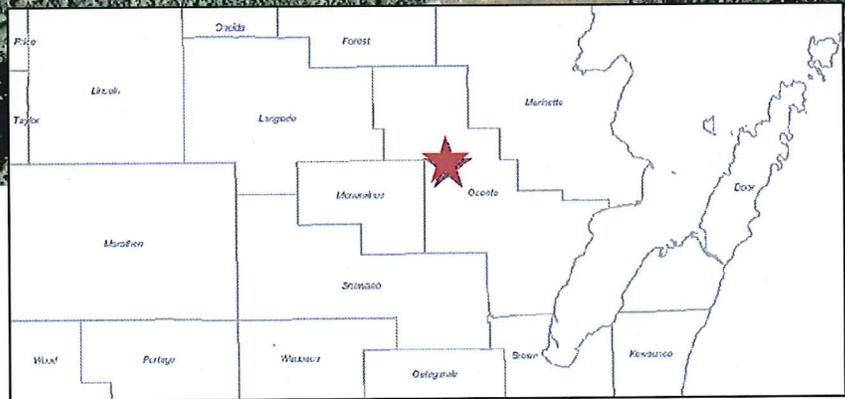
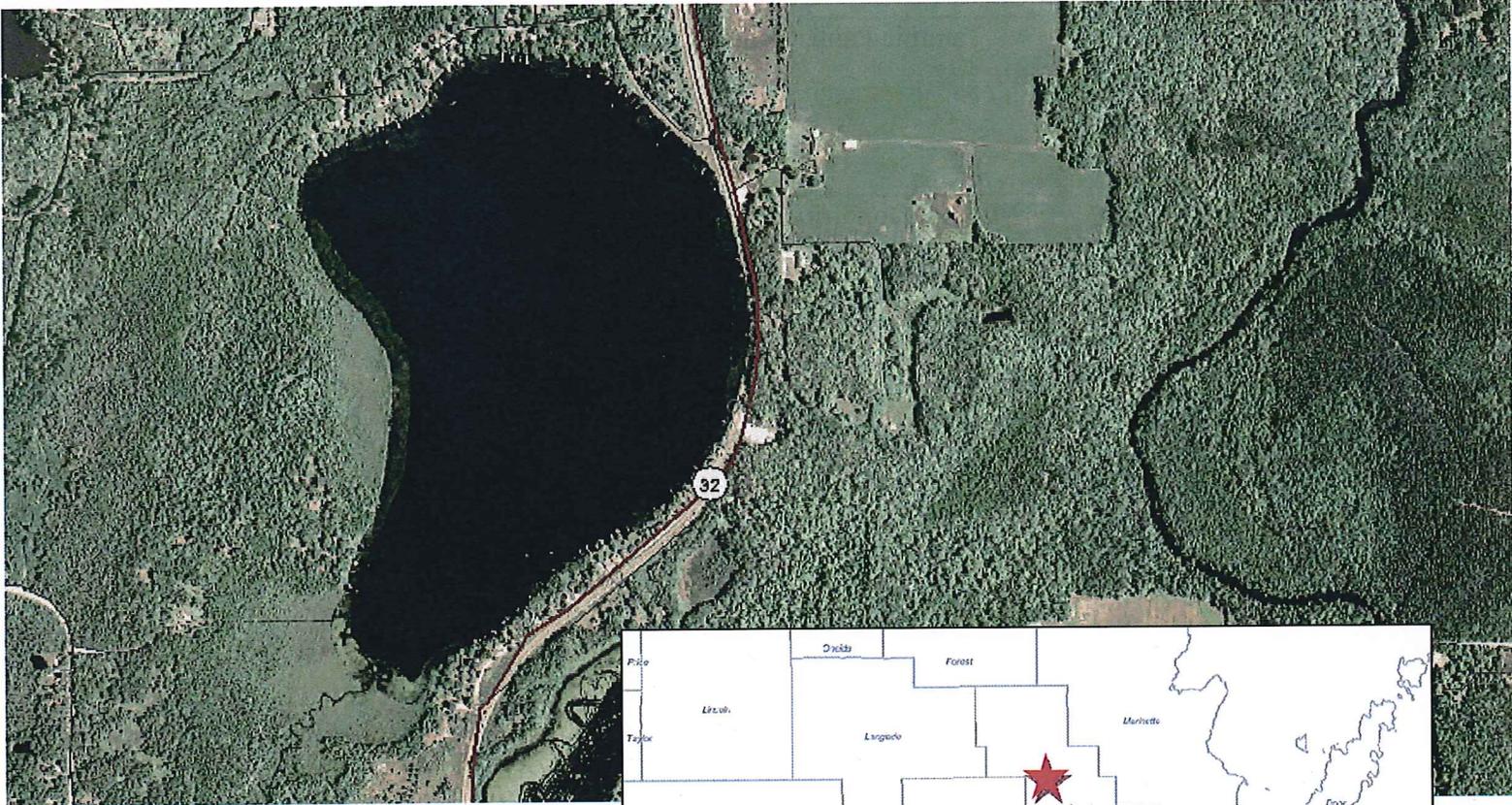


**Anderson Lake, Oconto County Wisconsin
Fisheries Survey Report, 2012**

Waterbody Identification Code: 458700



Tammie Paoli
Fisheries Biologist
Wisconsin Department of Natural Resources
Peshtigo, Wisconsin
April 2013

Anderson Lake, Oconto County Wisconsin
Fisheries Survey Report, 2012

Report Approval signatures

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Anderson Lake, Oconto County Wisconsin Fisheries Survey Report, 2012

Tammie Paoli
Fisheries Biologist
April 2013

SUMMARY

Lake and location

Anderson Lake, Oconto County, T31N R17E Section 31 and T30N R17E Sections 3 and 4

Physical / chemical attributes

Surface acres: 182

Mean depth: 23 feet

Maximum depth: 40 feet

Lake type: drainage

Basic water chemistry: Medium hard water, moderate transparency

Littoral substrate: primarily sand and muck

Shoreline: 65% upland (mixed hardwoods/conifers) and 35% wetland (shrub bog)

Aquatic vegetation: water lily, Potamogeton spp., Sparganium

Other features: There is a water control structure owned by Oconto County at the outlet on the north end of the lake that raises the lake level approximately 2 feet

Purpose of surveys

Baseline lake survey Tier 1 assessment

Dates of fieldwork

Fyke netting survey conducted March 27 through April 4, 2012. Electrofishing surveys conducted April 4, May 21, and October 1, 2012.

Fishery

Bluegill are abundant. Black crappie, northern pike, and largemouth bass are common. Walleye, rock bass, yellow perch, and pumpkinseed are present.

EXECUTIVE SUMMARY

- Anderson Lake is a 182 acre mesotrophic lake with a maximum depth of 40 feet. The last comprehensive fyke netting survey was completed in 2001.
- Anderson Lake was chosen as a brood stock lake for Great Lakes spotted muskellunge as part of the Green Bay Restoration Project. Musky were stocked in 2009 and 2010. No stocking occurred in 2011 or 2012 due to disease issues at the hatchery. Future stockings are scheduled to occur annually beginning in 2013.
- Walleye fingerlings have been stocked by the Wisconsin Department of Natural Resources approximately every other year at a rate of 35 to 50/acre since 1988.
- Overall, 1,279 fish representing 13 species were collected during the 2012 survey. The five most abundant species collected by number were bluegill (36%), northern pike (18%), black crappie (15%), walleye (11%), and largemouth bass (9%).
- A total of 195 black crappie were sampled. The average length was 8.9 inches with a range from 4.8 to 13.5 inches. Black crappie numbers have increased compared to the 2001 survey.
- A total of 459 bluegill were collected. Bluegill ranged in length from 2.2 to 9.9 inches and averaged 6.6 inches. Fyke net catch rates were significantly greater than the 2001 survey, when only 63 bluegill were captured.
- There were a total of 111 largemouth bass sampled. Catch rates were similar to the 2001 survey, but size structure was much improved, with 56% of the fish being of a legal size (14 inches or greater).
- Anderson Lake has a high density of small northern pike with slow growth rates. There were a total of 198 northern pike sampled (this total does not include recaptured individuals). Average length was 17.7 inches with a range from 8.2 to 30.6 inches. The population estimate for northern pike was 579 adults (3.2 per acre), compared to 286 (1.6 per acre) in 2001. The size structure was poor with only 13% of the fish greater than 21 inches.
- No muskellunge were captured in the 2012 survey. Musky from the 2009 and 2010 stockings have not yet reached maturity, so we did not expect them to be captured in fyke nets.
- Anderson Lake has a stable population of walleye that have excellent size structure and fast growth rates. A total of 98 walleye were sampled (this total does not include recaptured individuals). Average length was 19.4 inches with a range from 5.9 to 25.5 inches. The population estimate for walleye in 2012 was 175 fish (1 per acre), compared to 201 walleye (1.1 per acre) in 2001. Adult size structure is excellent, with 99% of the fish greater than 15 inches and 34% greater than 20 inches. However, only one fish less than 15 inches was captured which suggests lack of recruitment by stocked or naturally reproduced walleye in

recent years. Based on age interpretation, there appears to be some limited natural reproduction of walleye in some years but stocking is necessary to maintain Anderson Lake as a walleye fishery.

BACKGROUND

Anderson Lake is a medium hard water drainage lake with an area of 182 acres and a maximum depth of 40 feet. The littoral area on the eastern half of the lake is primarily hard sand while muck is the predominant bottom type on the western half of the lake. A dam owned by Oconto County at the outlet raises the lake level about two feet. The water level is sometimes drawn down about one foot in the fall, apparently to prevent ice damage to property. Weso Creek is the inlet to the lake along the south shore. There is one public boat landing on the north shore with limited parking for 1-3 vehicles. That access is owned and maintained by Oconto County. About one-third of the shoreline is owned by Oconto County or is Highway 32 right-of-way and is undeveloped. The remainder of the shoreline is developed as homes and seasonal cottages. A total of 73 piers were counted on a recent aerial photo. The Anderson Lake Association is a non-governmental group that is active in the lake community. Rusty crayfish are the only known aquatic invasive species present in Anderson Lake.

A tree drop project was completed in 2009, when 18 northern pin oaks (35 to 50' length) with a diameter of 12-16 inches were anchored along the shoreline. Trees were clustered into bundles of two, and the majority of trees were placed along the west shore. In 1987, an 80' x 90' walleye spawning reef was created and consisted of a one foot thick layer of four inch rock was placed along the east shore. In 2001, the Breed Sportsman's Club constructed a rock reef on Weso Creek near the Weso Creek Road crossing.

Current fishing regulations are listed in Table 1, and those follow the general inland regulations with the exception of the muskellunge minimum length (50 inches). That special regulation was enacted in 2012 to protect mature females since Anderson Lake is a Great Lakes spotted muskellunge brood source lake. In order to establish inland brood populations of Great Lakes spotted muskellunge, three inland lakes (Anderson Lake and Archibald Lakes in Oconto County; Big Elkhart Lake in Sheboygan County) have been identified and stocked with muskellunge in 2009 and 2010. Due to disease issues at the hatcheries, no musky were stocked in 2011 and 2012, but annual stockings are scheduled to commence in 2013 to establish a brood population. The long-term goal is to provide a viral hemorrhagic septicemia (VHS)-free source of eggs and provide genetic diversity to the Green Bay restoration project. State and private fish stocking history for all species from 1989 to 2012 for Anderson Lake is summarized in Table 2.

Fisheries surveys conducted from 1989 to 2012 are shown in Table 3. The most recent comprehensive (netting and electrofishing) survey was conducted in 2001.

METHODS

Data collection

Seven standard 4' x 6' hoop fyke nets with ¾" bar, 1.5" stretch mesh were set on March 26 and lifted daily from March 27 through April 4, 2012, for a total effort of 63 net nights (Figure 1). All fish captured were identified to species and measured to the nearest 0.1 inch. All gamefish were given a top caudal fin clip (for mark recapture population estimate), and a scale (northern pike) or dorsal spine (walleye, bass) was collected from 5 gamefish per 0.5 inch group per sex. Scales were collected from 5 panfish per 0.5 inch group per species with a length to the nearest 0.1 inch. An additional 250 lengths per species measured to the nearest 0.1 inch were collected and all additional fish were counted.

A WDNR standard direct current double anode electrofishing boat was used to sample the entire shoreline (2.17 miles) on the evenings of April 4, May 21, and October 1, 2012. Because of the size and draw of our boat, the water was too shallow to sample lower Weso Creek. Only gamefish were collected on April 4 (Spring Electrofishing I) and October 1 (Fall Electrofishing) per protocol. On May 21, all panfish and gamefish were collected for a 0.5 mile transect, and only gamefish were collected for the remaining 1.67 miles of shoreline (Spring Electrofishing II). Fish collected were measured to the nearest 0.1 inch, and inspected for a top caudal fin clip.

Ages were assigned to fish after scales and spines were aged using standard WDNR procedures. An age-length key was created to assign ages to un-aged fish based on proportional representation of the known age fish subsample, within the 0.5 inch length bins. The modified Schnabel population estimation technique was used for gamefish and was calculated using fish captured in fyke nets and the Spring Electrofishing I survey during spring 2012.

Data analysis

Total catch and catch per gear type was calculated for all species. Age and length frequency distributions and mean length at age analyses were performed for gamefish and panfish. Proportional stock density (PSD) and Relative stock density of preferred length fish (RSD-

preferred (Anderson and Neumann 1996; Bister et al. 2000) were calculated. Proportional stock density (PSD) is the ratio of 'quality-length' fish to 'stock-length' fish multiplied by 100. Relative stock density (RSD-preferred) is the ratio of 'preferred-length' fish to 'stock length fish' multiplied by 100. Both indices are commonly used as a measure of population size structure (Table 4). Data was combined for both gear types from all samples. Age-frequency distribution was calculated after ages were allocated to all fish in the sample. Mean length at age was calculated as mean length at time of capture. Mean lengths of known-age fish were plotted against northeast Wisconsin averages. Total mortality was estimated using a catch curve analysis (Ricker 1975) for populations where the assumptions of constant recruitment and mortality appeared valid, including black crappie, bluegill, and northern pike.

RESULTS AND DISCUSSION

A total of 1,279 fish of 13 different species were collected. Catch per gear type are shown for each species sampled (Table 5). Bluegill were the most abundant species. Black crappie, northern pike, and largemouth bass were common. Walleye, rock bass, pumpkinseed, yellow perch, smallmouth bass, bullhead spp., white sucker, bowfin, and bluntnose minnow were present.

Black Crappie

A total of 195 black crappie were sampled. The catch rate was 3.0 per net night and 8 per mile electrofishing (Table 5). The average length was 8.9 inches with a range from 4.8 to 13.5 inches. Black crappie numbers have increased compared to the 2001 survey, when the catch rate was 1.7 per net night. The length frequency distribution indicated a strong mode of fish around 8-8.5 inches (Figure 2). Because of this strong cohort of similar sized fish, 83% of fish were greater than 8 inches (PSD), and 21% of the fish were greater than 10 inches (RSD-preferred). The age frequency suggests good recruitment for ages 4, 5, 6 (Figure 3). The largest crappie (13.5 inches) was aged at 11 years old. Total annual mortality for ages 4-7 was estimated at 76%. The mean length at age shows that these fish are growing slightly slower compared to other populations in northeast Wisconsin (Figure 4).

Bluegill

There were a total of 459 bluegill sampled. The catch rate was 7.1/net night and 20/mile of electrofishing (Table 5). Average length was 6.6 inches with a range from 2.2 to 9.9 inches. Fyke net catch rates were significantly greater in 2012 compared to the 2001 survey, when only 63 bluegill were captured (1.1/net night). 76% of the fish were greater than 6 inches (PSD), but only 6% of fish were greater than 8 inches (RSD-preferred) (Figure 5). There was good representation of ages 3 through 6 (Figure 6). The largest bluegill (9.9 inches) was aged at 9 years old. Total annual mortality for ages 3-8 was estimated at 63%. The growth rate of bluegills is slightly below northeast Wisconsin averages (Figure 7), and may be a result of increased abundance of bluegill.

Pumpkinseed

There were a total of 32 pumpkinseed sampled. The catch rate was 0.4/net night and 10/mile of electrofishing (Table 5). Average length was 5.4 inches with a range from 3.1 to 8.9 inches. Fyke net catch rates were slightly greater in 2012 compared to the 2001 survey, when only 14 pumpkinseed were captured (0.2/net night). The size structure was skewed towards smaller fish, with only 34% of the fish greater than 6 inches (PSD) (Figure 8). There was good representation of several year classes (Figure 9), and growth rates are similar to Oconto County averages (Figure 10).

Rock Bass

A total of 59 rock bass were sampled, for a catch rate of 0.9/net night (Table 5). Average length was 8.0 inches with a range from 4.2 to 11.1 inches. Fyke net catches were greater in 2012 compared to the 2001 survey, when 17 rock bass were captured. The size structure was skewed towards larger fish, with 69% of the fish greater than 7 inches (PSD), and 44% greater than 9 inches (Figure 11). There was good representation of several year classes (Figure 12).

Yellow Perch

A total of 27 yellow perch were sampled during the Spring Electrofishing II survey in May 2012. No yellow perch were collected in fyke nets (Table 5). Average length was 4.0 inches with a range from 2.5 to 7.9 inches. Although very few mature adult yellow perch were sampled,

several hundred small perch (2-3 inches) were observed during the May electrofishing survey but most were too small to be retained in the dip nets. These fish were likely yearlings (2011 year class).

Largemouth Bass

There were a total of 111 largemouth bass sampled. The catch rate was 0.7/net night (Table 5), and was similar to the 2001 survey (0.5/net night). Average length was 13.7 inches with a range from 3.1 to 19.7 inches. The size structure was good, with 73% of the fish being 12 inches or more (PSD) and 56% of the fish being 14 inches or greater (legal size) (Figure 13). Size structure was much improved compared to the 2001 survey, when only 38% of the fish were 14 inches or greater. There appears to be constant recruitment (Figure 14). Growth appears similar to the northeast Wisconsin average and similar to 2001 (Figure 15).

Northern Pike

There were a total of 198 northern pike sampled (this total does not include recaptured individuals). The catch rate was 3.5/net night (Table 5) compared to 5.5/net night in 2001. Because there was a smaller proportion of recaptured fish in 2012, the population estimate for northern pike was 579 adults (3.2 per acre), compared to 286 (1.6 per acre) in 2001. Average length was 17.7 inches with a range from 8.2 to 30.6 inches. The size structure was poor with only 13% of the fish greater than 21 inches (PSD) and 2% of fish greater than 28 inches (RSD-preferred, Figure 16). The 2012 length distribution was very similar compared to 2001. This data may reflect high harvest pressure once fish reach a length acceptable to anglers for harvest, or demonstrate poor recruitment, or a combination. The age frequency distribution is dominated by age 3 and 4 fish, and very few older fish (Figure 17). The total annual mortality for ages 3-5 is estimated at 52%. The sex ratio of males to females in the sample was approximately 2:1. This ratio is a common pattern and may suggest either an angler preference to harvest faster growing females or a bias toward netting males. Growth rates are below the northeast Wisconsin averages and below the 2001 growth rates (Figure 18), which may be a result of the high population density.

Muskellunge

No muskellunge were captured in the 2012 survey. One 38-inch muskellunge was captured in the 2001 survey. Great Lakes strain spotted muskellunge were stocked in Anderson Lake in 2009 and 2010. Those fish have not yet reached maturity, when they would be expected to be captured in fyke nets as adults.

Walleye

A total of 98 walleye were sampled (this total does not include recaptured individuals). The catch rate was 1.8/net night (Table 5) compared to 3.3/net night in 2001. Average length was 19.4 inches with a range from 5.9 to 25.5 inches. The population estimate for walleye in 2012 was 175 fish (1 per acre), compared to 201 walleye (1.1 per acre) in 2001. Adult size structure is excellent, with 99% of the fish greater than 15 inches (PSD) and 34% greater than 20 inches (RSD-preferred; Figure 19), but only one fish under 15 inches was captured which suggests lack of recruitment by stocked or naturally reproduced walleye in recent years. Walleye fingerlings have been stocked approximately every other year at a rate of 35 to 50/acre since 1988 (Table 2). However, the age frequency distribution shows representation of ages 3 through 11 (Figure 20), concurrent with several years where no stocking occurred. Assuming correct age interpretation, this data suggests that some natural reproduction has occurred in the lake. The sex ratio of males to females in the sample was approximately 2:1. This ratio may suggest either an angler preference to harvest faster growing females or a bias toward netting males early in the spring. Growth rates for ages 3 through 6 are above the northeast Wisconsin averages and above the 2001 growth rates (Figure 21).

CONCLUSIONS AND RECOMMENDATIONS

Anderson Lake supports a good overall fishery. Many fish species have shown increases in abundance, size structure, or both compared to the 2001 survey. Management of Anderson Lake should focus on maintaining the current diverse community of fish and the quality fishing opportunities present. Public access is adequate for the size of the lake, with one boat ramp. There is a moderate amount of developed shoreline but large tracts of private and county land also exist on the lake, primarily on the west and south sides. Continued habitat improvement and shoreline protection is recommended, in consultation with WDNR and Oconto County. Due to

the large littoral zone in Anderson Lake, the establishment of aquatic invasive plants such as Eurasian water-milfoil could severely change the fish community. Presently, Eurasian water-milfoil has not been documented in Anderson Lake. Continuing to educate boaters on ways to prevent the spread of invasive species is critical, especially since neighboring Chute Pond contains several invasive aquatic plant species including Eurasian water-milfoil and curly-leaf pondweed. In addition to prevention, regular monitoring efforts for aquatic invasive species are recommended on Anderson Lake.

Bluegill, crappie, and largemouth bass populations are excellent, and size structure is good. Growth rates are average to slightly below regional averages, but this is not of great concern and is likely due to the mesotrophic qualities of the lake.

Yellow perch can exhibit cyclical year class strength that is often influenced by spring water temperatures. If conditions are ideal, only a small number of adult perch are needed to produce a large year class. A series of year class failures may partially explain the low numbers of adult perch captured. However, it is possible that the perch population is inversely related to walleye abundances since perch are a preferred prey item for walleye.

Walleye abundance is similar to the 2001 survey, but size structure is much improved. The population density of adult walleye may represent the maximum potential of the lake. However, the lack of small walleye indicates low recruitment, and may be a result of the increased abundance of other top predators in the lake such as largemouth bass and northern pike and/ or the limited amount of quality spawning habitat. Maintaining the walleye fishery will be dependent on continued stocking to maintain the population since spawning success is variable.

No muskellunge were present in the 2012 survey, but this may be because the fish stocked in 2009 and 2010 are not yet mature and would not be expected to be caught in a fyke net. However, it is a bit concerning that no muskellunge were found in the three completed electrofishing surveys that covered the entire shoreline. The high density (3.2/acre) of northern pike may be impacting muskellunge survival. As a comparison to the other Great Lakes spotted muskellunge brood stock lakes (Archibald, Big Elkhart), the density of northern pike in Archibald Lake, Oconto County, was 1.1/acre in 2011 (Long 2012). The density of northern pike in Big Elkhart Lake, Sheboygan County, was 0.7/acre in 2011 (Travis Motl, personal communication).

The next comprehensive survey for Anderson Lake is scheduled for 2022. If Great Lakes spotted muskellunge are stocked in upcoming years, it would be beneficial to complete a fall electrofishing survey in the same year that muskies are stocked to determine relative survival of stocked fish.

ACKNOWLEDGEMENTS

Data collection for the 2012 survey was completed by WDNR fisheries staff Mike Donofrio, Ronald Rhode, Steve Hogler, Rod Lange, Chip Long, Tammie Paoli, Steve Fajfer, and Conservation Warden Joe Paul. Fish aging was done by Rod Lange. Data entry was completed by Ron Rhode and Rod Lange. Data analysis was completed by Cory Wienandt.

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TABLES AND FIGURES

TABLE 1.— Current (2013) fishing regulations for Anderson Lake.

Species	Open Season	Daily limit	Minimum length
Largemouth and Smallmouth Bass	first Saturday in May -- first Sunday in March	5	14 inches
Walleye	first Saturday in May – first Sunday in March	5	15 inches
Muskellunge	Saturday nearest Memorial Day to November 30 th .	1	50 inches
Northern Pike	first Saturday in May – first Sunday in March	5	none
Panfish (bluegill, pumpkinseed, yellow perch, white and black crappie)	Open all year	25 in total	none

TABLE 2.— Stocking history of Anderson Lake from 1962 to 2012.

YEAR	SPECIES	STRAIN	AGE CLASS	NUMBER STOCKED	AVG LENGTH	SOURCE
1962	WALLEYE	UNSPECIFIED	FINGERLING	35000	NA	DNR
1964	WALLEYE	UNSPECIFIED	FINGERLING	35000	NA	DNR
1966	WALLEYE	UNSPECIFIED	FINGERLING	35000	NA	DNR
1988	WALLEYE	UNSPECIFIED	FINGERLING	1000	4	PRIVATE
1988	WALLEYE	UNSPECIFIED	YEARLING	600	7	PRIVATE
1989	WALLEYE	UNSPECIFIED	ADULT	300	13	FIELD TRANSFER
1989	WALLEYE	UNSPECIFIED	YEARLING	800	7	DNR
1990	WALLEYE	UNSPECIFIED	YEARLING	1000	7	FIELD TRANSFER
1992	WALLEYE	UNSPECIFIED	FINGERLING	4669	3	DNR
1992	WALLEYE	UNSPECIFIED	FINGERLING	2125	7	PRIVATE
1994	WALLEYE	UNSPECIFIED	FINGERLING	9044	3.6	DNR
1994	WALLEYE	UNSPECIFIED	YEARLING	1600	9	PRIVATE
1996	WALLEYE	UNSPECIFIED	FINGERLING	8411	1.6	DNR
1997	WALLEYE	UNSPECIFIED	LARGE FINGERLING	9000	2.7	DNR

1998	WALLEYE	UNSPECIFIED	SMALL FINGERLING	9000	1.2	DNR
2000	WALLEYE	UNSPECIFIED	SMALL FINGERLING	9000	1.7	DNR
2004	WALLEYE	MISSISSIPPI HEADWATERS	SMALL FINGERLING	8980	2	DNR
2006	WALLEYE	LAKE MICHIGAN	SMALL FINGERLING	6355	1.4	DNR
2008	WALLEYE	MISSISSIPPI HEADWATERS	SMALL FINGERLING	6364	1.4	DNR
2009	MUSKELLUNGE	GREAT LAKES SPOTTED	YEARLING	257	9	DNR
2010	MUSKELLUNGE	GREAT LAKES SPOTTED	YEARLING	56	10.8	DNR
2010	WALLEYE	LAKE MICHIGAN	SMALL FINGERLING	6300	1.4	DNR
2012	WALLEYE	LAKE MICHIGAN	SMALL FINGERLING	6297	1.6	DNR

TABLE 3.— Fisheries surveys completed on Anderson Lake from 1989 to 2012.

Date	Survey Type	Effort	Primary survey purpose
Mar 27-April 4, 2012	Fyke net	63 net nights	WAE/MUE/NOP population estimate
April 4, 2012	Electrofishing	2.17 miles (entire shoreline)	WAE/NOP/LMB recap survey
May 21, 2012	Electrofishing	2.17 miles (entire shoreline)	Bass/panfish assessment
Oct 1, 2012	Electrofishing	2.17 miles (entire shoreline)	Fall recruitment study
Sept 22, 2010	Electrofishing		Fall recruitment study
Aug 23-25, 2010	Mini fyke net	10 net nights	Natural community reference
Oct 14, 2009	Electrofishing		Fall recruitment study
Aug 10-12, 2009	Mini fyke net	10 net nights	Natural community reference
April 16-24, 2001	Fyke net	59 net nights	WAE/MUE/NOP population estimate
Sept 16, 1994	Electrofishing	2.17 miles (entire shoreline)	Fall recruitment study
June 7, 1989	Electrofishing	2.17 miles (entire shoreline)	Population estimate
April 22-26, 1989	Fyke net	25 net nights	WAE population estimate

TABLE 4.— Proposed length categories used to calculate Proportional stock density (PSD) and Relative stock density (RSD) for various fish species. Measurements are total lengths for each category in inches. Updated from Anderson and Neumann (1996) and Bister et al. (2000).

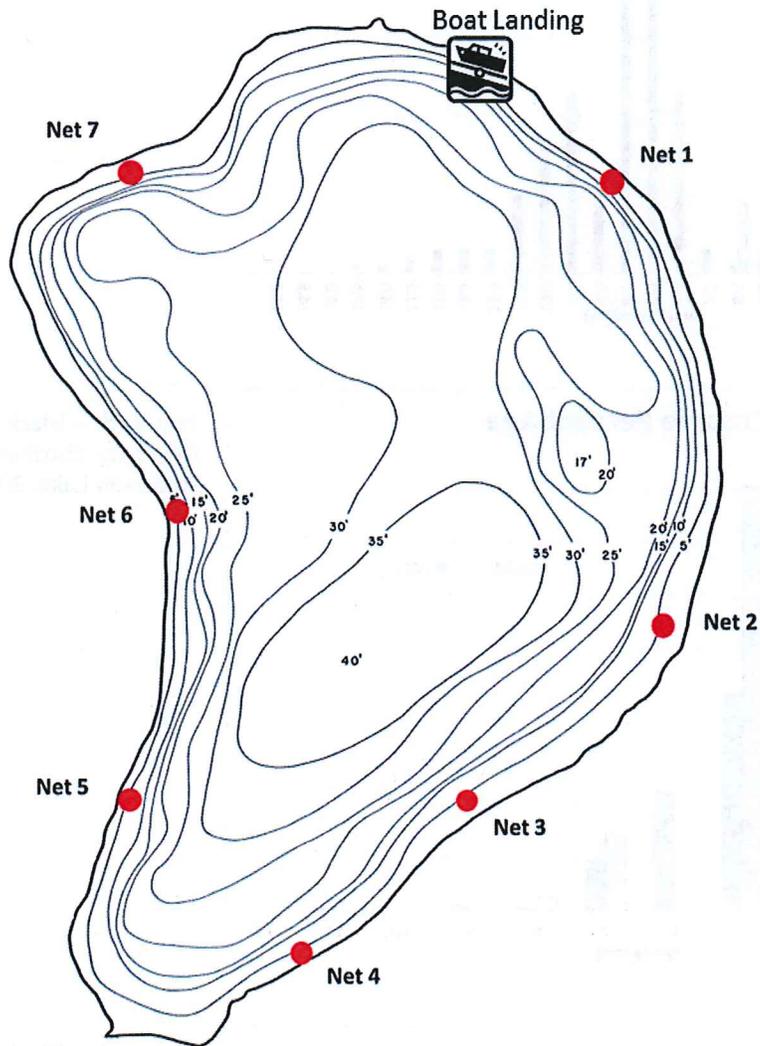
Species	PSD	RSD-P	Stock	Quality	Preferred	Memorable	Trophy
Black crappie			5	8	10	12	15
Bluegill	20 - 60	5 - 20*	3	6	8	10	12
Brown bullhead			5	8	11	14	17
Largemouth bass	40 - 70	10 - 40*	8	12	15	20	25
Muskellunge			20	30	38	42	50
Northern pike	30 - 60		14	21	28	34	44
Pumpkinseed			3	6	8	10	12
Rock bass	20 - 60		4	7	9	11	13
Walleye	30 - 60		10	15	20	25	30
Yellow perch			5	8	10	12	15
Yellow bullhead			4	7	9	11	14

*Range based on management strategy for balanced populations.

TABLE 5.— Catch summary for spring fyke netting and electrofishing samples from Anderson Lake, 2012. Totals include recaptured individuals. Seven fyke nets were fished for a total of 63 net nights from March 27 through April 4. The spring electrofishing I sample was collected on April 4. The spring electrofishing II sample was collected on May 21. Fall electrofishing was conducted on October 1. See Methods for additional sampling details.

	Fyke Netting		Electrofishing I			Electrofishing II			Fall Electrofishing		
	Mean Catch		Total Catch	Catch per hour	Catch per mile	Total Catch	Catch per hour	Catch per mile	Total Catch	Catch per hour	Catch per mile
	Total Catch	Per Net Night									
Black Crappie	191	3.0				4	14.1	8			
Bluegill	449	7.1				10	35.3	20			
Bluntnose Minnow	4	0.06									
Bowfin	2	0.03									
Bullhead Sp.	18	0.3									
Largemouth Bass	42	0.7	37	25.0	17.1	14	12.7	6.5	18	15.7	8.3
Northern Pike	219	3.5	7	4.7	3.2	2	1.8	0.9	4	3.5	1.8
Pumpkinseed	27	0.4				5	17.6	10			
Rock Bass	59	0.9									
Smallmouth Bass	2	0.03									
Walleye	112	1.8	15	10.1	6.9	3	2.7	1.4	7	6.1	3.2
White Sucker	1	0.02									
Yellow Perch						27	95.3	54			

FIGURE 1.— Locations of 7 fyke nets set on March 26 and removed on April 4, 2012 on Anderson Lake, Oconto County.



Net Number	Latitude	Longitude
1	45.1173	-88.417
2	45.11343	-88.41604
3	45.10978	-88.42087
4	45.10862	-88.42309
5	45.11156	-88.42497
6	45.11417	-88.42505
7	45.11777	-88.42532

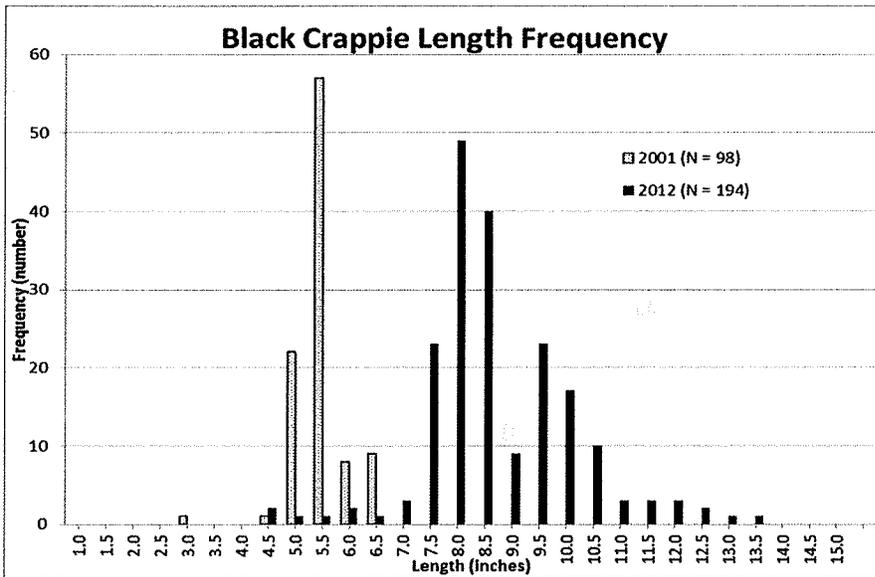


FIGURE 2. – Black crappie length frequency distribution from Anderson Lake, 2001 and 2012.

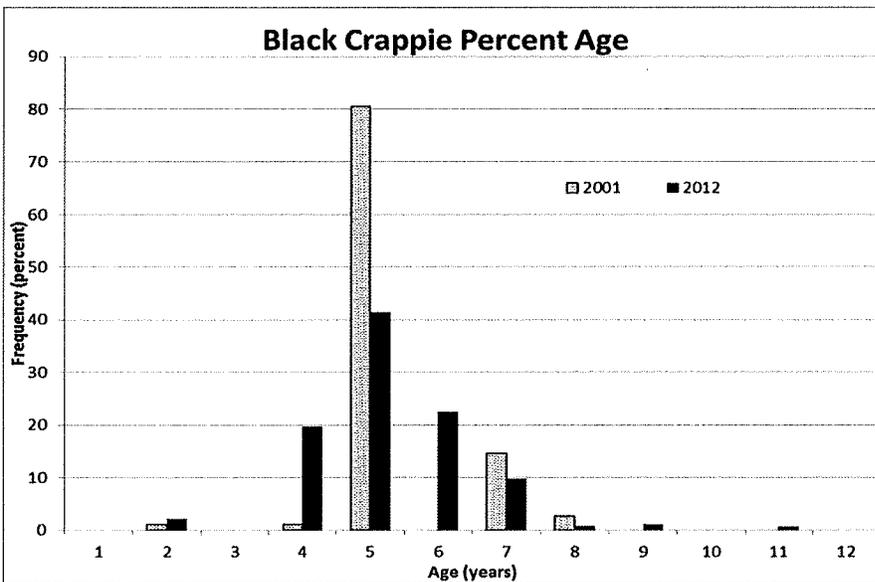


FIGURE 3. – Black crappie age frequency distribution from Anderson Lake, 2001 and 2012.

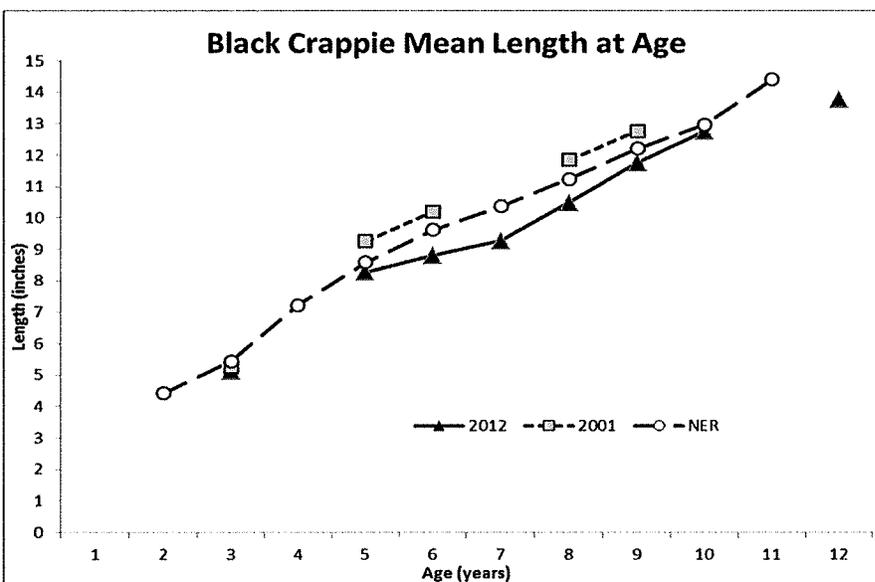


FIGURE 4. – Black crappie mean length at age, Anderson Lake, 2001 and 2012, compared to northeast WI (NER) averages.

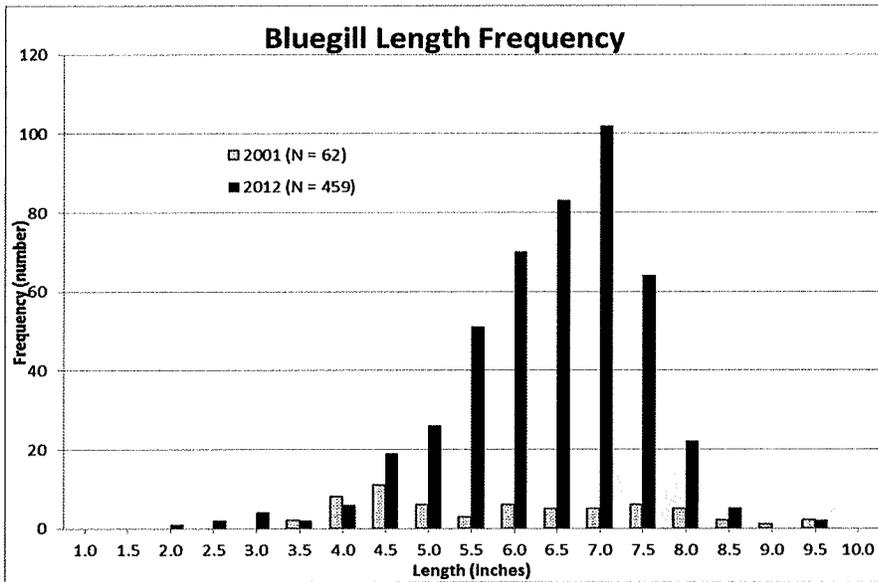


FIGURE 5. – Bluegill length frequency distribution from Anderson Lake, 2001 and 2012.

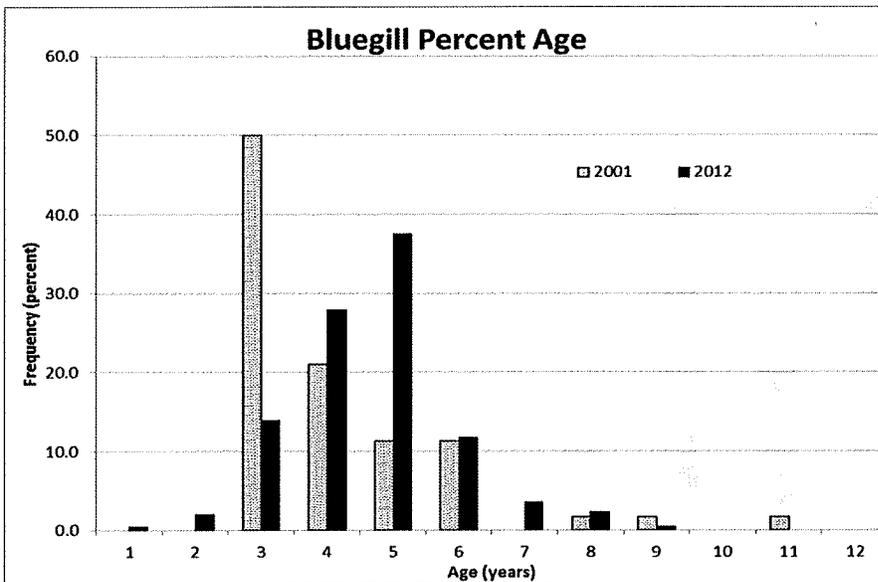


FIGURE 6. – Bluegill age frequency distribution from Anderson Lake, 2001 and 2012.

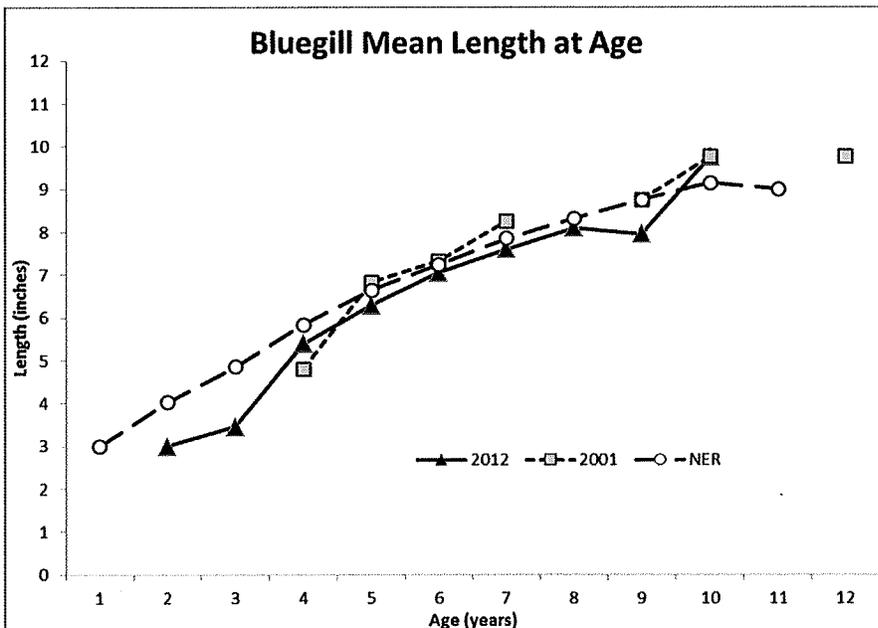


FIGURE 7. – Bluegill mean length at age, Anderson Lake, 2001 and 2012, compared to northeast WI (NER) averages.

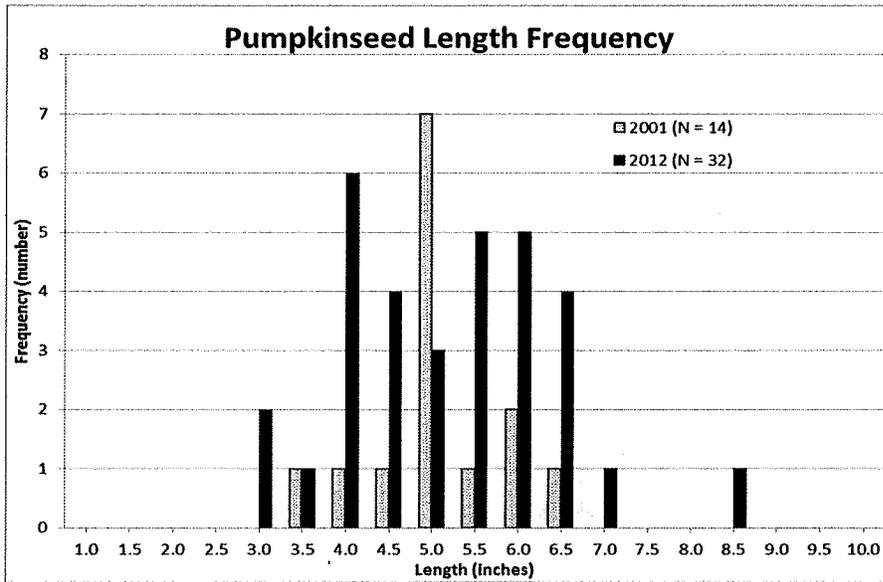


FIGURE 8. – Pumpkinseed length frequency distribution from Anderson Lake, 2001 and 2012.

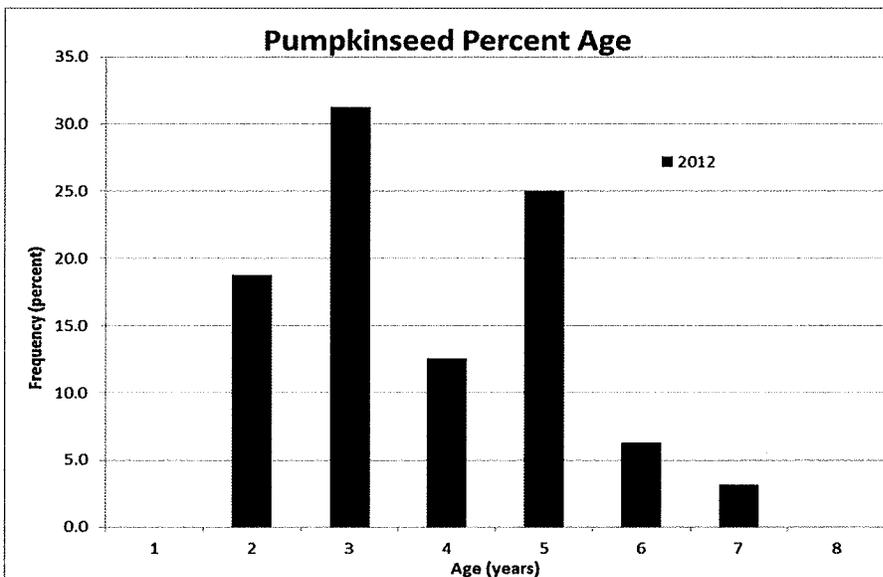


FIGURE 9. – Pumpkinseed age frequency distribution from Anderson Lake, 2012.

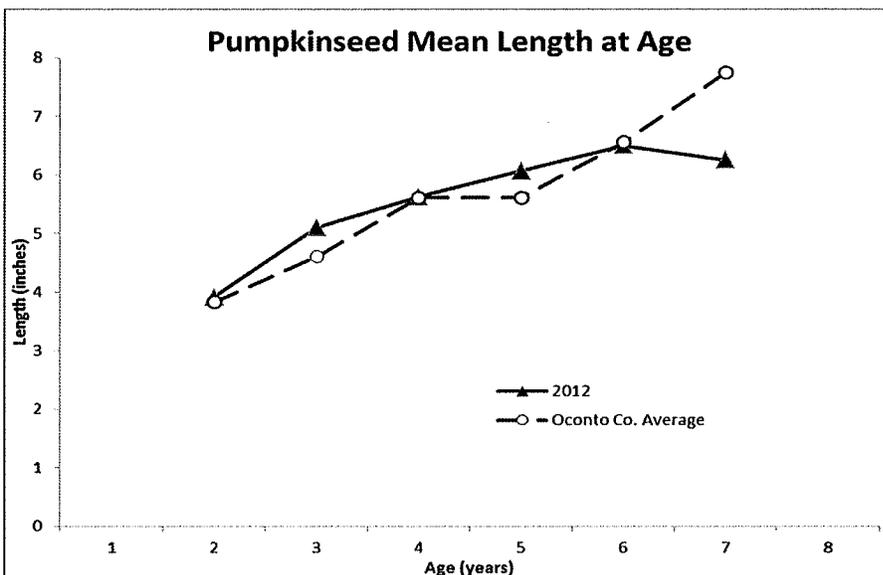


FIGURE 10. – Pumpkinseed mean length at age, Anderson Lake, 2001 and 2012, compared to Oconto County averages.

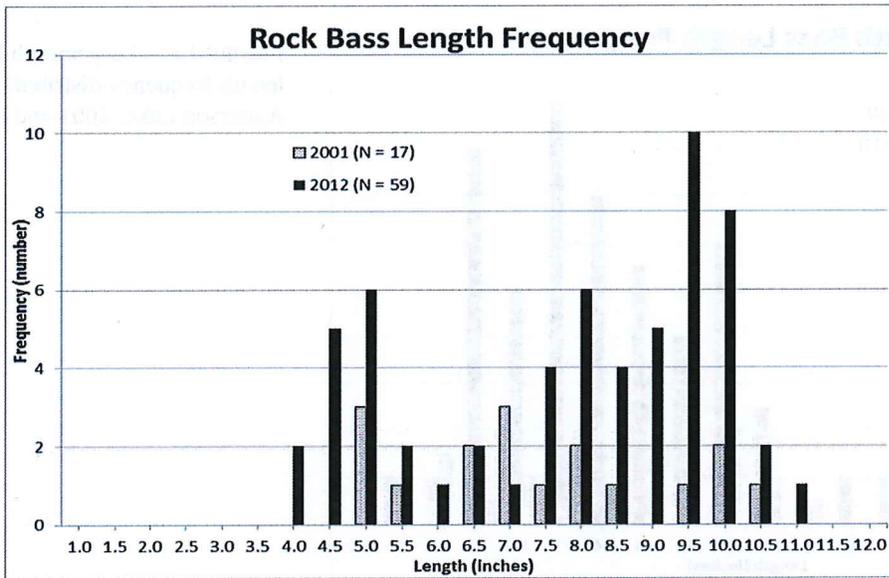


FIGURE 11. – Rock bass length frequency distribution from Anderson Lake, 2001 and 2012.

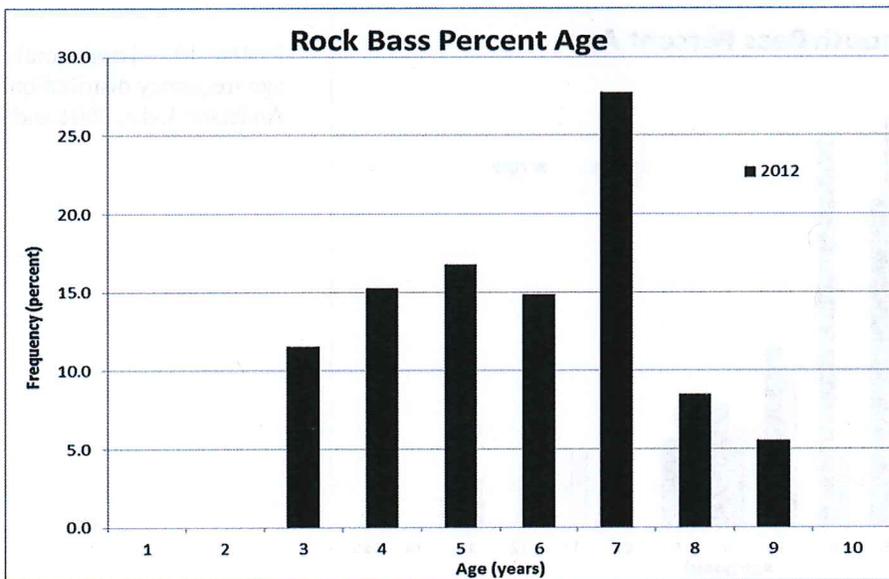


FIGURE 12. – Rock bass age frequency distribution from Anderson Lake, 2012.

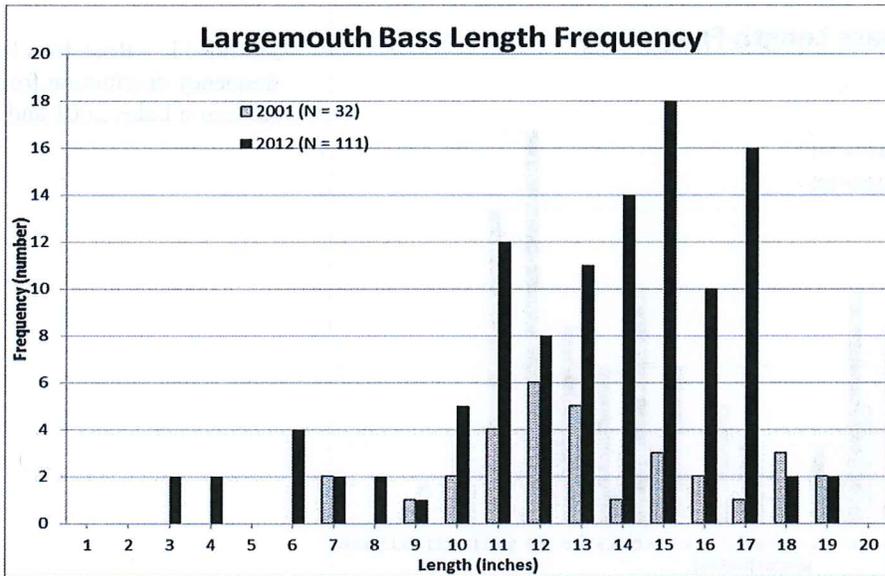


FIGURE 13. – Largemouth bass length frequency distribution from Anderson Lake, 2001 and 2012.

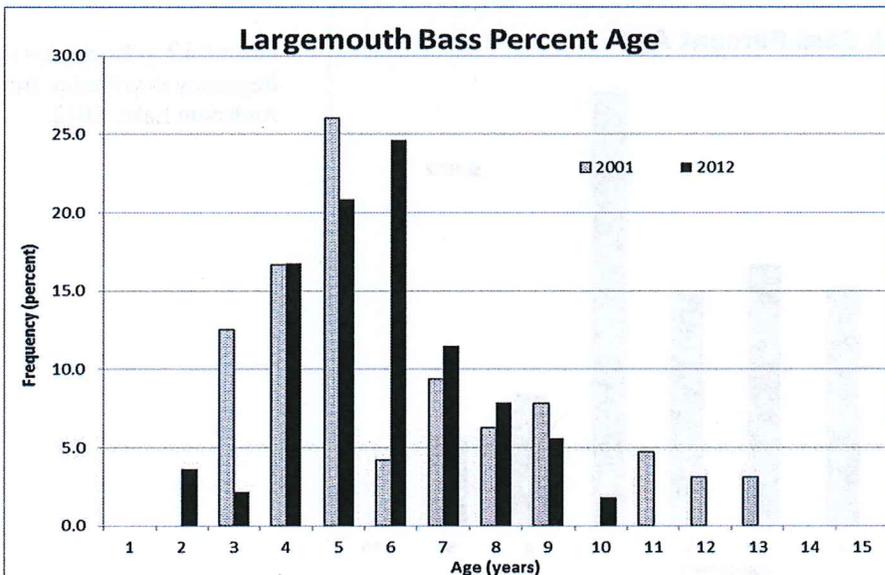


FIGURE 14. – Largemouth bass age frequency distribution from Anderson Lake, 2001 and 2012.

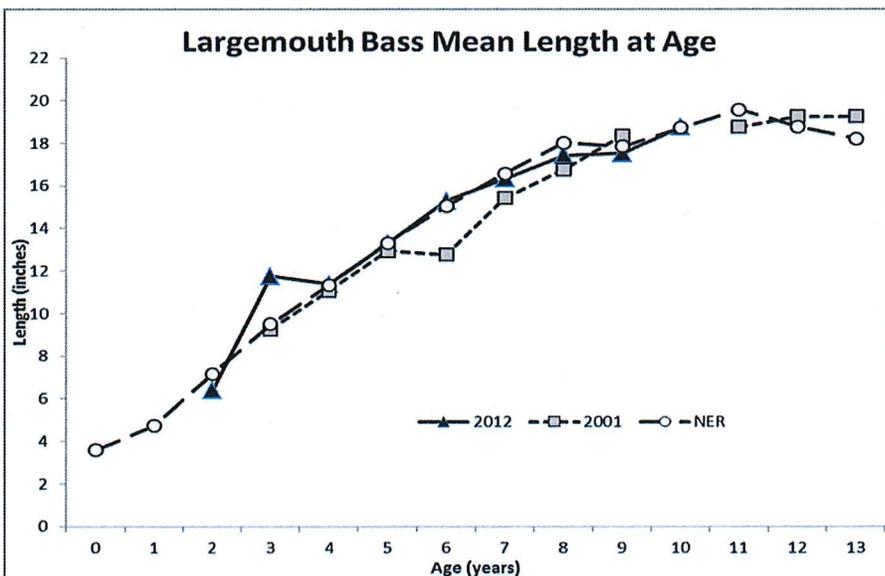


FIGURE 15. – Largemouth bass mean length at age, Anderson Lake, 2001 and 2012, compared to northeast WI (NER) averages.

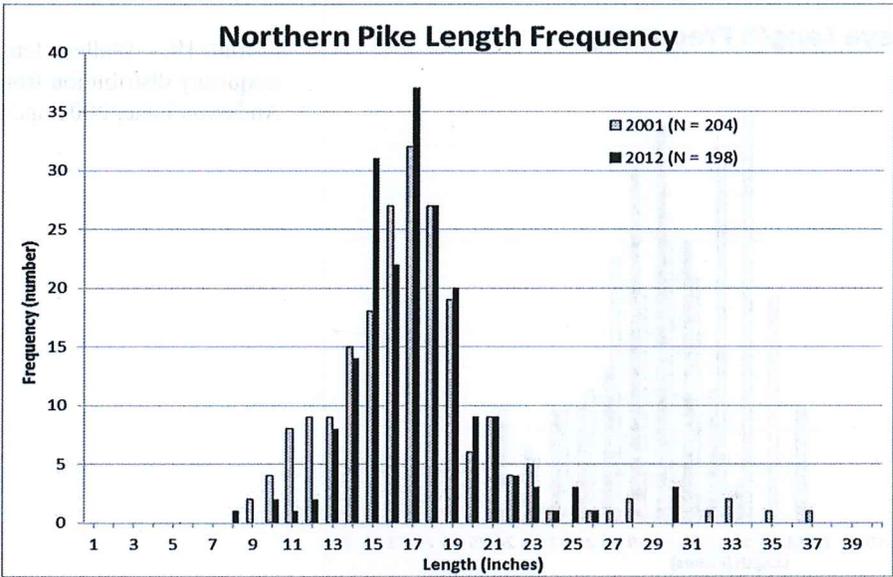


FIGURE 16. – Northern pike length frequency distribution from Anderson Lake, 2001 and 2012.

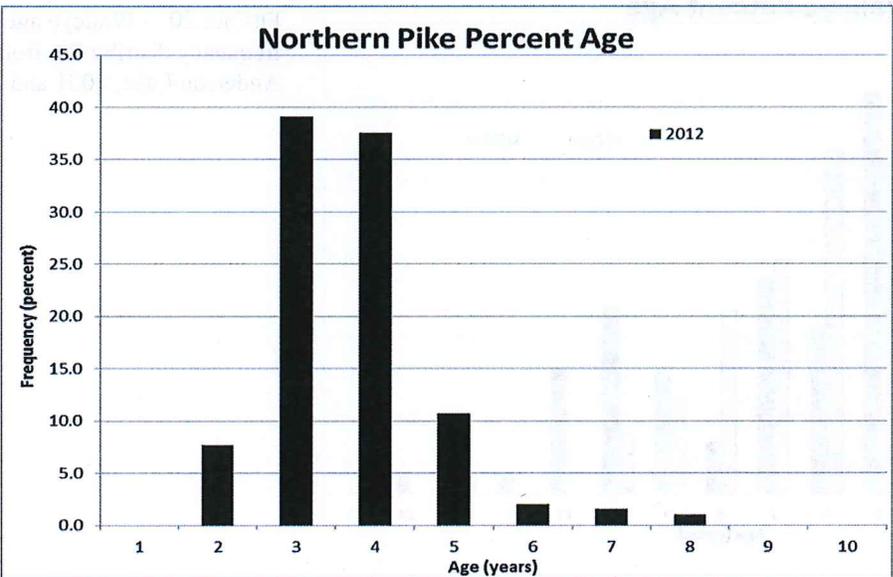


FIGURE 17. – Northern pike age frequency distribution from Anderson Lake, 2001 and 2012.

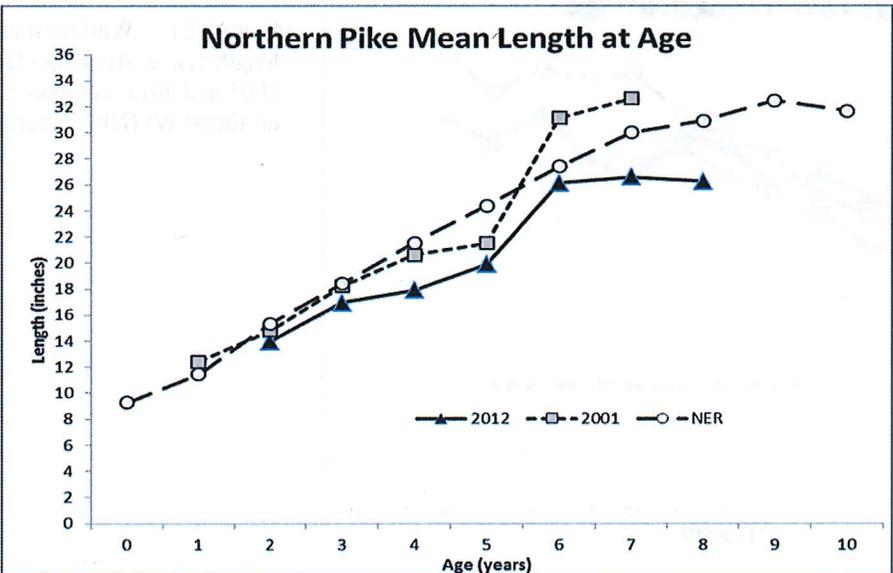


FIGURE 18. – Northern pike mean length at age, Anderson Lake, 2001 and 2012, compared to northeast WI (NER) averages.

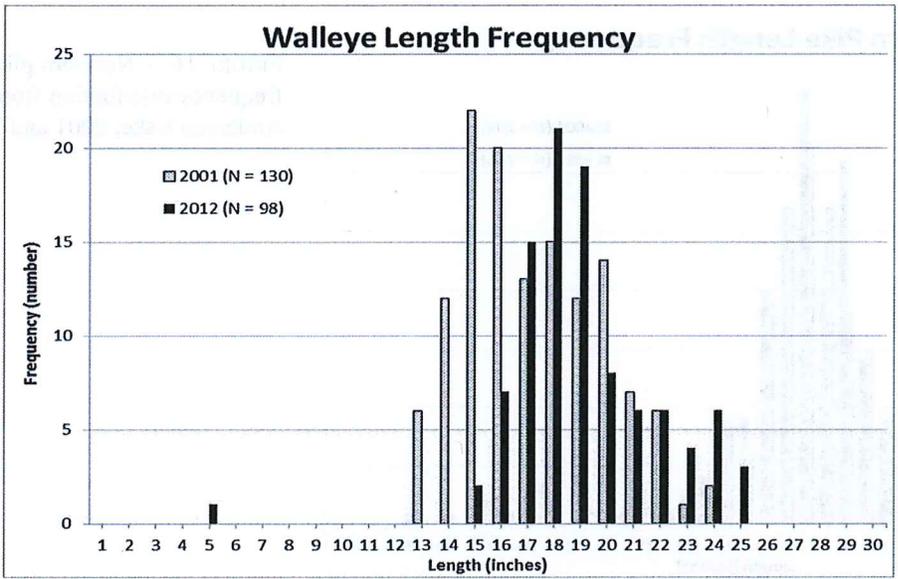


FIGURE 19. – Walleye length frequency distribution from Anderson Lake, 2001 and 2012.

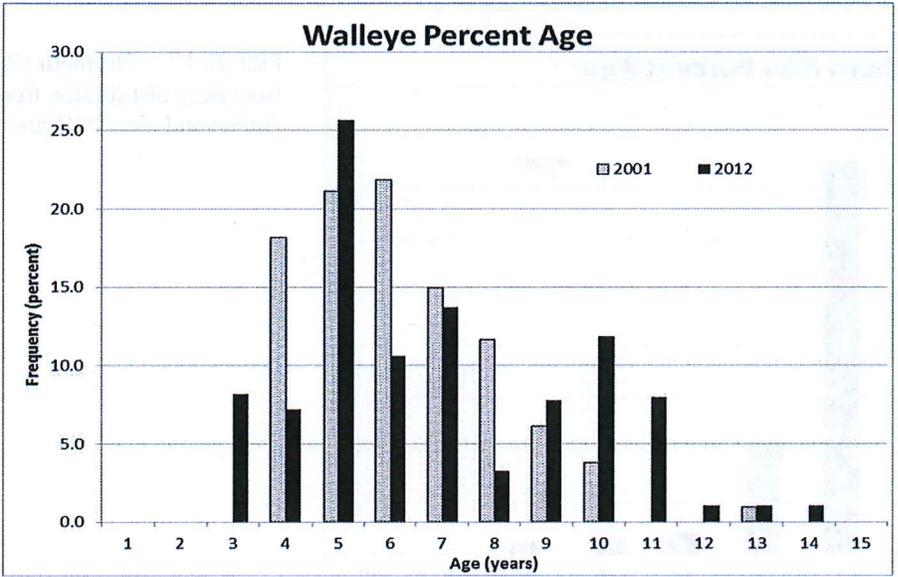


FIGURE 20. – Walleye age frequency distribution from Anderson Lake, 2001 and 2012.

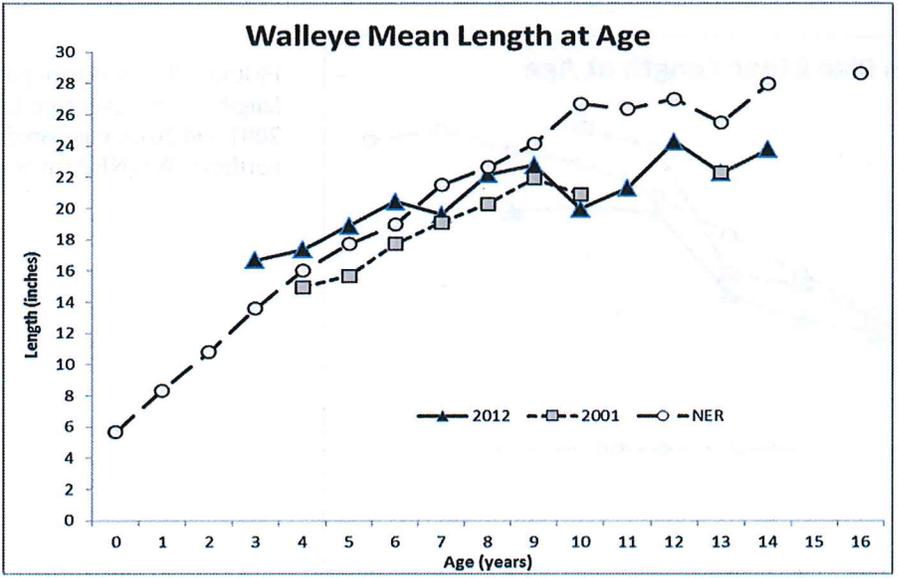


FIGURE 21. – Walleye mean length at age, Anderson Lake, 2001 and 2012, compared to northeast WI (NER) averages.