Largemouth Bass Virus reemerges and is confirmed in Cedar Lake (Iosco/Alcona Cos.)

In 2018, Largemouth Bass Virus (LMBV) reemerged in Michigan in a new Northern Lower Peninsula water after about a 15-year hiatus. The virus was a factor in adult Largemouth Bass mortalities in the early 2000s in multiple southern Michigan lakes, and unfortunately has now been confirmed as a factor in a 2018 fish kill in Cedar Lake, Iosco and Alcona counties.

LMBV is one of more than 100 naturally occurring fish viruses. Its origin and how it is spread are unknown but anglers are considered likely a vector for transmitting the virus through moving live infected fish between waterbodies. It is also suspected that contaminated and uncleaned gear or boats that were used in infected waters can spread it to new locations as well. The virus is not known to infect humans, and infected fish are safe to eat as long as the fish is thoroughly cooked.

LMBV usually causes fish kills during periods when fish are most stressed. Potential stressors include very hot weather such as experienced in the summer of 2018, high angling pressure, and possibly aquatic weed or other treatments. Any measures that minimize stress on fish will reduce the effects of this virus.

There are few outward signs that a fish has the virus. Affected fish usually appear normal, although they may be lethargic, swim slowly, and are less responsive to activity around them. Dying fish often are seen near the surface and have difficulty remaining upright. Upon internal examination, such fish usually will have bloated and yellowish swim bladders.

“LMBV appears to infect other related fish species, including smallmouth bass, bluegill and black crappie, but to date is only known to kill largemouth bass,” states Gary Whelan, the DNR’s fisheries research manager. “The disease typically kills large adult fish and die-offs affect approximately 10-20% of these bass in a given lake.”

Fortunately, after the initial die off, the surviving bass develop a strong immune response and the virus does not have an ongoing effect on the population.

“The DNR cannot eradicate this virus or treat infected wild fish populations but anglers and boaters help can reduce its spread,” Whelan said. “As we continue investigating this disease, we appreciate receiving reports of unusual fish kills so we can quickly investigate them.”

In 2018, largemouth bass mortalities were reported in other waters near Cedar Lake during the late-July to late-August period and some of these were likely LMBV related. However, many of those other reports came in too long after the mortalities occurred to confirm LMBV as the cause.
“We urge all members of the angling community to continue to help us monitor our waters,” said Whelan. “When you see unusually high mortalities of adult largemouth bass, please either report them using the DNR’s Eyes in the Field website or contact one of our offices immediately so we can investigate the die-off.”

The DNR reminds anglers and boaters to take the following steps to help prevent the spread of the virus:

- Clean boats, trailers, other equipment thoroughly between fishing trips to keep from transporting LMBV, as well as other undesirable pathogens and organisms, from one water body to another with special care to clean fishing equipment when you are done fishing known locations of the virus.
- Do not move fish or fish parts from one body of water to another, and do not release live bait into any water body.
- Handle bass as gently as possible if you intend to release them and release them as quickly as possible.
- Refrain from hauling the fish for long periods in live wells if you intend to release them.
- Minimize targeting of largemouth bass during the period from mid-July to mid-August, especially during exceptionally hot weather period as experienced this past summer.
- Report dead or dying adult largemouth bass fish, particularly when they number over 25 fish, to Eyes in the Field website or to any Michigan Department of Natural Resources – Fisheries Division office.
- Volunteer to help agencies collect bass for LMBV monitoring.
- Educate other anglers about LMBV.