

DNR Report - Jennifer Bergman, Fisheries Biologist Spring 2024

Again, I wish that I could be at the meeting to answer questions. I will have a fish survey summary report available later this summer and a comprehensive report will be available sometime this winter, typically we don't process otoliths and fin rays in the lab for age estimation until all our field work wraps up. Once each report is available, I will share it with you to share with everyone via Facebook/Webpage. I expect that the Lake Improvement Committee will be having meetings to discuss the fish data, etc. more as well in the coming months/seasons to discuss and continue to work on the management plan.

Regarding the fish surveys:

- A big thanks to Dave Deltgen for allowing us to park our boat on his property every day and for helping us on both the fyke net and electrofishing surveys. Dave was great and a big help!
- Our fyke net survey took place from March 10th – March 15th. This was the earliest that I've been on the water in my career, such a crazy spring.
 - Our target was northern pike and we hit their spawning window perfectly; females were hard or ripe at the beginning of the survey and spent by the end of the survey.
 - We handled 155 northern pike that ranged in length from 12" to 34.1", relative abundance was high and size structure is excellent. The majority of pike were over 21".
 - During the fyke net survey we also caught other gamefish - black crappie, largemouth bass, bluegill and yellow perch.
 - 2,585 black crappie were caught that ranged in size from 3.2" to 14.0", their relative abundance was high and size structure good. Over 80% were 8" or larger.
 - 202 bluegill were caught in the fyke nets; relative abundance is low. They ranged in length from 3.6" to 7.6"; Over 60% were 6" or larger.
 - 33 yellow perch were caught in the fyke nets; relative abundance is low. Perch ranged in length from 4.5" to 11.0".
 - 88 largemouth bass were caught, they ranged in size from 13.3" to 20.3"; this is a big bass lake as over 73% were 15" or larger.
 - 473 carp were caught in the fyke nets and disposed of.
 - 543 age-1 (4-5") gizzard shad were caught and disposed of.
 - Unfortunately, I am pretty certain we missed the bass spawning window for the electrofishing survey. On the night of May 15th, water temps were up to 70°F and most of the bass were off their spawning beds. Our ability to see fish was very poor from the water being turbid. The wind from the previous day really stirred up the water; not an effective survey. We did catch 50 bass that ranged in length from 6.2" to 20.0"; none of the bass had a clipped fin from the fyke net survey possibly indicating to me the bass abundance is moderate to high.

Regarding Carp and Gizzard Shad:

- I am very disappointed and beyond frustrated with the rough fish contract; lack of fishing; etc. If a rough fish contract is issued for 2025; we will ask for a new contractor to be found.
- Carp were caught in all our fyke nets set around the entire lake; we did not find carp concentrated in any particular location.
- Gizzard shad were observed throughout the 4 miles of shoreline shocked.
- Given that carp and gizzard shad are abundant and distributed lake wide, they are also in connected waters (streams and Amey Pond), and with all the challenges of fishing the lake in areas due to wood/stumps; I don't think it is possible to reduce the carp and gizzard shad populations down enough via seining by a contractor to see a benefit to water quality, aquatic plants and the fish community. Both are prolific spawners. We're going to have to consider more or different options if the goal is to rehabilitate Mason Lake to a clear water state with abundant vegetation and a fishery with bluegill as the most abundant panfish.
- The changes that we have seen happen to the fishery on Mason Lake are expected with a lake flipping from a clear water state with abundant aquatic vegetation to a turbid state that is algae dominated. Black crappie become the dominate panfish over the bluegill. Carp become abundant. Gizzard shad introduced to these small impoundments may benefit crappie, yet can have negative effects on other fish species and water quality. This type of shift in the habitat and fish community are seen with other shallow lakes and impoundments across the country.