Bass Spawning Sanctuaries "Frequently Asked Questions" (FAQs)

1) What are bass and why are they important for our lakes and our recreational fishing?

Largemouth and smallmouth bass are the two species of black bass that exist in Canada. They are top predators in freshwater ecosystems. Healthy bass populations help maintain the balance of aquatic life by controlling the populations of smaller fish and invertebrates, contributing to the overall diversity and health of aquatic ecosystems. Recreational fishing is one of the most popular outdoor activities in Canada, and bass are the number one target for anglers. Recreational fishing creates significant economic activity (over $2.5Billion annually across Canada, as of 2015), from fishing gear sales to boat rentals, guides, and food/lodging. This economic benefit is especially vital in our rural areas that rely on tourism for much of their economy.

2) How do bass spawn and reproduce?

In the spring, male bass create nests by clearing a shallow area on the bottom of lake or river. Once the nest is prepared, male bass court females that then choose their male spawning partner. For spawning, as the female lays her eggs, the male fertilizes them at which point they stick to rocks/sticks in the nest. When done, the female leaves the nest and her eggs to feed and perhaps spawn again in a day or two with a different male. That leaves the male alone to guard the nest, protecting the eggs until they hatch (3-4 days), while the larvae develop into free-swimming fry and begin to feed (another 8-10 days), and then for another 2-4 weeks (depending on temperature) until they can recognize predators and avoid them – when they are about 3-4 cm long. The entire parental care period, i.e., when the male needs to guard the young bass, lasts 4-6 weeks. After that period, the male leaves his offspring to fend on their own and he returns to active foraging.

3) **What happens when a nest-guarding male bass is angled?**

When male bass are removed from their nests even momentarily through fishing, even "catch and release" fishing -- the eggs are left unprotected. Without the male to guard the nest, predators (e.g., sunfish, perch, round gobies, and various minnows) quickly swoop in and begin to eat the now unguarded eggs/larvae/fry. Angling a male bass off the nest, even accidently and only for a short time, can very significantly reduce the number of babies in his brood. Research has shown that on average 50% of the eggs are consumed within the first 8-10 minutes. If that male is harvested or fails to return to continue to guard his offspring, NONE survive; they are ALL eaten.

4) What is a Bass Spawning Sanctuary?

A Bass Spawning Sanctuary is a designated area in a lake (or river) where all fishing for all species is prohibited until the entire bass reproductive period is completed. Bass Spawning Sanctuaries will provide a safe breeding ground for bass, allowing them to spawn and guard their broods without males being angled off the nests. The current bass closed season regulation that allows fishing for other species actually protects ZERO nesting males in Ontario lakes and rivers.

Once the bass reproductive season has ended (usually early July in the Rideau Lakes), all fishing, including bass fishing, is allowed in the Bass Spawning Sanctuaries. A network of Bass Spawning Sanctuaries would be established at easily ad well-

identified locations in a given lake that include the relatively shallow areas along shorelines. These sanctuaries would constitute only a small proportion of up a lake's shoreline (no more than 10-20%) and way less of its total surface area.

5) Bass populations have been fished for decades. Why, suddenly, do we need sanctuaries when fishing has been very good for many years?

It is true that in Ontario bass have been angled (and harvested) for decades. The number of anglers, however has dramatically increased since the turn of this century, and the technology to locate and catch fish has also increased exponentially. That level of angling has likely resulted in the slow decline in the abundance of bass populations across many local lakes. In Opinicon Lake, which has been studied extensively since 1990, we have in fact documented significant reductions in the number of spawning adult bass (both sexes), the percentage of successful nests, and the number of surviving, independent babies all of which has resulted in extremely poor recent year classes…except during 2020 and 2021 when the COVID pandemic forced the bulk of all anglers to stay off the lake. The year classes produced in those two COVID years were by far the largest ever recorded since our records began in 1990. Clearly, there are a number of changes occurring that are having negative impacts on our Ontario's populations, including overfishing, habitat loss, invasive species, pollution and nutrient run-off as more shoreline is developed. Climate change is also changing water temperatures and weather patterns, which can disrupt bass spawning cycles and overall fish health. The number one reason for the population declines is, however, the recruitment overfishing that has resulted from preseason angling for nesting bass…and that is something that we can mitigate immediately.

6) Why are lake associations supporting Bass Spawning Sanctuaries?

Lake associations are supporting the implementation of **Bass Spawning Sanctuaries** because robust bass populations contribute to healthy lakes and a strong recreational fishery! As top predators, bass help regulate populations of smaller fish and aquatic organisms, preventing any one species from becoming too dominant, thereby creating stable foodwebs and shaping the structure of aquatic communities. Healthy bass populations and healthy lakes also support recreational fishing and tourism, contributing to local economies and preserving local property values. The pilot Bass Spawning Sanctuaries in two lakes have been supported by their local associations: the cc

7) How will people know where the Bass Spawning Sanctuaries are on a given lake?

Bass Spawning Sanctuaries will be clearly marked with public signage that defines their boundaries Maps of the Bass Spawning Sanctuaries on individual lakes will be displayed at key locations around the lake, electronically on various local websites, and formally described in the OMNR's annual Provincial fishing regulations booklet. Local fishing guides, clubs, and other online resources will be encouraged to share information about Bass Spawning Sanctuaries and other conservation areas.

8) Who will make sure that there is no illegal fishing in bass sanctuaries?

In Ontario, fishing regulations are enforced primarily by the Ministry of Natural Resources (OMNR). Conservation officers monitor compliance with fishing laws and regulations, conduct inspections, and investigate violations. These officers will pay extra attention to compliance within the Bass Spawning Sanctuaries, but they have found quite good compliance within the Bass Spawning Sanctuaries in the two pilot lakes. Public reporting of violations will also help maintain sustainable fishing practices.

9) How long do the Bass Spawning Sanctuaries last each spring?

Bass Spawning Sanctuaries need to last for the entire bass reproductive season (late April to early July, depending on water temperature and local conditions). It is possible that the specific duration might vary across different lakes, but in general they will last into July, which is beyond the current opening day (the third Saturday in June). Why? Because in most lakes in Ontario (and definitely in the three Rideau Lakes), many/most bass are still guarding their offspring, and legal bass angling at that time crushes bass reproductive success. To reiterate, all fishing in the Bass Spawning Sanctuaries is prohibited during their active period (until early July), after which, all fishing, even for bass is allowed

10) If my waterfront property is part of a Bass Spawning Sanctuary, can I still boat and swim off my waterfront?

Of course! Many recreational activities like boating and swimming can occur in sanctuaries, because they cause little disturbance to the nesting fish. Fishing, however, including fishing off your dock, is not allowed if your dock is located within a Bass Spawning Sanctuary, until fishing within it is opened, likely during the first week of July.

11) Will a bass sanctuary hurt the local economy?

Absolutely not – it will help the economy in the long run by allowing more bass to successfully reproduce each year which will cause bass populations to grow and in response, more recreational bass anglers to visit. In addition, if given the choice, anglers choose to fish in areas that they know are being managed well. Once the word gets out on how well the Bass Spawning Sanctuaries are doing in rebuilding depleted populations, more anglers will travel farther to fish in those lakes. On the other hand, if there are no efforts to protect our bass populations from continued, rampant angling of nesting bass, the bass populations will continue to decline. This would hurt the recreational fishery, local tourism, and eventually, local property values.

12) What can I do to help?

Urge your lake association to join others in expanding the Bass Spawning Sanctuary program, and tell the OMNR that you support the idea of using Bass Spawning Sanctuaries to rebuild local bass populations.

For more information on the existing Bass Spawning Sanctuaries Project and the research that supports that innovative strategy for conserving bass fishing into a sustainable future, visit the following link:
https://arcg.is/jGPuz0