

Office of Applied Science

Project Highlight



Biotic and abiotic factors that influence walleye recruitment in ceded territory lakes

Researchers in the Office of Applied Science conducted electrofishing surveys on Escanaba Lake in September to study walleye recruitment in Northern Wisconsin lakes. This effort is part of Northern Lakes Fisheries Research Scientist Dr. Stephanie Shaw's work on how biotic and abiotic factors influence walleye populations. By studying lakes with a stable, naturally reproducing walleye population, we can learn what might be causing natural recruitment declines in other parts of the state.



Fisheries Technicians Katti Renik and Nick Hoffman prep the electrofishing vessel at the Northern Highland Fisheries Research Area on Escanaba Lake. That night, the team completed about 100 minutes of electrofishing to survey age-0 and age-1 walleye recruitment.



Fisheries Team Leader Dr. Greg Sass briefs Renik on the expected size of age-0 walleye prior to heading out. Recruitment surveys are done at night because walleye feed close to shore after dark and are easier to catch.



The vessel is equipped with a generator that sends an electric current down booms and cables that protrude from the bow of the boat and into the water. The electricity momentarily stuns fish, and special dip nets are used to safely bring them on board.



Renik takes length and weight measurements while Hoffman collects genetic fin samples. Communications Assistant Claire VanValkenburg removes fish from the holding tank for processing. After Sass recorded the data, walleye were released unharmed.