

# 2024 HALSEY LAKE COMPREHENSIVE SURVEY REPORT

## FLORENCE COUNTY

### INTRODUCTION AND SURVEY OBJECTIVES

The Wisconsin Department of Natural Resources (WDNR), in collaboration with the U.S. Forest Service, conducted a comprehensive survey of Halsey Lake, Florence County, to analyze the health of its fishery. A comprehensive survey includes surveys designed to assess all major fish populations within the lake; for species-specific survey details, see the table below. The summary that follows will detail the current state of the fishery, as well as changes observed in the fishery since the 2013 comprehensive survey and following a major winterkill event during the Winter of 2013-2014 which resulted in restocking of several species. Halsey Lake is located approximately 1 mile east of Long Lake. There is a public boat launch off of Halsey Lake Road

Halsey Lake is a 512-acre lake with a maximum depth of 10 feet and 3.8 miles of shoreline. Halsey Lake is a drainage lake that the WDNR has classified in the “Complex-Cool-Dark” lake-class. Halsey Lake is within the ceded territory and has special fishing regulations, of which 25 panfish may be kept, but no more than 10 of one species, and only largemouth and smallmouth bass less than 14 inches may be kept, except one fish over 18 inches may be kept, with the standard bag limit of 5 fish. All other fishing regulations are standard. Always check the fish regulation book or online for current regulations: <https://dnr.wisconsin.gov/topic/fishing/regulations>.



*Picture 1. An ariel view of Halsey Lake.*

Table 1: A summary of all effort conducted on Halsey Lake in 2024 during the comprehensive survey.

Survey Information				
Species	Survey Date(s)	Gear Used	Effort	Water Temp. (°F)
Walleye, Northern Pike, Yellow Perch, Black Crappie	3/19 – 4/5/2024	Fyke Net	59 Net-Nights	34-40
Walleye, Northern Pike, Yellow Perch, Black Crappie	4/6 – 8/2024	Fyke Net	20 Net-Nights	42-43
Walleye (Recapture)	4/8/2024	Boomshocker	1.78 Miles	47
Largemouth Bass and Smallmouth Bass	6/3/2024	Boomshocker	1.78 Miles	69
Bluegill, Pumpkinseed	6/3-6/2024	Fyke Net	12 Net-Nights	63-70
Juvenile Gamefish	9/26/2024	Boomshocker	1.51 Miles	69

## Fish Metric Descriptions

Population estimate (PE) is estimated by marking a portion of the population, then capturing another sample of fish and using the ratio of new fish to previously marked fish to estimate the number of fish in the population.

Catch per unit effort (CPUE) is the number of fish per mile (electrofishing) or per net-night (netting) and is used to index abundance when we are unable to get a PE.

Relative stock density (RSD) is an index used to describe the size structure of fish populations. It is calculated by dividing the number of fish larger than a certain length by the number of stock size fish for a given species. Stock size is a length set for each species and is used to offset potential large year classes of juvenile fish.

Length frequency distribution (LFD) is a graphical representation of the number of fish captured by inch group. Smaller fish (or younger age classes) may not always be represented in the length frequency due to different habitat usage or sampling gear limitations.

## Survey Methods

Surveys are designed to evaluate each species when they are particularly vulnerable to our gear.

Standard fyke nets and electrofishing gear is used to capture fish.

Data is collected from the target species of each survey to gather population metrics.

Fish metrics are compared to previous surveys of this water and the mean/median values for waters in this “area” (Florence and Forest Counties), and other Wisconsin lakes within the lake class.

Data collected is used to monitor the fishery, determine if stocking is necessary, evaluate fishing regulations, and determine how to improve the fishery.

## Gear Used During This Survey

Fyke Nets are set in areas where we anticipate fish to congregate. Fish traveling along the shoreline will be met by a “lead,” which is similar to a fence. The lead directs the fish toward the trap end of the net. Fish travel through a series of funnels and eventually become trapped. Fish are then removed from the net and placed in holding tanks to gather data before being returned to the lake.



***Picture 2.** A picture of two DNR employees in a work boat with the employee on the bow securing the back of a round hooped net being lifted out of the water to the bow with ropes. The front of the net is squared and the top sticks slightly out of the water. A line of buoys from the lead can be seen running from the shoreline to the front of the net.*

A boomshocker is a specially designed boat that creates an electric current in the water immediately in front of the boat. The boat is driven along the shoreline and shallow areas of the lake. When the boat encounters fish, they are momentarily stunned. Once the fish is stunned, they can be netted out of the lake and placed in a holding tank. After data is collected, the fish are returned to the lake.

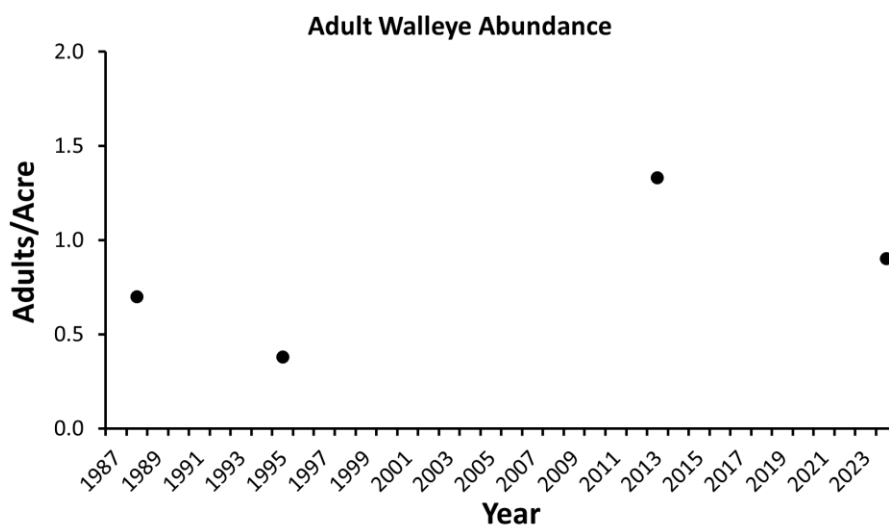


***Picture 3.** A picture of three DNR employees in a work boat with railings on the gunnels and bow. A metal tub can be seen in front of the console at which the driver is standing. Two employees stand on the front of the boat holding long dip nets. Two orange booms extend in front of the boat with anodes dropping in to the water. Lights shine off the front of the boat pointed toward the water.*

## WALLEYE

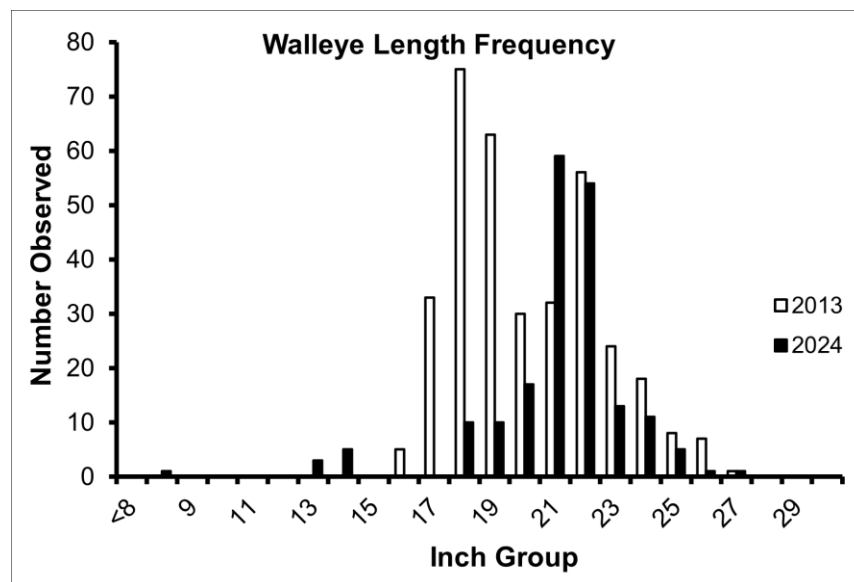
A mark-recapture survey was conducted to estimate the abundance of adult walleye in Halsey Lake. Ice left the lake extremely early in spring of 2024, approximately one month before typical ice-out. Nets were initially set on 3/18/2024, but were unable to be accessed regularly due to cold weather and reforming ice. Netting efforts were postponed until 3/29/2024. All nets were accessible on 4/5/2024 and were fished until 4/8/2025. The population estimate was conducted across both periods, however, relative abundance was only assessed using the catch from 4/5 – 8/2024, which was more representative of a typical spring survey. A total of 110 different adult walleye were captured and marked with an identifiable fin clip.

On the night of 4/8/2024, an electrofishing survey was conducted capturing 92 adult walleye. Of these fish, 21 had been previously captured in the netting survey. Based on this data, we estimate the adult walleye population of Halsey Lake to be 462 fish (0.90/acre). Adult walleye abundance has decreased since it was last surveyed by the WDNR in 2013 (1.33/acre; Figure 1). Halsey Lake is considered to have a low-density walleye population and is below the area average of 1.57 adults/acre. During the survey walleye were captured at a rate of 5.92 fish/net-night, which is above the statewide median for its lake class, suggesting that this population is above average when compared to similar lakes in Wisconsin.



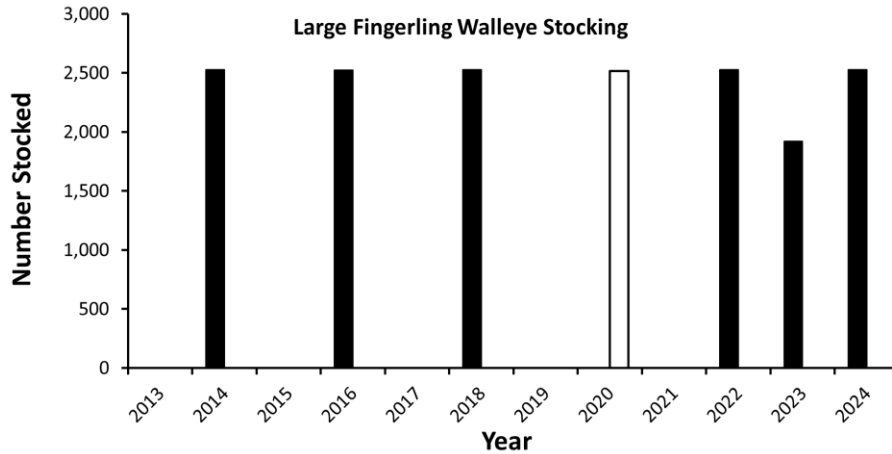
*Figure 1. A plot of adult walleye abundance over time in Halsey Lake, Florence County, Wisconsin.*

All walleye captured during the mark-recapture survey, a total of 190 different fish, were measured and used for size structure analysis. After removing all fish less than 10 inches, 95.8% of the sample was  $\geq 15$  inches, 85.2% was  $\geq 20$  inches, and 9.5% were  $\geq 24$  inches. A length frequency figure of walleye caught in 2024 can be seen below (Figure 2). This is an increase in overall size structure from 2013, when 100% of the walleye were  $\geq 15$  inches, 50.0% were  $\geq 20$  inches, and 9.7% were  $\geq 24$  inches. Halsey Lake has very high size structure for the area, with area averages of 84.5%, 40.5%, and 10.5% being  $\geq 15$ , 20, and 24 inches, respectively.



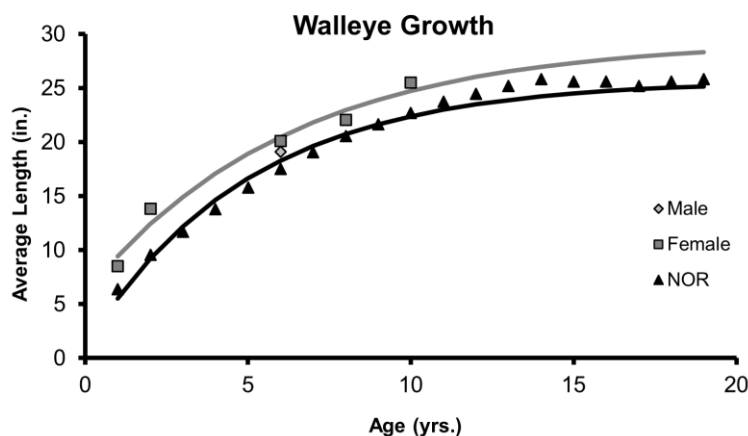
*Figure 2. A length frequency plot comparing the walleye captured on Halsey Lake, Florence County, Wisconsin during the 2013 and 2024 spring netting surveys.*

Natural walleye recruitment has never been observed in Halsey Lake. Halsey Lake has been managed for walleye since the 1940s, however the current population is relatively new as there was a severe winterkill event in the 2013-2014 winter which was assumed to have killed all walleye in the lake. Since the winterkill, the lake has been stocked 7 times (Figure 3), however, it's assumed that no fish stocked in 2020 survived. Walleye stocked in 2014, 2016, and 2018 would now be what comprises the adult walleye population in Halsey Lake, while the fish stocked since 2022 would still be juveniles. A total of 7,578 walleye were stocked across the 3 stocking events which created the current adult population, which is estimated to be 462 fish. Survival of these stocked fish to the 2024 adult stock is estimated to be 6.1%, which is considered to be very good survival of stocked walleye. The survival of stocked walleye will continue to be monitored.



*Figure 3. A bar graph showing the number of large fingerling walleye stocked in Halsey Lake, Florence County, Wisconsin, since the 2013-2014 winterkill event. Years with no bar indicate no stocking occurred. The 2020 stocking was an experimental stocking event, and no fish were believed to survive from this stocking class.*

Walleye growth was assessed in 2024 (Figure 4). A subsample of 48 adult walleye were aged (9 males, 39 females), and all fish corresponded to stocked year classes. Walleye growth in Halsey Lake is exceptional, with both male and female fish growing faster than the Northern Wisconsin combined-sex regional average. Female walleye grow faster than males. Of the 181 different adult walleye captured during this survey, only 12 were male (6.6%), ranging from 18.0 to 19.9 inches in length. All of the male fish are estimated to be age-6, from the 2018 stocking. These fish averaged 19.1 inches, suggesting that male walleye also grow incredibly fast in Halsey Lake.



*Figure 4. A graph examining the growth of walleye in Halsey Lake, Florence County, Wisconsin, from walleye captured during the 2024 comprehensive survey compared to the Northern Wisconsin Regional combined-sex average (NOR).*

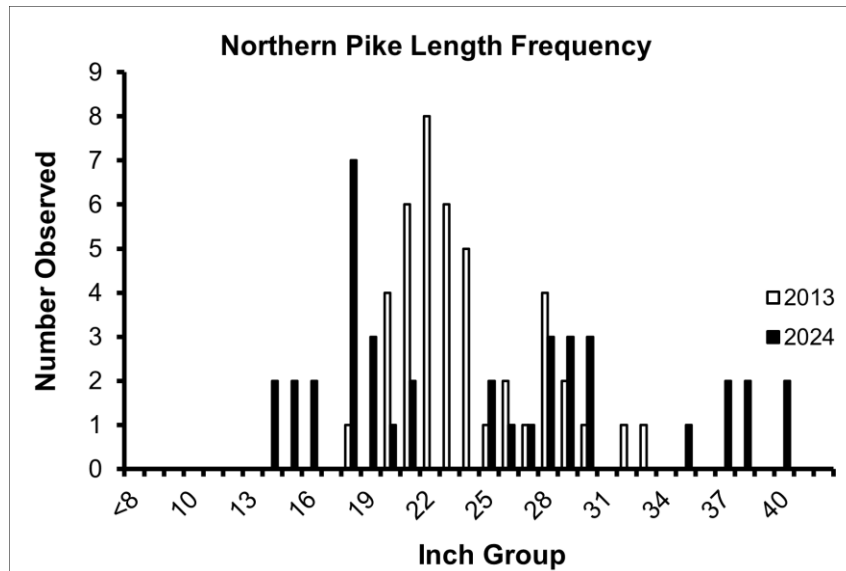
## NORTHERN PIKE

The Halsey Lake northern pike population was also assessed in the 2024 comprehensive survey, concurrent with the walleye survey. During the survey, northern pike relative abundance was 1.33 fish/net-night. This is a decline since northern pike were previously assessed in 2013 showing a relative abundance of 2.69 fish/net-night. Northern pike relative abundance in Halsey Lake is well below the area average of 5.23 fish/net-night and is considered a low-density population. The current relative abundance is below the median for the lake class, indicating a below average relative abundance for this lake type.



*Picture 4. Matt Messer (U.S. Forest Service) holding a northern pike caught during the 2024 comprehensive survey of Halsey Lake, Florence County, Wisconsin.*

A total of 39 different northern pike were captured during the spring netting survey, and all of these fish were measured to assess size structure of the population. Excluding fish less than 14 inches, 56.4% of the fish captured were  $\geq 21$  inches, while 41.0% were  $\geq 28$  inches and 17.9% were  $\geq 34$  inches. Size structure has increased since 2013 when 88.4% of the northern pike measured were  $\geq 21$  inches, 20.9% were  $\geq 28$  inches, and no fish were  $\geq 34$  inches. Current size structure is higher than the area average (46.9%  $\geq 21$  inches, 9.7%  $\geq 28$  inches, and 1.9%  $\geq 34$  inches). Northern pike length frequency can be seen below (Figure 4).



*Figure 5. A length frequency plot comparing the northern pike captured during the 2013 and 2024 spring netting surveys on Halsey Lake, Florence County, Wisconsin.*

There have been two live transfers of adult northern pike from connected waters to Halsey Lake since the 2013-2014 winterkill event. From 5/7-15/2014, 57 northern pike were transferred from Fay Lake (12-33 inches; 21.0 inches average size). From 3/19 – 4/8/2024, 88 northern pike were transferred from Long Lake (87 fish 12-26 inches; 1 fish 32 inches). The 2024 transfer occurred during our netting survey, and some of these generally smaller northern pike may have been captured, which would decrease the size structure metrics when compared to the size structure that was present in Halsey Lake prior to the transfer.



*Picture 5. Greg Matzke (Senior Fisheries Biologist) and volunteer Natalie holding a northern pike caught during the 2024 comprehensive survey of Halsey Lake, Florence County, Wisconsin.*

## **LARGEMOUTH BASS**

On the night of 6/3/2024, an electrofishing survey was conducted to assess the bass populations of Halsey Lake. All largemouth bass caught were adults. Largemouth bass relative abundance was 3.93 adults/mile. Adult largemouth bass relative abundance has significantly decreased since it was last assessed in 2013 (28.88 adults/mile), a result of the winterkill. The population falls well below the area average of 17.02 adults/mile, making this a very low abundance population. Largemouth bass relative abundance is below the statewide median for this lake type (5.41 fish/mile), indicating a below average largemouth bass population for this lake type.

We were unable to capture enough largemouth bass to conduct comparative size structure analysis on the population. Only 7 fish were caught, and only 3 were  $\geq 14$  inches. Largemouth bass ranged in size from 10.0 - 18.4 inches (Figure 6). Historically, Halsey Lake has had exceptionally poor size structure and growth of largemouth bass. In 2013 the majority of largemouth bass caught were less than 10 inches, and less than 4% were  $\geq 15$  inches.

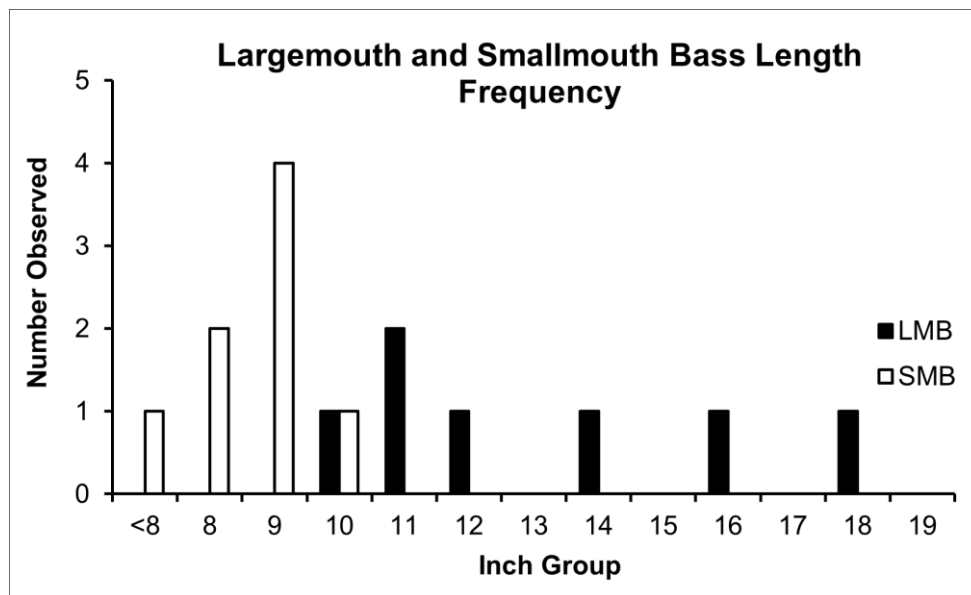
Since the winterkill, some private stocking of largemouth bass has occurred in Halsey Lake. It's also likely that largemouth bass entered Halsey Lake through connected waters following the winterkill.

## **SMALLMOUTH BASS**

Smallmouth bass were assessed during the same survey as largemouth bass. A total of 8 smallmouth bass were caught, 7 of which were adults. The current smallmouth bass population is likely the product of one private stocking event in 2022. Smallmouth bass relative abundance was 3.93 adults/mile. Smallmouth bass were not observed in the 2013 Halsey Lake survey, however previous survey data shows a sizeable population in 1998 (11.20 fish/mile) and a small population in 1995 (0.83 fish/mile). The population falls well below the area average of 10.71 adults/mile, making this a very low abundance population. Like largemouth bass, this is considered a "start-up" population as there was likely no survival of smallmouth bass following the 2013-2014 winterkill event.

Like largemouth bass, we were unable to capture enough smallmouth bass to conduct comparative size structure analysis on the Halsey Lake population. Of the 8

fish captured only 1 fish was  $\geq 10$  inches. This is a very young population of fish and it will take several years before it becomes desirable to anglers.

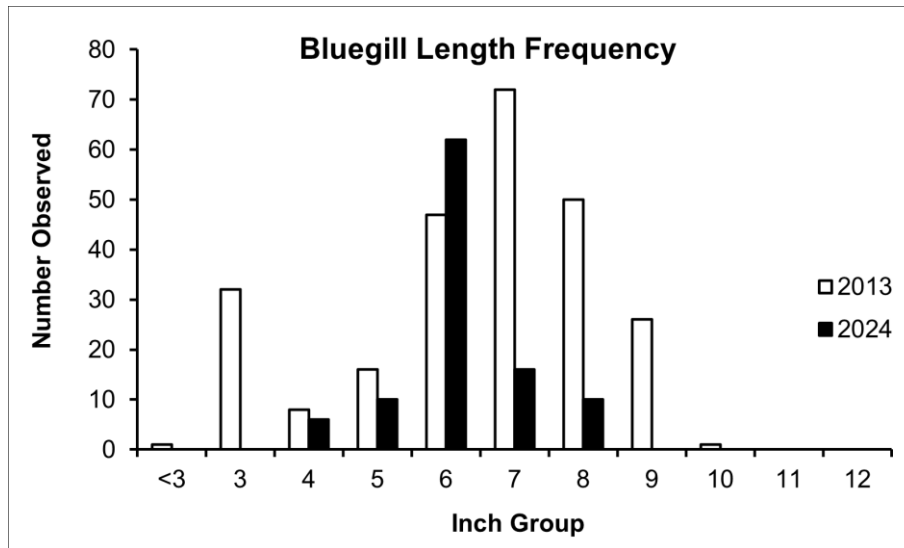


*Figure 6. A length frequency plot comparing the largemouth and smallmouth bass captured during the 2024 bass electrofishing survey on Halsey Lake, Florence County, Wisconsin.*

## BLUEGILL

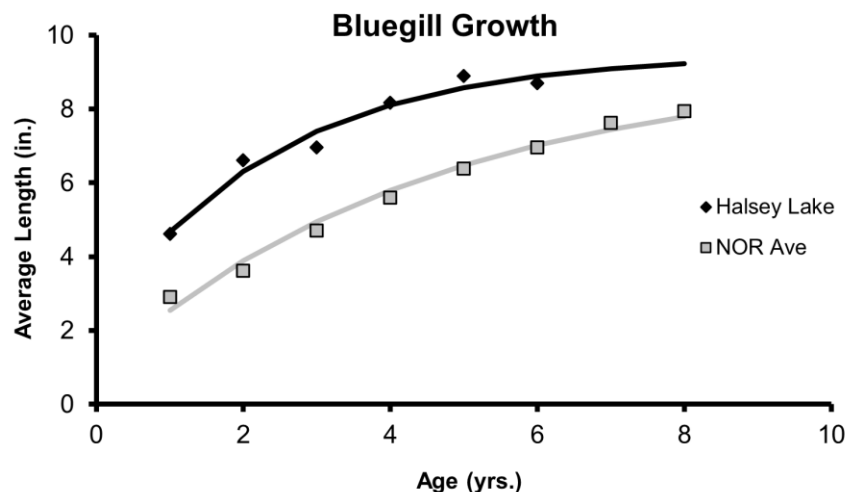
Bluegill were assessed during a late spring fyke netting survey targeting summer spawning panfish from 6/3 – 6/6/2025. Bluegill relative abundance was 8.67 fish/net-night. This is a decrease since the 2013 comprehensive survey when their relative abundance was 12.65 fish/net-night. The bluegill population in Halsey Lake has low abundance, well below the area average of 65.57 fish/net-night.

All bluegill captured, a total of 104 fish, were measured and used to assess the size structure of the population. Of these, 84.6% were  $\geq 6$  inches, 25.0% were  $\geq 7$  inches, and 9.6%  $\geq 8$  inches. Size structure has decreased since the 2013 survey when 77.8% were  $\geq 6$  inches, 59.1% were  $\geq 7$  inches, and 30.6%  $\geq 8$  inches. The current bluegill population in Halsey Lake has a slightly below average size structure when compared to the area average (61.6%  $\geq 6$  inches, 31.1%  $\geq 7$  inches, and 9.4%  $\geq 8$  inches). The bluegill length frequency can be seen below (Figure 7).



*Figure 7. A length frequency plot comparing the bluegill measured during the 2013 and 2024 comprehensive surveys on Halsey Lake, Florence County, Wisconsin.*

A subsample of 37 bluegill were aged to assess growth during 2024 (Figure 8). Bluegill growth in Halsey Lake is exceptional, with fish growing much faster than the Northern Wisconsin regional average. On average it took 3 years for bluegill in Halsey Lake to grow to 7 inches, twice as fast as the average population in the region. The oldest bluegill aged from Halsey Lake in 2024 were age-6, most likely from private stocking in 2018. Other private bluegill stocking occurred in 2020 and 2021.

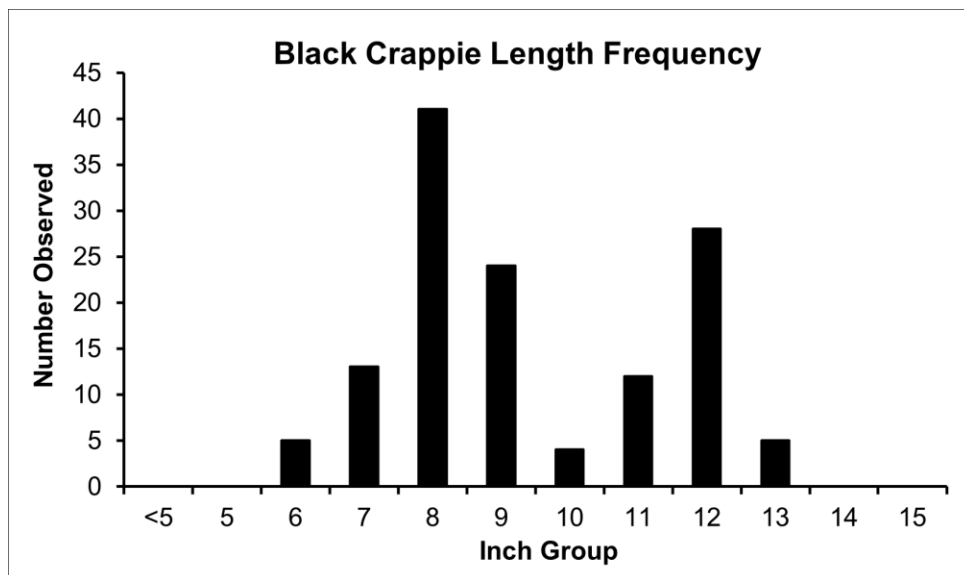


*Figure 8. A graph comparing the growth of bluegill in Halsey Lake, Florence County, Wisconsin, from the 2024 comprehensive survey to the Northern Wisconsin Regional average.*

## BLACK CRAPPIE

Black crappie were surveyed during the same netting survey as walleye. At this time, black crappie relative abundance was 4.50 fish/net-night. This is an increase in relative abundance since 2013 when their relative abundance was 0.81 fish/net-night. Black crappie are considered to be low-to-moderately abundant in Halsey Lake, as their relative abundance is below the area average (5.84 fish/net-night).

All black crappie caught during the early spring netting surveys were measured to assess size structure. Of these, 86.4% were  $\geq 8$  inches, 37.1% were  $\geq 10$  inches, and 25.0% were  $\geq 12$  inches. The Halsey Lake black crappie population has good size structure and is above the area average of 62.4%  $\geq 8$  inches, 19.9%  $\geq 10$  inches, and 4.7%  $\geq 12$  inches. Few black crappie were captured in 2013, however 73.3% were  $\geq 8$  inches, 46.7% were  $\geq 10$  inches, and 33.3% were  $\geq 12$  inches. Black crappie are cyclic in nature, and their population can be driven by periodic strong year classes with years of poor recruitment in between, as seen in the length frequency figure below (Figure 9). Private stocking of black crappie occurred in 2018, 2021, 2022, and 2023.

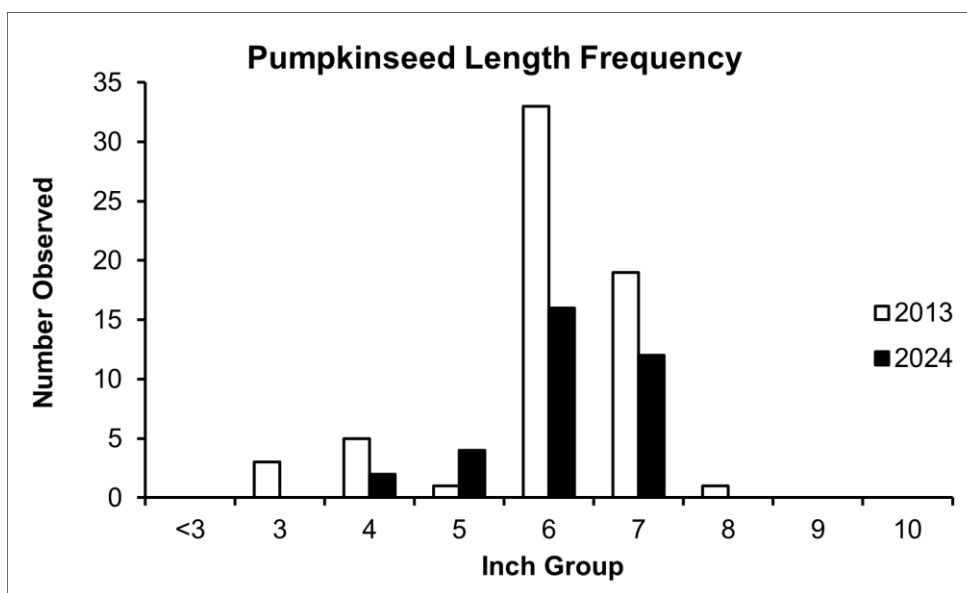


*Figure 9. A length frequency plot of the black crappie measured during the 2024 comprehensive survey on Halsey Lake, Florence County, Wisconsin.*

## PUMPKINSEED

Pumpkinseed were assessed during the same late spring fyke netting survey as bluegill. Pumpkinseed relative abundance was 2.67 fish/net-night. This is a slight decrease since the 2013 comprehensive survey when their relative abundance was 3.10 fish/net-night. This is considered to be a low abundance pumpkinseed population.

All pumpkinseed captured during this survey, a total of 34 fish, were measured and used to assess the size structure of the population. Of these, 82.4% were  $\geq 6$  inches and 35.3% were  $\geq 7$  inches. Size structure is similar to the 2013 survey when 85.5% were  $\geq 6$  inches and 32.26% were  $\geq 7$  inches (Figure 10). No pumpkinseed caught in 2024 were  $\geq 8$  inches while 1 was  $\geq 8$  inches in 2013. The Halsey Lake pumpkinseed population has good size structure.

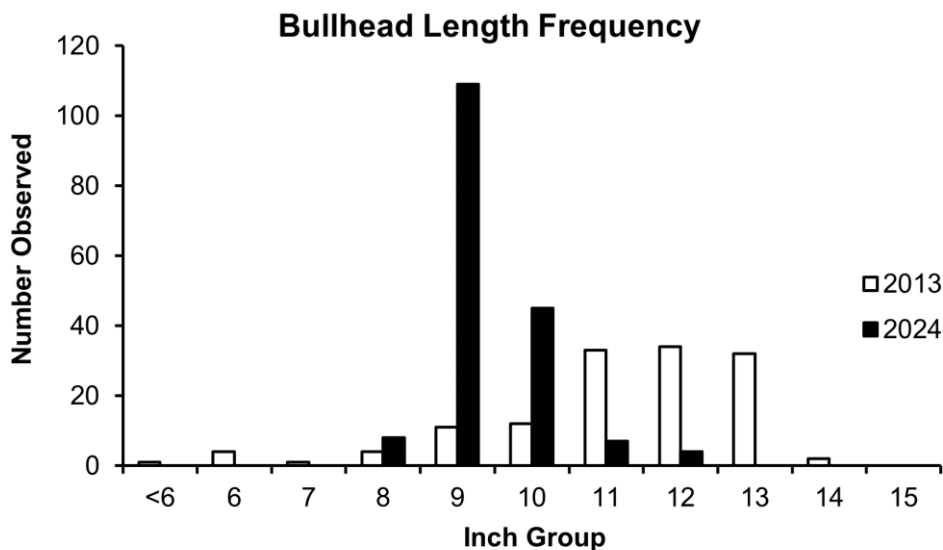


*Figure 10. A length frequency plot comparing the pumpkinseed measured during the 2013 and 2024 comprehensive surveys on Halsey Lake, Florence County, Wisconsin.*

## BULLHEAD

All 3 species of bullhead have been present historically in Halsey Lake, however during the 2023 survey, for ease of analysis, all species were grouped. During the early spring fyke netting survey, bullhead relative abundance was 46.5 fish/net-night, which is well above the area average of 12.0 fish/net-night. Bullhead comprised 70.9% of the total catch at this time. Similarly, their relative abundance of 34.3 fish/net-night during the late spring panfish survey was well above the area average during that survey (11.0 fish/net-night). Bullhead are abundant in Halsey Lake.

A random sample of 173 bullhead was measured during the comprehensive survey to assess the size structure of the population (Figure 11). Of the bullhead measured, 95.4% were  $\geq 9$  inches and 2.3% were  $\geq 12$  inches. Bullhead size structure is lower than the 2013 population, which had 93.2% and 51.1%  $\geq 9$  and 12 inches. Current bullhead size structure is considered moderate to high.

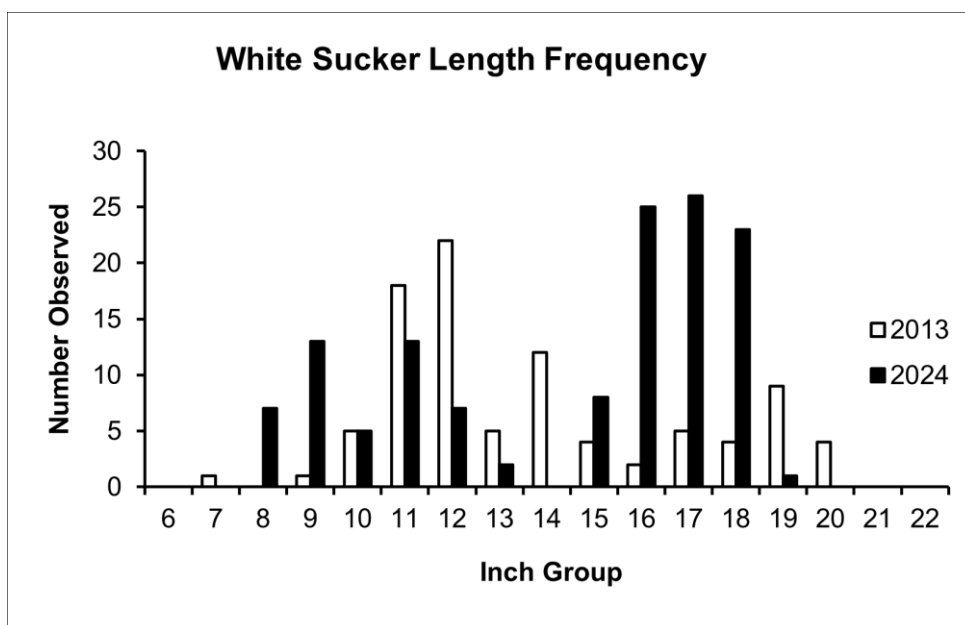


*Figure 11. A length frequency plot comparing the bullhead measured during the 2013 and 2024 comprehensive surveys on Halsey Lake, Florence County, Wisconsin. All species of bullhead were grouped.*

## WHITE SUCKER

The Halsey Lake white sucker population was assessed during the early spring walleye netting survey. White suckers are an important forage species as many predatory fish feed upon juvenile white suckers. White sucker relative abundance was 4.67 fish/net-night, which is well above the area average of 1.03 fish/net-night. White sucker relative abundance has significantly decreased since they were last assessed in 2013 when their relative abundance was 74.13 fish/net-night. Despite the decrease, white sucker are considered still considered abundant in Halsey Lake.

A total of 130 white sucker captured during the spring fyke net survey were measured for size structure analysis. Of the white sucker measured, 84.6% were  $\geq 10$  inches, 65.4% were  $\geq 13$  inches, and 57.7% of the white sucker were  $\geq 16$  inches. Overall size structure of the white sucker population has increased since 2013 (97.8%, 48.9%, and 26.1%  $\geq 10$ , 13, and 16 inches), however larger fish were present in 2013 (Figure 12). Size structure of the Halsey Lake white sucker population is considered high.



**Figure 12.** A length frequency plot comparing the white sucker measured during the 2013 and 2024 comprehensive surveys on Halsey Lake, Florence County, Wisconsin.

## **YELLOW PERCH**

Yellow perch were assessed during the 4/5 - 8/2024 netting survey. Yellow perch relative abundance was 0.67 fish/net-night. The yellow perch population may be more abundant than the current data suggests, as standard surveys do not always accurately assess yellow perch populations. However, the population has likely experienced a notable decline in abundance since 2013 when relative abundance was 235.31 fish/net-night. Yellow perch median relative abundance for this area of the state is 0.81 fish/net-night, making this a low abundance population. The Halsey Lake yellow perch population is not abundant for its lake type as its relative abundance is at the statewide 10<sup>th</sup> percentile (0.67 fish/net-night). Yellow perch have been the dominant panfish in Halsey Lake for quite some time. It will be important to monitor this population going forward.

We were unable to capture enough yellow perch to conduct comparative size structure analysis on the Halsey Lake population. A total of 11 fish were caught all of them were less than 7 inches. Historically, Halsey Lake has had low yellow perch size structure.

## **OTHER SPECIES**

During the 2024 comprehensive survey, only 1 other fish species was captured which was not detailed in this summary. A single creek chub was caught during the first stretch of netting which was affected by ice reforming. No other species were captured.

## **SUMMARY**

Halsey Lake is a lightly developed lake within the Chequamegon-Nicolet National Forest. The lake has adequate access via a gravel public boat launch. This lake provides quality recreational opportunity. This comprehensive survey details all major fish species within the system and should provide an adequate picture to the shape and status of the fishery in its current state.

Most fish populations in Halsey Lake should be viewed as “new” or “start-up” populations, as the fish community was mostly erased due to an extreme winterkill event in the 2013-2014 winter. While winterkills are not new for Halsey Lake, this extreme of a kill was unique and exceptionally noteworthy. Walleye stocking and northern pike transplanting by the WDNR and private stocking of bass are helping to promote the gamefish community. The panfish populations are also in recovery, which has been aided by input from connected waters and private stocking. Bullhead are abundant in Halsey Lake and are the main beneficiaries of the historic winterkill structure of this system. An aeration unit was installed in 2020 by the Lake Association and is a very important factor in managing this fishery. Halsey Lake is a volatile lake due to its shallow bathymetry. Without aeration or stocking, the fish community would be a winterkill style lake dominated by bullhead, small yellow perch, and northern pike. We thank the Halsey Lake Association for their efforts in maintaining and operating the aeration unit.

Halsey Lake has a low-density walleye population with good size structure and fast growth. Natural recruitment has never been observed in Halsey Lake, and the walleye population is dependent on stocking. Halsey Lake currently operates as a “put-grow-and-take” walleye fishery, but the survival of stocked walleye and growth rates suggest that Halsey Lake could become one of the best stocked walleye populations in the area. Halsey Lake should continue to be stocked with large fingerling walleye, and the stocking rate should be increased from the current stocking rate of 5 large fingerlings/acre to 10 large fingerlings/acre. The growth and survival of stocked fish suggest that the lake could support stocking at the increased rate, and this may promote a higher density walleye fishery. The current walleye regulation is appropriate. Approximately 20% of the adult walleye population is of harvestable size with the current statewide regulation. Walleye reach a harvestable size around age-3 currently, and more stocked fish will be entering the adult population in the coming years.

Halsey Lake has a low-density northern pike population with above average size structure, which creates a desirable fishery. It would be a benefit if northern pike abundance increased, however, recruitment appears to be quite low. It is recommended to continue to transfer northern pike into Halsey Lake from connected waters if the opportunity arises. It would be ideal to complete a northern pike population estimate, however, low abundance and inability to sample a large portion of the lake makes it unlikely. The current statewide regulations are appropriate.

The Halsey Lake bass populations are of very low abundance, and low size structure. The 2013 survey of Halsey Lake showed very high abundance of largemouth bass, with

poor growth and size structure. The current special regulation for bass was put in place as an attempt to reduce abundance and increase growth and size structure. The winterkill nearly wiped out the largemouth bass population, and consideration could be given to remove the special regulation. Considering that winterkill will likely be mitigated in the future, and that Halsey Lake has a history of largemouth bass overabundance, the current regulations are likely the best option.

Previous surveys have shown an abundant yellow perch population with impressive growth rates, but poor size structure. It was determined that overharvest of yellow perch was an issue, and a restrictive panfish regulation was put in place to improve size structure. Yellow perch typically survive winterkill relatively well, and it is still a mystery as to what happened to the yellow perch population. Nonetheless, Halsey Lake currently supports low abundance, high quality populations of bluegill, pumpkinseed, and black crappie. Bluegill growth is exceptional in Halsey Lake, as bluegill grow to 7 inches in only half the time of the regional average. The current panfish metrics continue to support a restrictive regulation. However, the current regulation is no longer an option, and a proposal to change the panfish regulation to an aggregate 10 fish daily bag limit was proposed and supported by the public. It will go into effect for 2026.

Halsey Lake has a very abundant bullhead population with good size structure. The nature of this lake promotes bullhead success, as they thrive in winterkill style lakes and can provide a quality fishery when other fish cannot. However, the overabundance of bullhead does not fit well with current management goals as bullhead have been found to limit walleye recruitment and can lead to declines in other fish species through predation and competition for resources. Now that an aeration unit has been installed, and winterkill minimized, Halsey Lake would be a good candidate for a large-scale bullhead removal. Approximately 600 bullheads were removed during surveys in 2024, but no effort was directly targeting bullheads for removal. The current bullhead population in Halsey Lake provides an exceptional opportunity for harvest-oriented anglers and we encourage harvest of bullheads.

Halsey Lake is on an 11-year sampling rotation and is scheduled for its next comprehensive survey in 2035.



*Picture 6. A picture of a DNR work boat on a trailer at the Halsey Lake boat launch (Florence County, Wisconsin) from the 2024 comprehensive survey when ice reformed on the lake, postponing survey efforts.*

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