

**From:** "Bruesewitz, Rick (DNR)" <[rick.bruesewitz@state.mn.us](mailto:rick.bruesewitz@state.mn.us)>

**Date:** October 11, 2023 at 3:36:36 PM CDT

**To:** dennis kraimer <[dkkraimer@hotmail.com](mailto:dkkraimer@hotmail.com)>

**Subject:** RE: Farm Island update

Hi Dennis,

Here's an update.

We surveyed the lake this summer and found good numbers of walleye. They were 8/net in the gill net assessment and had good size structure and good numbers of recruits (you ones) coming up.

Unfortunately, we also had the highest number of northern pike that we have seen at almost 16/net. They were small too with less than 10% over 24 inches and even fewer over 26 inches. I'm not sure, but this might be related to the clearer water. We'll see.

Like you, we also saw way more smallmouth bass. None to 21" but numbers of them such that in there were actually more in the gillnets than there were Largemouth Bass.

We also finished fall electrofishing for juvenile walleye last Saturday. Normally we wouldn't work on the weekend for this survey but we had really been battling the wind and so I didn't want to take a chance on not having two good nights this week (we had also needed to do Big Sandy). Results were pretty mediocre. Young of the year catch rates were only about 13.5, which is about ½ of average. That said, we have seen other decent year classes appear after a mediocre catch so we'll just wait and see.

Lastly, I want to chat a little about water quality. While water clarity is improving, the depth where there is at least 2 parts per million of dissolved oxygen is getting shallower. This is a function of the watershed and essentially oxygen consumption in the deep water. It is showing a disturbing trend such that the lake is clearer yet oxygen is going away sooner in the deeper water. This limits walleye habitat from two directions. Very similar to the thermal issues with Cisco (Tullibee), they are essentially getting squeezed and thus lose habitat that ordinarily would be available to them.

Below are a few charts for you to peruse.

Feel free to sling questions my way.

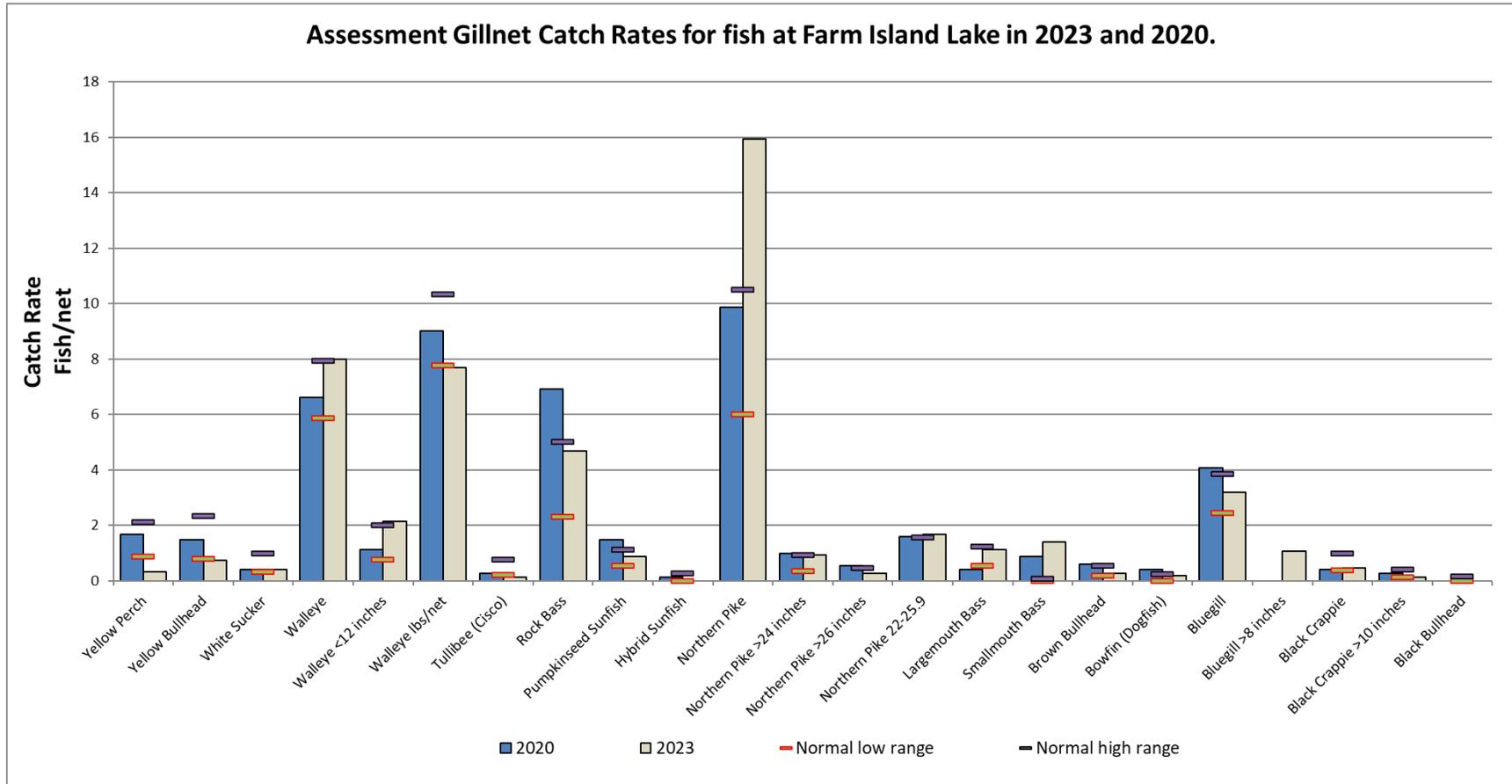
Rick

**Rick Bruesewitz** Aitkin Area Fisheries Supervisor | Fish and Wildlife

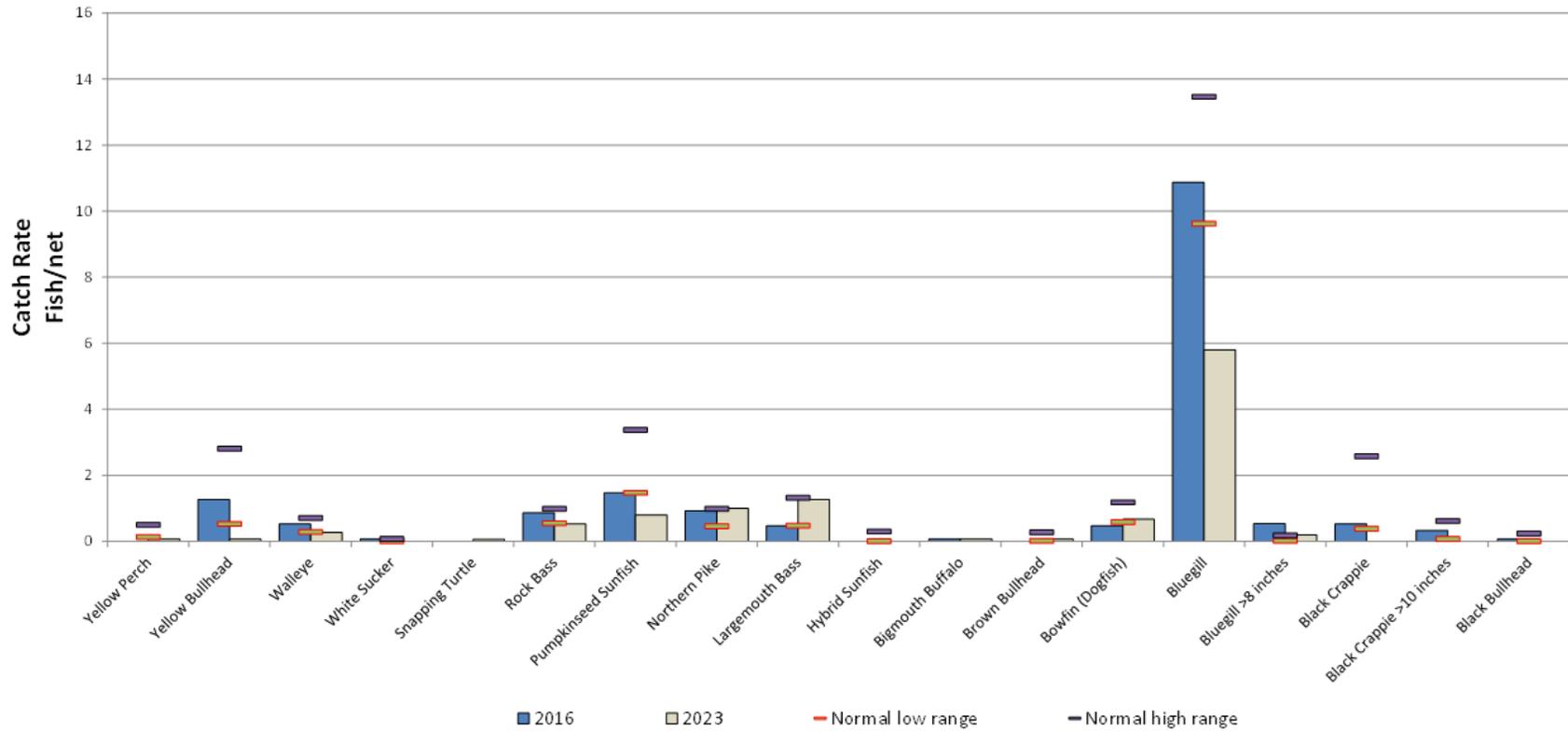
**Minnesota Department of Natural Resources**, 1200 Minnesota Ave S., Aitkin, MN 56431

Phone: 218-429-3037, Email: [rick.bruesewitz@state.mn.us](mailto:rick.bruesewitz@state.mn.us)

**Assessment Gillnet Catch Rates for fish at Farm Island Lake in 2023 and 2020.**



Assessment Trap Net Catch Rates for fish at Farm Island Lake in 2023 and 2016.



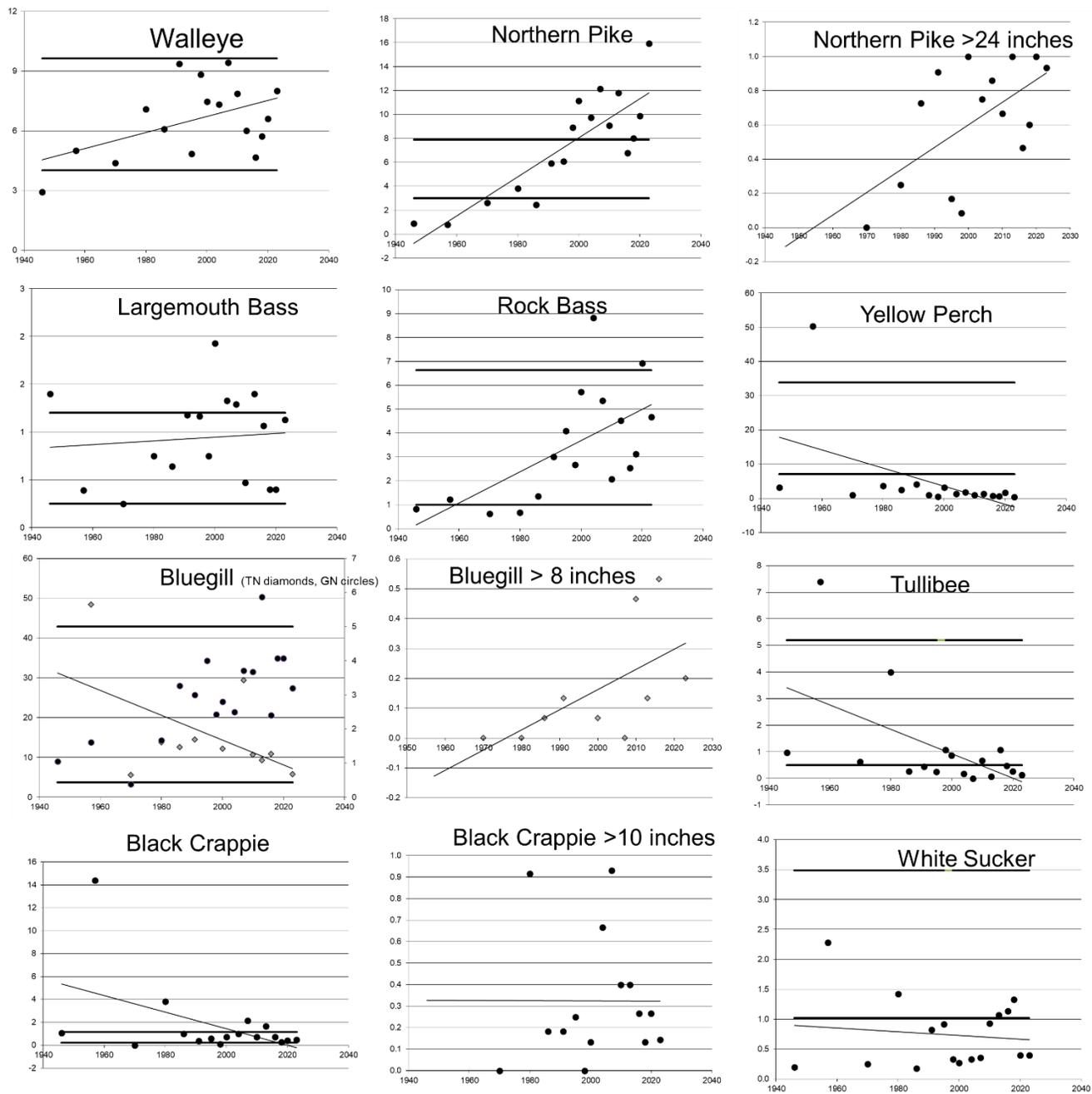
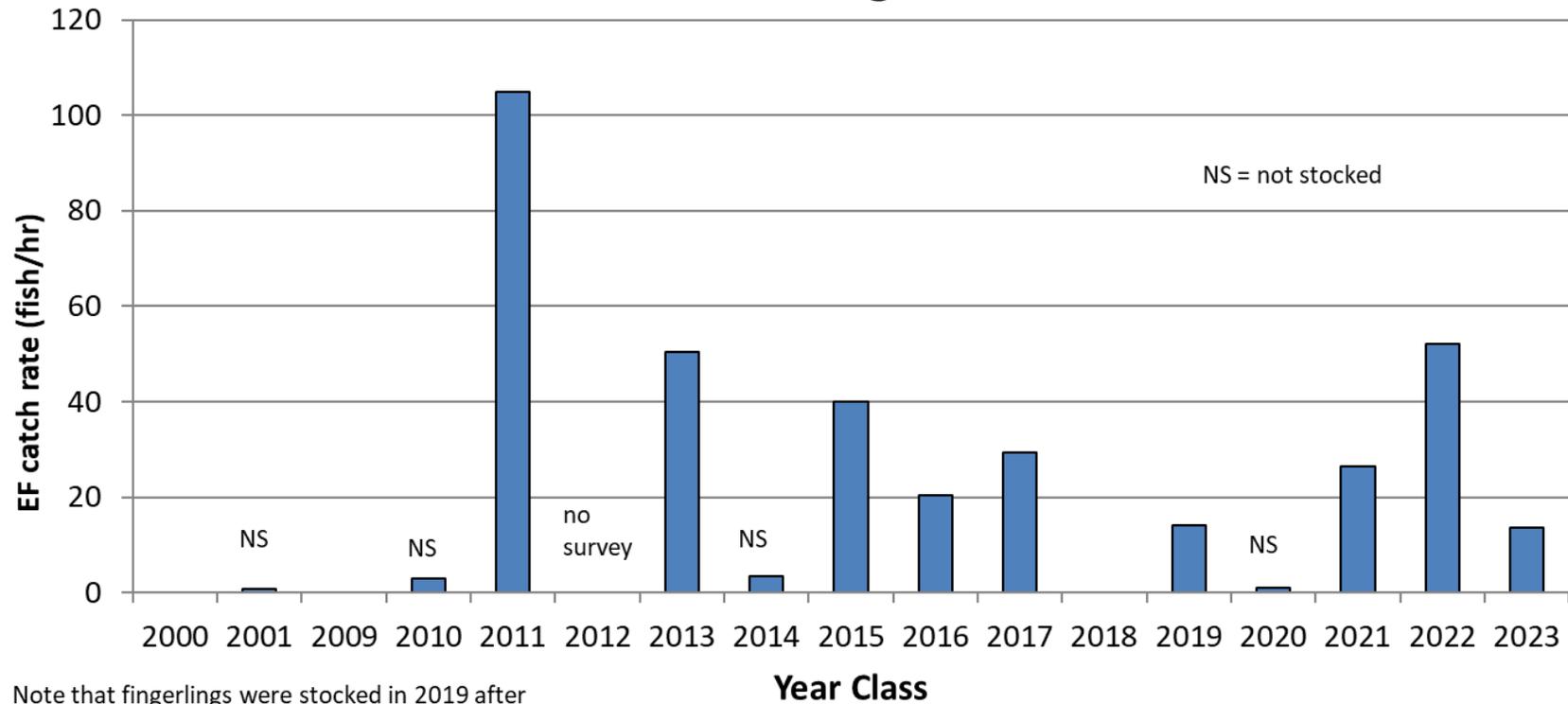


Figure 1. Catch rates of various species in Farm Island Lake assessment nets from 1946 thru 2023.

# Farm Island Lake Walleye Young-of-the-Year Electrofishing Catch rates



Note that fingerlings were stocked in 2019 after electrofishing but may have helped comprise the catch as yearlings in the following survey.

### Farm Island Lake - Secchi and Depth at Dissolved Oxygen of 2 ppm (DDO2)

