

2020 KLA Virtual Annual Meeting, August 8th

Follow-up Questions & Answers

Feedback to questions provided below in BLUE by Nick Legler, 11-5-2020.

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Questions following Nick's Presentation:

1. Do you have any info regarding the rough fish? (Jim Lehman)

Rough fish as defined in Wisconsin fishing regulations include: suckers, common carp, Asian carp (silver, bighead, black and grass), goldfish, redhorse, freshwater drum, burbot, bowfin, gar, buffalo, lamprey, alewife, gizzard shad, smelt, mooneye, and carpsuckers. While survey methods targeted gamefish and panfish species, some rough fish were caught too while sampling Kangaroo Lake during 2018. With nets, DNR caught 128 white suckers, 89 longnose suckers, 44 gar, and 28 bowfin.

2. Do we stock as has been done on Clark Lake? Does an increase in boating impact species/count? (Robin)

No recent fish stocking is ongoing or planned for Clark or Kangaroo Lakes. I don't have data on boating trends for Kangaroo Lake, and I'm not generally familiar with documented/researched boating impacts to fish populations. I expect boat traffic could impact fish behaviors and movements, especially in shallow and clear lakes. In Kangaroo Lake, one possible concern with boating could be impacts on nearshore habitat and vegetation. Regarding immediate/short term impacts of boating on fish survey methods – netting was conducted during early spring, before many boats were on the lake. Netting and electroshocking also targeted fish at night, when few to no boats were on the lake, and targeted fish that were concentrated nearshore for spawning. I don't anticipate boating impacted fish survey catch rates.

3. Steve Hogler, former "fish guy", said the best thing we can do is improve habitat...your best recommendations? (Tom Schneider)

There are three main components to fisheries management – 1) fish (e.g., surveys, stocking, regulations that impact fish), 2) habitat (e.g., protection, improvement or enhancement), and 3) people (e.g., stakeholder feedback, angler harvest, regulations that impact anglers, etc.). Habitat is a critical component of fish management, because fish need adequate habitat for spawning, nursery areas, foraging, cover, etc. I agree, that protecting and enhancing habitat is important for Kangaroo Lake. Habitat protection includes things like currently established slow no wake zones to protect nearshore habitat and vegetation. Enhancement includes efforts like fish sticks. My recommendation is to continue these efforts to protect and improve habitat.

Naturally occurring and vegetated land surrounding a lake provides key habitat through direct inputs of trees / course woody habitat and also a buffer to filter rain/runoff, etc. Generally, shoreline development on many lakes has diminished important nearshore habitat and riparian buffers. Nearshore habitat is very important for fish, invertebrates, other aquatic life, and terrestrial animals too. Improving nearshore habitat with projects like fish sticks and natural riparian buffers should be good for Kangaroo Lake.

I quickly searched online and found these documents which could be helpful:

<https://cdn.shopify.com/s/files/1/0145/8808/4272/files/GWQ040.pdf> (also attached as a PDF; The Water's Edge), <https://dnr.wi.gov/topic/fishing/documents/musky/LakeRestorationTechniques.pdf> (although specific to musky, could still be informative), <https://dnr.wisconsin.gov/topic/Fishing/outreach/FishSticks.html> (you're

familiar with this fish sticks info already),

https://dnr.wisconsin.gov/sites/default/files/topic/Fishing/Outreach_LitWoodyHabReviewWolter2012.pdf. These are just a few examples, as there are many reference materials on protecting and improving lakeshores.

4. What about the Carp? (Jim Lehmen)

I don't have much to share on carp, as none were caught while netting Kangaroo Lake during 2018. I expect there are some carp in Kangaroo Lake, but maybe not enough to create significant problems (???). Generally, and if overabundant, carp can negatively impact lake habitat and vegetation. Gamefish and especially panfish can be good predators of carp fry, which can sometimes help keep carp abundance in check.

5. What can we do to increase panfish, particularly perch...Steve Hogler thought 2014 perch might be an outlier, but seems like it's more of a trend...can we do anything? (Tom Schneider)

We can consider a panfish bag limit reduction, similar to Clark Lake. We can consider more habitat improvement projects (e.g., more fish sticks). We can also discuss private stocking of panfish by the lake association if interested, although there are important pros and cons to consider here (e.g., cost and expected benefit of panfish stocking is a big consideration).

Some additional thoughts on species composition and fishing regulations:

- *Panfish and gamefish populations have been cyclic in Kangaroo Lake, presently with smallmouth and rock bass up, while walleye are stable but at lower than historic levels, and with bluegill and perch survey catch rates down. Current lake conditions may just favor smallmouth and rock bass, and this may simply be ok as is.*
- *One question – is harvest limiting bluegill and perch in Kangaroo Lake (e.g., are too many fish being kept)? An angler/creel survey for Kangaroo Lake isn't available, so we don't know how many panfish are being harvested, or if perch are being overharvested. If panfish are being overharvested, then reducing a bag limit could positively impact the population. If harvest is just a perceived problem and not an actual problem, then a regulation change may have no impact on fish abundance.*
- *Regardless, I think a panfish bag limit reduction is worth considering for Kangaroo Lake. Inland lake panfish angling opportunities are limited in Door County, with just two main lakes (Kangaroo and Clark), so a panfish harvest reduction could help protect a somewhat limited resource. Bluegill in Kangaroo Lake are growing above the statewide average for length at age too, which is an indicator that the lake could support more bluegill (vs. if bluegill were growing slowly, then increasing abundance with more mouths to feed wouldn't be a good thing).*
- *DNR regulation changes can only be submitted at spring hearings every other year, so we have some time available to consider possible regulation proposals for Kangaroo.*

Some additional thoughts on habitat:

- *One question – is habitat limiting bluegill and perch in Kangaroo Lake (e.g., is spawning, nursery or foraging habitat missing or inadequate)? I'm not really sure, as I don't have qualitative habitat data for Kangaroo Lake. If habitat is limiting panfish, then improving habitat could positively impact the fish population. If habitat is NOT limiting the panfish population, then habitat improvement may have no positive impact on fish abundance.*
- *Projects such as fish cribs can sometimes provide beneficial structure that improves fish populations, but can sometimes just concentrate fish and make them easier to catch without ever improving fish abundance.*
- *While I don't have detailed information/data on habitat in Kangaroo Lake, general observations suggest there isn't a ton of structure or nearshore habitat. So, I think that continuing to improve nearshore habitat*

with projects like fish sticks and improving riparian shorelines should be beneficial to many fish species, including panfish.

Some additional thoughts on stocking:

- *There are many considerations for stocking, including predator/prey balance, fish community interactions, lake conditions, cost, expected benefits, genetics, etc.*
- *Stocking a species like panfish, is generally less concerning than stocking a top predator like walleye.*
- *If the lake association is interested in stocking panfish, then we can discuss this further (see question number 8 below for more details).*

6. Aren't panfish a pre-indicator for game fish? (Tom Schneider)

Not necessarily. Different species respond differently to different lake changes, habitats, angler preferences, etc.

7. After spawn periods the fish population near shore is nearly non-existent. Specifically, on the south and east side of the lake more specifically from net 6 south from June 1 through the balance of the season. Any observations? (Dale Reiser)

Many fish move and concentrate nearshore for spawning, so it makes sense to see more fish nearshore during spawning periods. Outside spawning, fish will move seasonally and daily too (daytime vs. nighttime patterns). Fish will move and associate with structure, cover, forage, water temps, etc. Kangaroo Lake is shallow with somewhat limited structure – this likely impacts fish distributions and angler's ability to find fish too. For example, it's much easier for me to catch fish with survey nets when fish are concentrated nearshore for spawning, but a lot tougher for me to find and catch fish with fishing poles when fish are spread-out into different areas of the lake!

8. Here is a request for stocking – why not? Follow up: Thank you Nick...not stocking predator fish makes sense. The concept of stocking panfish was the basis for my question. (Dale Reiser)

- *There are many important considerations for whether or not to stock fish, including predator/prey balance (i.e., is there enough forage to support stocked fish?), fish community interactions (i.e., how will stocked fish interact with other fish), expected benefits (i.e., will stocked fish survive), genetics (i.e., keeping what the lake has naturally, vs. changing it with stocked fish that may have different genetics), rates of natural reproduction (i.e., if fish are reproducing well on their own, then stocking may not be warranted), problems that stocking seeks to correct (i.e., poor wild production or overharvest), lake conditions, cost, etc. Stocking gamefish especially needs to be carefully considered, simply because top predators consume smaller fish and compete for space and food with other top predators. Similar things need to be considered for panfish stocking too, but these concerns for panfish typically aren't as great since panfish are lower on the food chain.*
- *Will stocked perch or bluegill survive, or be eaten by smallmouth or outcompeted by rock bass? It's tough to know. There is a chance that lake conditions are just favoring smallmouth and rock bass right now, and that stocked perch or bluegill may not do too well. However, there is a chance that stocked perch or bluegill may indeed help the populations, which we could evaluate during subsequent surveys.*
- *If the Lake association is interested in stocking panfish, then we can discuss this further. I think one of the biggest considerations will be cost. For example, the Clark Lake association historically stocked yellow perch, and recently looked into stocking perch again, but decided not to after considering the high cost.*
- *Information on private stocking via a permit is available here: <https://dnr.wisconsin.gov/topic/Fishing/stocking>. Some information on private hatcheries that produce fish for purchase and stocking is available here: <https://www.wisconsinaquaculture.com/>.*

9. What are favorable lake conditions for rock bass? (Michael Faugust)

A quick Google search suggests:

- *“The Rock Bass is mainly a sedentary and inactive fish, spending much of its activity hiding in the shadows of underwater structures.”*
- *“Rock bass prefer clear, rocky, and vegetated stream pools and lake margins. Rocky banks of northeastern lakes and reservoirs are a common habitat for rock bass. Their favorite habitat contains some vegetation with rocky bottoms and cool to warm waters. Rock bass species are usually found near rocky shorelines. They can be surprisingly unflustered by the presence of human activity, living under lakeside docks and near swimming areas. Rock bass are frequently seen in groups, particularly near other sunfish.”*

Generally, fish needed specific habitat for spawning, nursery areas, foraging, cover, etc. Different fish species have different preferences for habitat, temperature, water clarity, depth, substrate or bottom type, vegetation, food, etc. Fish also compete and interact with other fish (within the same species, and between different species) for space, food, etc. Collectively, if lake conditions favor one species over another, then the favored species may thrive and outperform another species. If lake conditions change, then the composition and abundance of fish species may change too, as changing conditions favor different species. For example, some lakes simply favor bass/bluegill, over walleye/perch.

10. There seems to be a large increase in visitor bass boats on the lake this year fishing around our docks. Is the word out already? (Don Wackwitz)

I'm not too familiar with local boating traffic, or what attracts anglers to Kangaroo or Clark Lakes. Perhaps anglers heard about recent fish survey results and were intrigued by the smallmouth numbers and size (???). Some anglers have mentioned to me going to Clark or Kangaroo Lakes, due to poor weather/wind on the big lake, or to avoid large crowds on Sturgeon Bay or Green Bay especially during busy bass tournaments. Many factors could come into play here.

Kangaroo Lake Association Question:

How do new lake residents get informed about boating regulations? We see watercraft not adhere to no wake zones. (Robin)

- Responses in chat:
(Tom Schneider) On the website, we have all of the regulations and no authority to enforce.
- (Cindy Weinkers) The south end has had a lot of jet skis full speed in the no wake zone, five times adj to our dock and fishsticks. I have contacted Patrick Neal regarding this esp over the 4th. They are coming from the long dock that was recently put in by the Collins property.