

# Columbia County, Wisconsin 2024



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## **EXECUTIVE SUMMARY**

A comprehensive fishery survey was conducted on Lazy Lake during the spring of 2024. The 2024 sampling included early spring fyke netting (SN1) targeting northern pike and late spring electrofishing targeting bass and panfish (SE2). Bluegills were present in high abundance compared to other lakes in the simple-riverine lake class. Largemouth bass, northern pike and black crappie were all present at moderate abundances compared to the rest of lake class.

Bluegill abundance placed well above the 75<sup>th</sup> percentile for the lake class and size structure was good compared to other area lakes based on PSD values and size-specific electrofishing catch rates. Bluegill growth was good, with mean length-at-age values equal to or higher than area and state averages and lake class median values. Black crappie abundance was just below the median for the lake class, while size structure was good relative to other area lakes based on PSD values. Black crappie mean length-at-age lagged behind area and state averages but was consistent with median values for the lake class.

Largemouth bass abundance placed just above the median for the lake class and was virtually unchanged from 2011. Size structure (based on size-specific catch rates) was in the top 10 out of 24 area lakes in every category. Bass growth was average in local, statewide and lake class comparisons of mean length-at-age values. Largemouth bass averaged 15.1 inches at age-6 which placed 7<sup>th</sup> out of 15 area lakes surveyed since 2014 that had largemouth mean length-at-age data available.

Northern pike abundance based on the SN1 catch rate decreased slightly from 2011 to 2024 and placed just below the median for the lake class. The Schnabel mark-recapture population estimate (PE) was 3.7 adult northern pike/acre. This placed Lazy Lake third among area lakes with valid northern pike PEs since 2014 (after Mirror Lake and Lake Delton). Northern pike size structure in Lazy Lake was in the middle of the pack in a comparison of PSD-26 and PSD-32 values in the 10 area lakes surveyed since 2014 that had PSD values available. Northern pike growth was consistent with area and state average and lake class medians. Northern pike reached the minimum harvest size of 26 inches as early as age-3 and averaged over 26 inches by age-7. Females grew faster than males and averaged over 26 inches by age 5. Some males exceeded 26 inches, but males did not average over 26 inches at any age.

### **Future Management Recommendations**

1. Continue to manage Lazy Lake using the current length and bag limits for all species. Stocking is not currently utilized to maintain gamefish populations in Lazy Lake and is not recommended moving forward.
2. Allow aquatic plant harvesting in summer in selected areas deeper than three feet to create navigation lanes that also serve as feeding zones for fish.

3. Encourage installation of fish sticks or tree drops in the littoral zone of Lazy Lake to improve fish habitat.

## **General Lake Information**

### Lake & location

Lazy Lake (Fall River Millpond)

Town of Fountain Prairie and Village of Fall River, Columbia County

T11N, R12E, Sections 22, 23, 26 and 27

Waterbody Identification Code (WBIC): 843400

### **Physical/chemical attributes**

- **Morphometry:** 161 acres, maximum depth of 8 feet, average depth of 3.6 feet, 4.2 miles of shoreline. Lake volume (surface area x mean depth) 578 acre-feet. Residence time (medium) 8 days.
- **Watershed:** 57 square miles
- **Lake type:** Drainage (artificial impoundment of North Branch Crawfish River).
- **Water Clarity:** Generally clear, occasionally turbid with algal blooms
- **Littoral substrate:** 70% muck, 30% sand
- **Trophic status:** Eutrophic; listed as impaired due to high total phosphorous levels since 2012.
- **Aquatic vegetation:** Abundant with moderate species richness; 18 species found in 2023 (Columbia County 2024).
- **Winterkill:** Infrequent; one severe winterkill in winter 1976-77.
- **Boat Landings:** Three public boat access points exist on the lake; two are controlled by the Town of Fountain Prairie including Sleepy Hollow Road (donation) and Lazy Point (donation). The third is controlled by the Village of Fall River (Brayton Blvd., donation).
- **Other Features:** The Crawfish River including the North Branch Crawfish River and Lazy Lake has a continuous (year-round) open fishing season for gamefish.

### **Purpose of survey**

Baseline lake survey Tier 1 assessment.

### **Dates of fieldwork**

- Fryke netting survey conducted March 4 through March 19, 2024 (SN1)
- Spring electrofishing survey conducted May 8, 2024 (SE2)

### **Fishery**

Bluegills were abundant, largemouth bass and northern pike were common and black crappies were present. Seasons and length and bag limits for Lazy Lake are presented in Table 1.

## Introduction

Lazy Lake is a 161-acre, artificially impounded drainage lake in southeastern Columbia County. It is located partially within the Village of Fall River, and partially in the Town of Fountain Prairie. Lazy Lake is formed by a dam that creates a 14-foot head and impounds around 2.5 miles of channel on the North Branch Crawfish River, a 31-mile tributary to the Crawfish River within the Rock River drainage. The lake was created by the construction of the original dam in 1860, and the dam was rebuilt in 1917. Lazy Lake drains an area of approximately 57 square miles (Columbia County 2024). The relatively large catchment of the lake delivers enough flow to keep the water residence time in the lake short at around 8 days. Land use in the watershed is primarily agricultural (88.3%; Columbia County 2024), and Lazy Lake has been on the 303d Impaired Waters list since 2012 due to high total phosphorous levels which contributes to excess algal growth in the lake. Lazy Lake is shallow with a maximum depth of 8 feet, an average depth of 3.6 feet and around 40% of the lake is 3 feet deep or less. The lower half of the lake has extensive development along the shoreline in the form of residential homes in the Village of Fall River. Shoreline development is greatly reduced in the upper end of the lake which is more rural.

Despite its eutrophic status and occasional algal blooms, Lazy Lake has clear water for much of the year and is home to abundant aquatic vegetation. A point-intercept aquatic vegetation survey completed in 2023 found 18 total species (17 voucher, one visual; Columbia County 2024). The Lazy Lake Management District, with assistance from the Columbia County Land and Water Conservation Department, maintains an Aquatic Plant Management Plan (APMP) for Lazy Lake which was most recently updated and approved in 2024. The APMP includes the cutting plan utilized by the lake district in their effort to maintain navigation lanes in the lake via mechanical harvesting of aquatic plants. The current APMP, including full results of the 2023 point-intercept aquatic vegetation survey can be found on the Lazy Lake Management District website (<https://lazylake.ws/aquatic-plant-management-plan.html>).

Lazy Lake was chemically treated in 1958 to eradicate a fishery dominated by carp and bullheads, and the lake was stocked with northern pike and largemouth bass following the treatment (Kanehl and Larson 1978). A severe winter in 1976-77 coupled with a three-foot winter drawdown for aquatic vegetation control that greatly reduced the pool size of the lake resulted in a severe winterkill event, with recorded dissolved oxygen (DO) levels as low as 0.1 parts per million (ppm) in early February 1977 (Kanehl and Larson 1978). Predatory gamefish populations were hardest hit, and largemouth bass and northern pike stocking occurred in 1977 and 1978 (Kanehl and Larson 1978). A follow-up electrofishing survey in the fall of 1980 noted a recovering fishery with excellent recruitment of largemouth bass based on the large number of fish between three and seven inches in length (Larson 1981).

Stocking of walleye fingerlings purchased from a private fish farm by the Fall River Rod and Gun Club occurred in August 1989 (8,000 small fingerlings, average length 3

inches) and November 1990 (4,500 large fingerlings, 4-6 inches). Fall electrofishing surveys in 1989 and 1991 found no survival of stocked walleyes (Larson 1990, Larson 1991). A summary report on the 1991 fishery survey noted that numbers of largemouth bass around 14 inches had been reduced since 1989 when the 14-inch minimum length limit went into effect. The report recommended increasing the largemouth bass minimum length limit from 14 inches to either 18 or 20 inches and reducing the daily bag limit from 5 fish to 1 fish (Larson 1991). The change was recommended to improve largemouth bass size structure and increase the opportunity for anglers to catch and harvest trophy bass, while also increasing predation pressure on abundant bluegills to reduce their abundance and improve bluegill growth and size structure (Larson 1991). Following this recommendation, the current 18-inch minimum length limit and 1-fish daily bag limit went into effect in 1995. An electrofishing survey in the fall of 1996 found that numbers of largemouth bass  $\geq 14$  inches were improving under the 18-inch minimum length limit (Larson 1997). All other panfish, gamefish and rough fish species in Lazy Lake are managed using standard statewide length and bag limits.

Other historical stocking efforts included state-raised northern pike fry and fingerlings stocked annually from 1989-1996 and adult yellow perch purchased from a private fish farm by the Fall River Rod and Gun Club and stocked in 2015 and 2017-2019. A comprehensive fishery survey conducted in 2003-2004 found abundant populations of northern pike, largemouth bass and bluegill in Lazy Lake (Stremick-Thompson 2004). Prior to the 2024 comprehensive fishery survey, the most recent comprehensive fishery survey occurred in 2011, however no final report was completed. In general, the 2011 survey found quality populations of northern pike, largemouth bass, bluegill and black crappie, and very few common carp. Data from the 2003-2004 and 2011 comprehensive surveys including catch rates, population estimates and proportional size distribution (PSD) values are referenced in this report for comparison to 2024 values.

During the extremely hot and dry summer of 2012, fish die-off events were documented at numerous lakes across southern Wisconsin, including Lazy Lake. A die-off was reported on July 11, 2012, with dead fish appearing as early as July 9. An investigation found dozens of dead fish including white suckers, northern pike, bluegills and common carp. Oxygen levels were more than sufficient to sustain fish populations at 8ppm. The die-off was attributed to the extreme heat; the water temperature was measured at 88°F during the investigation and remained in the 80s for several days. While notable, the die-off was not thought to be significant enough to cause negative impacts to the fishery, and no follow-up stocking or surveys occurred.

Three public boat access points exist on the lake, two of which are controlled by the Town of Fountain Prairie (Sleepy Hollow Road and Lazy Point Road), with the other controlled by the Village of Fall River (Brayton Boulevard). While no set fees are collected at any of the three access points, donations are accepted at all three

landings. All three landings are ADA accessible, provide paved launch ramps and parking for 1-5 vehicle-trailer units.

## **SURVEY EFFORT**

Following partial ice-out in the middle and lower sections of the lake, four fyke nets were set on March 4, 2024. Nets were added gradually as the ice receded until eight total nets were set by March 11 in Lazy Lake and the North Branch Crawfish River upstream of the lake. Nets were moved to new locations and removed from the lake as necessary until the final nets were removed on March 19. Nets were a mixture of 2-foot and 3-foot rectangular frame nets with rectangular or circular hoops, and they targeted northern pike (SN1). Total SN1 effort was 88 net-nights. Fyke net descriptions and locations (GPS coordinates) from SN1 can be found in Table 2.

Gamefish, as defined in sec. 29.001(41), Wis. Stats, includes all varieties of fish except rough fish and minnows. Panfish are therefore gamefish, and in ch. 20.03(29), Wis. Adm. Code, panfish includes yellow perch, bluegill, black crappie, white crappie, pumpkinseed, green sunfish, warmouth and orangespotted sunfish (orangespotted sunfish are not present in Lazy Lake). For the purposes of this report, sport fish refers to northern pike and largemouth bass.

Gamefish were measured to the nearest 0.1 inch and a subsample of each species was weighed to the nearest 0.01 pound. Otoliths were taken from a subsample of bluegills and black crappies for aging. Fin rays or spines were taken from northern pike and largemouth bass. The goal was to take structures from five fish per half-inch group for bluegills, black crappies and largemouth bass. Five structures per half-inch group from each sex were removed from northern pike. Sex was recorded when evident for northern pike. Sexually mature northern pike were marked with a top caudal fin clip, and immature fish were marked with a bottom caudal fin clip. Largemouth and smallmouth bass  $\geq 8$  inches were marked with a top caudal fin clip, and bass  $\leq 8$  inches were marked with a bottom caudal fin clip. Fin clips were given for the purpose of calculating mark-recapture PEs for the species listed.

A DNR standard direct current (DC) boom shocker boat was used to complete the SE2 survey on the night of May 8. The SE2 survey assessed the relative abundance of bass and panfish. Two stations were sampled, each measuring 2.0 miles in length. All species were collected during the first 0.5 mile of each station (common carp were counted but not dipped) and were processed before sampling the remaining 1.5 miles where only sportfish were collected. Starting and ending GPS coordinates for the SE2 stations can be found in Table 3. During SE2, calcified structures were removed, and fish were weighed as needed to fill out length bins for age and growth analysis.

## **Methods**

A multiple census mark-recapture population estimate for northern pike was calculated during SN1 using the Schnabel method. The formula for the Schnabel method is noted here:

$$N = \frac{\sum(C_t M_t)}{R+1}$$

Where  $N$  is the population size,  $C_t$  is the number captured on day  $t$ ,  $M_t$  is the number marked on day  $t$  and  $R$  is the total number of recaptures from the survey (Ricker 1975).

Various data analyses were completed using both Microsoft Excel and R (version 4.2.3) combined with R Studio (2023.03.0+386, “Cherry Blossom”). For all sampling periods, total catch and catch-per-unit of effort (CPUE) was calculated by gear type for all species. Length frequency distributions were generated for gamefish species of interest. Length range, mean and median lengths were calculated for gamefish species as well. The proportional size distribution (PSD), proportional size distribution of fish sizes often acceptable for harvest (PSD-H, either socially acceptable or legally acceptable under current fishing regulations) and proportional size distribution of preferred length fish (PSD-P) were calculated for all gamefish species of interest with more than 100 stock size individuals collected (Anderson and Neumann 1996, Guy et al. 2007). Length designations for stock, quality, harvestable, preferred, memorable and trophy sizes of the gamefish species collected from Lazy Lake can be found in Table 4; these values were used for calculation of PSD (Anderson and Neumann 1996, Guy et al. 2007). For bluegills, PSD calculations were reported separately for fyke netting and electrofishing due to possible bias, with fyke nets being selective for larger bluegills (Laarman and Ryckman 1982).

Ages were estimated from calcified structures for a subsample of each species, and age and size data of these fish were used to generate age-length keys and ages were assigned to all fish sampled to estimate the age frequency of the population based on the aged subsample (Isermann and Knight 2005). Age frequency distributions were then generated for each species and inferences were made about year class strength and annual mortality when possible. Catch curves were generated for species exhibiting consistent recruitment for calculation of total annual mortality rates. The mean length-at-age was used to make inferences about fish growth in Lazy Lake by comparing the lake to area, regional and statewide averages and lake class median values. Area averages are calculated from mean length-at-age values from lakes managed out of the Poynette fisheries office that were surveyed from 2013-2024. Area comparisons are helpful for local anglers who are interested in knowing which of the lakes in their area offer the greatest fishing potential for a certain species. Statewide comparisons help to give anglers a better idea how a given lake compares on a broader scale. Lake class comparisons help anglers understand how a given lake shapes up against other lakes in Wisconsin that are the most like that lake.

Lazy Lake is classified as simple-riverine under the current classification system for Wisconsin Lakes. The simple-riverine class includes 175 lakes across Wisconsin (Rypel et al. 2019). Lakes in this classification account for 3% of classified lakes by number which equates to around 2% of the total surface area of classified lakes. Simple-riverine lakes have three or fewer sportfish species present (and no walleye), short hydrologic retention time (<15 days), small lake area and a high number of degree



days, with small millponds on warmwater streams typifying this lake class (Rypel et al. 2019).

The mean length-at-age was calculated using methods outlined in Bettoli and Miranda (2001), with the formula listed here:

$$\bar{L}_i = (\sum N_{ij} \bar{l}_{ij}) / N_i$$

where  $\bar{L}_i$  represents the mean length of the  $i$ th age group,  $N_{ij} = N_j(\frac{n_{ij}}{n_j})$ ,  $N_j$  is the number of fish in the  $j$ th length group,  $n_{ij}$  = number of fish of the  $i$ th age group subsampled in the  $j$ th length group,  $n_j$  is the number of fish subsampled in the  $j$ th length group and  $N_i = \sum N_{ij}$  over all  $j$  length groups. The inputs to this equation are derived from the length frequency distribution of the sample and the age-length key.

Relative weights were calculated to evaluate body condition of fish. Relative weight ( $W_r$ ) is a tool that compares the length of the fish to an expected weight for that length. Standard weights were calculated for individuals of each species that had weights recorded and standard weights were only calculated for individuals larger than the minimum recommended length for each species. (Murphy et al. 1991, Anderson and Neumann 1996). Relative weights for each fish were calculated by dividing a fish's actual weight by the standard weight for a fish of that length. Average relative weight was then calculated for each species, and for each sex separately when sex data were available. Relative weight values between 75 and 100 indicate normal weight for a given length. A relative weight value greater than 100 indicates that a fish is in excellent condition. A relative weight value less than 75 indicates that a fish is in poor condition.

## Results

### GENERAL FISH COMMUNITY

In total, 1,890 fish representing 13 species from six families were collected during SN1 and SE2 at Lazy Lake in 2024. Catch and catch rate (CPUE) by gear type are shown for each species collected in Table 5. Length, age and relative weight data are summarized in Table 6.

### BLUEGILL

In total, 954 bluegills were collected during the survey; the catch rates were 8.1 fish/net-night during SN1 and 242.0 fish/mile of shoreline during SE2. In terms of the total number of fish caught during spring netting and electrofishing, bluegill was the most abundant species collected. The 2024 SE2 catch rate was double the 2011 value (122 fish/mile) and ranked third out of 25 lakes in the Poynette management area surveyed since 2013 (Table 7). When compared to other lakes in its lake class, the SE2 catch rate placed Lazy Lake well above the 75<sup>th</sup> percentile; bluegills are more abundant in Lazy Lake than in most other simple-riverine lakes (Figure 1). When looking at size-specific electrofishing catch rates of larger bluegills (6, 7 and 8

inches), Lazy Lake ranked higher than all other area lakes in each category by a wide margin.

Lengths of 932 measured bluegills ranged from 2.8 to 8.9 inches, with mean and median values of 6.1 and 6.0 inches, respectively. The length frequency distribution for bluegills is presented in Figure 2. The PSD, PSD-7 and PSD-P values from SN1 were 46, 37 and 10, respectively. The PSD, PSD-7 and PSD-P values from SE2 were 68, 46 and 10, respectively. Size-specific catch rates and PSD values both indicate size structure is very good in Lazy Lake compared to other area lakes.

Ages ranged from 1 to 9 years and bluegills were fully recruited to the sampling gear by age-3, which is typical (Figure 3). Recruitment was consistent except for either a weak year class in 2019 (age-5) or a really strong year class in 2018 (age-6). Catch curve analysis estimated total annual mortality after age-3 at 51.2% using the Chapman-Robson method (Figure 4). This estimate was relatively low compared to other area lakes.

Bluegill mean length-at-age values for Lazy Lake were at or above area and statewide averages and lake class medians for all observed ages indicating good growth (Figure 5). Bluegills in Lazy Lake averaged 8 inches by age-6, consistent with other area lakes with good bluegill growth rates. Bluegill growth slows markedly for ages 7 and older, appearing to top out around 9 inches.

Overall, bluegills larger than 3 inches were in good condition; relative weight averaged 102. Fifty bluegills (32.2%) had relative weight values >100, indicating excellent condition, while none had a relative weight value <75, indicating poor condition.

## **BLACK CRAPPIE**

In total, 251 black crappies were collected; the catch rates were 2.8 fish/net-night during SN1 and 8.0 fish/mile during SE2. The SN1 catch rate was somewhat lower than the last survey in 2011 (4.3 fish/net night) and just below the median for the simple-riverine lake class (Figure 6). Lengths of 251 black crappies from 2.8 to 12.4 inches and mean and median lengths were 9.0 and 9.9 inches, respectively. The PSD-8, PSD-9, PSD-P and PSD-M values were 75, 73, 46 and 1, respectively. These values are indicative of good size structure relative to other area lakes (Table 8). Comparatively, in 2011 the PSD, PSD-9, PSD-P and PSD-M values were 86, 52, 17 and 1, respectively. The black crappie length frequency distribution from the 2024 survey is presented in Figure 7.

Ages ranged from 1 to 13 years with no absent year classes (Figure 8). Recruitment was highly variable, with ages 2 (2021) and 6 (2018) being the dominant year classes, and ages 8 (2016) and 13 (2011) being relatively strong year classes as well. High recruitment variability meant that application of a catch curve to the crappie data was not possible, and no inferences on annual mortality could be made. Mean

length-at-age values for black crappies in Lazy Lake were consistent with area and state averages and above lake class medians through age-8. However mean length-at-age was below area and state averages and consistent with lake class medians for ages 9-13. Crappies reached 10 inches as early as age-5 and averaged over 10 inches by age-7 (Figure 9). The lack of crappies larger than 12.5 inches in a population with fish as old as age-13 indicated that the top-end scope for growth of crappies is limited, and the lake isn't likely to produce trophy-sized fish.

Overall, black crappies in Lazy Lake were in excellent condition; relative weight values averaged 101.3. One fish (1.2%) had a relative weight value  $\leq 75$  indicating poor body condition, and 42 fish (51.2%) had relative weight values  $\geq 100$  indicating excellent body condition.

## **NORTHERN PIKE**

In total, 266 northern pike were collected including recaptures during the spring of 2024; catch rates were 3.0 fish/net-night during SN1 and 1.0 fish/mile during SE2. The SN1 catch rate in 2024 was lower than the SN1 catch rate in 2011 (5.7 fish/net-night) but was comparable to 2004 (3.1 fish/net-night). The Schnabel population estimate was 597 sexually mature northern pike (95% CI 447 – 794), or 3.7 adult fish/acre (95% CI 2.8 - 4.9 fish/acre). This estimate was higher than 2004 (1.8 fish/acre; 95% CI 1.3 - 3.3 fish/acre) but lower than 2011 (7.4 fish/acre; 95% CI 5.8 - 10.1 fish/acre). Despite an apparent decrease in abundance since 2011, northern pike were still moderately abundant in Lazy Lake compared to other area lakes and lakes in the simple-riverine lake class; the 2024 SN1 catch rate was near the median (Figure 10).

Lengths of 222 unique northern pike ranged from 11.1 to 34.2 inches, and the mean and median lengths were 23.2 and 23.5 inches, respectively. The length frequency distribution for all pike is presented in Figure 11. The PSD, PSD-26, PSD-P and PSD-M values were 75, 25, 14 and 1, respectively in 2024. This represented a slight decline in some categories compared to 2011 when the values were 64, 31, 16 and 3, respectively. Size structure in Lazy Lake in 2024 was in the middle of the pack compared to other area lakes, ranking 8th of 15 lakes for average length and 7th of out of 10 lakes for PSD-26 (lakes with at least 100 stock-size northern pike sampled; Table 9). Female northern pike (n = 63) ranged from 14.6 to 34.2 inches, with mean and median lengths of 27.0 and 26.8 inches, respectively. Male northern pike (n = 154) ranged from 11.1 to 32.8 inches with mean and median lengths of 21.7 and 22.6 inches, respectively.

Ages ranged from 1 to 9 years and fish were fully recruited to the sampling gear by age-5. Northern pike recruitment was very consistent with no missing year classes and only one slightly weak year class (Figure 12). Catch curve analysis estimated total annual mortality after age-5 at 50.9% using the Chapman-Robson method (Figure 13). This estimate was consistent with other area lakes.

Northern pike mean length-at-age in Lazy Lake was consistent with area and state averages and lake class median values for all ages (Figure 14). Some northern pike reached 26 inches as early as age-3, and mean length exceeded 26 inches by age-7. When examined separately, female pike mean length-at-age was consistent with area

averages for all ages, and females averaged over 26 inches by age-5 (Figure 15). Male length-at-age was also consistent with area averages (Figure 16). Some males exceeded 26 inches by age-4, but males did not average over 26 inches at any age.

The body condition of northern pike in Lazy Lake in 2024 was good; relative weights of 173 fish averaged 90.7. Six fish (3.4%) had a relative weights below 75 (poor body condition), and 32 (18.5%) had relative weights greater than 100 indicating excellent body condition. Females were in slightly better condition, with relative weights averaging 95.6 compared to 87.8 for males.

## **LARGEMOUTH BASS**

In total, 171 largemouth bass were collected including recaptures. Catch rates were 0.4 fish/net-night during SN1 and 34.3 fish/mile during SE2. The SE2 catch rate in 2024 was nearly identical to the 2011 survey (32.5 fish/mile). The 2024 SE2 catch rate was between the median and the 75<sup>th</sup> percentile for the lake class (Figure 17); largemouth bass abundance in Lazy Lake was consistent with what one should expect to see from lakes of its type. Lazy Lake was slightly better than the middle of the pack on a local level, ranking 10<sup>th</sup> for total catch rate out of 24 lakes surveyed in the Poynette management area since 2013. Lazy Lake fared even better when comparing catch rates of larger bass, ranking 5<sup>th</sup> out of 24 lakes for CPUE-14 (10.0 fish/mile) and 7<sup>th</sup> out of 24 lakes for CPUE-18 (0.8 fish/mile). Full rankings can be found in Table 10.

Lengths of 170 unique largemouth bass ranged from 4.7 to 20.3 inches, and the mean and median lengths were 12.6 and 13.3 inches, respectively. The length frequency distribution is presented in Figure 18. Of the largemouth bass  $\geq 8$  inches in length (stock size), fish  $\geq 12$  inches were present in good proportion (PSD = 76), as were fish  $\geq 14$  inches (PSD-14 = 47) and 18 inches (PSD-18 = 5). The 2024 values were similar to those observed in 2011 when PSD, PSD-14 and PSD-18 values were 72, 51 and 7, respectively.

Largemouth bass were fully recruited to the sampling gear at age-4, with numbers at age declining steadily thereafter (Figure 19). Some minor year class variability was apparent with ages 5 and 6 being slightly weaker year classes, or ages 7 and 8 being slightly stronger year classes. There were no missing year classes or overly weak or strong year classes. Catch curve analysis estimated total annual mortality after age-4 at 29.0% using the Chapman-Robson method (Figure 20). This estimate was lower than most other area lakes.

Largemouth bass mean length-at-age in Lazy Lake was consistent with state and local averages and lake class median values for ages 1-7 but lagged for ages 8-13 (Figure 21). Some faster-growing fish exceeded the minimum length limit of 14 inches in Lazy Lake by age-4, and largemouth bass averaged over 14 inches by age-6. Mean length-at-age 6 was 15.1 inches, which ranked 7<sup>th</sup> out of 15 area lakes surveyed since 2014 where largemouth bass age and growth data were available (Table 11).

The body condition of largemouth bass in Lazy Lake was excellent; relative weights of 111 fish averaged 101.2. One fish (1.0%) had a relative weight below 75, indicating poor

body condition, and 71 fish (64.0%) had relative weights greater than 100 indicating excellent body condition.

### **OTHER SPECIES OF INTEREST**

Other species of interest to anglers included yellow bullhead, pumpkinseed and rock bass. In total, 104 yellow bullheads were collected, and the catch rates were 1.1 fish/net-night during SN1 and 3.0 fish/mile during SE2. Lengths of 85 measured yellow bullheads ranged from 8.9 to 15.7 inches, averaging 12.2 inches. In total, 44 pumpkinseeds were collected, and the catch rates were 0.5 fish/net-night during SN1, and 4.0 fish/mile during SE2. Lengths ranged from 4.3 to 8.4 inches, averaging 6.5 inches. In total, 28 rock bass were collected, all during SN1. The catch rate was 0.3 fish/net-night. Lengths ranged from 4.6 to 9.1 inches and averaged 6.6 inches. Common carp were found in very low numbers with a total of two fish collected during SN1, and just a single carp observed during SE2. Carp numbers were also very low in 2011.

## **Discussion**

Overall, the fish community of Lazy Lake is relatively simple with bluegill, northern pike, black crappie and largemouth bass comprising 87% of the total catch in the 2024 survey. Common carp were present at very low abundance in 2024 which was unchanged from 2011. Carp do not appear to be causing any negative impacts in Lazy Lake which is heavily vegetated and has relatively clear water for much of the year.

The bluegill and black crappie populations in Lazy Lake provide a quality fishing opportunity for anglers. Yellow perch numbers are very low despite four stocking events in the last 10 years. Black crappie abundance was moderate and appeared to have decreased slightly from the last survey in 2011. Bluegill abundance was high relative to other area lakes and other simple-riverine lakes and higher than the last survey in 2011. Black crappie recruitment was highly variable but showed no signs of year class failure in any year. Bluegill recruitment was far less variable. Black crappie size structure was good compared to other simple-riverine lakes based on PSD-P values. Bluegill size structure was the best in the area based on the PSD-P and size-specific electrofishing catch rates of larger bluegills. Based on the high quality panfish angling experience offered at Lazy Lake there are no new management recommendations at this time.

The abundance of largemouth bass in Lazy Lake was essentially unchanged from 2011 and was slightly above the middle of the pack compared to other lakes in the Poynette management area and the simple-riverine lake class. Recruitment is stable, and population size structure in 2024 was unchanged from 2011 based on PSD values and was better than most area lakes. Largemouth bass growth is only slightly above average, but the 18-inch minimum length limit protects most of the population from harvest, keeping annual mortality low and allowing fish to reach large sizes. All aspects of the largemouth bass population have been stable since the last survey

and Lazy Lake provides one of the best largemouth bass angling opportunities in the area. There are no new largemouth bass management recommendations.

Northern Pike abundance was somewhat lower in 2024 compared to 2011 but remained in the middle of the pack when compared locally and within the simple-riverine lake class. This apparent decline in abundance may have been a function of targeting areas less favorable for northern pike spawning activity early in the 2024 survey. The highest catches of northern pike in both 2024 and 2011 were observed in nets set in the North Branch Crawfish River upstream of Lazy Lake, and admittedly, northern pike catch rates for the 2024 survey would have been more comparable to 2011 values if sampling effort focused more on those riverine areas earlier in the survey. Future surveys that target northern pike should have sampling effort directed at riverine areas upstream of the lake for the full duration of the survey.

Northern pike recruitment is strong and steady, and total annual mortality estimates are comparable to other area lakes, with only a gradual decline in numbers-at-age after fish are fully recruited at age-5. Growth is average when compared locally, statewide and within the simple-riverine lake class. Size structure is in the middle of the pack compared to other area lakes. In short, the northern pike fishery is solid, but not outstanding. However, a regulation change is not likely to affect a major positive impact to the fishery. Density dependent factors don't appear to be limiting growth to the point where the lake would be a good candidate for the 25–35-inch protected slot regulation designed to allow harvest of smaller pike to reduce abundance and improve growth while also improving size structure by protecting larger fish. Lazy Lake has lower northern pike abundance and markedly better growth and population size structure than two other area lakes where the 25–35-inch protected slot was implemented in 2020 (Mirror Lake and Dutch Hollow Lake). Conversely, implementing a more protective regulation like the 32-inch minimum length limit and one fish daily bag limit is also not likely to benefit the fishery. While it might lead to small improvements in size structure initially, strong and steady recruitment would likely lead to increases in abundance that would ultimately see “stacking” of sub-32-inch fish occur, with density dependent growth taking hold. This would reduce growth rates that were only average to begin with, thus limiting the long-term potential to improve population size structure. The current regulation of a 26-inch minimum length limit and a two fish daily bag limit is the best regulation moving forward, and no change is recommended.

Coarse woody habitat (fallen trees) in the littoral zone is limited in the lower end of the lake which is heavily developed with houses. However, coarse woody structure in the littoral zone is common in the upper end of the lake where the shorelines are wooded and far less developed. Addition of coarse woody habitat (fish sticks or tree drops) in the lower part of the lake where that structure is lacking is encouraged.

Lazy Lake is shallow and is known for heavy growth of aquatic macrophytes. This aquatic plant growth provides an excellent habitat component for fish and helps maintain a clear water state in Lazy Lake. It can also make navigation difficult for



boaters. Aquatic plant harvesting to create navigation lanes in areas deeper than three feet has been common practice in Lazy Lake in the past. Opening selected lanes for navigation also creates feeding areas for panfish to feed on zooplankton, and for predatory fish (pike and bass) to feed on panfish and other non-game prey fish which can help improve fish growth rates. Aquatic plant harvesting to create navigation lanes and feeding zones for fish should be allowed to continue at Lazy Lake under an approved APMP plan.

## **Recommendations**

1. Continue to manage Lazy Lake using the current length and bag limits for all species. Stocking is not currently utilized to maintain gamefish populations in Lazy Lake and is not recommended moving forward.
2. Allow aquatic plant harvesting in summer in selected areas deeper than three feet to create navigation lanes that also serve as feeding zones for fish.
3. Encourage installation of fish sticks or tree drops in the littoral zone of Lazy Lake to improve fish habitat.

## **Acknowledgements**

Several DNR Fisheries staff assisted the author with field surveys, including Advanced Technicians Casey Weber and Clayton Roberts and Statewide Electrofishing Coordinator Andrew Notbohm. Casey Weber and Clayton Roberts were instrumental in completing age structure preparation and age estimation. Southern District Fisheries Supervisor Tim Simonson reviewed this manuscript and provided vital feedback which made this a strong report. Thank you all.

## **References**

- Anderson, R. O., and R. M. Neumann. 1996. Length, weight, and associated structural indices. Pages 447-482 in B. R. Murphy and D.W. Willis editors. Fisheries techniques, 2<sup>nd</sup> edition. American Fisheries Society, Bethesda, Maryland.
- Bettoli, P.W., and L.E. Miranda. 2001. Cautionary note about estimating mean length at age with subsampled data. North American Journal of Fisheries Management 21: 425-428.
- Guy, C.S., R.M. Neumann, D.W. Willis, and R.O. Anderson. 2007. Proportional size distribution (PSD): a further refinement of population size structure index terminology. Fisheries 32(7): 348.
- Isermann, D.A., and C.T. Knight. 2005. A computer program for age-length keys incorporating age assignment to individual fish. North American Journal of Fisheries Management, 25: 1153-1160.

- Kanehl, P., and T. Larson. 1978. Lazy Lake Survey, 1977, Columbia County. Wisconsin Department of Natural Resources, Poynette, Wisconsin. 3pp.
- Laarman, P.W., and J. R. Ryckman. 1982. Relative size selectivity of trap nets for eight species of fish. *North American Journal of Fisheries Management* 2: 33-37.
- Larson, T. 1981. Lazy Lake Survey, 1980. Wisconsin Department of Natural Resources, Poynette, Wisconsin. 3pp.
- Larson, T. 1990. Lazy Lake Survey, 1989. Wisconsin Department of Natural Resources, Poynette, Wisconsin. 2pp.
- Larson, T. 1991. Lazy Lake Survey, 1991. Wisconsin Department of Natural Resources, Poynette, Wisconsin. 6pp.
- Larson, T. 1997. Lazy Lake Survey, 1996. Wisconsin Department of Natural Resources, Poynette, Wisconsin. 3pp.
- Murphy, B. R., D. W. Willis, and T. A. Springer. 1991. The relative weight index in fisheries management: status and needs. *Fisheries* 16(2): 30-38.
- Rypel, A.L., T.D. Simonson, D.L. Oele, Joanna D.T. Griffin, T.P. Parks, D. Seibel, C.M. Roberts, S. Toshner, L.S. Tate, and J. Lyons. 2019. Flexible classification of Wisconsin lakes for improved fisheries conservation and management. *Fisheries* 44(5) 225-238.
- Stremick-Thompson, L. 2004. Lazy Lake Comprehensive Fish Survey Report 2003-2004. Wisconsin Department of Natural Resources, Horicon, Wisconsin. 3pp.



## Tables

Table 1. Current fishing regulations for Lazy Lake, Columbia County, Wisconsin.

SPECIES <sup>1</sup>	SEASON DATES	LENGTH AND BAG LIMITS
Catfish (channel and flathead)	Open All Year	No minimum length limit and the daily bag limit is 10.
Panfish (bluegill, pumpkinseed sunfish, crappie and yellow perch)	Open All Year	No minimum length limit and the daily bag limit is 25.
Largemouth bass and smallmouth bass	First Saturday in May through the first Sunday in March	The minimum length limit is 18" and the daily bag limit is 1.
Northern pike	First Saturday in May through the first Sunday in March	The minimum length limit is 26" and the daily bag limit is 2.
Walleye, sauger and hybrids	First Saturday in May through the first Sunday in March	The minimum length limit is 15" and the daily bag limit is 5.
Bullheads	Open All Year	No minimum length limit and the daily bag limit is unlimited.
Rough fish	Open All Year	No minimum length limit and the daily bag limit is unlimited.

1. Channel catfish, flathead catfish, walleye, sauger and hybrids are not present in Lazy Lake but are listed here to be consistent with other reports that list regulations for common gamefish and rough fish species.

Table 2. Dimensions, dates and locations (GPS coordinates) of fyke nets used during the 2024 SN1 survey of Lazy Lake, Columbia County, Wisconsin.

NET NUMBER	LEAD LENGTH (FEET)	FRAME HEIGHT (FEET)	SET DATE	FINAL LIFT DATE	LATITUDE	LONGITUDE
1	75	2	03/04/2024	03/15/2024	43.40086	-89.04402
2	75	2	03/04/2024	03/07/2024	43.39542	-89.05160
3	50	3	03/04/2024	03/13/2024	43.39795	-89.04675
4	75	3	03/04/2024	03/19/2024	43.39730	-89.04134
5	100	2	03/06/2024	03/11/2024	43.40042	-89.03225
6	75	2	03/06/2024	03/13/2024	43.40298	-89.04159
7	75	2	03/07/2024	03/08/2024	43.39290	-89.05005
8	75	2	03/08/2024	03/13/2024	43.39623	-89.04601
9	75	2	03/11/2024	03/15/2024	43.39981	-89.04567
10	75	3	03/11/2024	03/19/2024	43.41694	-89.02773
11	75	3	03/11/2024	03/19/2024	43.41409	-89.03114
12	75	2	03/13/2024	03/19/2024	43.41544	-89.02822
13	50	3	03/13/2024	03/19/2024	43.41221	-89.03291

Table 3. Locations of electrofishing stations (GPS coordinates) sampled during SE2 on Lazy Lake, Columbia County, Wisconsin in 2024.

STATION NAME	DATE	START TIME	END TIME	DISTANCE SAMPLED (MILES)	WATER TEMPERATURE (°F)	START LATITUDE	START LONGITUDE	END LATITUDE	END LONGITUDE
Panfish 1	5/08/2024	2042	2059	0.5	69.0	43.39987	-89.03605	43.39576	-89.04365
Gamefish 1	5/08/2024	2139	2220	1.5	69.0	43.39576	-89.04365	43.39486	-89.04874
Panfish 2	5/08/2024	2244	2259	0.5	68.0	43.39288	-89.04605	43.39513	-89.04027
Gamefish 2	5/08/2024	2344	0020	1.5	68.0	43.39513	-89.04027	43.40022	-89.03542

Table 4. The PSD length categories (inches) for selected fish species that were collected from Lazy Lake in 2024 (Anderson and Neumann 1996, Guy et al. 2007).

SPECIES	STOCK	QUALITY (PSD)	HARVEST (PSD-H) <sup>1</sup>	PREFERRED (PSD-P)	MEMORABLE (PSD-M)	TROPHY (PSD-T)
Bluegill	3	6	7	8	10	12
Black crappie	5	8	9	10	12	15
Largemouth bass	8	12	18	15	20	25
Northern pike	14	21	26	28	34	44

1. Lengths of fish found socially (bluegill, black crappie, yellow perch) or legally (largemouth bass, northern pike) acceptable for harvest by anglers.

Table 5. Summary of catch and catch-per-unit effort (CPUE) by sampling period during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

Species	CATCH			CPUE (FISH/NET-NIGHT) (FISH/MILE)	
	SN1	SE2	Total	SN1	SE2
Bluegill	712	242	954	8.1	242.0
Northern pike	262	4	266	3.0	1.0
Black crappie	243	8	251	2.8	8.0
Largemouth bass	34	137	171	0.4	34.3
Yellow bullhead	101	3	104	1.1	3.0
Pumpkinseed	40	4	44	0.5	4.0
Golden shiner	12	26	38	0.1	26.0
Rock bass	28	0	28	0.3	0.0
White sucker	11	8	19	0.1	8.0
Brown bullhead	6	2	8	0.1	2.0
Common carp	2	1	3	<0.1	1.0
Creek chub	3	0	3	<0.1	0.0
Yellow perch	1	0	1	<0.1	0.0
	1,455	435	1,890		

Table 6. Summary of lengths (inches), PSD and ages of gamefish sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin. Lengths are reported in inches.

SPECIES <sup>1</sup>	PERIOD	NUMBER COLLECTED <sup>2</sup>	NUMBER MEASURED <sup>3</sup>	LENGTH RANGE	MEAN LENGTH	MEDIAN LENGTH	PSD	PSD-H	PSD-P	PSD-M	AGE RANGE	MEAN RELATIVE WEIGHT
Bluegill	SN1	712	690	3.5-8.9	6.0	5.6	46	34	10	0		
Bluegill	SE2	242	242	2.8-8.6	6.4	6.7	68	46	10	0		
Bluegill	ALL	954	932	2.8-8.9	6.1	6.0					1-9	102.0
Black crappie	ALL	251	251	2.8-12.4	9.0	9.9	75	73	46	2	1-13	101.3
Northern pike	ALL	222	222	11.1-38.4	31.4	31.4					4-8	90.7
LMB	ALL	170	170	4.7-20.3	12.6	13.8	76	5	45	1	1-13	101.2

1. Largemouth bass is abbreviated LMB.

2. Number collected is the total number of fish collected minus recaptures.

3. Number measured is the number of unique fish measurements included in calculation of length range, mean and median length for each species.

Table 7. Bluegill size-specific electrofishing catch rates (CPUE; fish/mile) from SE2 surveys of lakes in the Poynette management area, 2013-2024.

Lake <sup>1,2</sup>	County	Year	CPUE (FISH/MILE)				AREA RANK			
			Total	6"+	7"+	8"+	Total	6"+	7"+	8"+
Silver	Columbia	2016	345.0	5.0	0.0	0.0	1	20	21	
Tarrant	Columbia	2018	267.0	37.0	22.0	7.0	2	14	6	3
<b>Lazy</b>	<b>Columbia</b>	<b>2024</b>	<b>242.0</b>	<b>160.0</b>	<b>108.0</b>	<b>23.0</b>	3	1	1	1
Blass	Sauk	2017	190.0	50.0	27.3	1.3	4	7	4	9
Fish	Dane	2021	189.0	16.0	1.0	0.0	5	18	20	
Mirror	Sauk	2014	143.3	62.0	14.7	0.0	6	4	10	
Dutch Hollow	Sauk	2016	141.3	69.3	30.7	6.0	7	3	2	5
Fish	Dane	2015	135.0	46.0	8.0	0.0	8	10	13	
Seeley	Sauk	2016	123.4	85.5	14.5	0.0	9	2	11	
Mud (Marx Pond)	Dane	2015	120.7	38.0	0.0	0.0	10	13		
White Mound	Sauk	2019	102.0	48.0	22.0	7.0	11	9	6	3
George	Columbia	2013	101.0	53.5	19.2	0.0	12	6	8	
West	Columbia	2019	86.7	2.7	1.3	0.0	13	22	19	
Crystal	Dane/Col.	2015	79.3	62.0	28.7	0.0	14	4	3	
Swan	Columbia	2018	74.0	38.7	6.7	0.7	15	12	14	10
Delton	Sauk	2021	68.0	50.0	3.0	0.0	16	7	15	
Redstone	Sauk	2022	61.0	17.5	3.0	0.0	17	16	15	
Virginia	Sauk	2016	53.9	38.8	26.7	4.2	18	11	5	6
Wisconsin	Col./Sauk	2023	45.3	28.7	8.7	1.7	19	15	12	8
Park	Columbia	2021	43.0	15.0	2.0	0.0	20	19	18	
Spring	Columbia	2018	32.0	2.0	0.0	0.0	21	23		
La Valle Millpond	Sauk	2021	29.0	1.0	0.0	0.0	22	25		
Devils	Sauk	2024	22.2	16.7	15.0	10.0	23	17	9	2
Wyona	Columbia	2022	22.0	2.0	0.0	0.0	24	23		
Crystal	Columbia	2014	20.0	2.9	2.9	2.9	25	21	17	7

1. Mud Lake and Fish Lake are listed separately for 2015 and as one combined lake for 2021 (Fish Lake). In 2019 rising lake levels inundated Fish Lake Road, causing the two lakes to become one.
2. Crystal Lake in Columbia County (2014) is 28 acres and is located within the Peter Helland Wildlife Area near Pardeeville.

Table 8. Black crappie size structure metrics for lakes in the Poynette management area, 2014-2024. Lengths are reported in inches.

LAKE <sup>1</sup>	COUNTY	YEAR	NUMBER COLLECTED	NUMBER MEASURED	MEAN LENGTH	MEDIAN LENGTH	LARGEST FISH	PSD	PSD-9	PSD-P	PSD-M
Mud	Dane	2015	1,344	473	8.2	8.7	9.8	97	37	0	0
Park	Columbia	2021	512	351	10.4	10.4	13.5	92	88	77	27
Crystal	Dane	2015	764	764	8.3	8.4	10.8	78	17	1	0
Swan	Columbia	2018	525	525	9.2	9.7	13.0	78	68	43	1
<b>Lazy</b>	<b>Columbia</b>	<b>2024</b>	<b>251</b>	<b>251</b>	<b>9.0</b>	<b>9.9</b>	<b>12.4</b>	<b>75</b>	<b>73</b>	<b>46</b>	<b>1</b>
Wisconsin	Columbia	2023	339	274	9.0	9.0	14.6	73	57	55	34
Delton	Sauk	2014	1,661	635	8.1	8.3	9.4	68	4	0	0
Redstone	Sauk	2022	792	756	7.9	6.8	17.4	47	38	22	2
Spring	Columbia	2018	951	845	7.4	7.4	12.3	34	12	4	0
Fish	Dane	2021	3,173	495	7.2	7.6	12.5	29	3	1	0
Mirror	Sauk	2014	510	508	7.5	7.2	12.8	28	17	3	1
Fish	Dane	2015	1,627	877	5.3	4.3	9.8	24	4	0	0
Wyona	Columbia	2022	57	57	8.9	8.5	13.2				
Dutch Hollow	Sauk	2016	76	76	9.3	9.8	12.2				
White Mound	Sauk	2019	35	35	5.9	4.0	13.2				
Devils	Sauk	2024	11	11	10.3	11	14.5				

1. Mud Lake and Fish Lake are listed separately for 2015 and as one combined lake for 2021 (Fish Lake). In 2019 rising lake levels inundated Fish Lake Road, causing the two lakes to become one.



Table 9. Northern pike abundance and size structure metrics for lakes in the Poynette management area, 2014-2024. Lengths are reported in inches.

LAKE <sup>1</sup>	COUNTY	YEAR	NUMBER OF UNIQUE FISH SAMPLED	SN1 CPUE (FISH/ NET- NIGHT)	MEAN LENGTH	MAX LENGTH	n>40	PSD	PSD-26	PSD-P	PSD-32	PSD-M	PSD-40
Delton	Sauk	2014	250	4.4	27.7	41.4	2	92	59	45	19	14	1
Devils	Sauk	2024	103	0.9	30.2	43.7	14	80	70	63	50	43	14
Park	Columbia	2021	151	1.3	23.9	37.9	0	79	40	24	3	1	0
<b>Lazy</b>	<b>Columbia</b>	<b>2024</b>	<b>222</b>	<b>3.0</b>	<b>23.2</b>	<b>34.2</b>	<b>0</b>	<b>78</b>	<b>25</b>	<b>14</b>	<b>5</b>	<b>1</b>	<b>0</b>
Fish	Dane	2021	323	7.1	24.5	43.7	6	77	35	24	9	5	2
Swan	Columbia	2018	268	1.0	21.9	33.5	0	66	27	19	1	0	0
Wisconsin	Col/Sauk	2023	247	4.4	22.6	40.6	3	63	36	29	13	8	1
Mirror	Sauk	2014	302	4.2	21.0	42.0	3	56	10	3	2	2	1
Wyona	Columbia	2022	126	7.9	19.8	35.9	0	42	9	3	1	1	0
Dutch Hollow	Sauk	2016	469	4.6	19.1	35.9	0	22	4	2	1	0	0
Mud	Dane	2015	1	0.1	26.4	26.4	0						
Crystal	Dane	2015	18	0.5	26.0	34.3	0						
White Mound	Sauk	2019	45	0.5	24.0	38.1	0						
Fish	Dane	2015	86	2.0	22.8	38.2	0						
Spring	Columbia	2018	46	1.0	22.8	29.7	0						

1. Mud Lake and Fish Lake are listed separately for 2015 and as one combined lake for 2021 (Fish Lake). In 2019 rising lake levels inundated Fish Lake Road, causing the two lakes to become one.

Table 10. Largemouth bass size-specific electrofishing catch rates (CPUE; fish/mile) from SE2 surveys of lakes in the Poynette management area, 2013-2024.

LAKE <sup>1,2,3</sup>	COUNTY	YEAR	CPUE (FISH/MILE)						AREA RANK					
			Total	8"+	12"+	14"+	18"+	20"+	Total	8"+	12"+	14"+	18"+	20"+
White Mound	Sauk	2019	273.2	243.2	102.4	5.2	1.6	0.8	1	1	2	13	4	1
Virginia	Sauk	2016	207.9	201.2	172.7	2.4	0.0	0.0	2	2	1	19		
Crystal	Columbia	2014	190.5	184.8	23.8	0.0	0.0	0.0	3	3	6			
Tarrant	Columbia	2018	81.0	76.0	44.0	31.0	0.0	0.0	4	5	3	1		
Dutch Hollow	Sauk	2016	79.2	76.2	43.3	11.3	0.7	0.0	5	4	4	3	8	
Silver	Columbia	2016	72.4	59.6	23.2	10.4	0.0	0.0	6	6	7	4		
Devils	Sauk	2024	55.8	50.6	16.1	3.9	0.6	0.0	7	7	9	16	9	
George	Columbia	2013	49.5	45.5	13.1	1.0	0.0	0.0	8	8	11	21		
Fish	Dane	2015	35.3	26.5	23.9	15.6	2.1	0.3	9	11	5	2	1	5
<b>Lazy</b>	<b>Columbia</b>	<b>2024</b>	<b>34.3</b>	<b>27.8</b>	<b>19.5</b>	<b>10.0</b>	<b>0.8</b>	<b>0.0</b>	<b>10</b>	<b>10</b>	<b>8</b>	<b>5</b>	<b>7</b>	
Blass	Sauk	2017	32.7	28.7	12.0	6.7	0.0	0.0	11	9	12	11		
Redstone	Sauk	2022	28.6	19.8	11.6	5.6	0.1	0.0	12	14	13	12	13	
Seeley	Sauk	2016	25.8	21.0	13.7	8.1	0.0	0.0	13	13	10	7		
Crystal	Dane/Col.	2015	23.7	22.1	11.3	7.6	2.1	0.5	14	12	14	8	2	2
Fish-Mud	Dane	2021	20.8	18.5	9.6	4.6	1.7	0.4	15	15	16	14	3	4
Mud	Dane	2015	18.7	4.7	1.3	0.7	0.0	0.0	16	23	23	22		
Mirror	Sauk	2014	18.2	17.0	11.2	9.0	0.3	0.0	17	16	15	6	11	
Delton	Sauk	2021	10.6	10.3	9.4	7.1	0.5	0.0	18	17	17	9	10	
Wyna	Columbia	2022	9.9	9.3	8.1	6.9	0.3	0.0	19	18	18	10	12	
Swan	Columbia	2018	7.4	7.0	5.0	3.9	0.9	0.4	20	19	19	17	6	3
Spring	Columbia	2018	7.0	6.0	4.0	4.0	0.0	0.0	21	20	20	15		
Park	Columbia	2021	6.3	5.4	3.7	2.9	1.0	0.0	22	21	21	18	5	
Wisconsin	Columbia	2023	4.8	4.8	3.4	1.8	0.1	0.0	23	22	22	20	14	
West	Columbia	2019	2.7	0.0	0.0	0.0	0.0	0.0	24					

1. Crystal Lake in Columbia County is 28 acres and is located within the Peter Helland Wildlife Area near Pardeeville.

2. Mud Lake and Fish Lake are listed separately for 2015 and as one combined lake for 2021 (Fish Lake). In 2019 rising lake levels caused the two lakes to become one.

3. West Lake suffered a winter kill in the winter of 2018-2019 due to low oxygen levels. The lake lost most of its largemouth bass as a result.

Table 11. Mean length at age-6 (MLA-6) of largemouth bass in lakes in the Poynette management area, 2014-2024.

LAKE	COUNTY	YEAR	MLA-6
Park	Columbia	2021	16.6
Wisconsin	Col/Sauk	2023	16.0
Fish	Dane	2021	15.8
Spring	Columbia	2018	15.6
Delton	Sauk	2014	15.4
Swan	Columbia	2018	15.3
<b>Lazy</b>	<b>Columbia</b>	<b>2024</b>	<b>15.1</b>
Redstone	Sauk	2022	14.3
Mirror	Sauk	2014	14.2
Fish	Dane	2015	13.1
Crystal	Dane/Col.	2015	13.1
White Mound	Sauk	2019	12.8
Virginia	Sauk	2016	12.5
Dutch Hollow	Sauk	2016	12.2
Devils	Sauk	2024	11.9
Area Mean			14.3
Area Median			14.3

## Figures

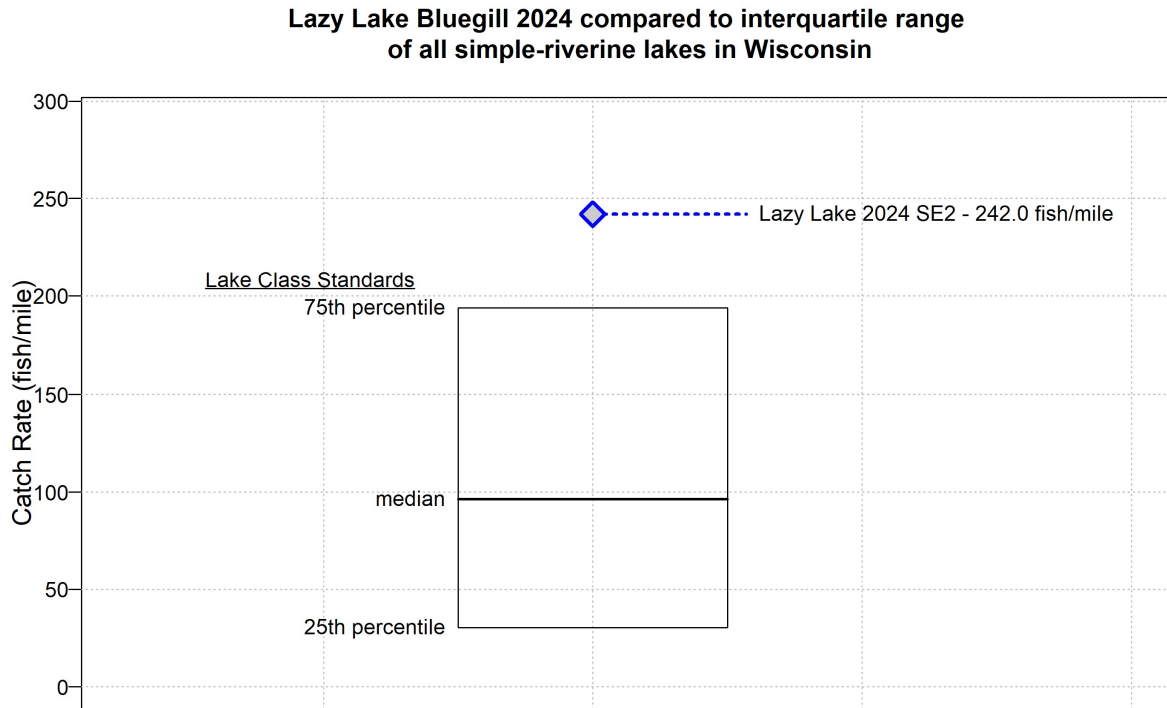


Figure 1. Bluegill electrofishing catch rate lake class comparison for Lazy Lake, Columbia County, Wisconsin.

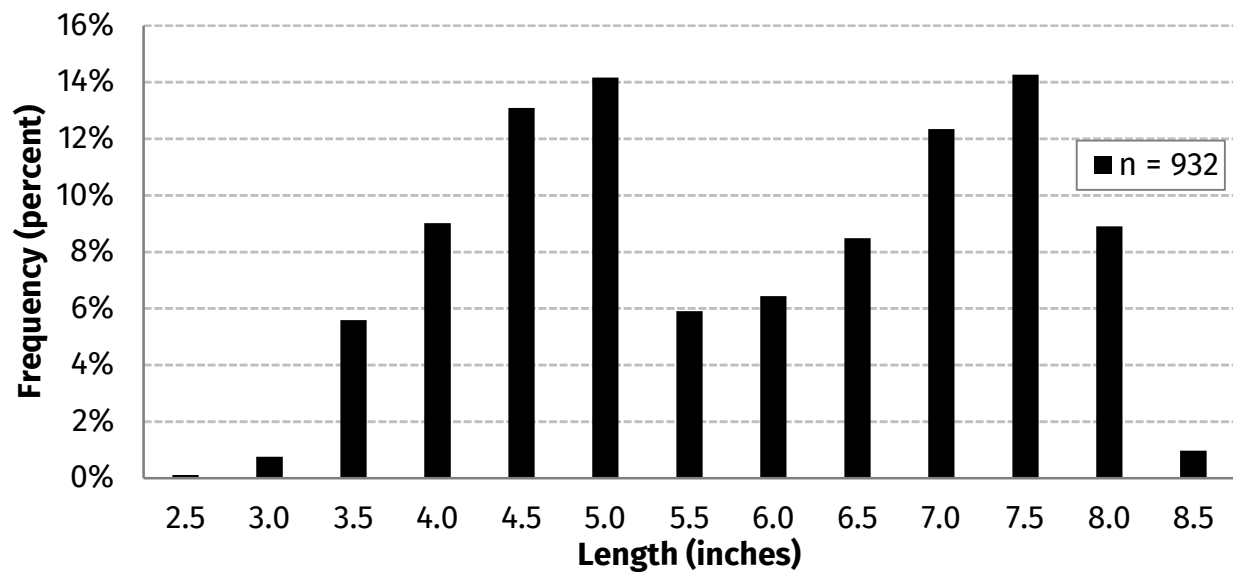


Figure 2. Length frequency distribution of bluegills sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

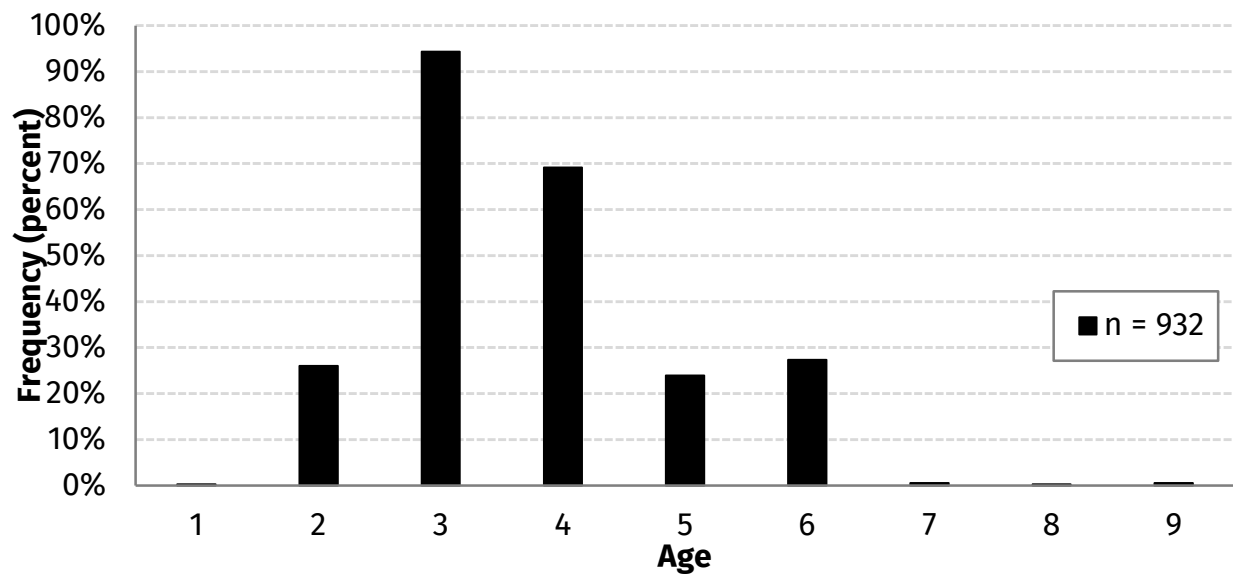


Figure 3. Age frequency distribution of bluegills sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

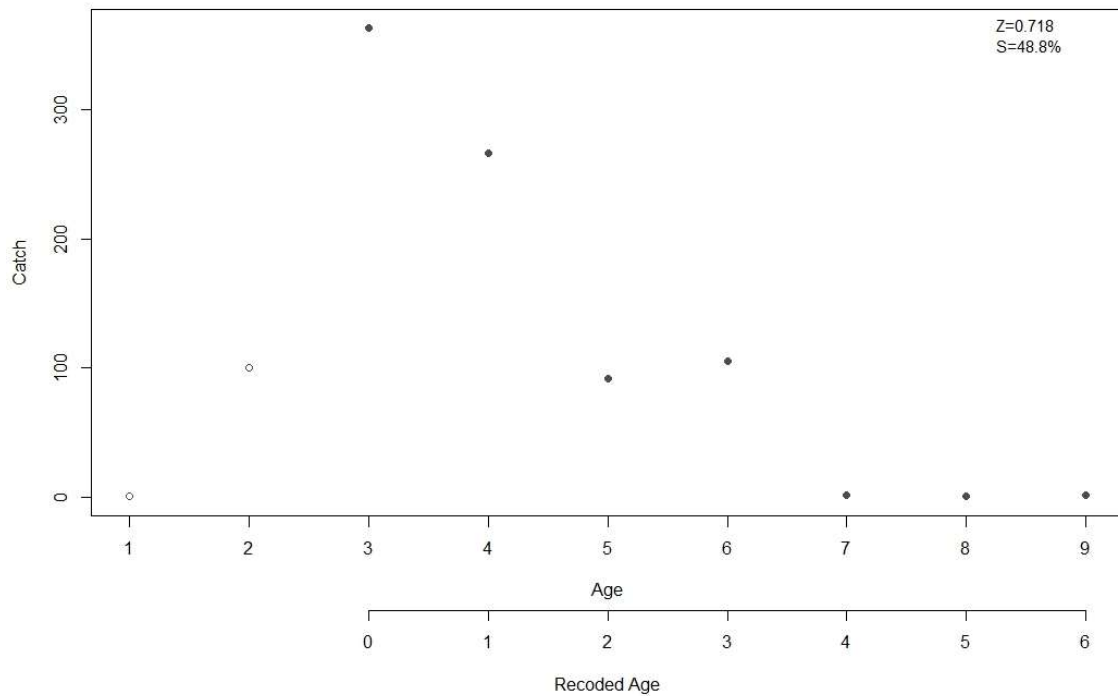


Figure 4. Chapman-Robson catch curve for bluegills sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

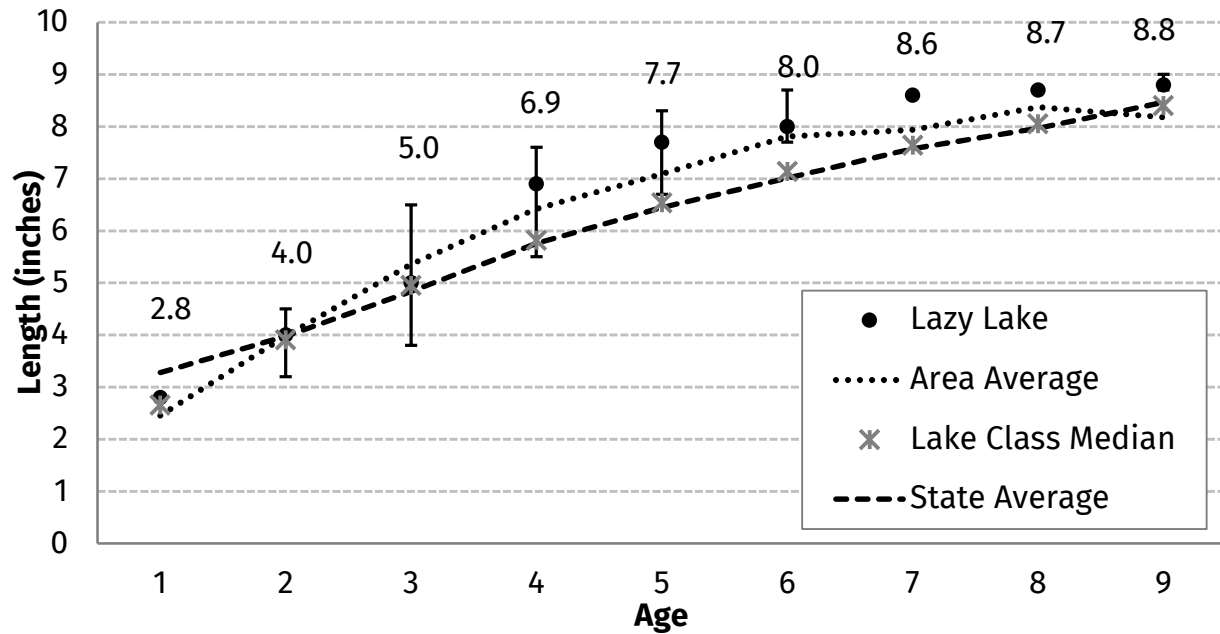


Figure 5. Mean length-at-age of bluegills sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

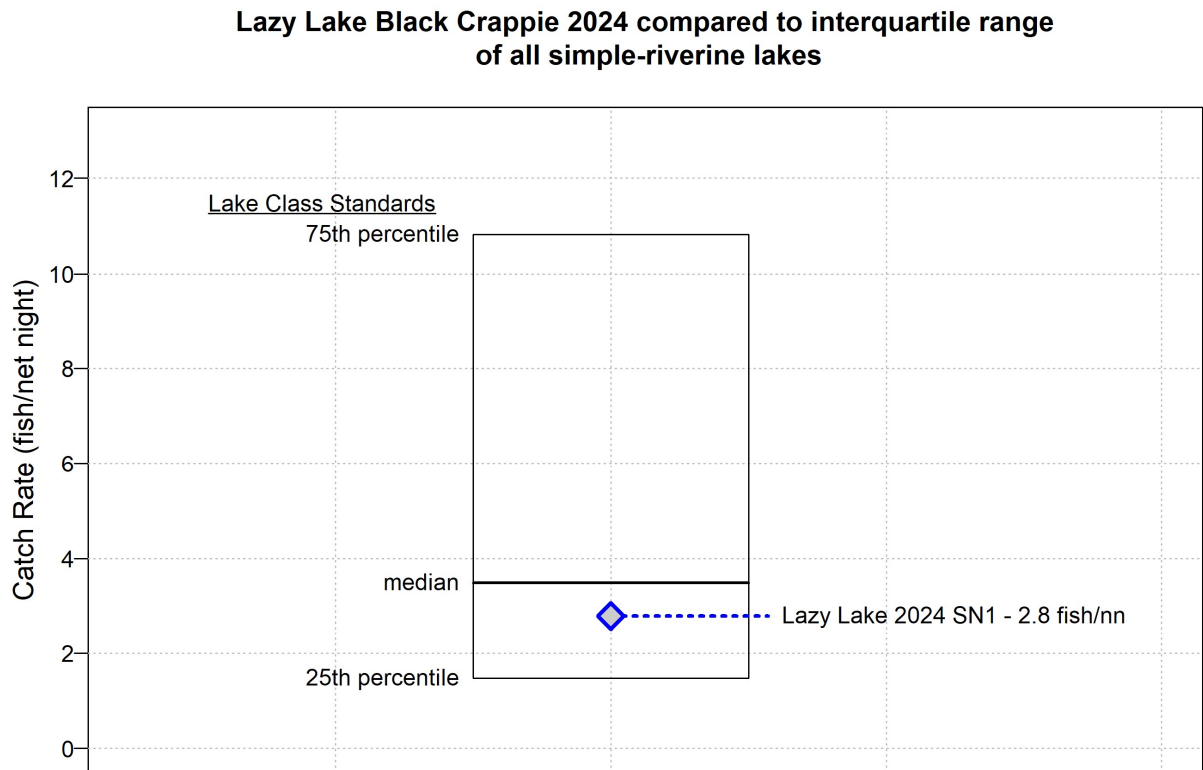


Figure 6. Black crappie fyke net catch rate lake class comparison for Lazy Lake, Columbia County, Wisconsin.

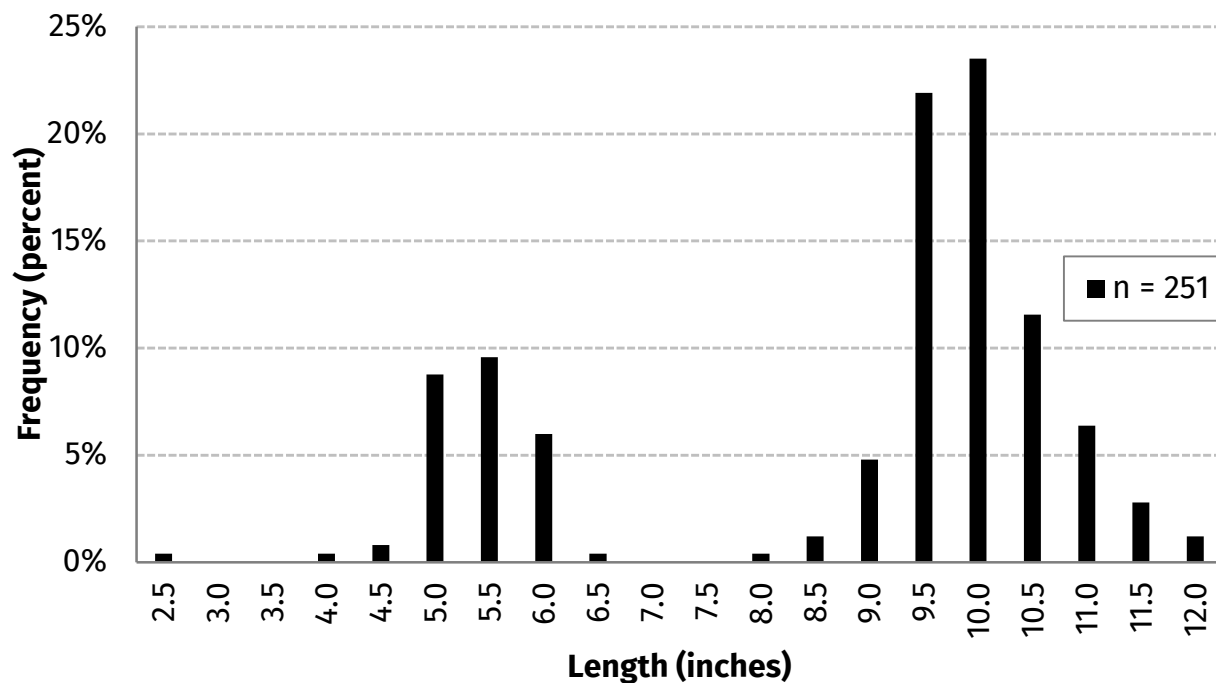


Figure 7. Length frequency distribution of black crappies sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

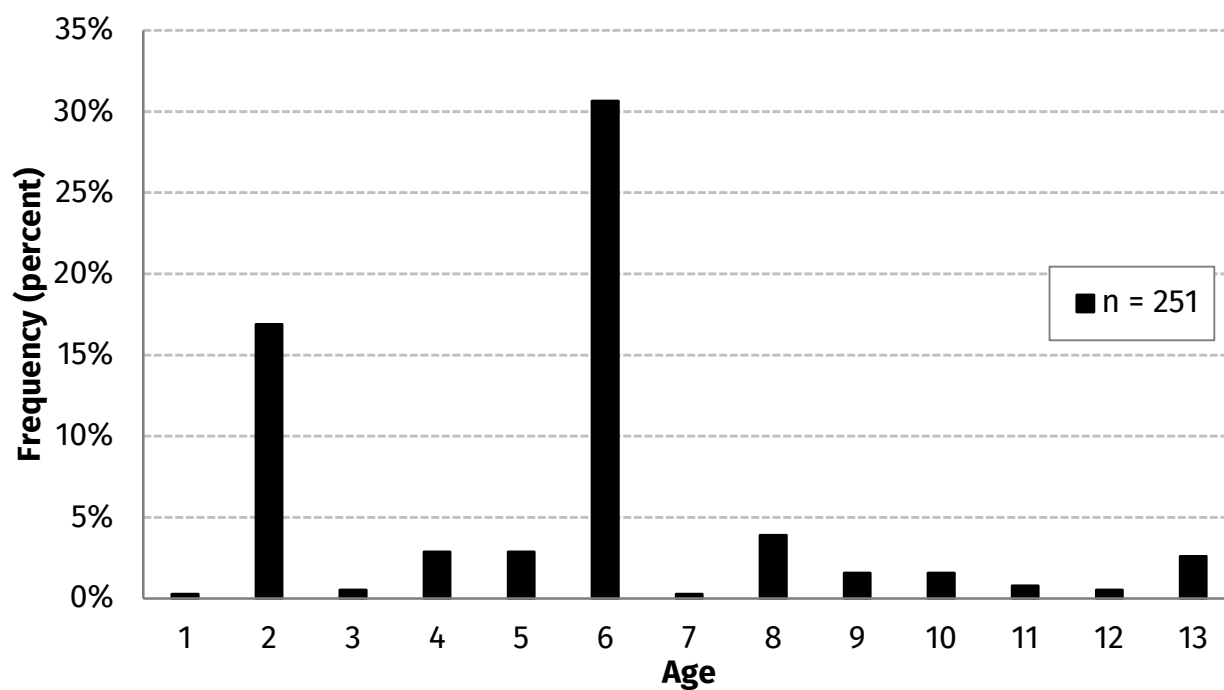


Figure 8. Age frequency distribution of black crappies sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

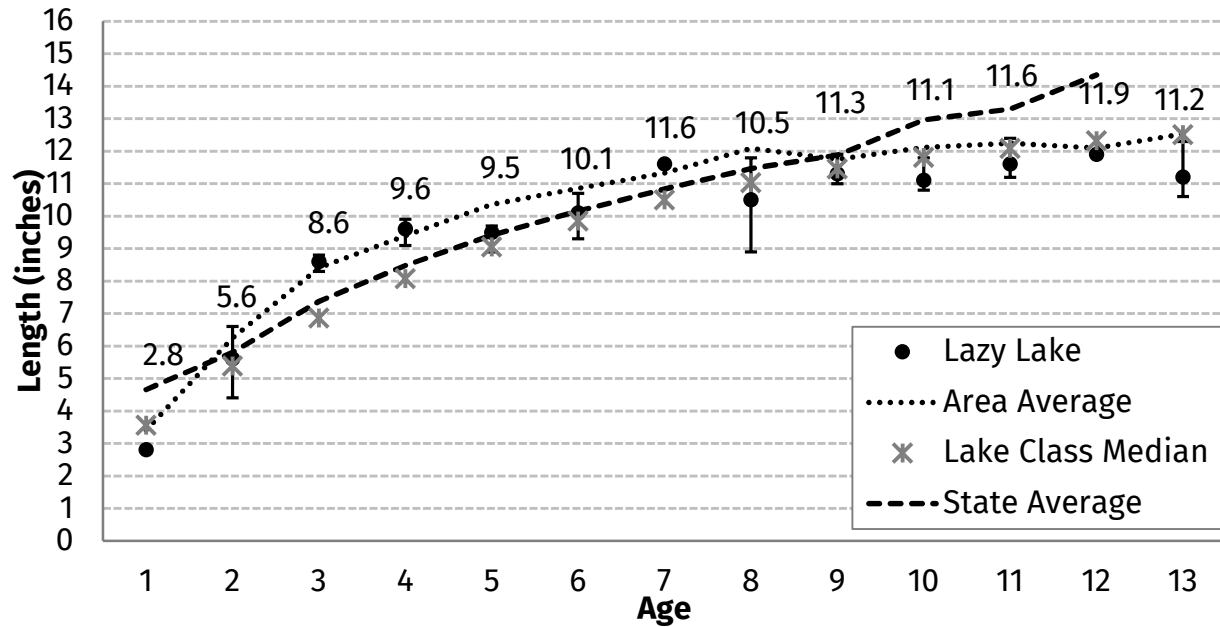


Figure 9. Mean length-at-age of black crappies sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

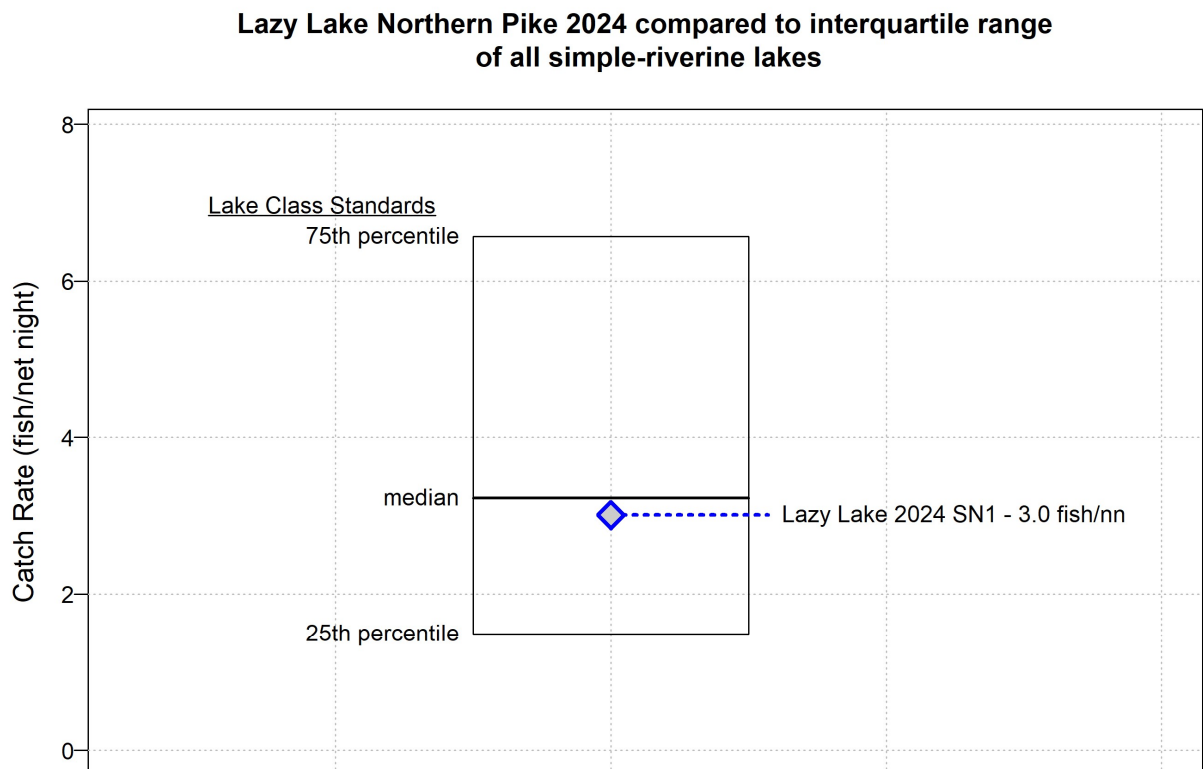


Figure 10. Northern pike SN1 catch rate lake class comparison for Lazy Lake, Columbia County, Wisconsin.



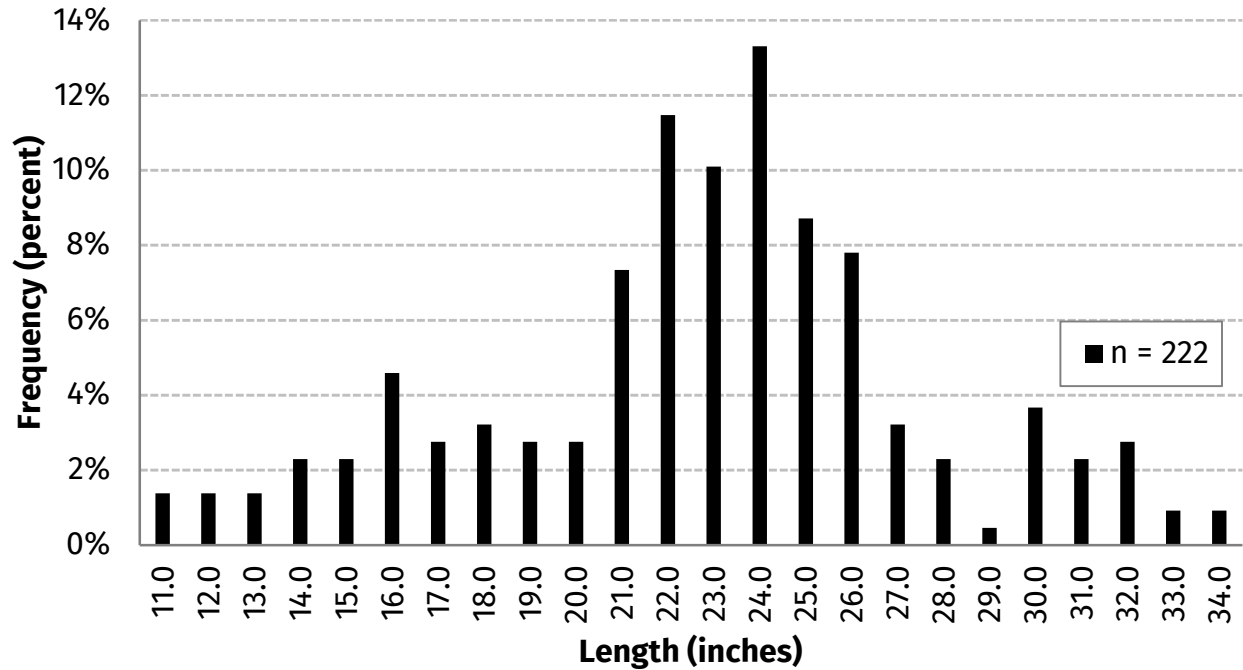


Figure 11. Length frequency distribution of northern pike sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

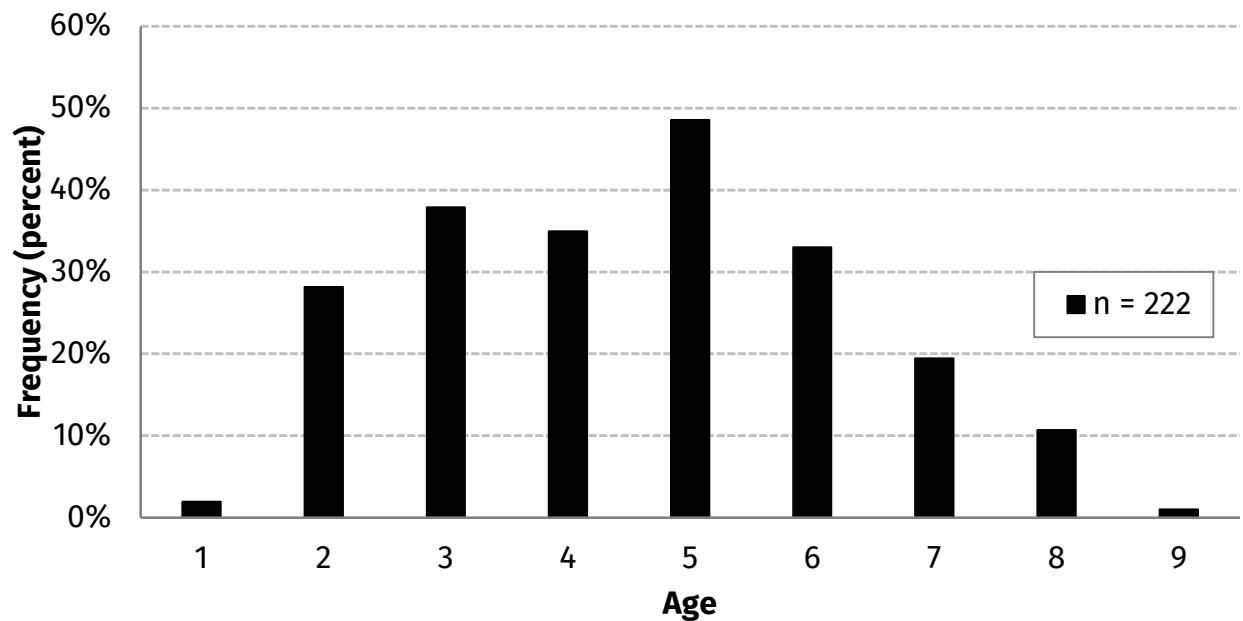


Figure 12. Age frequency distribution of northern pike sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

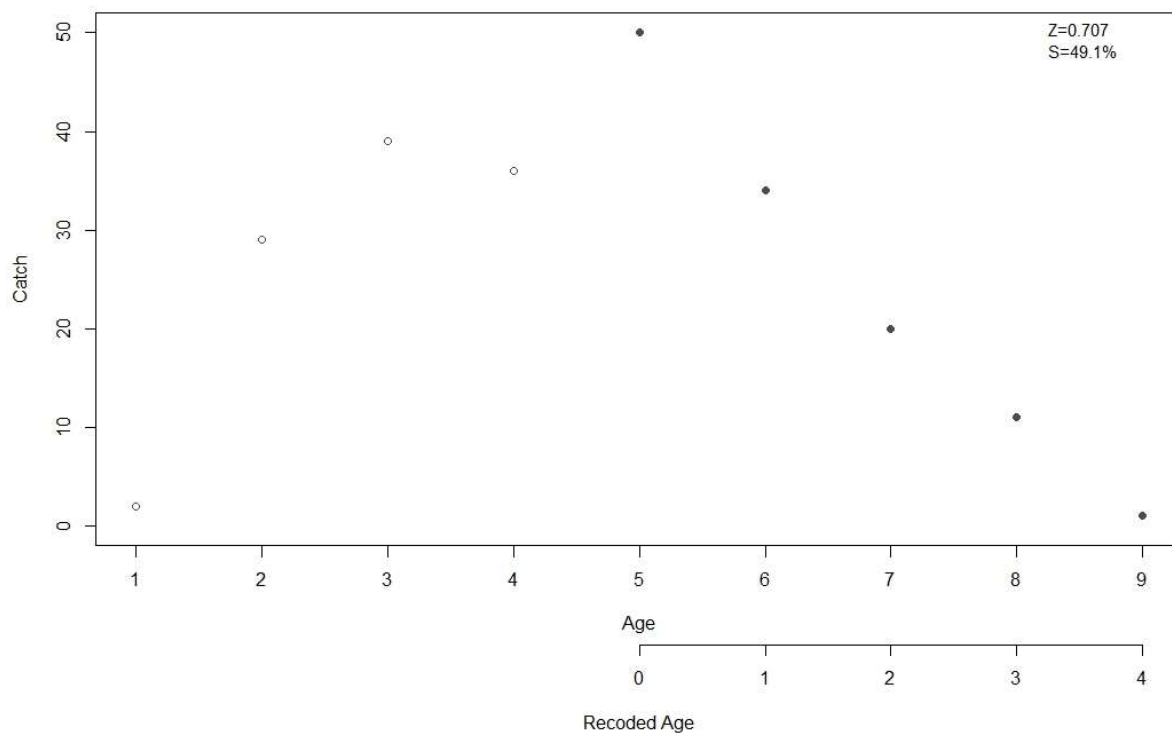


Figure 13. Chapman-Robson catch curve for northern pike sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

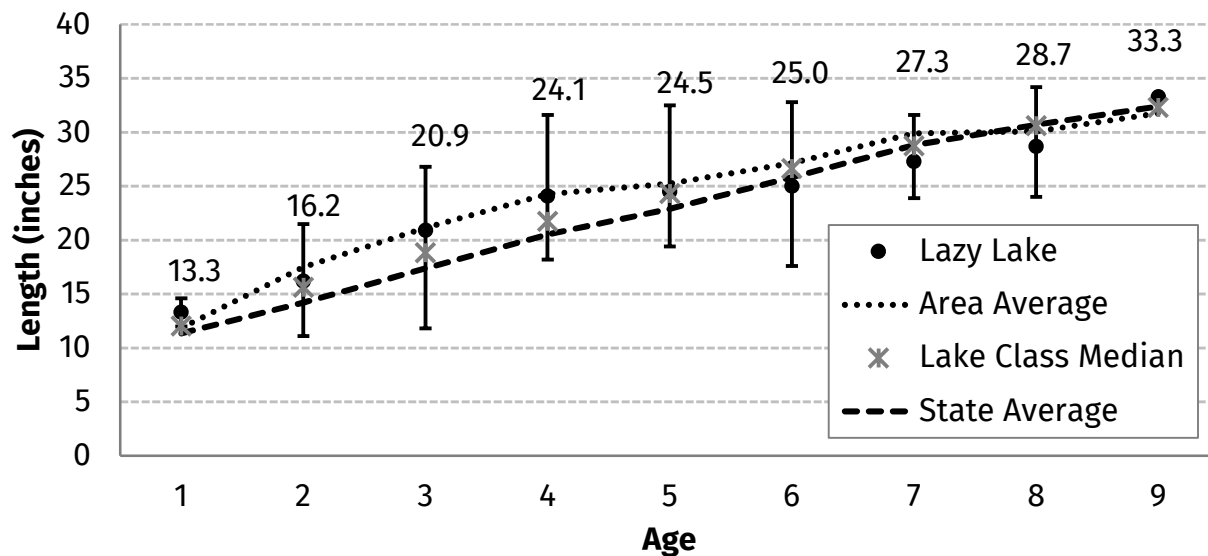


Figure 14. Mean length-at-age of northern pike sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

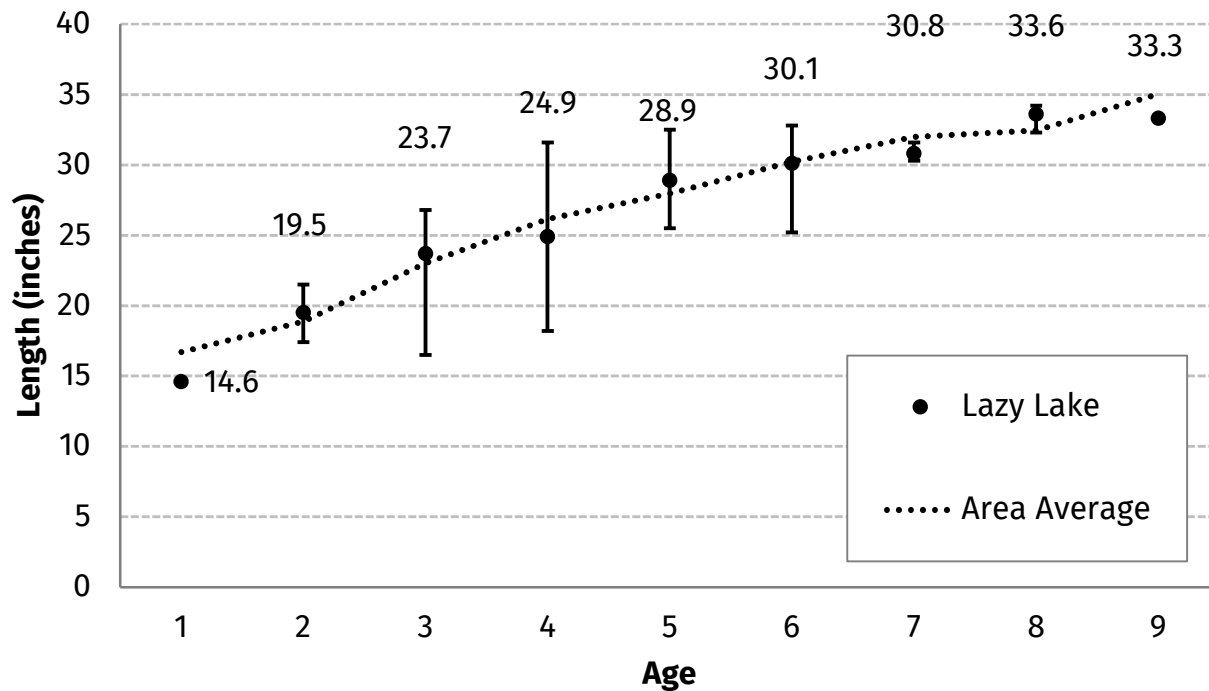


Figure 15. Mean length-at-age of female northern pike sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

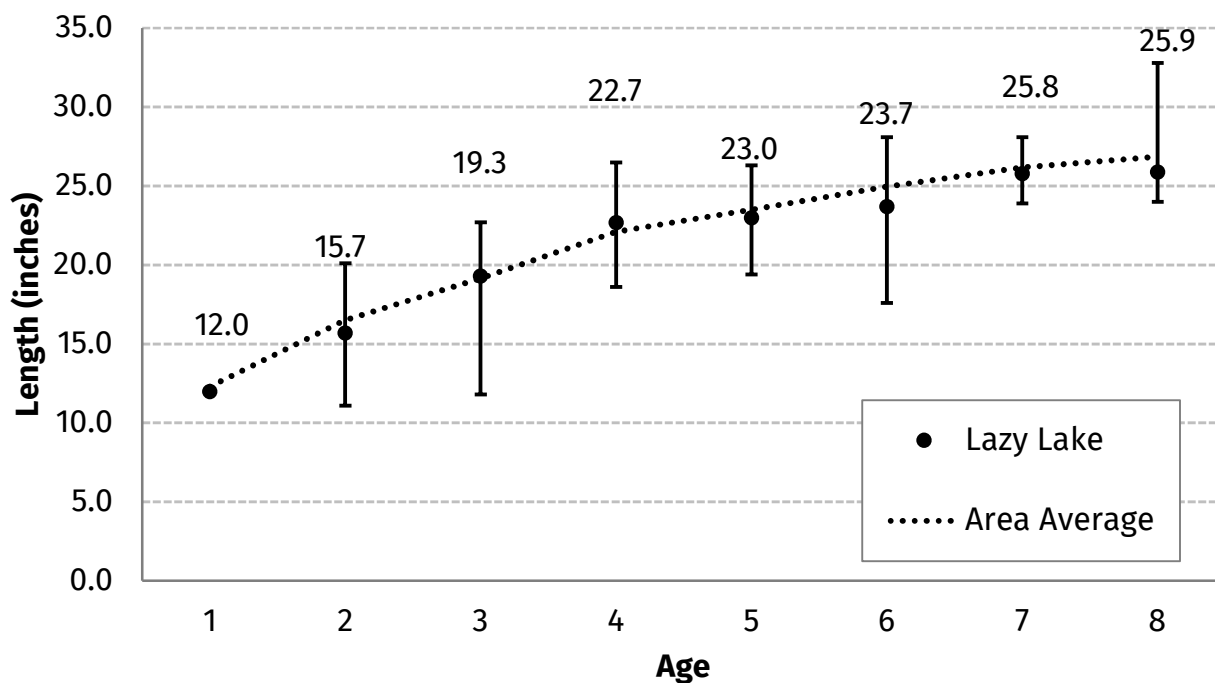


Figure 16. Mean length-at-age of male northern pike sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

**Lazy Lake Largemouth Bass 2024 compared to interquartile range of all simple-riverine lakes in Wisconsin**

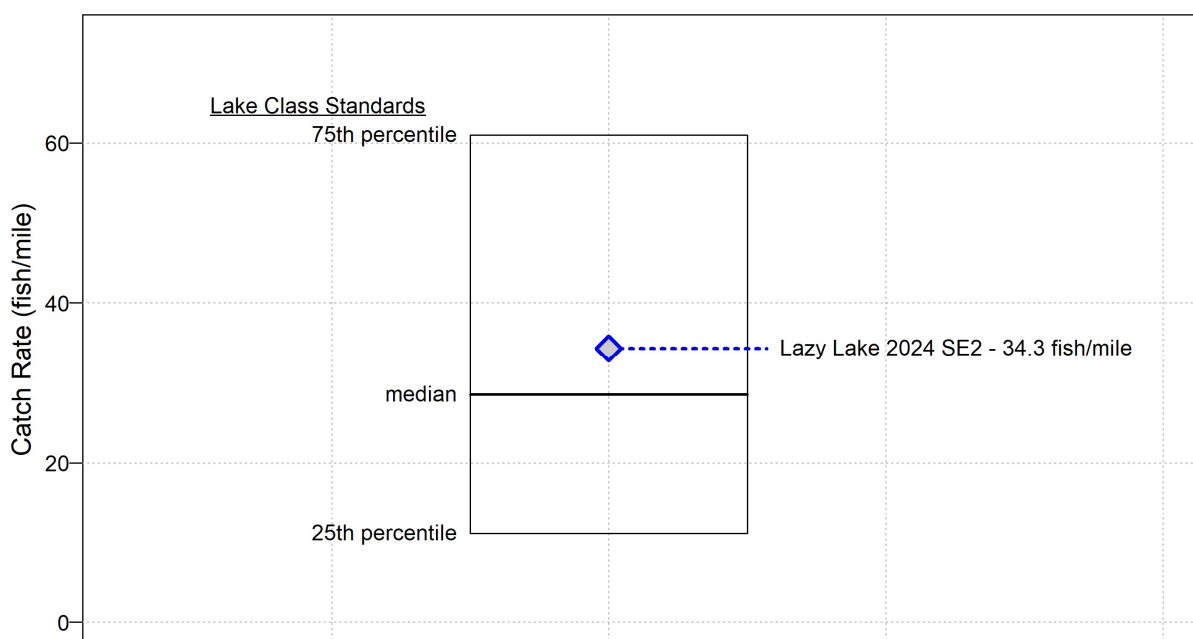


Figure 17. Largemouth bass electrofishing catch rate lake class comparison for Lazy Lake, Columbia County, Wisconsin.

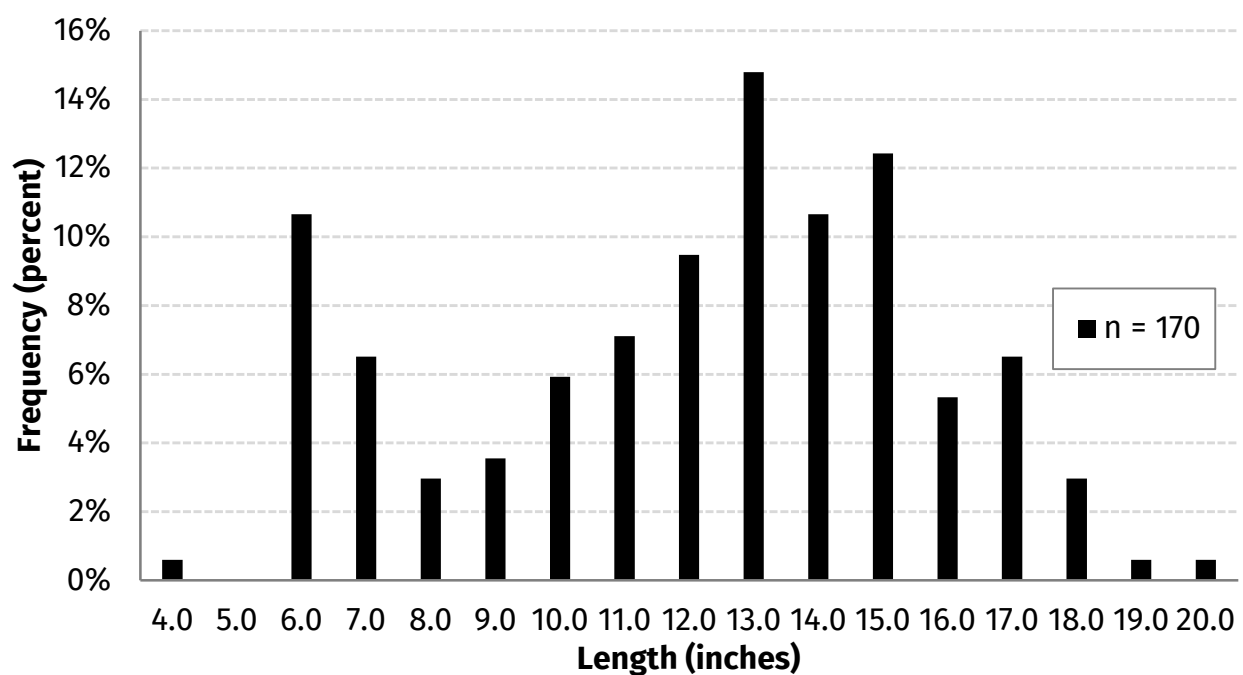


Figure 18. Length frequency distribution of largemouth bass sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

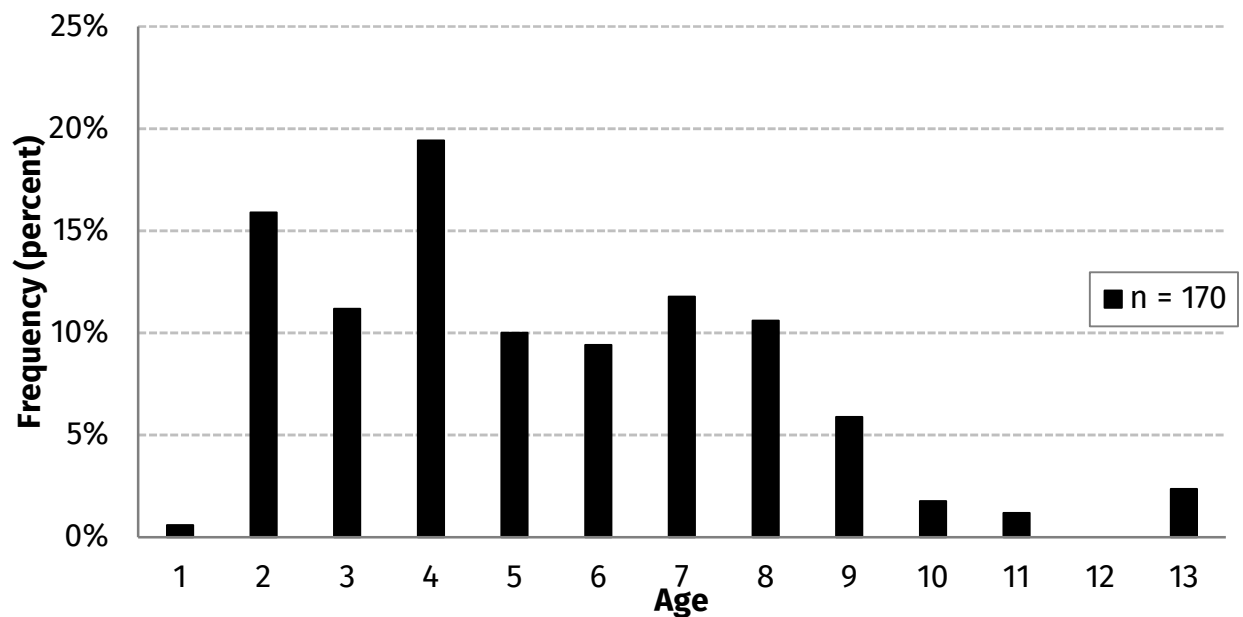


Figure 19. Age frequency distribution of largemouth bass sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

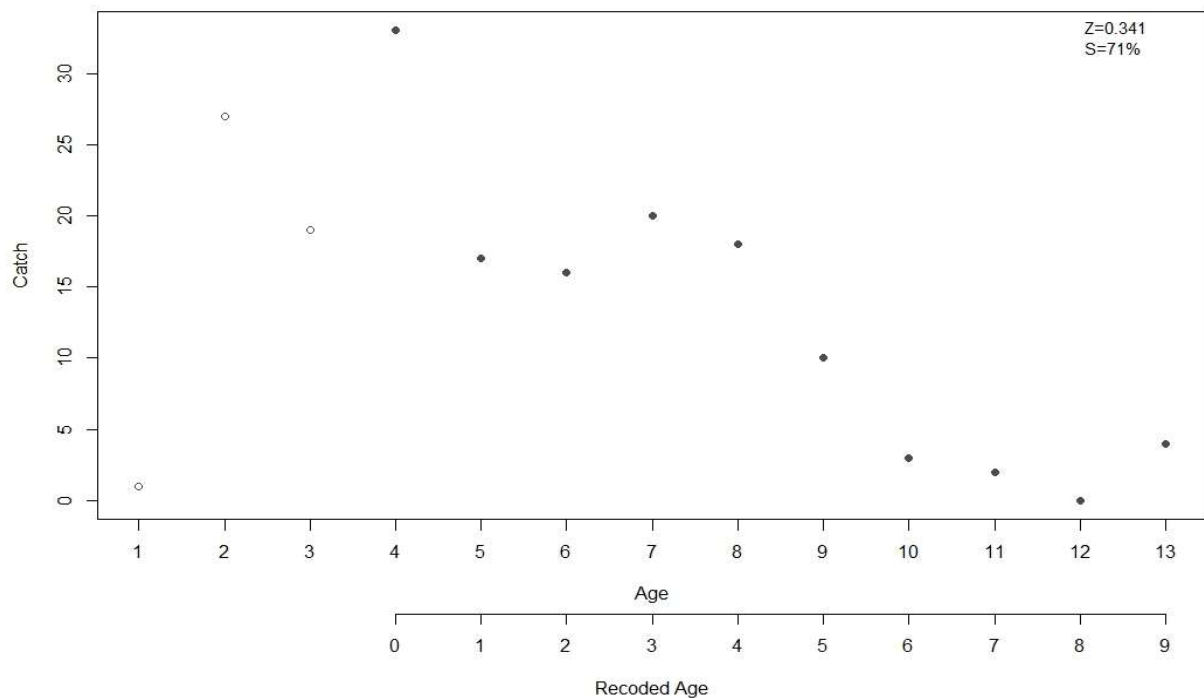


Figure 20. Chapman-Robson catch curve for largemouth bass sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.

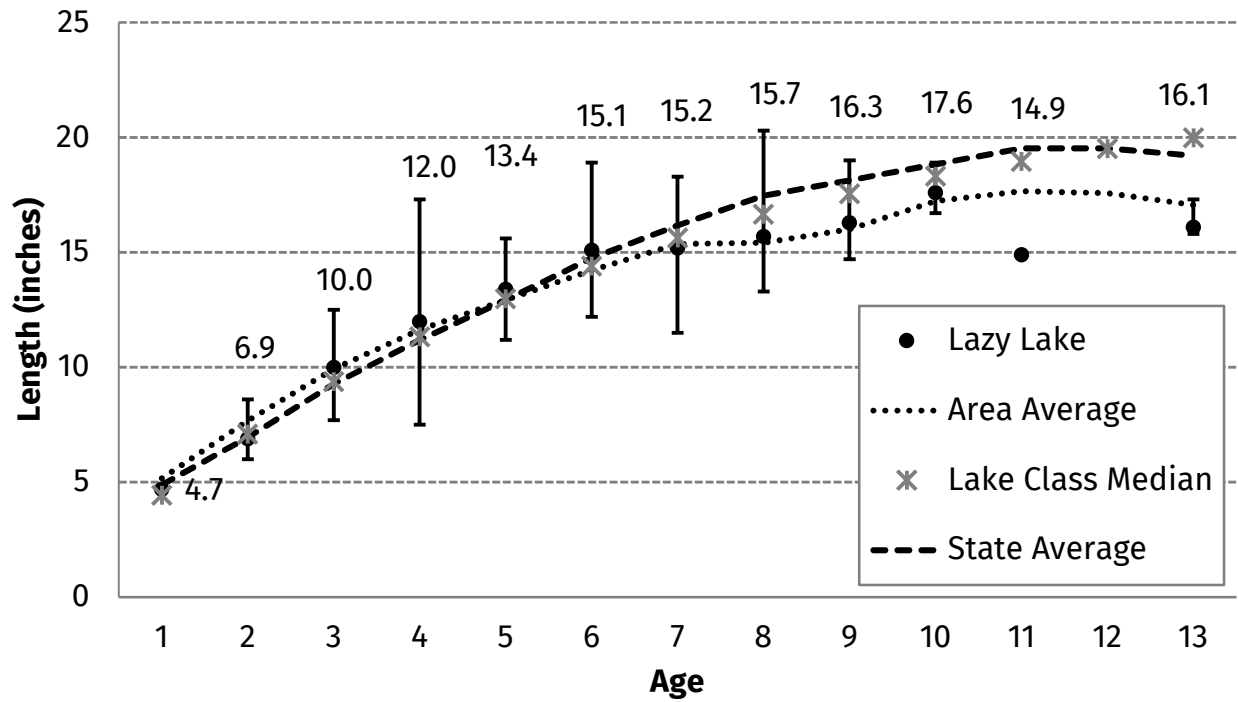


Figure 21. Mean length-at-age of largemouth bass sampled during the 2024 comprehensive fishery survey of Lazy Lake, Columbia County, Wisconsin.