		
Barron	Red Cedar L	2109600	1841	1-2 Year Pe	392		
Barron	Rice L	2103900	939			Other	18
Barron	Sand L	2661100	322	Other	43	Other	9
Barron	Scott L	2630700	81	Other	12		
Barron	Silver L	1881100	337	Other	137		
Barron	Spring L	1882800	60	Other	26		
Barron	Staples L	2631200	305	Other	41		
Barron	Tenmile L	2089500	376	Other	17		
Barron	Upper Devils L	2043500	86	Other	6		
Barron	Upper Turtle L	2079800	438	Other	176		
Bayfield	Armstrong L	2754600	48	Other	21		
Bayfield	Atkins L	2734000	176	Other	73		
Bayfield	Bellevue L	2755800	65	Other	5		
Bayfield	Bladder L	2756200	81	Other	35		
Bayfield	Bony L	2742500	191	Other	79	Other	7
Bayfield	Buffalo L	1837700	190	Other	11	Other	7
Bayfield	Buskey Bay	2903800	100	Other	43	Other	4
Bayfield	Camp One L	2965700	37	Other	16		
Bayfield	Chippewa L	2431300	319			Other	9

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Bayfield	Cisco L	2899200	95	Other	14		
Bayfield	Cranberry L	2732800	58	Other	5		
Bayfield	Crystal L	2874700	94	Other	7		
Bayfield	Crystal L	2897300	111	1-2 Year Pe	25		
Bayfield	Deep L	2760100	125	Other	8		
Bayfield	Diamond L	2897100	341	1-2 Year Pe	48		
Bayfield	Drummond L	2899400	130	Other	19		
Bayfield	Eagle L	2902900	170	Other	10	Other	6
Bayfield	Everett L	2761600	34	Other	3		
Bayfield	Finger L	2965500	76	Other	6		
Bayfield	Flynn L	2902800	29	Other	3	Other	2
Bayfield	Ghost L	2423900	142			Other	5
Bayfield	Hammil L	2467900	83	Other	6		
Bayfield	Hart L	2903200	259	Other	106	Other	8
Bayfield	Hildur L	2902600	67			Other	3
Bayfield	Iron L	2877000	248	Other	13		
Bayfield	Jackson L	2734200	142	Other	9		
Bayfield	Kelly L	2472000	56	Other	5		
Bayfield	Kern L	2900500	91	Other	39		
Bayfield	L Millicent	2903700	183	Other	76	Other	6
Bayfield	L Owen	2900200	1323	Other	504		
Bayfield	L Ruth	2765900	66	Other	5		
Bayfield	L Tahkodah	2473500	152	Other	9		
Bayfield	Little Siskiwit L	2882200	37	Other	16		
Bayfield	Long L	2767100	263	Other	35		
Bayfield	Marengo L	2921100	99	Other	42		
Bayfield	Mccarry L	2903400	32			Other	2
Bayfield	Middle Eau Claire L	2742100	902	Other	350	Other	17
Bayfield	Mill Pond L	2899700	62	Other	27		
Bayfield	Mullenhoff L	2876500	69	Other	5		
Bayfield	Muskellunge L	2903600	45	Other	4		
Bayfield	Namekagon L	2732600	3227	Other	1175	Other	37
Bayfield	Perch L	2770800	25	Other	11		
Bayfield	Pigeon L	2489400	213	Other	12		
Bayfield	Samoset L	2494800	46	Other	4		
Bayfield	Siskiwit L	2882300	330	1-2 Year Pe	121		
Bayfield	Spider L	2774200	75	Other	6		
Bayfield	Spider L	2876200	124	Other	8		
Bayfield	Swett L	2743700	88	Other	38		
Bayfield	Trapper L	2734500	84	Other	36		
Bayfield	Twin Bear L	2903100	172	Other	72	Other	6
Bayfield	Upper Eau Claire L	2742700	996	Other	385	Other	18
Burnett	Big Bear L	2705700	189	Other	11		
Burnett	Big Mckenzie L	2706800	1185	Other	136	Other	21
Burnett	Big Sand L	2676800	1400	Other	36		
Burnett	Big Trade L	2638700	304			Other	9
Burnett	Clam R FI	2654500	359	Other	145		
Burnett	Clear L	2457600	115	Other	8		
Burnett	Danbury FI	2674500	256			Other	8
Burnett	Des Moines L	2674200	229	Other	12	Other	7
Burnett	Devils L	2461100	1001	Other	117		
Burnett	Dunham L	2651800	243	Other	33		
Burnett	Elbow L	2463100	233	Other	12		
Burnett	Lipsett L	2678100	393	Other	51		
Burnett	Little Mcgraw L	2477000	55	Other	9		
Burnett	Little Trade L	2639300	130			Other	5
Burnett	Little Yellow L	2674800	348	Other	141	Other	10
Burnett	Long L	2674100	251	Other	13		
Burnett	Lower Twin L	2480000	123	Other	8		
Burnett	Poquettes L	2491100	97	Other	14		
Burnett	Rice L	2677900	311			Other	9
Burnett	Rooney L	2493100	322	Other	43		
Burnett	Round L	2640100	204	Other	28		
Burnett	Sand L	2495100	962	1-2 Year Pe	38		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Burnett	Twenty-Six L	2672500	230			Other	7
Burnett	Viola L	2598600	285	Other	14		
Burnett	Yellow L	2675200	2287	Other	848	Other	30
Chippewa	Axhandle L	2092500	84	Other	6		
Chippewa	Chippewa Falls Fl	2152600	282	Other	115		
Chippewa	Cornell Fl	2181400	577	Other	229	Other	13
Chippewa	Cornell L	2171000	194	Other	11		
Chippewa	Holcombe Fl	2184900	3890	Other	1402	Other	42
Chippewa	L Wissota	2152800	6300	1-2 Year Pe	1595	Other	55
Chippewa	Long L	2351400	1052	1-2 Year Pe	362	Other	19
Chippewa	Old Abe L	2174700	1072	Other	413	Other	19
Chippewa	Otter L	2157000	661	Other	81		
Chippewa	Popple L	2173900	90	Other	13		
Chippewa	Round L	2169200	216	Other	30	Other	7
Clark	Mead L	2143900	320	Other	21	Other	5
Douglas	Amnicon L	2858100	426	1-2 Year Pe	152	Other	11
Douglas	Bass L	2451700	126	Other	53		
Douglas	Bear L	2857700	49	Other	21	Other	3
Douglas	Beauregard L	2452400	93	Other	40		
Douglas	Bond L	2693700	292	Other	14		
Douglas	Clear L	2457700	36	Other	16		
Douglas	Dowling L	2858300	154	Other	65	Other	6
Douglas	Hoodoo L	2763900	32	Other	3		
Douglas	L Minnesuing	2866200	432	Other	173		
Douglas	L Nebagamon	2865000	914	1-2 Year Pe	121		
Douglas	Leader L	2693800	165	Other	69		
Douglas	Lower Eau Claire L	2741600	802	Other	313	Other	16
Douglas	Lund L	2480300	75	Other	6		
Douglas	Lyman L	2856400	403	Other	18	Other	11
Douglas	Person L	2488600	172	Other	10		
Douglas	Red L	2492100	258	Other	13		
Douglas	Upper St Croix L	2747300	855	Other	333		
Douglas	Whitefish L	2694000	832	1-2 Year Pe	92		
Dunn	Tainter L	2068000	1752	Other	659		
Eau Claire	Altoona L	2128100	840	Other	164	Other	8
Eau Claire	Dells Pond	2149900	739	Other	290	Other	15
Eau Claire	Halfmoon L	2125400	132	Other	19		
Eau Claire	L Eau Claire	2133200	860	Other	167	Other	8
Florence	Emily L	651600	191	Other	27		
Florence	Fay L	677100	247	Other	13		
Florence	Fisher L	704200	54	Other	4		
Florence	Halsey L	679300	512	Other	20		
Florence	Keyes L	672900	202	Other	84		
Florence	Patten L	653700	255	Other	105		
Florence	Pine R Fl	651300	127	Other	54		
Florence	Sea Lion L	672300	125	1-2 Year Pe	6		
Forest	Arbutus L	181400	161	Other	23		
Forest	Birch L	555500	468	Other	187		
Forest	Butternut L	692400	1292	1-2 Year Pe	131		
Forest	Crane L	388500	337	1-2 Year Pe	30		
Forest	Franklin L	692900	892	Other	347		
Forest	Ground Hemlock L	395900	88	Other	13		
Forest	Howell L	691800	177	Other	10		
Forest	Jungle L	377900	182	Other	76		
Forest	King L	501700	33	Other	15		
Forest	L Lucerne	396500	1026	1-2 Year Pe	111		
Forest	L Metonga	394400	1991	Other	215		
Forest	Lily L	376900	211	1-2 Year Pe	210	Other	7
Forest	Little Long L	190500	102	Other	7		
Forest	Mole L	390600	73	Other	6		
Forest	Pine L	406900	1670	Other	184		
Forest	Quartz L	591000	47			Other	3
Forest	Range Line L	478200	82	Other	12		
Forest	Riley L	557100	213			Other	7

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Forest	Roberts L	378400	414	Other	53	Other	11
Forest	Silver L	555700	320	Other	15	Other	9
Forest	Stevens L	683000	297	Other	40		
Forest	Trump L	479300	172	Other	24		
Forest	Wabikon L	556900	594			Other	13
Forest	Windfall L	373500	55			Other	3
Iron	Bearskull L	2265100	75	Other	11		
Iron	Big Pine L	2270700	632	Other	249	Other	14
Iron	Boot L	2297800	180	Other	25	Other	6
Iron	Catherine L	2309100	118	Other	17		
Iron	Cedar L	2309700	193	Other	27	Other	7
Iron	Charnley L	1840400	71	Other	5		
Iron	Clear L	2303700	67	Other	5	Other	3
Iron	Echo L	2301800	220	Other	91	Other	7
Iron	Fisher L	2307300	452	Other	58	Other	11
Iron	French L	1849600	92	Other	7	Other	4
Iron	Gile Fl	2942300	3384	Other	1229	Other	38
Iron	Grand Portage L	2314100	144	Other	21	Other	5
Iron	Grant L	2312500	107	Other	7	Other	4
Iron	Hewitt L	2763300	78			Other	4
Iron	Island L	2945500	352	Other	46	Other	10
Iron	L Of The Falls	2298300	338	Other	137	Other	9
Iron	L Tahoe	2314000	37	Other	3	Other	2
Iron	Little Martha L	2314700	35	Other	3	Other	2
Iron	Long L	2303500	396	Other	51	Other	10
Iron	Lower Springstead L	2267000	95	Other	41	Other	4
Iron	Martha L	2314300	146	Other	61		
Iron	Mcdermott L	2296500	84	Other	6		
Iron	Mercer L	2313600	184	Other	26	Other	6
Iron	Moose L	2299300	269			Other	8
Iron	Mud L	2316400	56	Other	24		
Iron	Muskie L	2266800	81	Other	35	Other	4
Iron	N Bass L	1868900	180	Other	10	Other	6
Iron	Owl L	2307600	129	Other	19	Other	5
Iron	Oxbow L	2302300	80	Other	34	Other	4
Iron	Pardee L	2308000	206	Other	85	Other	7
Iron	Pike L	2299900	194	Other	81	Other	7
Iron	Pine L	2949200	312	1-2 Year Pe	182	Other	9
Iron	Plunkett L	2325200	48	Other	4		
Iron	Randall L	2318500	115	Other	49	Other	5
Iron	Rice L	2300600	125	Other	53	Other	5
Iron	Sandy Beach L	2316100	111	Other	47		
Iron	Saxon Falls Fl	2941100	41	Other	18	Other	2
Iron	Second Black L	2298600	60	Other	26		
Iron	Spider L	2306300	352	Other	143	Other	10
Iron	Stone L	2267200	82	Other	6	Other	4
Iron	Third Black L	2298800	68	Other	29		
Iron	Trude L	2295200	781	Other	305	Other	16
Iron	Turtle-Flambeau Fl	2294900	13545	Other	4547	Other	86
Iron	Upper Springstead L	2267100	126	Other	53	Other	5
Iron	Virgin L	2304500	119			Other	5
Iron	Wilson L	2297000	162			Other	6
Langlade	Big Twin L	182200	60	Other	5		
Langlade	Deep Wood L	1445100	72			Other	3
Langlade	Duck L	981500	123	Other	8		
Langlade	Enterprise L	1579700	505	1-2 Year Pe	45	1-2 Year Pe	25
Langlade	Goto L	348700	28	Other	3		
Langlade	Greater Bass L	1445500	246			Other	8
Langlade	Jessie L	188700	35	Other	3		
Langlade	Lawrence L	997300	50	Other	8		
Langlade	Moccasin L	1005600	110	1-2 Year Pe	9	1-2 Year Pe	4
Langlade	Mueller L	194000	88	Other	13		
Langlade	Otter L	387200	83	1-2 Year Pe	54		
Langlade	Pickrel L	388100	1299	Other	34		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Langlade	Rolling Stone L	389300	672	Other	82		
Langlade	Rose L	494200	112	Other	16		
Langlade	Sawyer L	198100	149	Other	62		
Langlade	Summit L	1445600	282	Other	14	Other	8
Langlade	Upper Post L	399200	757	Other	91		
Langlade	Water Power L	1445400	22			Other	2
Langlade	White L	365500	166	Other	10		
Lincoln	Alexander L	1494600	677	Other	24	Other	15
Lincoln	Bass L	969600	100	Other	15		
Lincoln	Crystal L	979100	109	Other	16		
Lincoln	Deer L	1519600	152	Other	64	Other	6
Lincoln	Grandfather FI	1502400	223	Other	12		
Lincoln	Grandmother FI	1503000	119	Other	8		
Lincoln	Jersey City FI	1516000	433	Other	174	Other	11
Lincoln	L Alice	1555900	1369	Other	521	Other	22
Lincoln	L Mohawksin	1515400	1910	Other	715	Other	27
Lincoln	L Nokomis	1516500	2433	Other	899	Other	32
Lincoln	Long L	1001000	132	Other	19		
Lincoln	Merrill FI	1481100	164	Other	69		
Lincoln	Muskellunge L	1555500	167	Other	24		
Lincoln	Pesabic L	1481600	146	Other	21		
Lincoln	Pine L	1012100	134	Other	19	Other	5
Lincoln	Rice R FI	1516400	920	Other	357	Other	18
Lincoln	Seven Island L	1490300	132	1-2 Year Pe	27	Other	5
Lincoln	Silver L	1017400	82	Other	35		
Lincoln	Somo L	1547700	472	1-2 Year Pe	102	Other	12
Lincoln	Spirit R FI	1506800	1663	1-2 Year Pe	499	Other	25
Lincoln	Squaw L	1564400	82	Other	12	Other	4
Lincoln	Thompson L	1022200	30			Other	2
Lincoln	Tug L	1482400	151	Other	63	Other	6
Marathon	Big Eau Pleine Reserv	1427400	6830	Other	1909	Other	46
Marathon	L Wausau	1437500	1918	Other	72	Other	3
Marathon	Mayflower L	310500	98	Other	15		
Marathon	Mission L	1005400	107			Other	4
Marathon	Pike L	1406300	205	Other	28		
Marathon	Wausau Dam L	1469700	284	Other	11		
Marinette	Big Newton L	498800	68	Other	29		
Marinette	Caldron Falls Reservo	545400	1018	Other	30	Other	19
Marinette	High Falls Reservoir	540600	1498	Other	568		
Marinette	Hilbert L	501200	247	Other	34		
Marinette	Johnson Falls FI	533300	68	Other	29		
Marinette	Little Newton L	502300	60	Other	26		
Marinette	Oneonta L	503300	66	Other	5		
Marinette	Sandstone FI	531300	153	Other	32		
Oconto	Archibald L	417400	430	Other	55	Other	11
Oconto	Bass L	417900	149	Other	62		
Oconto	Bear L	471200	78	Other	6		
Oconto	Boot L	418700	235	Other	97	Other	7
Oconto	Boulder L	491800	362	Other	16		
Oconto	Boundary L	499000	37	Other	3		
Oconto	Crooked L	462000	143	Other	9		
Oconto	Horn L	467100	132	Other	8		
Oconto	John L	470600	103	Other	7		
Oconto	Maiden L	487500	290	Other	39		
Oconto	Munger L	470900	97	Other	7	Other	4
Oconto	Paya L	425600	121	Other	8		
Oconto	Townsend FI	465000	476	Other	19		
Oconto	Waubee L	439500	137	Other	9		
Oconto	Wheeler L	439800	293	Other	120		
Oneida	Aldridge L	967400	134	Other	56		
Oneida	Alva L	968100	201	Other	83		
Oneida	Baker L	1546000	42	Other	18		
Oneida	Bass L	1580300	124	Other	52	Other	5
Oneida	Bear L	1527800	312	Other	41		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Oneida	Bearskin L	1523600	400	1-2 Year Pe	464	Other	10
Oneida	Big Carr L	971600	213	Other	88	Other	7
Oneida	Big Fork L	1610700	690	Other	271	Other	15
Oneida	Big L	1613000	865	Other	337	Other	17
Oneida	Big Stone L	1612200	548	Other	218	Other	13
Oneida	Birch L	1523800	180	Other	75		
Oneida	Bird L	972000	99	Other	42		
Oneida	Blue L	1538600	456	Other	183		
Oneida	Bolger L	973000	119	Other	17		
Oneida	Boom L	1580200	437	Other	175	Other	11
Oneida	Booth L	1537800	207	Other	29	Other	7
Oneida	Bridge L	1516800	411	Other	165	Other	11
Oneida	Brown L	973700	98	Other	7		
Oneida	Buckskin L	2272600	634	1-2 Year Pe	340	Other	10
Oneida	Buffalo L	974200	104	Other	44		
Oneida	Burrows L	975000	156	Other	9	Other	6
Oneida	Carrol L	1544800	352	1-2 Year Pe	30	Other	10
Oneida	Chain L	1598000	219	Other	90	Other	7
Oneida	Clear L	977100	36	Other	3		
Oneida	Clear L	977200	30	Other	13	Other	2
Oneida	Clear L	977400	62	Other	27	Other	3
Oneida	Clear L	977500	846	1-2 Year Pe	220	1-2 Year Pe	10
Oneida	Clear L	2272555	212	Other	86	Other	7
Oneida	Clearwater L	1616400	351	Other	142	Other	10
Oneida	Columbus L	1616900	670	Other	264		
Oneida	Crescent L	1564200	612	1-2 Year Pe	275	Other	14
Oneida	Crooked L	1613300	176	Other	10		
Oneida	Cunard L	1590000	43	Other	19		
Oneida	Currie L	979300	96	Other	41		
Oneida	Dam L	1596900	744	1-2 Year Pe	223	Other	15
Oneida	Deer L	1612300	177	Other	74	Other	6
Oneida	Diamond L	1537100	124	Other	52	Other	5
Oneida	Dog L	1590200	37	Other	3		
Oneida	Dog L	1612900	216	Other	89	Other	7
Oneida	E Horsehead L	1523000	184	Other	77	Other	6
Oneida	E Twin L	982400	47	Other	4		
Oneida	Echo L	1597800	107	Other	45	Other	4
Oneida	Emma L	983500	223	Other	31		
Oneida	Fifth L	1571100	240	Other	99	Other	8
Oneida	Fish L	1570600	70	Other	30	Other	3
Oneida	Fourmile L	1610800	218	Other	90	Other	7
Oneida	Fourth L	1572000	258	Other	106	Other	8
Oneida	Franklin L	986000	161	Other	23	Other	6
Oneida	Fuller L	2272000	101	Other	7		
Oneida	Garth L	986600	114	Other	48		
Oneida	George L	1569600	435	Other	175	Other	11
Oneida	Gilmore L	1589300	301	Other	40	Other	9
Oneida	Hancock L	1517900	259	Other	13	Other	8
Oneida	Hasbrook L	1589100	302	Other	123	Other	9
Oneida	Hat Rapids Fl	1567325	650	Other	256		
Oneida	Hemlock L	989200	39	Other	17		
Oneida	Hill L	990200	30	Other	3		
Oneida	Hixon L	1568900	50	Other	4		
Oneida	Hodstradt L	990700	126	Other	18		
Oneida	Indian L	1598900	397	Other	160		
Oneida	Island L	1610500	295	Other	120	Other	9
Oneida	Jennie Webber L	1574300	226	Other	31		
Oneida	Julia L (Three Lakes)	1614300	401	Other	52	Other	10
Oneida	Kate Pier L	1586300	34	Other	15		
Oneida	Kathan L	1598300	189	Other	79		
Oneida	Katherine L	1543300	590	Other	234	Other	13
Oneida	Kawaguesaga L	1542300	670	Other	264	Other	14
Oneida	Killarney L	1520900	421	Other	18		
Oneida	L Creek	1580500	172	Other	72	Other	6

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Oneida	L Julia (Rhineland)	995000	238	Other	98	Other	8
Oneida	L Seventeen	996100	172	Other	24		
Oneida	L Thompson	1569900	382	1-2 Year Pe	46	Other	10
Oneida	Laurel L	1611800	232	Other	96	Other	7
Oneida	Little Bearskin L	1523500	164	Other	23		
Oneida	Little Carr L	998800	52	Other	4		
Oneida	Little Fork L	1610600	354	Other	143	Other	10
Oneida	Little Tomahawk L	1543900	160	Other	23	Other	6
Oneida	Lone Stone L	1605600	172	Other	10	Other	6
Oneida	Long L	1001300	113	Other	48	Other	5
Oneida	Long L	1609000	620	Other	245	Other	14
Oneida	Long L	1618300	56	Other	24	Other	3
Oneida	Lost L	1575100	155	Other	65		
Oneida	Lower Kaubashine L	1534800	187	Other	26	Other	6
Oneida	Lumen L	1002800	49	Other	21		
Oneida	Madeline L	1544700	159			Other	6
Oneida	Manson L	1517200	236	1-2 Year Pe	37	Other	7
Oneida	Maple L	1609900	144	Other	9		
Oneida	Margaret L	1615900	88	Other	38		
Oneida	Marion L	1003100	62	Other	5		
Oneida	Mars L	1577100	41	Other	18		
Oneida	Mccormick L	1526600	118	Other	8		
Oneida	Medicine L	1611700	372	Other	150	Other	10
Oneida	Mercer L	1538900	257	Other	105	Other	8
Oneida	Mid L	1542600	215	Other	12	Other	7
Oneida	Mildred L	1004600	191	1-2 Year Pe	16		
Oneida	Minocqua L	1542400	1360	Other	518	Other	22
Oneida	Moccasin L	1612100	95	Other	41	Other	4
Oneida	Moen L	1573800	460	Other	19	Other	11
Oneida	Mud L	1544000	41	Other	18		
Oneida	Mud L	1612500	124	Other	8	Other	5
Oneida	Muskellunge L	1595600	284	Other	116	Other	8
Oneida	Muskie L	1524300	43	Other	4		
Oneida	N Nokomis L	1595800	476	1-2 Year Pe	173	Other	12
Oneida	N Two L	1007500	146	Other	61		
Oneida	Oatmeal L	1597300	97	Other	7		
Oneida	Oneida L	1518200	255	Other	105	Other	8
Oneida	Paradise L	1009400	89	Other	13		
Oneida	Pelican L	1579900	3585	Other	1298	Other	40
Oneida	Pickarel L	1583000	49	Other	4		
Oneida	Pickarel L	1590400	736	Other	89	Other	15
Oneida	Pier L	1529700	257	Other	35		
Oneida	Pine L	1012200	203	Other	84		
Oneida	Pine L	1581700	240	Other	99	Other	8
Oneida	Planting Ground L	1609100	1012	Other	391	Other	19
Oneida	Prairie L	1013000	58	Other	25		
Oneida	Rainbow Fl	1595300	2035	Other	759	Other	28
Oneida	Range Line L	1610300	123	Other	52	Other	5
Oneida	Rhineland Fl	1580100	1326	Other	505	Other	22
Oneida	Rocky Run Fl	1525500	96	Other	41		
Oneida	Round L	1610400	150	Other	63	Other	6
Oneida	S Pine L	1580700	77	Other	33		
Oneida	S Two L	1015500	214	Other	88		
Oneida	Sand L	1597000	540	1-2 Year Pe	214	Other	13
Oneida	Scotchman L	1016200	33	Other	3		
Oneida	Second L	1572300	111	Other	47	Other	5
Oneida	Sevenmile L	1605800	503	Other	63	Other	12
Oneida	Shepard L	1576100	179	Other	10	Other	6
Oneida	Shishebogama L	1539600	716	Other	43	Other	8
Oneida	Skunk L	1533200	130	Other	55		
Oneida	Soo L	1018900	135	Other	57	Other	5
Oneida	Spider L	1586600	118	Other	50	Other	5
Oneida	Spirit L	1612000	368	Other	149	Other	10
Oneida	Squash L	1019500	392	Other	17		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Oneida	Squirrel L	1536300	1317	1-2 Year Pe	844	Other	22
Oneida	Stella L	1575700	405	Other	18	Other	11
Oneida	Stone L	1597600	188			Other	6
Oneida	Stone L	2272700	248	Other	102		
Oneida	Sunday L	1020600	88	Other	6		
Oneida	Sunset L	1572500	33	Other	15	Other	2
Oneida	Swamp L	1522400	296	Other	39		
Oneida	Swamsauger L	1528700	141	Other	59		
Oneida	Sweeney L	1589600	187	Other	78	Other	6
Oneida	Tamarack L	1582200	99	Other	42		
Oneida	Third L	1572200	103	Other	44	Other	4
Oneida	Thunder L	1580400	172	Other	72	Other	6
Oneida	Thunder L	1618100	1768	1-2 Year Pe	401		
Oneida	Tim Lynn L	1597400	84	Other	36		
Oneida	Tom Doyle L	1586800	102	Other	15	Other	4
Oneida	Tomahawk L	1542700	3392	Other	342	1-2 Year Pe	43
Oneida	Townline L	1609600	152	Other	64	Other	6
Oneida	Turtle L	1587400	53	Other	4		
Oneida	Two Sisters L	1588200	719	1-2 Year Pe	210	1-2 Year Pe	11
Oneida	Upper Kaubashine L	1535000	190	Other	79	Other	7
Oneida	Venus L	1577000	65	Other	28		
Oneida	Virgin L	1614100	276	Other	113	Other	8
Oneida	W Horsehead L	1522900	145	Other	9	Other	5
Oneida	W Twin L	1177400	28	Other	3		
Oneida	Walters L	1582800	61	Other	26		
Oneida	Whitefish L	1613500	205	Other	11	Other	7
Oneida	Wildwood L	1178600	28	Other	5		
Oneida	Willow FI	1528300	5135	Other	1823	Other	49
Oneida	Willow L	1529500	395	Other	17	Other	10
Polk	Antler L	2449400	101	Other	7		
Polk	Apple R FI	2624200	639			Other	14
Polk	Balsam L	2620600	2054	1-2 Year Pe	182		
Polk	Bear L	2452200	155	Other	65		
Polk	Big Blake L	2627000	217	Other	12		
Polk	Big Butternut L	2641000	378	Other	49		
Polk	Big Round L	2627400	1015	Other	118		
Polk	Bone L	2628100	1781			1-2 Year Pe	137
Polk	Church Pine L	2616100	107	Other	7		
Polk	Clear L	2623500	30	Other	3		
Polk	Deer L	2619400	807			Other	16
Polk	Half Moon L	2621100	579	1-2 Year Pe	39		
Polk	Indianhead FI	2634400	776	Other	303		
Polk	Little Butternut L	2640700	189	Other	26		
Polk	Magnor L	2624600	224	Other	31		
Polk	Mckeith L	2481500	72	Other	6		
Polk	N Pipe L	2485700	58	Other	25		
Polk	N Twin L	2623900	135	Other	9		
Polk	Pike L	2624000	159	Other	10		
Polk	Pipe L	2490500	284	Other	116		
Polk	Poplar L	2491000	125	Other	8		
Polk	Sand L	2495000	187	Other	26		
Polk	Vincent L	2598500	70	Other	5		
Polk	Wapogasset L	2618000	1186	Other	136		
Polk	Ward L	2599400	91	Other	14		
Portage	Tree L	289400	74	Other	6		
Price	Amik L	2268600	224			Other	7
Price	Bass L	2282200	58	Other	25	Other	3
Price	Big Dardis L	2244200	144	Other	21	Other	5
Price	Butternut L	2283300	1006	Other	389	Other	19
Price	Crane + Chase L	2237500	86	Other	37	Other	4
Price	Crowley FI	2287200	422	Other	18	Other	11
Price	Deer L	2239100	145			Other	5
Price	Duroy L	2240100	379	Other	153	Other	10
Price	Elk L	2240000	88	Other	38	Other	4

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Price	Grassy L	2238100	81	Other	35	Other	4
Price	Island L	2260900	29	Other	3		
Price	Lac Sault Dore	2236800	561	Other	223	Other	13
Price	Long L	2239300	418	Other	168	Other	11
Price	Long L	2282000	241	Other	99	Other	8
Price	Lower Park Falls Fl	2290100	71	Other	31	Other	3
Price	Miles L	2271100	32			Other	2
Price	Musser L	2245100	563	Other	70	Other	13
Price	N Spirit L	1515200	213	Other	29	Other	7
Price	Pike L	2268300	806	1-2 Year Pe	244	1-2 Year Pe	12
Price	Pixley Fl	2288900	334	Other	136	Other	9
Price	Round L	2267800	726	1-2 Year Pe	370	1-2 Year Pe	16
Price	Schnur L	2284000	158	Other	66	Other	6
Price	Solberg L	2242500	859	Other	334	Other	17
Price	Spirit L	1513000	126			Other	5
Price	Thompson L	2265900	111	Other	8	Other	5
Price	Tucker L	2269000	118	Other	8		
Price	Turner L	2268500	149	1-2 Year Pe	27	Other	6
Price	Upper Park Falls Fl	2290500	431			Other	11
Price	Upper Price L	2235300	43			Other	2
Price	Whitcomb L	2266100	44	Other	7	Other	2
Price	Wilson L	2239400	351	Other	142	Other	10
Price	Worcester L	2210900	100	Other	43		
Rusk	Amacoy L	2359700	278	Other	37	Other	8
Rusk	Audie L	2368700	128			Other	5
Rusk	Bass L	2090900	88	Other	6		
Rusk	Big Falls Fl	2230100	369	Other	149	Other	10
Rusk	Chain L	2350500	468	Other	59	Other	12
Rusk	Clear L	2350600	95	Other	14	Other	4
Rusk	Dairyland Reservoir	2229200	1745	Other	656	Other	26
Rusk	Fireside Lakes	2349500	302	Other	123		
Rusk	Island L	2350200	526	Other	66	Other	12
Rusk	Ladysmith Fl	2228700	288	Other	118	Other	9
Rusk	Mccann L	2350400	133	Other	19	Other	5
Rusk	Perch L	2368500	23			Other	2
Rusk	Potato L	2355300	534	Other	67	Other	13
Rusk	Pulaski L	1875900	126	Other	53		
Rusk	Sand L	2353600	262	Other	35	Other	8
Rusk	Thornapple Fl	2227500	268	Other	110	Other	8
St. Croix	Cedar L	2615100	1100	Other	423	Other	20
Sawyer	Barber L	2382300	238	Other	32	Other	8
Sawyer	Barker L	2400000	238	Other	98	Other	8
Sawyer	Beverly L	2387200	9			Other	1
Sawyer	Black Dan L	2381900	128	Other	8	Other	5
Sawyer	Black L	2401300	129	Other	8	Other	5
Sawyer	Blaisdell L	2402200	356	Other	16	Other	10
Sawyer	Boos L	2425000	37	Other	16	Other	2
Sawyer	Burns L	2436400	37	Other	3	Other	2
Sawyer	Callahan L	2434700	106			Other	4
Sawyer	Clear L	1841300	77			Other	4
Sawyer	Connors L	2275100	429	Other	172	Other	11
Sawyer	Durphee L	2396800	193	Other	80		
Sawyer	Evergreen L	2277600	200	Other	83	Other	7
Sawyer	Fawn L	2435900	23	Other	2		
Sawyer	Fishtrap L	2401100	216			Other	7
Sawyer	Ghost L	2423000	372	1-2 Year Pe	47	Other	10
Sawyer	Grimh Fl	2385100	86	Other	6	Other	4
Sawyer	Grindstone L	2391200	3111	1-2 Year Pe	210	Other	18
Sawyer	Ham L	1852300	100	Other	43		
Sawyer	Hayward L	2725500	247	Other	102	Other	8
Sawyer	Holmes L	2419600	62			Other	3
Sawyer	Hunter L	2400600	126	Other	53	Other	5
Sawyer	Island L	2381800	67	Other	5	Other	3
Sawyer	L Chetac	2113300	1920	1-2 Year Pe	909		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Sawyer	L Chippewa	2399700	15300	Other	3390	Other	61
Sawyer	L Of The Pines	2275300	273	Other	112	Other	8
Sawyer	L Placid	2436500	160	Other	10	Other	6
Sawyer	L Winter	2381100	676	Other	24	Other	15
Sawyer	Lac Courte Oreilles	2390800	5039	Other	1169	Other	32
Sawyer	Lewis L	1860200	52	Other	4		
Sawyer	Little Round L	2395500	229	Other	76		
Sawyer	Little Sissabagama L	2394100	299			Other	9
Sawyer	Loretta L	2382700	126			Other	5
Sawyer	Lost Land L	2418600	1304	Other	148	Other	22
Sawyer	Lovejoy L	2395900	76	Other	33		
Sawyer	Lower Clam L	2429300	229	Other	31	Other	7
Sawyer	Mason L	2277200	190	Other	79	Other	7
Sawyer	Meadow L	2424800	39	Other	17	Other	2
Sawyer	Mirror L	1866900	38	Other	3		
Sawyer	Moose L	2420600	1670	Other	629	Other	25
Sawyer	Mud L	2434800	480	Other	19	Other	12
Sawyer	Nelson L	2704200	2503	Other	262		
Sawyer	North L	2436000	129	Other	8	Other	5
Sawyer	Partridge Crop L	2424600	45	Other	20	Other	3
Sawyer	Perch L	1873600	129	Other	8	Other	5
Sawyer	Radisson FI	2397400	255	Other	105	Other	8
Sawyer	Round L	2395600	3054	Other	1115	Other	36
Sawyer	Sand L	2393200	928	Other	109	Other	18
Sawyer	Sissabagama L	2393500	719	Other	282	Other	15
Sawyer	Smith L	2726100	323	Other	15		
Sawyer	Spider L	2435700	1454	Other	163	Other	23
Sawyer	Squaw L	2395100	208	Other	14		
Sawyer	Teal L	2417000	1049	Other	404	Other	19
Sawyer	Teal R FI	2416900	75	Other	32	Other	4
Sawyer	Tiger Cat FI	2435000	819	Other	98	Other	16
Sawyer	Whitefish L	2392000	786	Other	94	Other	16
Sawyer	Windfall L	2046500	102	1-2 Year Pe	93		
Sawyer	Windigo L	2046600	522	Other	208		
Taylor	Anderson L	2165700	43	Other	4		
Taylor	Diamond L	1757200	49	Other	21		
Taylor	Esadore L	1764000	46	Other	4		
Taylor	Hulls L	1762700	67	Other	5		
Taylor	Kathryn L	2166100	62	Other	10		
Taylor	Mondeaux FI	2193300	416			Other	11
Taylor	N Harper L	2204000	54	Other	23	Other	3
Taylor	Rib L	1469100	320	Other	130	Other	9
Taylor	S Harper L	2204100	80	Other	12		
Taylor	Sackett L	1764500	63	Other	10		
Taylor	Shearer L	2197600	21	Other	2		
Vilas	Alder L	2329600	274	Other	112	Other	8
Vilas	Allequash L	2332400	426	Other	55	Other	11
Vilas	Alma L	967900	55	Other	9	Other	3
Vilas	Annabelle L	2953800	213	Other	88	Other	7
Vilas	Anvil L	968800	380	1-2 Year Pe	230		
Vilas	Apeekwa L	2269400	188	Other	78	Other	6
Vilas	Armour L	2953200	320	Other	130	Other	9
Vilas	Arrowhead L	1541500	99	Other	15	Other	4
Vilas	Averill L	2956700	71	1-2 Year Pe	11	Other	3
Vilas	Ballard L	2340700	505	Other	201	Other	12
Vilas	Bass L	1604200	266	Other	13	Other	8
Vilas	Bear L	2335400	76	Other	12	Other	4
Vilas	Beaver L	2960600	68	Other	5		
Vilas	Belle L	2955700	53	Other	23	Other	3
Vilas	Benson L	2327100	28	Other	12	Other	2
Vilas	Big Arbor Vitae L	1545600	1090	1-2 Year Pe	720	1-2 Year Pe	68
Vilas	Big Crooked L	2338800	682	1-2 Year Pe	159	Other	15
Vilas	Big Donahue L	971700	92	Other	7		
Vilas	Big Gibson L	1835200	116	Other	49	Other	5

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Vilas	Big Hurst L	2756000	48	Other	4		
Vilas	Big Kitten L	2336700	55	Other	5	Other	3
Vilas	Big L (Boulder Jct)	2334700	835	1-2 Year Pe	297	Other	17
Vilas	Big L (Mi Border)	2963800	771	Other	239	Other	13
Vilas	Big Muskellunge L	1835300	930	1-2 Year Pe	343	Other	18
Vilas	Big Portage L	1629500	638	1-2 Year Pe	390		
Vilas	Big Sand L	1602600	1408	Other	158	Other	23
Vilas	Big St Germain L	1591100	1617	1-2 Year Pe	1005	Other	25
Vilas	Bills L	1835500	37			Other	0
Vilas	Birch L	2311100	528	Other	210	Other	12
Vilas	Black Oak L	1630100	584	Other	72		
Vilas	Boot L	1619100	284	Other	38	Other	8
Vilas	Boot L	2756400	29	Other	3	Other	2
Vilas	Boulder L	2338300	524	1-2 Year Pe	276	Other	12
Vilas	Brandy L	1541300	110	Other	16	Other	5
Vilas	Carpenter L	976100	333	Other	16		
Vilas	Catfish L	1603700	1012	Other	391	Other	19
Vilas	Circle Lily L	2326700	223	Other	31	Other	7
Vilas	Clear L	2329000	555	Other	220	Other	13
Vilas	Cleveland L	2758600	32	Other	3		
Vilas	Cochran L	2963500	126	Other	8	Other	5
Vilas	Crab L	2953500	949	Other	368	Other	18
Vilas	Crampton L	2759000	59	Other	5		
Vilas	Cranberry L	1603800	956	Other	370	Other	18
Vilas	Crystal L	1842400	88	Other	6		
Vilas	Dead Pike L	2316600	297	1-2 Year Pe	39	Other	9
Vilas	Deer L	980600	65	Other	5		
Vilas	Deer L	2311500	37	Other	3		
Vilas	Deerskin L	1601300	309	Other	41	Other	9
Vilas	Diamond L	1844700	122	Other	8	Other	5
Vilas	Dorothy Dunn L	1845600	70	Other	11	Other	3
Vilas	Duck L	1599900	108	Other	46	Other	5
Vilas	E Ellerson L	2331300	136	Other	57	Other	5
Vilas	E Witches L	982500	34	Other	3		
Vilas	Eagle L	1600200	572	Other	227	Other	13
Vilas	Eleanore L	1631500	28	Other	12	Other	2
Vilas	Erickson L	983600	106	Other	16		
Vilas	Escanaba L	2339900	293	1-2 Year Pe	268	Other	9
Vilas	Fawn L	1591000	22	Other	10	Other	2
Vilas	Fawn L	2328900	74	Other	32	Other	4
Vilas	Finger L	984700	90	Other	6		
Vilas	Fishtrap L	2343200	329	Other	15	Other	9
Vilas	Forest L	2762200	466	1-2 Year Pe	305		
Vilas	Found L	1593800	326	Other	43	Other	9
Vilas	Frank L	985900	141	Other	9		
Vilas	Harmony L	988300	88	Other	6		
Vilas	Harris L	2958500	507	1-2 Year Pe	149	Other	12
Vilas	Helen L	2964400	111	Other	47	Other	5
Vilas	Hiawatha L	2328400	36	Other	6		
Vilas	High L	2344000	734	1-2 Year Pe	158	Other	15
Vilas	Horsehead L	2953100	234	Other	96	Other	7
Vilas	Hunter L	991700	184	Other	26		
Vilas	Imogene L	586800	66	Other	5		
Vilas	Indian L	2764400	68			Other	3
Vilas	Irving L	2340900	403			Other	11
Vilas	Island L	2334400	1023	Other	395	Other	19
Vilas	Jag L	1855900	158	Other	66	Other	6
Vilas	Jenny L	1856400	59	Other	26		
Vilas	Johnson L	1541100	78	Other	12	Other	4
Vilas	Jute L	1857400	194			Other	7
Vilas	Katinka L	2957000	172	Other	72		
Vilas	Kentuck L	716800	957	1-2 Year Pe	1530	Other	18
Vilas	Kenu L	1629800	73	Other	6		
Vilas	Kildare L	1631700	54	Other	4	Other	3

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Vilas	L Content	1592000	244	Other	100	Other	8
Vilas	L Laura	995200	599	1-2 Year Pe	139	Other	13
Vilas	Lac Des Fleurs	1630900	49	Other	4		
Vilas	Lac Vieux Desert	1631900	4300	1-2 Year Pe	832	Other	29
Vilas	Little Arbor Vitae L	1545300	534	Other	212	Other	13
Vilas	Little Crooked L	2335500	153	Other	22	Other	6
Vilas	Little Horsehead L	2953000	52	Other	23		
Vilas	Little John L	2332300	166	Other	69	Other	6
Vilas	Little Papoose L	2328200	46	Other	4	Other	3
Vilas	Little Portage L	1629200	170	Other	71	Other	6
Vilas	Little Presque Isle L	2959700	85			Other	3
Vilas	Little Rice L	2338900	59	Other	5	Other	3
Vilas	Little Spider L	1540400	235	Other	32	Other	7
Vilas	Little St Germain L	1596300	980	Other	115	Other	18
Vilas	Little Star L	2334300	244	Other	100	Other	8
Vilas	Little Trout L	2321600	978	Other	113	Other	5
Vilas	Lone Pine L	2961600	142	Other	20	Other	5
Vilas	Long L	1602300	872	Other	103	Other	17
Vilas	Loon L	1001600	31	Other	3		
Vilas	Lost Canoe L	2339800	249	1-2 Year Pe	76		
Vilas	Lost L	1593400	544	Other	68	Other	13
Vilas	Lower Aimer L	2955000	34	Other	3		
Vilas	Lower Buckatabon L	1621000	352	Other	46	Other	10
Vilas	Lower Gresham L	2330300	149			Other	6
Vilas	Lynx L	1600000	22	Other	10	Other	2
Vilas	Lynx L	2954500	339	Other	138	Other	9
Vilas	Mamie L	2964100	400	Other	155	Other	10
Vilas	Manitowish L	2329400	506	Other	202	Other	12
Vilas	Mann L	2332000	261	Other	13		
Vilas	Marshall L	1626600	87	Other	6	Other	4
Vilas	Mccullough L	2960400	216	Other	12	Other	7
Vilas	Mermaid L	2768100	60	Other	5		
Vilas	Meta L	1004400	175	Other	10		
Vilas	Middle Ellerson L	1866100	60			Other	2
Vilas	Middle Gresham L	2330700	53	Other	4	Other	3
Vilas	Moccasin L	1005700	83	Other	6	Other	4
Vilas	Moon L	1005800	124	Other	18	Other	5
Vilas	Morton L	2960300	163	Other	10	Other	6
Vilas	Murphy L	2769700	81	Other	6	Other	4
Vilas	Muskellunge L	1596600	272	Other	37	Other	8
Vilas	N Crab L	2953400	56	Other	24	Other	3
Vilas	N Turtle L	2310400	369	Other	149	Other	10
Vilas	N Twin L	1623800	2788	Other	1023	Other	34
Vilas	Nelson L	1007600	104	Other	7	Other	4
Vilas	Nelson L	1869900	27			Other	2
Vilas	Nixon L	2341200	110	Other	7	Other	5
Vilas	No Mans L	2312100	225	Other	93	Other	7
Vilas	Norwood L	1008100	125	Other	14		
Vilas	Oswego L	1871800	66			Other	3
Vilas	Otter L	1600100	196	Other	81	Other	7
Vilas	Oxbow L	2954800	511	Other	204	Other	12
Vilas	Palette L	1872100	173			Other	6
Vilas	Palmer L	2962900	635	Other	78	Other	14
Vilas	Papoose L	2328700	428	Other	172	Other	11
Vilas	Partridge L	2341500	228	Other	12	Other	7
Vilas	Pickarel L	1619700	293	Other	14	Other	9
Vilas	Pine Island L	1011900	79	Other	6	Other	4
Vilas	Pioneer L	1623400	427	Other	55	Other	11
Vilas	Plum L	1592400	1033	1-2 Year Pe	550	Other	19
Vilas	Plum L	2963200	100	Other	11		
Vilas	Presque Isle L	2956500	1280	1-2 Year Pe	203	Other	21
Vilas	Rainbow L	2310800	146	Other	61	Other	5
Vilas	Razorback L	1013800	362	Other	146	Other	10
Vilas	Rest L	2327500	608	Other	240	Other	14

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Vilas	Rice L	1618600	71	Other	31	Other	3
Vilas	Roach L	1014000	51	Other	22	Other	3
Vilas	Roach L	2772500	125	Other	2		
Vilas	Rock L	2311700	122	Other	52	Other	5
Vilas	Rosalind L	1877900	43			Other	2
Vilas	Round L	2334900	116	Other	8	Other	5
Vilas	Rudolph L	2954300	79			Other	4
Vilas	Rush L	2343600	44	Other	19	Other	2
Vilas	S Turtle L	2310200	454	Other	182	Other	11
Vilas	S Twin L	1623700	642	Other	253	Other	14
Vilas	Sanford L	2335300	88	Other	38	Other	4
Vilas	Scattering Rice L	1600300	267	Other	109	Other	8
Vilas	Sherman L	1880700	123	1-2 Year Pe	37	Other	5
Vilas	Snipe L	1018500	239	1-2 Year Pe	150	Other	8
Vilas	Sparkling L	1881900	154	1-2 Year Pe	81	Other	6
Vilas	Spectacle L	717400	171	Other	10		
Vilas	Spider L	2329300	272	Other	111	Other	8
Vilas	Spring L	2964800	205	Other	85		
Vilas	Squaw L	2271600	785	1-2 Year Pe	521	Other	16
Vilas	Star L	1593100	1206	1-2 Year Pe	451	1-2 Year Pe	12
Vilas	Starrett L	1019800	66	Other	5		
Vilas	Stateline L	2952100	199	Other	3		
Vilas	Stewart L	1020000	39	Other	17		
Vilas	Stone L	2328800	139	Other	58	Other	5
Vilas	Sturgeon L	2327200	32	Other	14	Other	2
Vilas	Sumach L	1020500	60	Other	5	Other	3
Vilas	Sunset L	1020900	185	Other	11	Other	6
Vilas	Tenderfoot L	2962400	437	Other	154	Other	10
Vilas	Towanda L	1022900	146	Other	21	Other	5
Vilas	Trout L	2331600	3816	Other	379	Other	41
Vilas	Twin Island L	2959300	205			Other	7
Vilas	Upper Aimer L	2955100	33	Other	3		
Vilas	Upper Buckatabon L	1621800	494	Other	62	Other	12
Vilas	Upper Gresham L	2330800	366	Other	48	Other	10
Vilas	Van Vliet L	2956800	220	1-2 Year Pe	35	Other	7
Vilas	Vance L	2327300	30	Other	13	Other	2
Vilas	Verna L	1540300	77			Other	4
Vilas	Voyageur L	1603400	130	Other	55	Other	5
Vilas	W Bay L	2964000	368	Other	70	Other	5
Vilas	W Plum L	1592500	75	Other	32	Other	4
Vilas	W Witches L	1177500	30	Other	3		
Vilas	Watersmeet L	1599400	100	Other	43	Other	4
Vilas	White Birch L	2340500	112	Other	47	Other	5
Vilas	White Sand L	2339100	734	1-2 Year Pe	108	1-2 Year Pe	16
Vilas	Wild Rice L	2329800	379	Other	122	Other	8
Vilas	Wildcat L	2336800	305	Other	41	Other	9
Vilas	Wolf L	2336100	393	1-2 Year Pe	162	Other	10
Vilas	Yellow Birch L	1599600	202	Other	84	Other	7
Washburn	Balsam L	2112800	295	1-2 Year Pe	105		
Washburn	Bass L	1833300	130	Other	55		
Washburn	Bass L	2451300	144	Other	21		
Washburn	Bass L	2451900	188	1-2 Year Pe	88	Other	6
Washburn	Bean L	2718500	100	Other	7		
Washburn	Beartrack North Lake	2452399	33	Other	15		
Washburn	Beartrack South Lake	2452300	65	Other	28		
Washburn	Big Bass L	2453300	203	Other	28		
Washburn	Birch L	2113000	368	Other	48		
Washburn	Cable L	2456100	185	Other	26		
Washburn	Chippanazie L	2722800	58	Other	25		
Washburn	Colton Fl	2702100	58	Other	25		
Washburn	Cranberry Fl	2722400	201	Other	11		
Washburn	Deep L	1844000	43	Other	19		
Washburn	Dunn L	2709800	193	Other	80		
Washburn	Gilmore L	2695800	389	1-2 Year Pe	15		

County	Lake Name	WBIC Code	Area (acres)	Walleye Method	Walleye SH	Musky Method	Musky SH
Washburn	Horseshoe L	2470000	194	Other	27		
Washburn	Island L	2470600	276	Other	37		
Washburn	L Nancy	2691500	772	Other	93	Other	16
Washburn	Leach L	2474400	30	Other	13		
Washburn	Leisure L	2475000	75			Other	4
Washburn	Little Long L	2664500	112	Other	8		
Washburn	Little Mud L	2107100	71	Other	31		
Washburn	Little Sand L	2477700	74	Other	11		
Washburn	Little Stone L	1862400	27	Other	3		
Washburn	Long L	2106800	3290	Other	333		
Washburn	Matthews L	2710800	263	Other	35	Other	8
Washburn	Mclain L	2481600	150	Other	21		
Washburn	Middle Mckenzie L	2706500	530	Other	66	Other	12
Washburn	Minong Fl	2692900	1564	1-2 Year Pe	1150		
Washburn	Mud L	2107700	103	Other	7		
Washburn	Pavlas L	2488100	44	Other	4		
Washburn	Rice L	2696000	132	Other	56		
Washburn	Ripley L	2492600	190	Other	26		
Washburn	S Twin L	2494500	115	Other	17		
Washburn	Shell L	2496300	2580	Other	951	Other	33
Washburn	Silver L	2496900	188	Other	26		
Washburn	Slim L	2109300	224	Other	31		
Washburn	Spider L # 5	1882500	177	Other	10		
Washburn	Spring L	1882900	42	Other	4		
Washburn	Spring L	2498600	211	Other	29		
Washburn	Stone L	1884000	39	Other	3		
Washburn	Stone L	1884100	523	Other	208		
Washburn	Tozer L	2502000	36	Other	6		
Washburn	Trego L	2712000	451	Other	58	Other	11
Bayfield	Pike L Chain	2902701	714	Other	297		
Lincoln	Rice R Fl Chain	1516401	3764	Other	1421		
Oneida	Tomahawk L Chain	1542701	3552	Other	365		
Vilas	Presque Isle L C	2956501	1571	1-2 Year Pe	249		
Vilas	Twin L Chain	1623801	3430	Other	1276		