

Bass Action Plan Frequently Asked Questions

8/29/2022

The following is a summary of questions received during public comment of the Draft Bass Action Plan. The questions have been categorized into those related to regulations, tournaments, the suggested catch and release season experiment, stocking, habitat, species interactions, enforcement, fishing pressure, and other.

Regulations:

Question: What new regulations are being proposed?

Answer: None. This plan is not a regulations proposal. Justifying new regulations requires a high bar of transparent evidence, and we're not there yet on many of the actions discussed in the Bass Action Plan. Accordingly, the first goal in the plan is to assess black bass recruitment, size structure, growth, and other relevant fishery characteristics, like effort and harvest, to assess how our fisheries have changed through time and see what potential regulatory actions might be justified. Any regulations discussed in the plan should be thought of as a suite of potential options, with the eventual adoption of any particular regulation being guided by fisheries science, public input, impacts on anglers, predicted economic impact, and other factors.

Question: The Bass Management Plan from 2002 uses many of the same tools as the current Bass Action Plan, mostly regulations on the angler. From the data that was included, it appears that regulations at the Bass Management Lakes have not had any sizeable change in the bass. What will be different with these new plans that will make a difference?

Answer: We do not want to needlessly restrict fishing opportunities, and so are considering making regulations less restrictive on Bass Management Lakes. Some new regulations could still be helpful. Changing regulations in response to changing conditions and new information is central to adaptive management. Additionally, we include several non-regulatory actions in the plan, such as bass stocking, habitat work, and outreach, that we hope will improve bass fishing.

Tournaments:

Question: How would creel or length limit changes impact bass tournaments?

Answer: Traditional weigh-in based tournaments would be able to get exemptions from new statewide length or creel limits as part of the permit application process. Length and creel limits would have no bearing on catch and immediate release tournaments.

Question: Is there a mechanism for DEEP or tournament anglers to financially support the local communities who maintain access at certain waterbodies?

Answer: There are currently no fees or taxes related to fishing tournament permits in Connecticut. We have not yet considered a program like the one suggested.

Question: If bass management lakes are open to tournaments in the summer, how do you tell recreational boaters they have to go away when they already reached capacity at 10 in the morning?

Answer: Tournament applications at state-owned ramps are only approved for up to 50% of the available parking at the launch to allow for multiple uses. Tournament fishing is a legitimate recreational activity, and it is always a challenge to balance the needs of competing user groups.

Question: Have you considered a system where tournament anglers catch and immediately release bass during the spawning season?

Answer: Yes, we support and encourage catch and immediate release tournament formats, but do not mandate them.

Question: I'm hearing a lot about tournament anglers. Are the interests of the typical bass angler being overlooked?

Answer: We are committed to pursuing the interests of all of Connecticut anglers. Typical bass anglers don't have the supporting organizations that tournament groups do, which can make it harder for them to communicate their interests. But we are doing our best to be responsive to the desires and values of the typical angler.

Question: Is tournament data on bass management water bodies publicly available?

Answer: In part, yes. You can search for approved tournament applications using our ezFile system here: [eFiling System - Public Search \(ct.gov\)](https://www.ct.gov/ezfile). Tournament catch information is not publicly available at this time, but we are working to develop summary information from tournament reports that will be shared annually.

Question: Is there any data on the catch and release mortality rates from tournaments?

Answer: There has been a lot of research on tournament mortality and it's relatively low. Catch and release mortality from tournaments tends to be around 2%, but can be much higher in certain conditions, such as high-water temperatures. Bass mortality rates from tournaments have gone down as the anglers continually develop improvements in fish care and handling strategies.

Question: Why should tournament anglers be hit with extra rules? Could tournament mortality actually be beneficial in helping balancing over-abundant, slow growing populations? That is, would it make up for the lack of angler harvest that used to happen?

Answer: Although removing individuals can increase the growth of remaining fish through density-dependent effects, tournament fishing preferentially causes mortality among large bass whereas harvest-based management approaches that are designed to increase size structure promote the selective harvest of smaller bass. That said, the plan is not proposing that tournaments specifically face new rules.

Question: What is something catch and release tournaments can implement immediately to help support this initiative?

Answer: If you're running catch and immediate release style tournaments, you're already doing a lot to protect bass and we appreciate that. If there are any projects that you wanted to do, like waterbody clean ups, habitat enhancement work, fishing education, youth fishing events, etc.,

feel free to reach out to me Andrew.Bade@ct.gov and I'd be happy to support you however we can. We are always open to your suggestions too.

Suggested Catch and Release Season Experiment:

Question: When would the experimental catch and immediate season take place and on what waterbodies?

Answer: We are no longer pursuing a catch and release season at this time.

Question: Closing bass fishing during the spawn will detrimentally affect tournament fishing by closing off the staple months of our season. Closing bed fishing specifically would be a much better option.

Answer: Thank you for this suggestion. It's an enforcement challenge to police the intent of the person who may be targeting beds, but the idea does have merit. A related option may be to close areas of the waterbody where bass commonly nest as opposed to entire waterbodies, although that creates enforcement challenges as well. That said, we are no longer pursuing a catch and release season at this time.

Question: Instead of shutting off fishing from certain areas to see if it increases bass populations, why not open a closed body of water with a good bass population to anglers to see if it reduces the population?

Answer: Hopefully we can do the suggested experiment if we succeed in opening new waterbodies to fishing that were previously closed.

Question: Why does Connecticut still allow bass tournaments during the spawn?

Answer: Connecticut has allowed fishing during the spawn for several decades. This is largely due to the lack of published studies or evaluations that demonstrate a negative impact. CT has opted for more liberal regulations until data indicates that fishing during the spawn is causing a negative impact on bass populations.

Question: Has there been economic impact study around the proposed changes during the spawning timeframe? This could effectively eliminate all tournaments and have a major impact.

Answer: Any proposed changes to regulations require an economic impact statement. If we were to propose such a regulation, an economic impact study would be performed.

Question: There were many fewer tournaments permitted in 2020 because of Covid. If that didn't help the bass populations, what will be different this time with an experimental closed season?

Answer: Covid presented a natural experiment, and we've been doing population surveys to assess the impacts. We hope to determine if more bass were spawned in the 2020 season than what we would typically expect, especially at lakes such as Candlewood that receive a lot of spring tournament fishing effort. Your question suggests that the data don't support a change, but at this point those analyses have yet to be performed. Additionally, the experimental closed season would affect non-tournament anglers also, who fished more than usual during 2020.

Stocking:

Question: Will DEEP be stocking bass?

Answer: Bass stocking is being seriously considered. Dedicating resources to a new stocking program needs substantial justification. We've been reviewing the literature on previous bass stocking efforts, in Connecticut and elsewhere, as well as communicating with experts from other states who are stocking currently. We are seriously pursuing the idea and mapping out potential paths to stocking bass in Connecticut, but there remains much work to be done.

Question: Why doesn't DEEP stock Florida strain bass?

Answer: Although Florida strain largemouth bass have created trophy fisheries in the southern United States, they don't do very well in northern climates. Additionally, the hybrid northern strain x Florida strain bass tend to have lower reproductive fitness, leading to recruitment problems where hybridization occurs. So, although there is a climate band in the south to mid-Atlantic where it can be productive, Connecticut is likely too far north to support Florida strain largemouth and stocking them may reduce recruitment in local bass populations.

Question: Is Connecticut looking into raising bass, both largemouth and smallmouth? How about crappie also, as they are also in bass family.

Answer: We have no plans currently to raise crappie. We are exploring options of raising bass, particularly reservoir-origin smallmouth, in the hatchery system. We are also exploring using water supply reservoirs closed to fishing as source populations for direct stocking efforts.

Question: Are lakes without public access receiving stockings from state programs?

Answer: No. We don't currently stock bass, and any sport fish stocking that we do is on waters with public access.

Habitat:

Question: What are the impacts of broad scale habitat changes on black bass? Things like eutrophication, climate change, land use, etc.

Answer: Those habitat changes are very important to consider. We're seeing range reductions in smallmouth bass that could be related to large scale habitat changes, as evidenced by their apparent disappearance even from an unfished reservoir (Bethany Lake, Bethany). That said, the Bass Action Plan tries to focus on the things that are under our control, which is why there's a relative lack of emphasis on these large regional forces, despite their clear importance.

Question: What are the effects of local habitat changes caused by things like herbicides, grass carp, drawdowns, etc. on bass?

Answer: Drawdowns, herbicides, and grass carp can reduce some of the types of fish habitat that multiple life stages of sportfish and their forage rely on. However, there are competing interests that we need to consider, such as property owners, swimmers, and boaters. There is a need to balance these competing interests. The Fisheries Division will continue to provide comment on herbicide and triploid grass carp applications, as well as proposed drawdown regimes, with a particular focus on protecting habitat in high quality bass fisheries and Bass Management Lakes.

Question: Would targeted dredging be a tool used in shallow eutrophic ponds, to help improve bass habitat?

Answer: Targeted dredging in shallow, eutrophic ponds can and has been used to improve fish habitat in Connecticut, and will continue to be used as opportunities arise.

Question: Have the fish kills, loss of habitat, and delayed mortality caused by chemical spraying for weeds been recognized while developing this plan? Using Lillinonah and Zoar as an example, the population of bass has significantly declined as sprayings have increased in comparison to Candlewood which has not been sprayed.

Answer: Yes, that has been considered in the creation of the plan and is being considered moving forward. We seek to develop a database of where herbicide treatments have been done historically and better track applications moving forward. In conjunction with angler catches and electrofishing data, that will help us better understand what impact, if any, aquatic herbicides may be having. This will help Fisheries Division comments on those applications better reflect the impacts that they're having, and thus mitigate potential harm to fish populations.

Question: Candlewood has no weeds this year for the first time in my life. That worries me as I've seen lakes go from a great fishery to stunted bass due to removal of all weeds from grass carp. Squantz Pond, Lake Waubeeka, Ball Pond, and many other lakes have suffered dramatically due to the introduction of grass carp. How can we manage the weeds better than overstocking carp? I am not an advocate for spraying.

Answer: We have been hearing about the lack of weeds on Candlewood a lot and from a lot of anglers. We also sampled Candlewood in early June and saw little to no aquatic vegetation. It's possible that this issue is related to grass carp, but there remain many unknowns in explaining the speed and severity of the decline now when grass carp were stocked in 2015 and 2017. We are highly concerned about the situation in Candlewood and are exploring multiple strategies to address the issue.

Question: I am noticing a lack of weeds on a lot of my lakes in Tolland County. I don't know if it has to do with the quick warming pattern we had or herbicide use.

Answer: The answer to these questions is likely to be lake-specific and will depend on the conditions, plant assemblages, and management actions taken at the waterbody in question. Please reach out to Andrew.bade@ct.gov with specific waterbodies and we will investigate as appropriate.

Question: Does anyone have a plan for the strain of hydrilla that is plaguing the Connecticut river?

Answer: Managing or controlling hydrilla in the Connecticut River is challenging because of its wide distribution and the limited treatment methods available. The Connecticut Agricultural Experiment Station (CAES) has been doing a lot of research and some experimental control work over the years in different waterbodies. In addition, during this last legislative session, the Connecticut General Assembly established an Office of Aquatic Invasive Species, which will be housed at the CAES. To minimize the continued spread of aquatic invasive species, it is essential that boats and trailers are cleaned of aquatic vegetation when trailering between waterbodies.

Question: Why are people determined to remove water chestnuts in Connecticut? The Great Lakes Hudson River and Southern Champlain are full of water chestnuts and are some of the most fertile waterways in the country.

Answer: It's an invasive species, and one that's relatively easy to control. Organizations in Connecticut, including the CT DEEP, been doing manual removal for many years.

Question: What impact does the age of a natural lake or upland reservoir have on the carrying capacity of a lake and, in turn, the bass population?

Answer: At first, increasing age is generally going to lead to increasing productivity. As more sediment fills in, you're going to get more nutrient rich water and soil in areas where light is reaching the bottom, and thus more primary productivity. Then, habitat quality can begin to degrade as sediment fills in various bottom types and large woody debris degrades. Finally, there's an end point where the lake becomes a shallow marsh habitat that's not conducive to bass. Largemouth and smallmouth bass prefer different habitats, with the sweet spot for smallmouth occurring in relatively deep, cool, and oligotrophic waters as compared to largemouth bass.

Species Interactions:

Question: What effects are other introduced species (e.g., channel catfish, walleye, northern pike) having on bass fisheries?

Answer: Potential competitive interactions among introduced predators haven't always been effectively studied or addressed by the Fisheries Division. As we continue to evaluate our stocking programs moving forward, impacts on the existing fish communities will be an increasingly important consideration.

Question: Would culling overpopulated fish species be another tool used to manage freshwater fisheries?

Answer: Potentially. Some regulations have been based on the idea that we could increase harvest of certain size classes of fish in order to increase growth rates. However, voluntary release rates are so high that it's challenging to modify angler harvest through regulations, and, at current staffing levels, manual culling of smaller fish may be impractical at scale.

Question: What are the considerations for reintroducing natural forage opportunities to sportfish in Connecticut lakes, using an example of alewives?

Answer: Introducing forage for sportfish is something that we have done historically and could be open to in the future. However, there are a number of reasons why it's a complicated issue. Landlocked alewives, for example, are mostly introduced (there are some naturally occurring landlocked populations) and can have negative competitive interactions with other species. There are other native forage fishes where it's unclear why they became extirpated from a given location, and if the conditions have changed such that they could be reestablished now. If they can't be established as self-sustaining populations, regular stocking of forage fishes may be cost prohibitive.

Question: Would selectively culling common non-targeted predatory species such as pickerel be a consideration to improve bass fishing?

Answer: Potentially. There are several complicating factors. One is that many anglers target pickerel, according to our survey data on warm water anglers, especially through the ice. Practically, it's also unclear how effective this strategy would be at changing the bass fishery given that chain pickerel populations are likely too small in most Connecticut lakes to significantly influence bass populations. How other introduced and native predatory fisheries interact with bass in CT is not fully understood. Lastly, there are ethical and biodiversity implications to consider in culling the primary native predator of our lakes and ponds to improve bass fishing.

Question: Is there any update on zebra mussels being found in Candlewood?

Answer: Yes, the Candlewood Lake Authority and others are working on providing factual messaging concerning the increased numbers of zebra mussels that are being found in standardized surveys. The species was first detected in very low numbers in Candlewood Lake in 2020. As they are definitely in Candlewood Lake, extra attention will need to be paid to preventing the spread to other waters moving forward.

Question: How does the stocking of thousands of northern pike benefit the growth and forage for bass in a specific body of water?

Answer: It probably doesn't. There are likely tradeoffs, with niche overlap that could have negative impacts on both bass and northern pike. Our last northern pike population estimate on Mansfield Hollow was in 2016, and the estimate of 'all size' pike was only 133, which equates to approximately 0.29 pike per acre (range 0.10-1.45). At this low density, competition for forage is unlikely to have a large impact on the bass population. However, the bass do have a negative impact on fingerling pike because they feed on the stocked fish.

Enforcement:

Question: How will regulations be enforced? For example, are the terminal tackle regulations that are suggested in the plan enforceable?

Answer: DEEP Environmental Conservation Police, EnCon, will have the opportunity to review any regulation proposals that we submit and suggest changes as needed if there are enforceability concerns. EnCon cannot be everywhere all the time, so we highly recommend calling DEEP at 800-842-4357 to report any violations.

Question: With the increasing amount of fishermen and fishing pressure, has DEEP considered adding more game wardens to their fleet?

Answer: EnCon, like many other parts of our agency, is suffering from lower numbers than would be optimal. However, this is being actively addressed. EnCon has recently hired seven new Environmental Conservation Enforcement Officers and has eight additional positions to be filled with ongoing recruitment efforts. Five of the eight new positions are a result of the legislature providing additional funding for EnCon officers in the recently passed budget. Enforcement is often the number one issue that comes up with a lot of fisheries, regardless of

whether it's bass, trout, striped bass, bluefish, etc. As anglers, we should all do what's right for the resource, but we know that not everyone will do so. Our advice is if you observe illegal fishing anywhere, please call law enforcement at 800-842-4357, because if they don't know they can't go. They need to know where the issues are so that they can prioritize and respond.

Fishing Pressure:

Question: Fishing pressure as the number one threat – has this been scientifically proven or is this just perceived based on the public bass survey?

Answer: Fishing pressure is the number one threat identified by surveyed anglers.

Question: Overfishing is a real concern. Are you defining overfishing as high concentration of angling on a water body? Since bass fishing in Connecticut is typically catch and release, not harvesting bass.

Answer: We are defining overfishing as a level of fishing pressure that dramatically reduces fishing quality, which is distinct from the concept of overfishing in harvest-oriented fisheries.

Question: How much of the fishing pressure on our lakes is from non-Connecticut bass clubs? Have there been any discussions about restricting tournaments to only Connecticut bass clubs to reduce the number of tournaments on lakes like Candlewood in order to reduce the pressure?

Answer: About 18% of bass tournaments in Connecticut during recent years are from out of state clubs. In Candlewood Lake, about 43% of tournaments are from out of state. Restricting out of state tournaments has been suggested, but it may not be practical or legal. Limiting access to federally funded facilities, such as state boat launches, would violate funding agreements.

Question: What is the basis of quantifying fishing mortality?

Answer: It depends on what information we have available. One way that it's assessed is estimating the population size using mark-recapture and estimating the harvest and predicted catch and release mortality using angler surveys. Then we can compare the estimated number of fish that were harvested with an estimated population size to estimate fishing mortality. Often, we are working with less information and use relative indicators of population as opposed to absolute population estimates, or we infer mortality from reductions from one age class to the next, which identifies total mortality but does not discriminate between fishing and natural causes. So how we answer that question depends on the available data.

Question: Have you guys noticed any difference in age or sizes of fish on Candlewood from the lack of traditional tournament pressure during a time of Covid? I feel like we're seeing more and more smaller fish being caught, whereas before we didn't. I really support catch and immediate release during the bass spawn. We observe many empty bass beds very early on, as a result of tournament fishing and out of state boats competing because neighboring states close bass fishing during that time.

Answer: The Fisheries Division did four electrofishing samples on Candlewood this spring and we're going to go back again this fall. It's anecdotal at this point, but comparing the catch from this year so far to previous years, we are seeing more younger fish that could potentially be from

the 2020 spawning season. This would support the hypothesis that limiting fishing during the spawn increases recruitment. However, those fish have not yet been aged and the samples are awaiting quantitative evaluation, so a definitive answer is not available at this time.

Question: Where is there public access to fishing that fisheries induced evolution does not occur? Bass anglers understand that fish learn and adapt to their environment. It is a major part of our sport that we must learn and adapt to the changes of the fish.

Answer – It is not a given that fisheries induced evolution (FIE) occurs everywhere that fishing occurs. FIE is a distinct concept from fish learning. Multiple conditions need to be met for FIE to reduce catchability in the way that we describe, including that catchability must be heritable, that there is standing variation in catchability within the population, and that the level of selective fishing mortality and/or fishing-induced reductions in reproductive fitness are great enough to overwhelm genetic drift and natural selection that often pushes in the opposite direction. In largemouth bass, catchability covaries with other physiological and behavioral traits, such as resting metabolic rate and nest guarding ability. Given that the most catchable bass are the most reproductively fit in the absence of angling, it likely takes substantial fishing pressure and/or long time periods for bass populations to evolutionarily shift towards low-catchability phenotypes in response.

Question: Has fisheries induced evolution been proven to harm a fishery? Seems like the top bass lakes nationwide would be suffering.

Answer: Jan-Michael Hessenauer's dissertation work, cited in the Bass Action Plan, demonstrated that fished populations in Connecticut had lower metabolic rates and learned lure avoidance more quickly than populations from unfished reservoirs. Further, through common garden experiments, these differences were shown to be genetically based. The available evidence suggests that FIE occurs both experimentally and in practice, in Connecticut and elsewhere. However, FIE is not all or nothing. Rather, marginal changes in the catchability, metabolism, and behavioral phenotypes of bass take place over generations. Hal Schramm, writing for Outdoor Life in 2020 ([The Science on Why Bass Are Getting Harder to Catch | Outdoor Life](#)), "analyzed catch rates from 311 BASS tournaments on major bass fisheries throughout the country. From 1972 to 2015, the average catch rate in these tournaments increased at a rate of only .06 bass each year. Pros were catching slightly more fish each tournament season, but consider that there were tremendous advancements in technology, knowledge, and the development of bass pros who fished for a living (not just a hobby) over this time. Even though catch-and-release is common these days, not all bass are released and not all released bass survive. As easily caught bass get removed from the gene pool, those hard-to-catch bass continue to reproduce elusive offspring. So even top anglers will have a tougher time putting bass in the boat." Hal ends with the solution being to "fish harder and fish smarter." While that solution may be adequate for some, requiring an ever increasing amount of knowledge, equipment, time, and money to catch bass is not a desirable outcome.

Other:

Question: Would the DEEP be open to have a bass review board made up of bass anglers, tournament and non-tournament, to work to review the gathered data and provide input of new ideas?

Answer: Yes! This is an excellent idea and has been added to the revised Bass Action Plan.

Question: How are smallmouth populations measured? By fishing reports or electrofishing? I know they can generally be elusive, even if there are plenty present.

Answer: Electrofishing is generally used to measure smallmouth bass populations, with angler surveys and tournament reports also providing valuable information where available.

Question: Why focus on water company reservoirs? It's not just reservoirs – all of these lake associations control many bodies of potential great fishing. Columbia Lake, Amston Lake, etc.

Answer: When the property is held by private citizens it's often even more challenging. We can't unilaterally say that they have to let everybody come in and fish if they own the property, but there may be opportunities to improve access through easements or land purchases.

Question: Most of the discussion has been about bass management, what about the public outreach goal, what does that look like? Coordination within DEEP and other agencies and NGOs, promote the value of bass and bass fishing, including tournament angling?

Answer: Yes to all of the above. We want to support fishing organizations in Connecticut, whether that's helping identify and compete for grants, publicizing the work you're already doing on our social media accounts, or other forms of support. We also want to enhance public outreach related to data availability. Another important element is having ongoing conversations about what it is that bass fishermen are interested in, and whether the management actions we're taking are achieving what those interests are. The Bass Action Plan is also designed to complement our Angler R3 Plan, which has a larger focus on general angler outreach. That said, this question highlights room for improvement in the plan to be more concrete about the proposed outreach activities.

Question: Does Largemouth Bass Virus (LMBV) occur in Connecticut, and could it be implicated in smallmouth bass declines?

Answer: LMBV has been detected in Connecticut, specifically in Gardner and Amos Lakes, but the testing was done in 2005 and it has not been an area of active interest since then. However, LMBV has been found to be a contributing factor in smallmouth declines in the Susquehanna River and elsewhere. Accordingly, future testing for LMBV is one of the actions proposed in the Bass Action Plan.