

## The Curious Fisherman

By Jack Mulka/2021

Have you ever wondered about the various species of fish in Elk Lake and their lifespan? Thanks to my dad, fishing has been a life's passion of mine. I have served as Chair of ELDA's Fish Committee for the past 18 years, and one of the committee's responsibilities is to decide on the species of fish to stock in our lake.

The data in this article emanated from the review of ELDA's minutes, the 2019 Fish Population Survey of Elk Lake conducted by Aquatic Environmental Consultants, and information obtained by googling. While different resources will show variances in the numbers I chose to use, the norms or averages depend on a spectrum of factors, including, among others, the following: predators- - such as eagles, ospreys, migrating loons, seagulls, and snapping turtles; stress- -such as being caught and released; water quality- -such as oxygen supply, alkalinity, acidity, and pollutants; and food chain and supply, such as - plankton, insects, leeches, crayfish and forage fish (alewives, shiners, and small gamefish).

Factoring in all of these variables, including geography or location, climate, spawning conditions, structure in and size of a lake, and water source (spring-fed, creek, river, or runoff), the lifespan of most fish in a lake is 4 to 6 years, according to Google's various references.

Let's start our discussion with panfish. Most pumpkinseeds/sunfish and bluegills rarely live beyond 6 years. Few crappies survive more than 4 years, but the luckier ones under good conditions can make it to 8 years. Perch have been known to exist up to 10 years.

Now, let's turn our attention to the bottom feeders in Elk Lake - -the American Eel, brown bullhead, and channel catfish. Eels are the most abundant in our lake. Before migrating to sea (salt water) to reproduce and complete their life cycles, eels can live between 10 to 25 years in freshwater lakes. The ones sampled here ranged in size from 6 to 28 inches. In low numbers in our lake, bullheads reportedly have a 5-year lifespan, with the more fortunate ones living an extra year or 2. Channel catfish, which were stocked in the lake in the 1990's to help consume the spawn of the overabundance of growth-stunted perch, have a longer survival rate of 15 to 20 years. As a result, it is possible that there are very few, if any, remaining channel catfish in Elk Lake as they were stocked more than 20 years ago and usually do not spawn naturally in small lakes without plentiful structure.

Predator Fish. Walleye, chain pickerel, rainbow trout, and largemouth and smallmouth bass are the main predators in our lake. Unlike walleye and rainbow trout, the two species of bass and pickerel reproduce in the lake. Walleye and rainbows require currents and gravel beds in creeks, streams, and rivers to deposit their eggs for ideal fertilization.

On average, walleye live to about 7 years. Chain pickerel have an average lifespan of 3 to 4 years, but can survive to 9 years. Rainbow trout can make it 3 to 5 years, but can live longer with an ample food source. A 19-inch rainbow is typically three years old.

Smallmouth and largemouth bass appear to be the senior inhabitants of the lake, some making it to their mid-teens. On average, largemouth often survive 5 to 10 years, while smallmouth range 6 to 13 years. A smallmouth that reaches 19 inches is reported to be about 9 years old.

Forage Fish. Alewives, a member of the herring family, were stocked in Elk Lake in May, 1991. The purpose was to have the adult gamefish become accustomed to feeding on the baitfish in order to increase the survival rate of smaller gamefish. They can survive up to 6 to 7 years. Aquatic Environmental Consultants reported in 2019 that alewives sampled were 2 to 3 inches, but some were recorded up to 6 inches.

The golden shiner is also a good forage fish for both largemouth and smallmouth bass, as well as walleye. In the survey noted above, the shiners captured and studied were 2 to 9 inches. Survivors in this family can live to 9 years.

Results of 2019 Survey. "...the 2019 survey indicate that the fish population in Elk Lake is in good condition compared to similar lakes in PA. There is good reproduction from largemouth bass, chain pickerel as well as all species of forage fish indicating that there is available habitat for all species to successfully spawn...

Walleye should be stocked with more frequency as availability allows. Your recent stocking of rainbow trout appears to have been worthwhile and can continue if angling interest continues...The current fishing pressure and harvest rate is not disrupting the balance of the fishery..."

Trophy Fish. Two of the largest fish caught in Elk Lake were a brown trout and channel catfish. In 1994, Ron Mulka of Waymart landed a brownie that measured 33 inches and weighed 16 pounds. Two years later, laker Mike Farrell caught a channel catfish, 31 inches and scaling 20 pounds.