

Lake of the Woods Stock Status Update, 2021

Walleye

- Walleye catch in the 2021 gill net sample averaged 11.5 per net, below the 2002 to 2020 average of 16.6 (Figure 1). The 3-year average abundance is at the management goal. Current Walleye abundance is near the levels observed in the late 2000s.
- The 2011, 2013 and 2014 year classes were strong, while 2015 and 2016 year classes are of average strength (Figure 2). The 2017 and 2019 year classes are weak. Due to sampling restrictions in 2020, no prediction can be made for the 2020 year class. Early observations of the 2021 year class is that it will be average strength.
- Small Walleye, from 7 and 10 inches long are abundant (2020 and 2021 year-classes; Figure 3). Walleye from 11to13 inches were slightly below average in 2021. Walleye exceeding 18 inches were well above the historic average.

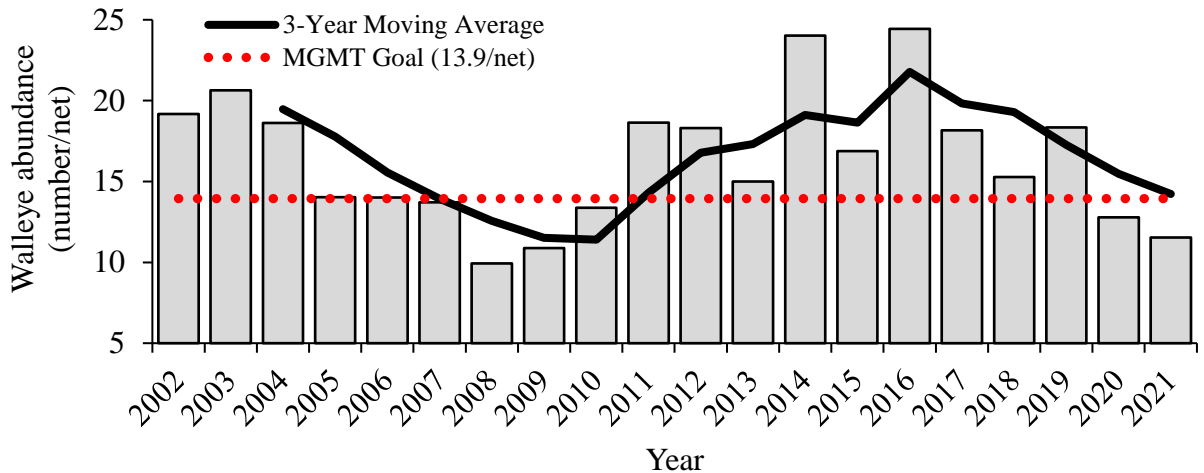


Figure 1. Average of near shore and off shore catch per unit effort of Walleye in September gill nets, 2002 through 2021.

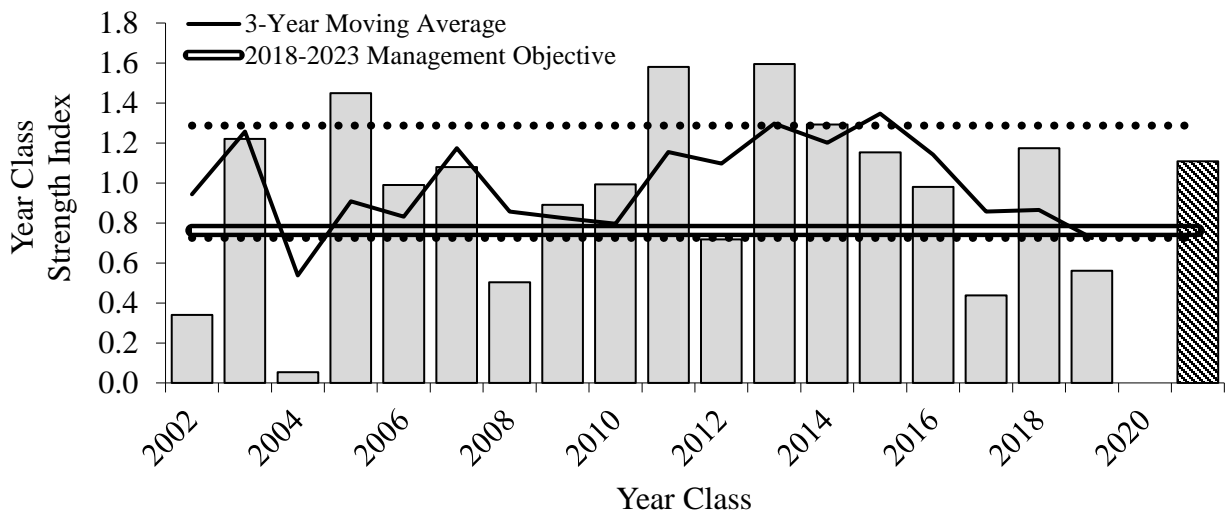


Figure 2. Year class strength of Walleye in Lake of the Woods from 2002-2021 (no prediction was made in 2020). Fished hatched in 2021 and not considered fully vulnerable to gill nets; therefore strength values are predicted.

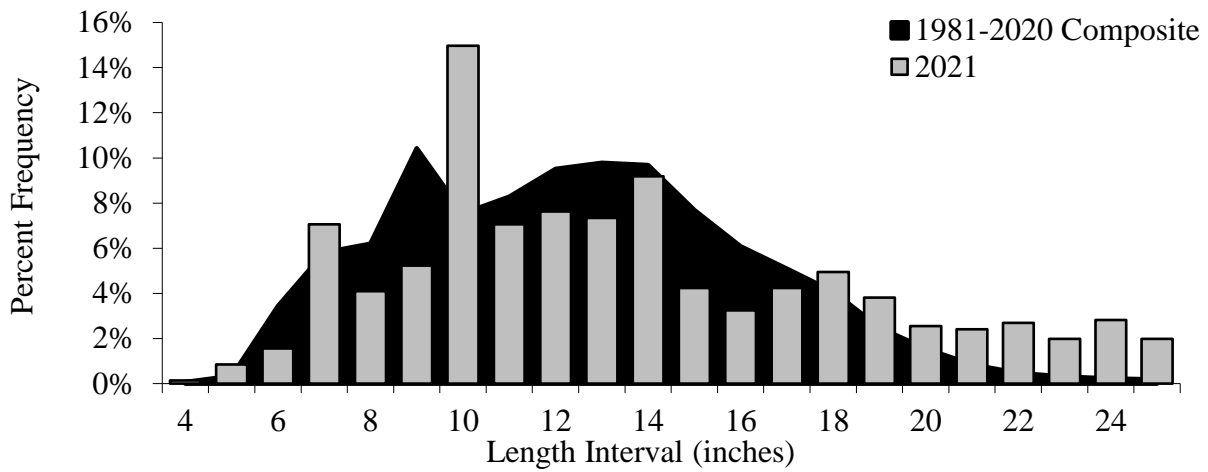


Figure 3. Walleye size distribution from 2021 fall gill net survey (gray bars). Shaded area denotes the average length frequency from 1981-2020.

Sauger

- Strong year classes were produced from 2014 to 2017 and 2019, and driving high catches in recent years (Figures 4 & 5). Sauger from 9 to 13 inches (Figure 6) are above average in abundance. Small Sauger, 6 to 8 inches, were below average suggesting the 2020 and 2021 year-classes are weak in strength.

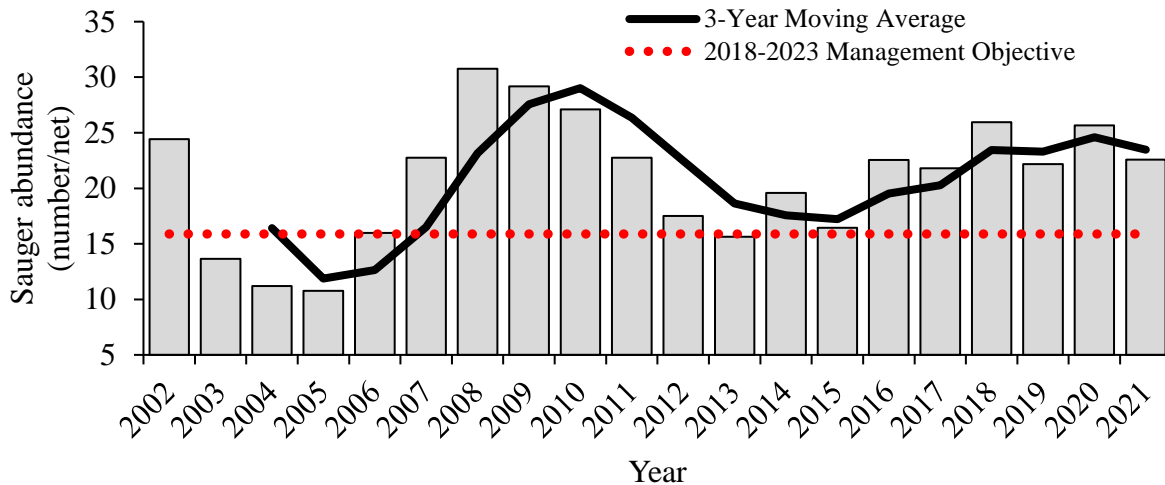


Figure 4. Average of near shore and off shore catch per unit effort of Sauger in September gill nets, 2002 through 2021.

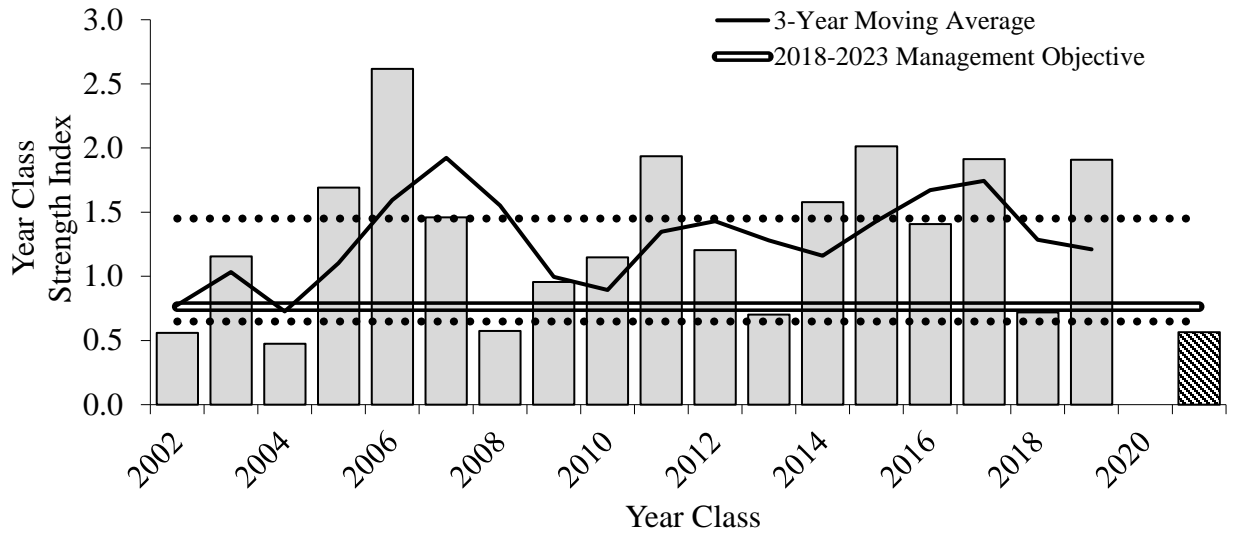


Figure 5. Year class strength of Sauger in Lake of the Woods from 2002-2021. Fished hatched in 2021 and not

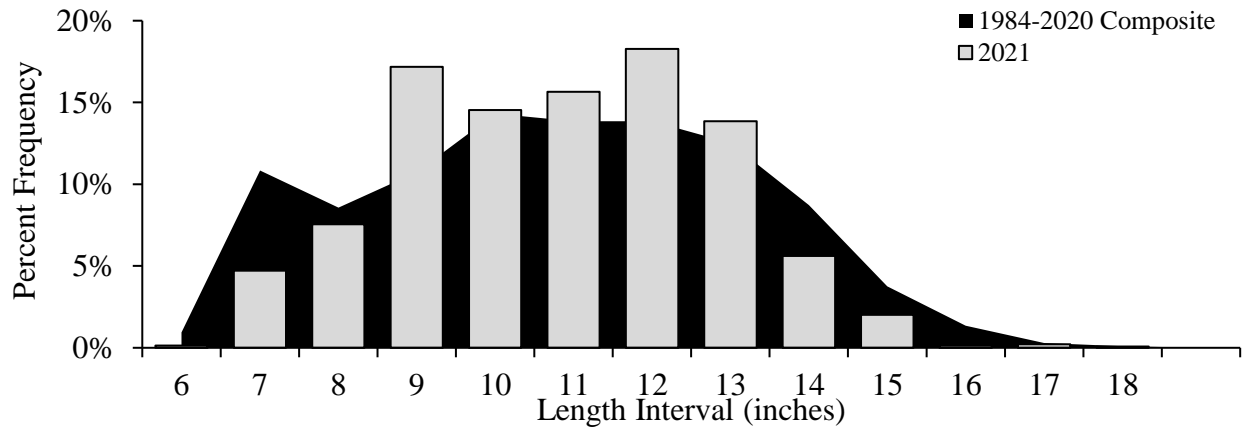


Figure 6. Sauger size distribution from 2020 fall gill net survey (gray bars). Shaded area denotes the average length frequency from 1984-2019.

Creel Survey Highlights

- Winter 2020-2021: Winter fishing pressure was estimated at 2.7 million angler-hours, approximately 500,000 angler-hours above average. Current six-year average winter harvest is 250,000 pounds for Walleye and 350,000 pounds for Sauger. Winter harvest in 2020-21 was 215,000 pounds for Walleye, and 312,000 pounds for Sauger (a three-year downward trend for both species). Both winter and summer creel surveys are scheduled for 2022.