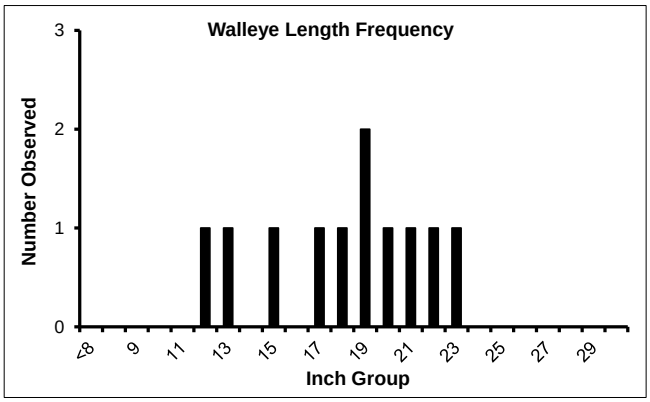
WISCONSIN DNR
FISHERIES INFORMATION SHEET

LAKE: Twin Falls Flowage **COUNTY:** Florence **YEAR:** 2016

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 o n 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

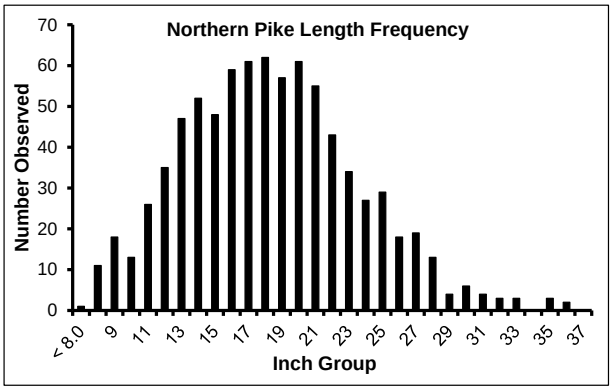
Nets were set at ice-out to assess the walleye and northern pike populations within the flowage. With the abnormal spring weather the netting survey was much more thorough than a typical spring survey. However, even with tremendous effort put forth, only 11 walleye were captured. With a relative abundance of one walleye captured for every 27 net-nights of effort this population is well below what is considered a "fishable" population.

Every walleye captured during our spring survey was measured to assess size structure. From this small sample, approximately 81.8% of the fish sampled were ≥ 15 inches and 36.4% were ≥ 20 inches.

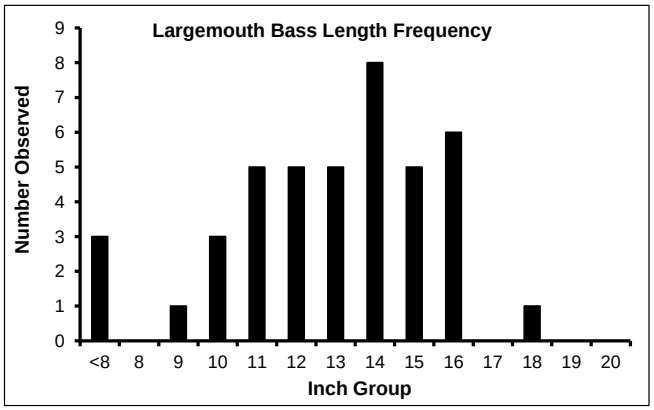
Northern Pike

Northern pike were captured and marked with an identifiable fin clip during the spring fyke net survey from 3/26 to 4/15/2016. A second sample of northern pike was collected with fyke nets from 4/16-18/2016. The data from these surveys estimate the adult (≥ 12 inches) northern pike population in Twin Falls Flowage at approximately 2,903 fish (3.1/acre). At just over 3 adults per acre, the northern pike population in this flowage is of average abundance when compared to other populations in the area.

During the 2016 survey we captured a total of 814 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 is below average with only 39.7% of the fish sampled being ≥ 21 inches, and 5.7% ≥ 28 inches in length. The largest northern pike captured during our survey was 36.4 inches long.



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

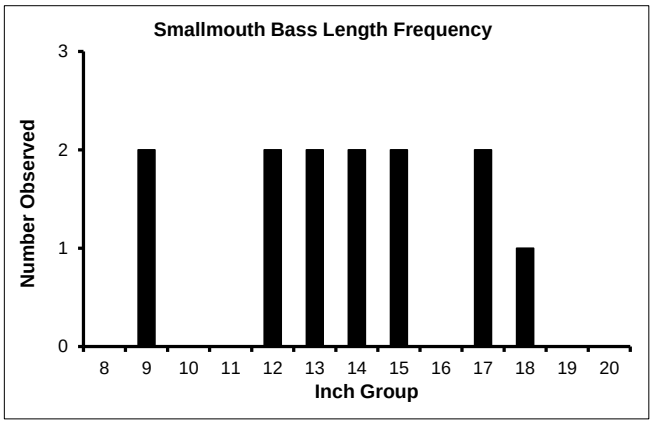


* Note: Adult bass are defined as all bass ≥ 8 inches long.

Largemouth Bass

The largemouth bass population was assessed during an electrofishing survey conducted the night of 6/7/2016. During this survey a total of 42 different largemouth bass were captured, with 39 considered to be adults (≥ 8 inches). Relative abundance of adult largemouth bass was measured at 7.8 adults per mile. However, actual abundance is likely higher than what was measured since only a single netter was used during the survey. All in all, the Twin Falls Flowage largemouth bass population is considered to be of moderate abundance, when compared to other populations in the area.

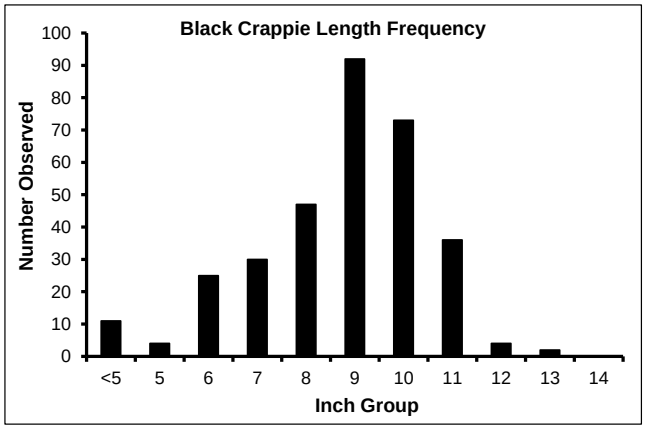
Every largemouth bass captured during the bass electrofishing survey was measured to assess the size structure of the population. The size structure of the Twin Falls Flowage largemouth bass population is good with approximately 51.3% of the largemouth bass captured being ≥ 14 inches and 17.9% ≥ 16 inches in length.



Yellow Perch

Relative abundance of yellow perch during the spring fyke net survey was measured at 0.4 fish per net-night. A catch rate of less than half of one fish per net-night suggests that yellow perch are of low abundance in Twin Falls Flowage.

All 39 yellow perch captured during the 2016 survey were measured to assess the size structure of their population. Yellow perch size structure seems to be good with 27% of the fish sampled being ≥ 8 inches.



Bluegill

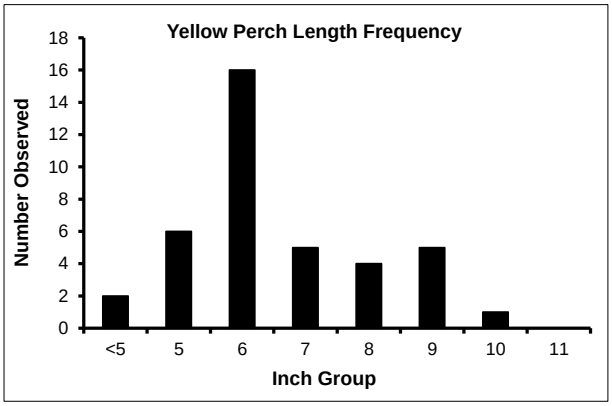
Nets were set in mid June to assess the summer spawning panfish populations in Twin Falls Flowage. Bluegill appear to be the most abundant panfish in the flowage with a relative abundance of 35.8 fish per net-night. At approximately 35 fish per net-night the abundance of the bluegill population in Twin Falls Flowage is slightly above average when compared to other area lakes.

A random sample of 286 bluegill were measured during our panfish survey to assess the size structure of the population. Bluegill size structure is slightly below the area average with approximately 51.0% of the fish being ≥ 6 inches and 28.3% 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 13 different smallmouth bass were captured, all of these fish were adults (≥ 8 inches). Relative abundance of adult smallmouth bass was measured at 2.6 adults per mile, but just like largemouth bass, actualy abundance is likey higher than what was measured during this survey.

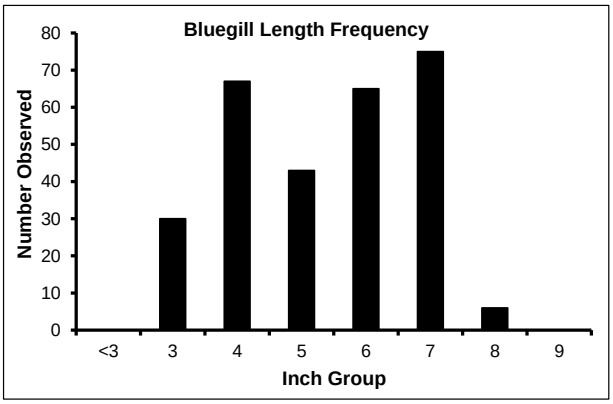
All 13 of the fish captured were measured to assess the size structure of the population. The fish in this small sample were evenly distributed between 9.0 and 18.4 inches in length.



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 5.2 fish per net-night. Black crappie appear to be the second most abundant panfish in the flowage, and the abundance of the Twin Falls population is above average when compared to other populations in the area.

A Random sample of 324 black crappie was measured during the 2016 survey to assess size structure. The size structure of the population is above average for the area with 81.2% of the fish being ≥ 8 inches, and 36.7% of the fish being ≥ 10 inches in length.



Other Species

The species listed above were the focus of the 2016 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. This flowage seems to have moderate fishing pressure and a creel survey would enhance our management of these waters.

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 inaccessable 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 activites and plans for Twin Falls Flowage contact:

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