



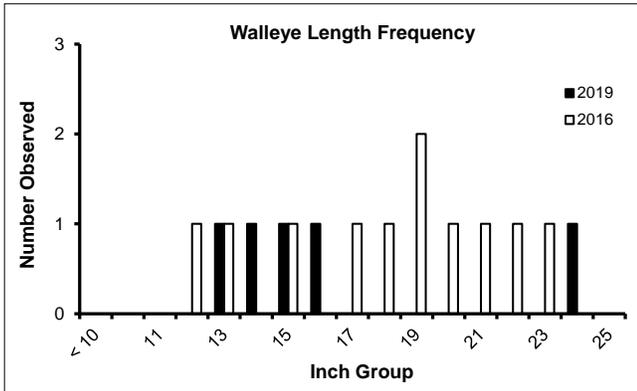
WISCONSIN DNR
FISHERIES INFORMATION SHEET

LAKE: Twin Falls Flowage

COUNTY: Florence

YEAR: 2019

The Wisconsin Department of Natural Resources conducted a comprehensive survey of Twin Falls Flowage, Florence County, to analyze the health of its fishery. Twin Falls Flowage is an impoundment of the Menominee River located between Florence, WI and Iron Mountain, MI. The entire flowage is considered a WI-MI Boundary water and can be fished with either state's fishing licence. There are multiple boat access points on this flowage, but the most improved access is in Vagabond Park, just off US HWY 2 on the WI side of the flowage. Twin Falls Flowage covers approximately 928 acres and achieves a maximum depth of 50 feet.



* Note: Adult walleye are defined as all sexually mature fish and all fish of unknown sex ≥ 15 inches long.

Walleye



Nets were set on April 15th, shortly after ice was off the main river channel, and were fished through April 25th, to assess the walleye and northern pike populations within the flowage. However, even with tremendous effort put forth, only 5 walleye were captured. With a relative abundance of one walleye captured for every 24 net-nights, abundance was similar to the last survey where one walleye was captured for every 27 net-nights of effort. The walleye population is of extremely low abundance, well below what is considered a "fishable" population.

Every walleye captured during our spring survey was measured to assess size structure. The 5 walleye captured during 2019 ranged from 13.2 to 24.6 inches in length in this small sample.

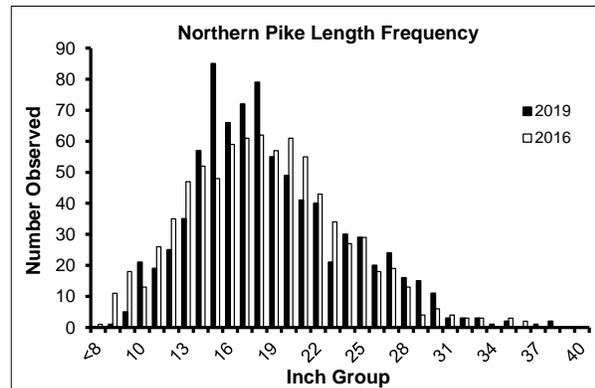
Due to the low abundance of walleye, the WI DNR has recently begun a stocking initiative to try to increase the walleye population in Twin Falls Flowage. WDNR plans to stock approximately 9,280 large fingerling walleye (7-8 inches in length) every other fall, during even numbered years.

Northern Pike

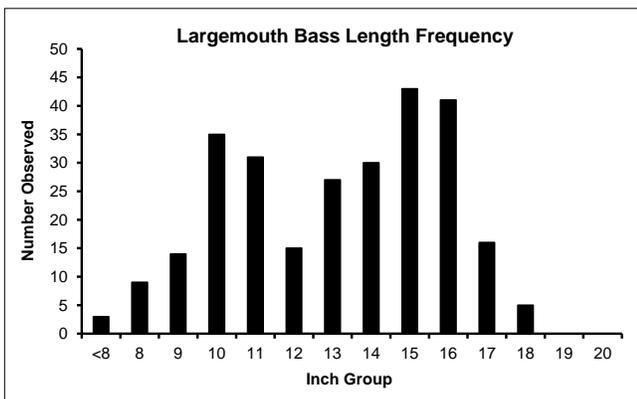


Northern pike were the main target during our early spring fyke net survey in 2019. A total of 739 different northern pike (716 considered adults) were captured and marked with an identifiable fin clip during the spring fyke net survey from 4/15 to 4/23/2019. A second sample of northern pike was collected with fyke nets from 4/24 to 4/25/2019. The data from these surveys estimate the adult northern pike population in Twin Falls Flowage at approximately 2,229 fish (2.4/acre). The 2019 population estimate suggests a slight decrease in northern pike abundance since 2016 when the adult population was estimated to be 3.1 adults/acre. At nearly 2.5 adults per acre, the northern pike population in this flowage is of moderate abundance, and is just below the average abundance in this area.

During the 2019 survey we captured a total of 831 different northern pike, all of these fish were measured to assess size structure. The size structure of the northern pike population in Twin Falls Flowage has improved slightly from the 2016 survey, but is still below average for this area with 36.1% of the fish sampled being ≥ 21 inches, and 7.9% ≥ 28 inches in length. The largest northern pike captured during our survey was 38.9 inches long.



* Note: Adult northern pike are defined as all sexually mature fish and fish of unknown sex ≥ 12 inches long.



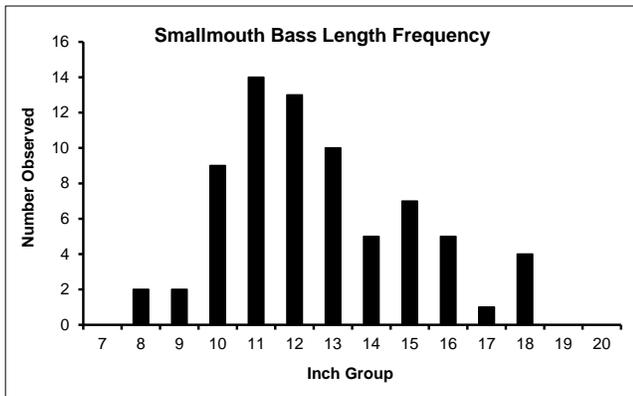
* Note: Adult bass are defined as all bass ≥ 8 inches long.

Largemouth Bass



The largemouth bass population was assessed during an electrofishing survey conducted the night of 5/28/2019. Four stations covering a total of 10.8 miles of shoreline in the lower flowage were surveyed. During this survey a total of 269 different largemouth bass were captured, with 266 considered to be adults (≥ 8 inches). Relative abundance of adult largemouth bass was measured at 24.7 adults per mile, nearly double the average relative abundance of largemouth bass in this area. All in all, the Twin Falls Flowage largemouth bass population is considered to be abundant.

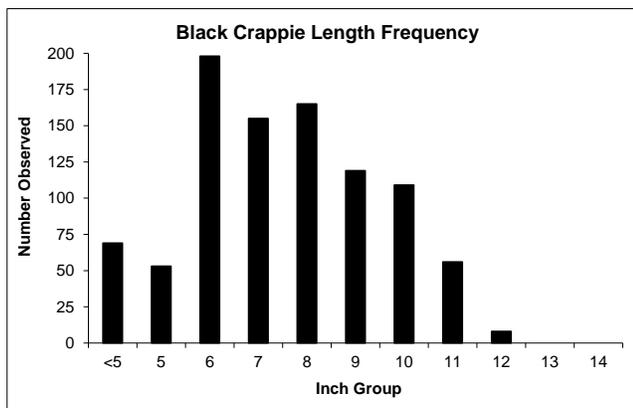
Every largemouth bass captured during the bass electrofishing survey was measured to assess the size structure of the population. The size structure of the Twin Falls Flowage largemouth bass population is better than the area average with approximately 50.8% of the largemouth bass captured being ≥ 14 inches and 23.3% ≥ 16 inches in length.



Yellow Perch 

Relative abundance of yellow perch during the spring fyke net survey was measured at 0.6 fish per net-night. This is a similar abundance to what was measured during the 2016 survey, and suggests that yellow perch are of low abundance in Twin Falls Flowage.

All 72 yellow perch captured during the 2019 survey were measured to assess the size structure of their population. Yellow perch size structure is just above average for this area with 23% of the fish sampled being ≥ 8 inches.



Bluegill 

Nets were set in mid June to assess the summer spawning panfish populations in Twin Falls Flowage. Bluegill are the most abundant panfish in the flowage with a relative abundance of 70.6 fish per net-night. At approximately 70 fish per net-night the abundance of the bluegill population in Twin Falls Flowage is above average when compared to other area lakes.

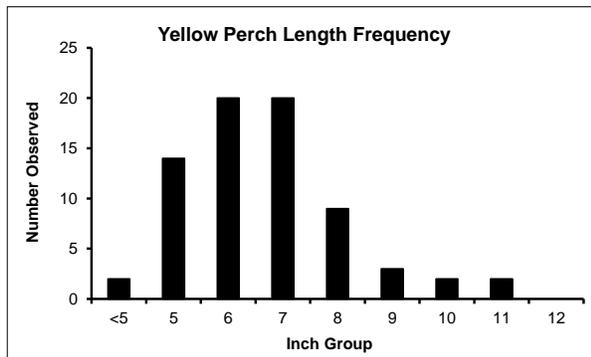
Every bluegill captured, a total of 1,060 fish, was measured during our panfish survey to assess the size structure of the population. Bluegill size structure is right at the area average with approximately 67.2% of the fish being ≥ 6 inches and 33.0% of the fish being ≥ 7 inches in length.

Smallmouth Bass



Smallmouth bass were assessed during the same survey as largemouth bass. During the electrofishing survey a total of 72 different smallmouth bass were captured, all of these fish were adults (≥ 8 inches). Relative abundance of adult smallmouth bass was measured at 6.7 adults per mile, suggesting that smallmouth bass are considerably less abundant than largemouth bass in the lower flowage. Smallmouth bass are considered to be of moderate to low abundance in the lower portion of Twin Falls Flowage.

All 72 of the fish captured were measured to assess the size structure of the population. With 30.6% of the smallmouth being ≥ 14 inches and 6.9% ≥ 17 inches the size structure of this population is below average for this area.

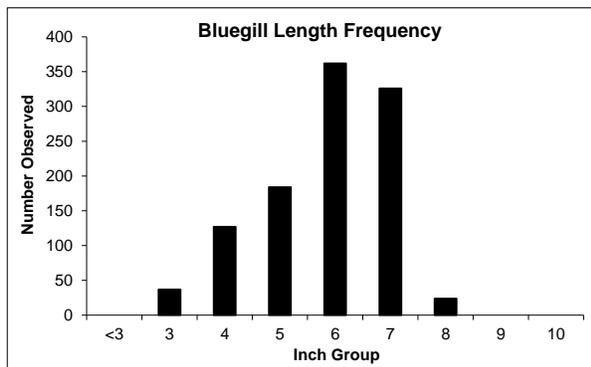


Black Crappie



Just like yellow perch, black crappie abundance was assessed during the early spring fyke net survey, where their relative abundance was measured at 10.3 fish per net-night, nearly double the relative abundance from the 2016 survey. Making the Twin Falls Flowage population one of the more abundant black crappie populations in Florence County.

A Random sample of 932 black crappie was measured during the early spring survey to assess size structure. The size structure of the population is slightly below the average for the area, however, with 53.0% of the fish being ≥ 8 inches, and 20.0% of the fish being ≥ 10 inches in length this population is still quite desirable.



Other Species

The species listed above were the focus of the 2019 survey, with surveys designed to best sample these individual species. Other species captured during our survey efforts include; brook trout, pumpkinseed, hybrid bluegill, rock bass, white sucker, golden shiner, and common shiner. Based on catch rates and observations during this survey, pumpkinseed are considered to be of moderate abundance, white sucker and shiners are of low to moderate abundance, while rock bass and hybrid bluegill are considered to be of low abundance. Brook trout are of low abundance and can only survive in the flowage seasonally. Angler access is considered sufficient with multiple boat landings on Twin Falls Flowage.

Comments

Flowages like Twin Falls Flowage are tough to properly assess due to early ice out, water temperatures controlled by inflow and the ability of fish to migrate to areas that are inaccessible due to high flows and shallow water.

This report is interim only; data and findings should not be considered final.
For answers to questions about fisheries management activities and plans for Twin Falls Flowage contact:

Greg Matzke, Fisheries Biologist
Wisconsin Department of Natural Resources
(715) 528-4400 Ext: 5 [Email: Gregory.Matzke@Wisconsin.gov](mailto:Gregory.Matzke@Wisconsin.gov)

Jennifer Johnson, Fisheries Biologist
Michigan Department of Natural Resources
(906) 563-9247 Ext: 113 [Email: Johnsonj17@Michigan.gov](mailto:Johnsonj17@Michigan.gov)