The Wisconsin Department of Natural Resources along with the Mole Lake Chippewa Community conducted a comprehensive survey of Trump Lake, Forest County, to analyze the health of its fishery. Trump Lake is located approximately 3 miles north of Wabeno, with boat access off of Trump Lake Road. Trump Lake covers 172 acres and achieves a maximum depth of 25 feet.

A mark-recapture survey was conducted to estimate the abundance of adult walleye in Trump Lake during 2017. Over a four day period in April a total of 220 different walleye, 121 being adults, were captured during fyke net and electrofishing surveys. Based on our survey data we estimate the adult walleye population in Trump Lake to be approximately 196 fish (1.1/acre). There has never been evidence of natural reproduction by walleye in Trump Lake. The current Trump Lake walleye population has been created by aggressive stocking efforts by the Trump Lake Association and Mole Lake Chippewa Community. At just over 1 adult walleye per acre this population is considered to be of low abundance. However, additional surveys were conducted during 2017 to assess the success of the current stocking program, these surveys suggest there is a large year class of two year old walleye (estimated at 1.9/acre) from the last major stocking event. If the Lake Association continues their walleye management the adult population will likely continue to increase in the future.

Every walleye captured during our spring survey, 220 fish, was measured to assess size structure. The size structure of this relatively young walleye population in Trump Lake is considered good with approximately 60.1% of the population being ≥ 15 inches and 3.6% ≥ 20 inches.

Largemouth Bass

Largemouth bass were captured during both spring netting surveys as well as 3 electrofishing surveys that took place between 4/13 and 5/24/2017. During these surveys a total of 290 different adult (> 8 inches) largemouth bass were captured during spawning season. These fish were allowed to mix back into the population before we conducted our recapture surveys on 6/5 and 6/6/2017. During the recapture survey a total of 164 largemouth bass were captured, with 30 fish bearing the fin clip given during the marking survey. With the data obtained from our bass surveys we estimated the largemouth bass population (> 8 inches) to be approximately 1,220 fish. At approximately 7.1 adults/acre the Trump Lake population is considered very abundant. However, the adult largemouth bass population has declined by approximately 48% since 2011 when the adult population was an estimated 13.6 fish per acre.

The decrease in largemouth bass abundance since 2011 is directly related to the removal of a protective 18-inch minimum size limit, replaced with the current regulation (no min length, 14-18” protective slot), which went into effect in 2013. The current bass regulation appears to be working as planned. The largemouth bass population will likely be reduced further in the near future, which will help the fishery become more balanced.

A total of 404 different largemouth bass were captured and measured to assess the size structure of the population. The size structure of the Trump Lake largemouth bass population is still considered poor with approximately 84.0% of the largemouth bass captured being ≥ 12 inches and 30.0% ≥ 14 inches. However, size structure has improved greatly since 2011 when only 53.3% and 2.8% of the population was ≥ 12 and 14 inches respectively.

Like walleye, adult northern pike were captured and marked with an identifiable fin clip during the early spring portion of our survey. A second sample of northern pike was captured during the muskellunge, juvenile walleye, and largemouth bass portions of the 2017 survey. The data from these surveys estimate the adult (> 12 inches) northern pike population in Trump Lake at approximately 41 fish (0.24/acre). There is a quarter of an adult per acre, the northern pike population in Trump Lake is considered to be of very low abundance. In fact, the Trump Lake population is currently the least dense population of adult northern pike in Florence and Forest Counties.

During the 2017 survey we captured a total of 22 different northern pike, all of these fish were measured to assess size structure. Like most low density populations, the size structure of northern pike is considered very good, with 95.2% of the fish sampled being ≥ 21 inches, and 23.8% ≥ 28 inches in length. The largest northern pike captured during our survey was 35.8 inches long.
**Muskellunge**

Muskellunge were introduced to Trump Lake when a small number of fish were stocked in 1969, with one more stocking of muskellunge in 1988. Previous survey work to assess the muskellunge population has been minimal, with the assumption that the population was capable of maintaining a fishable population through natural reproduction.

Two adult muskellunge were captured during the early spring netting portion of the 2017 survey. A more extensive survey targeting muskellunge was then conducted from 4/25 to 5/11/2017, capturing one more adult muskellunge. The results of the 2017 survey confirm that muskellunge are present in Trump Lake, and the population is a product of a limited amount of natural reproduction. However, the population appears to be of extremely low abundance, likely below what would be considered a fishable population.

The largest muskellunge captured during our survey was a 46.5-inch female that weighed 23.8 pounds.

**Note:** Adult muskellunge are defined as all fish > 30 inches long.

**Other Species**

The early spring netting and muskellunge netting surveys were used to assess abundance of yellow perch and black crappie in Trump Lake. Relative abundance of yellow perch was measured at 0.3 fish per net-night during early spring, and 0.1 fish per net-night during the muskellunge netting survey. Black crappie abundance was 5.5 and 2.1 fish per net-night during the same surveys. Yellow perch are considered to be of very low abundance, while black crappie are of low to moderate abundance, when compared to other populations in the area.

While too few yellow perch were captured to assess size structure, a random sample of 370 black crappie was measured to assess the size structure of their population. Black crappie size structure was quite good with 85.4% of the fish being > 8 inches, and 14.3% of the fish being > 10 inches in length.

Nets were set in mid June to assess the summer spawning panfish populations in Trump Lake. Bluegill are the most abundant panfish in Trump Lake with a relative abundance of 178.4 fish per net-lift. At over 175 bluegill per net-lift the bluegill population in Trump Lake is considered to be very abundant.

Bluegill have always been very abundant in Trump Lake. In fact, over abundance of bluegill is what led to the 18-inch minimum length limit for largemouth bass in 1996. The rationale behind the protective regulation was quite simple. By increasing largemouth bass abundance, predation on bluegill would increase, reducing bluegill abundance. While the current bluegill population is not over abundant, concerns that the population could become over abundant are still valid. I am hopeful that the development of a respectable adult walleye population, as well as the current protection of larger largemouth bass will be sufficient at keeping the bluegill population in check.

Every bluegill captured on the first day of panfish netting, a total of 685 fish, was measured to assess the size structure of the population. Bluegill size structure is considered moderate with approximately 60.0% of the fish being > 6 inches and 4.2% of the fish being > 8 inches in length.

The species listed above were the focus of the 2017 survey, with surveys designed to best sample these individual species. Other species captured during our survey efforts include; smallmouth bass, pumpkinseed, rock bass, hybrid bluegill, warmouth, hybrid warmouth, yellow bullhead, white sucker, and golden shiner. Based on catch rates and observations during this survey, pumpkinseed, rock bass, and yellow bullhead are of low to moderate abundance. Hybrid bluegill, warmouth, hybrid warmouth, white sucker and golden shiner are of low abundance, while smallmouth bass are considered rare.

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*This report is interim only; data and findings should not be considered final.*

For answers to questions about fisheries management activities and plans for Trump Lake contact:

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