

**Fish Stockings:**

In the last 10 years (2017 – 2008) KDFWR has stocked nearly 50,000 fish into Lake Carnico. This includes channel catfish (even year stocking), largemouth bass (has been stocked annually since 2015), saugeye (a new fishery started in 2017, annual stocking; more to follow), bluegill (stocked in 2015 and will be again in 2018) and grass carp (193 in 2016 and again in 2018). Estimated cost of stocking these same species from a private dealer could reach \$10,000 a year between fish cost and transportation fees... the 2 stockings of grass carp cost \$5,000 for the fish plus a delivery charge. Additionally, saugeye are not a species of fish readily available at commercial fish dealers.

**Fish Sampling and Population Assessments:**

Lake Carnico was annually sampled from 1977 until 2013 (missing only 1983). In 2013, at the urging of our senior staff, we stepped back sampling on the majority of our smaller lakes to every other year. Our sampling has included largemouth bass, and bluegill population assessments, channel catfish monitoring and generalized fish population health checks.

Since 2014 (12 sampling trips), the lake has averaged out as a fair largemouth bass fishery (when compared to other lakes across the state of a similar size). The big hindrance at Lake Carnico has always been low recruitment (movement of spawned fish through to the next year... meaning fish born in spring of 2018 surviving until spring of 2019). This low recruitment has gone up the chain and resulted in lower number of bigger fish. This factor is why we have been stocking largemouth bass in the lake... to try and make up for those lower recruitment.

Likewise, since 2006 (8 sampling trips) the lake has averaged out as a fair bluegill fishery. The major hindrance here is just lower numbers and slower growth... and in my opinion the lower numbers is the key here. Since 2006 we have never caught a fish over 8.0 inches in the lake and our catch rates of fish over 6.0 inches is terrible. We have requested a stocking of bluegill and redear sunfish to try and bump these numbers up overall.

Comments regarding the overall fish population health:

1. As expected population and growth of channel catfish. Annual stocking was slightly reduced in 2012 to fall more in line with standard research for optimal growth rates and condition. Flathead catfish have also been sighted in the lake. This aggressive piscivore likely also has an impact on survival of juvenile fish (i.e largemouth bass, bluegill, etc.).
2. A strongly stunted crappie population. In addition to the size of the lake not being optimal for a healthy crappie population, observations while sampling have shown characteristics of a stunted population

(many smaller fish and relatively few larger fish) which is to be expected in a lake of this size.

3. Illegal dumping/stocking of gizzard shad and golden shiners into the lake. The gizzard shad species will have a negative impact on the bluegill population, and will likely add little to the bass population as this species quickly grows past the size at which the bass can eat them.

Saugeye stockings have been used in other states and in other areas of Kentucky to help with stunted crappie populations by consuming young and small crappie. This will help to provide a new fishery to the area and the lake and also speed up growth of the remaining crappie. This stocking has been very successful in other lakes KDFWR manages.