



Clear Lake, Mecosta County – 2025 Volunteer Northern Pike Survey Report
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Introduction

Clear Lake is a natural lake of glacial origin located in central Mecosta County, Michigan, several miles east of Big Rapids. Clear Lake is 130 acres and oval shaped. It has gradual drop-offs to its maximum depth of approximately 30 feet. The shoreline of Clear Lake is almost entirely privately-owned, except for a small MDNR public access site on the southern shoreline. The access site has a paved boat ramp and parking for about 8 vehicles and trailers. The lake is mostly developed with residential homes and cottages, and accompanying boat docks, seawalls, and swimming beaches. Scrutiny of satellite imagery shows only small areas of natural shoreline remaining on the lake.

Clear Lake was first stocked by the Michigan Fish Commission in 1874 with Lake Whitefish, and then with Brown Trout, Lake Trout and Smallmouth Bass in the 1890s. None of those stockings were successful. In the first half of the 1900s, Walleye, Largemouth Bass, Smallmouth Bass, Bluegill, Yellow Perch, and Rainbow Trout were stocked. Walleye were stocked in 1957, and that was the last time Clear Lake was stocked by the state.

Clear Lake has not been recently surveyed by MDNR. The most recent survey was conducted in 1966. Species caught in that survey included Black Crappie, Bluegill, Golden Shiner, Largemouth Bass, Northern Pike, Pumpkinseed, Yellow Bullhead, and Yellow Perch. Unfortunately, no report or data interpretation is available for that survey.

In recent years, we have been receiving numerous complaints from riparian landowners and anglers regarding the prevalence of stunted Northern Pike in Clear Lake (MDNR files, Cadillac office). The complaints have generally stated that sub-legal Northern Pike are extremely plentiful, and that it is nearly impossible to catch a Northern Pike exceeding 24 inches in the lake. As a result, a volunteer creel survey was conducted in the summer of 2025 to provide data on the Northern Pike of Clear Lake.

2025 Volunteer Northern Pike Creel Survey-Materials and Methods

While it would have been more desirable to have Fisheries Division staff conduct a comprehensive fisheries survey of Clear Lake, reduced staffing levels of field MDNR Fisheries personnel have made this impossible. Instead, volunteer anglers were recruited to collect dorsal spine samples for age/growth analysis by MDNR Fisheries Technicians. The volunteers were instructed on how to properly measure the Northern Pike and on how to remove the dorsal spines. The spines were placed into scale envelopes, dried, and then analyzed by MDNR Fisheries Technicians. The goal of the Northern Pike spine collection effort was to examine the growth rates of Northern Pike in Clear Lake.

Results

A total of 28 dorsal spine samples were collected for Northern Pike caught from Clear Lake (Table 1). The Northern Pike that were analyzed ranged from 12.0 to 16.0 inches in length. Four different year classes were present in the catch, including ages 1 through 4. No Northern Pike exceeded the current minimum size limit of 24 inches.

Discussion



Growth analysis from the Northern Pike sampled in 2025 revealed that they were growing extremely slowly (Table 1). For the one age class where enough were aged to be able to make statistical determination (a minimum of 5 is required), the Northern Pike were growing more than 4 inches below the State of Michigan average. Northern Pike from two of the other determined age classes were also growing very slowly and well behind the state average.

Management Direction:

The 2025 volunteer Northern Pike survey of Clear Lake was successful in that it provided crucial information on Northern Pike age and growth, leading to the conclusion that the Northern Pike in Clear Lake are growing extremely slowly and are stunted. Therefore, the regulations on Northern Pike in Clear Lake should be changed to no minimum size limit, with a 5 fish per day catch limit (only one over 24 inches).

Table 1. Age distribution of Northern Pike caught by anglers from Clear Lake, Mecosta County, during June 2025.

Year Class	Age	No. Aged	Length range (in.)	Ave. length	State Ave. length
2024	I	4	13.5-15.3	14.1	11.7
2023	II	19	12.8-16.0	14.7	19.0
2022	III	4	13.3-16.1	15.1	21.8
2021	IV	1	15.5	15.5	24.2