## **Summary of Changes to the Bass Action Plan**

#### 8/29/2022

The Fisheries Division released the Draft Bass Action Plan on June 29<sup>th</sup>, 2022. It was sent by email to licensed freshwater anglers, tournament directors, and other stakeholders. The plan was also publicized on Connecticut Fish and Wildlife social media accounts, the Fisheries Division Website, and via the CT Fishin' Tips monthly newsletter. The Fisheries Division received public feedback on the Draft Bass Action Plan through a feedback form, emails, calls, and discussions during a public webinar and with stakeholder groups. The feedback was constructive and has led to several improvements. Below is a list of the changes made in response to public feedback.

- The experimental closed season suggested in Objective 1.3.a and related text has been removed (see the section "Removing an Experimental Closed Season from the Bass Action Plan" below for more information).
- A figure (Figure 2 in the updated plan) on voluntary release rates for bass was added.
- The third sentence in the first paragraph of Theme 1 was corrected to state that anglers overall, rather than "both tournament and non-tournament anglers", identified fishing pressure as the number one threat to black bass. Tournament anglers identified weed treatments as the number one threat to black bass.
- Text was added to Theme 1 to clarify that the Bass Action Plan is not a formal regulations proposal and that all formally proposed regulations will go through additional public comment as well as legal and legislative review.
- Mortality was added as a metric to be considered in Objective 1.1.a.
- Additional groups were added to the "People" sections of several objectives to recognize their contributions.
- An action was added to Objective 1.2.a to develop resources to support and encourage catch and immediate release tournament formats.
- An action was added to Objective 1.6.a to develop citizen-science approaches to sample Smallmouth Bass where current sampling methodologies are inadequate.
- An action was added to Objective 1.6.b to assess habitat at potential stocking locations to determine if they can still support Smallmouth Bass.
- An action was added to Objective 2.2.a to consider removing or altering summer tournament restrictions at Bass Management Lakes.
- The third sentence of the third paragraph in Theme 3 was rewritten to clarify that the Fisheries Division's recommended 20-40% vegetative cover in the littoral zone is a <u>longstanding policy</u>.
- An action was added to Objective 3.1.a to improve our understanding of interactions among bass and other introduced species (e.g., Walleye, Northern Pike).
- Objective 3.2.c was added to monitor lake and pond habitats statewide.
- The action to hold town hall style meeting was removed from Objective 4.1.a in favor of other outreach methods added to the plan.
- Objective 4.1.d was added to systematically engage stakeholders to improve bass management.
- Other minor formatting, spelling, and grammatical errors were corrected.

#### Removing an Experimental Closed Season from the Bass Action Plan

The Fisheries Division removed the experimental catch and release season for black bass from the Draft Bass Action Plan in response to communications with other Northeast states, an updated literature review, and public feedback. Specifically, the revised Bass Action Plan omits the following text that was under Goal 1.3, Objective 1.3.a:

- Experiment with catch-and-immediate-release only for bass during the spawning period (April 15<sup>th</sup> June 15<sup>th</sup>) in select heavily fished lakes during the spring.
  - Select a trial set of lakes from current Bass Management Lakes to assess the effects of catch-and-immediate-release on bass recruitment and bass sizestructure.
  - Assess changes in recruitment and size-structure over a 5-year trial period.
  - No possession limit exemptions will be granted on the set of trial lakes. However, catch-and-immediate-release fishing, including tournaments, will be allowed.

# Why the Experimental Closed Season was in the Draft Bass Action Plan:

Closed bass spawning season regulations in the United States and Canada were among the first bass regulations ever enacted – before the field of fisheries science had been established. In fact, Connecticut and Massachusetts enacted a closed season for bass in 1871 – the first of such regulations in North America (Quinn, 2002). These closed seasons were not often scientifically evaluated, and their rationales tended to involve angler ethics, use conflicts, and other social pressures rather than focusing solely on bass population changes. However, fishing for spawning bass could potentially reduce recruitment and decrease catchability through selective nest failure. The biggest and most catchable bass are selectively removed, and these traits are also associated with the greatest reproductive potential in the absence of angling (Sutter et al., 2012).

Although the use of closed seasons for bass has fallen out of favor in the Southern states, Northern states tend to have stricter regulations in this regard for several reasons. At northern latitudes bass have shorter spawning seasons, inhabit clearer water (which enables anglers to target beds more easily), and have higher overwinter mortality when compared to southern bass populations in large reservoirs, all of which theoretically make them more vulnerable to negative effects from angling during the spawn. Independent of potential impacts on reproductive success, the harvest and/or cumulative catch and release mortality of large, adult fish during this time of vulnerability may also pose a threat to maintaining quality-size fisheries. In addition, the selective failure of nests from the most catchable bass may cause reductions in the catchability of the population through time due to fisheries induced evolution.

Connecticut, in particular, receives high bass fishing pressure during the spawn due to the catch and immediate release seasons of adjacent states (e.g., New York, New Jersey). Being the most liberal in the regional patchwork of springtime bass regulations leads anglers from neighboring states to fish preferentially in Connecticut during the spring. This creates several threats to our fisheries resources through increased fishing pressure, more out of state boaters potentially introducing aquatic invasive species, and increased user conflicts at fishing access sites.

Given the use of catch and release seasons during the bass spawning period as a management tool in neighboring states to improve fisheries and minimize user conflicts, the Fisheries Division decided to explore the concept in the Draft Bass Action Plan as an experimental approach on a

suite of heavily fished lakes. This experiment could shed light on the impacts of a catch and release season during the bass spawning period (positive or negative) on bass fishing. The goal of the Bass Action Plan is to improve bass fishing, and it was the Fisheries Division's intention to execute a study which would provide information to inform bass management in Connecticut.

# Why the Experimental Closed Season is being removed from the Bass Action Plan:

Most closed season regulations for black bass have not been rigorously evaluated. However, the evaluations that have been done strongly suggest that bass populations can sustain angling during the spawning season. The published evaluations are mostly of three kinds – southern and midwestern states removing historical closed seasons entirely and finding no ill effects (e.g., Eschmeyer and Manges 1945), northern jurisdictions going from closed seasons (i.e., no targeting of bass) to catch and release seasons (i.e., no possession of bass) and finding no negative impacts (e.g., Jackson et al., 2015), and experimental approaches of manipulating nesting success to evaluate recruitment impacts and finding stable recruitment over a wide range of stock sizes and nesting success rates (e.g., Allen et al., 2011). Although each of the studies have limitations and considerable uncertainty remains, the evidence does not suggest that additional protections for bass during the spawning season are likely to improve bass recruitment or size-structure.

Given the apparent lack of evidence for a benefit, Fisheries Division biologists consulted with several bass biologists from nearby states with stricter regulations to better understand the rationale for catch and release seasons during the bass spawning period. The respective agencies implemented these regulations at different times and for different reasons. However, in each case, the continued presence of a catch and release season is driven primarily by social rather than biological factors. In essence, local angler ethics and behaviors have adapted to the current regulatory paradigm and there is little desire to make changes, despite there being no demonstrable biological benefit. By way of contrast, anglers in Connecticut have adapted to a year-round season for black bass. Asked to list the top threat to bass fisheries in Connecticut, only 1.4% of freshwater anglers chose fishing during the spawn, although an additional 22.2% chose fishing pressure or tournament fishing, which are likely interrelated concerns.

Following the release of the Draft Bass Action Plan, we solicited public feedback through an electronic form sent to licensed freshwater anglers, phone calls, emails, a webinar with a discussion component, and an in-person meeting with the Connecticut B.A.S.S. Nation (CBN). Despite broad support for the plan, many anglers expressed concern specifically about the potential for a catch and release season for bass. These anglers considered such a regulation misguided because it was seen as restricting fishing opportunities, especially traditional weigh-in based bass tournaments, without being likely to improve fishing quality.

The anglers also saw the potential for negative unintended consequences. For example, CBN affiliates try to schedule their tournaments in the spring as opposed to summer to reduce fishing mortality and user conflicts. This is well-justified, as catch and release mortality increases with increasing water temperature and capture depth, and bass tend to be found in relatively shallow, cool conditions during the spring. Other recreational uses of Connecticut waterbodies (e.g., boating and swimming) are also the greatest during the warm summer months. Therefore, restricting spring tournaments during the spawning season may in fact *increase* fishing mortality and user conflicts by reallocating fishing effort to the summer months.

In conclusion, thoughtful public feedback and consultation with other fish management agencies, in addition to an updated review of the relevant literature, has led the Fisheries Division to believe that a catch and release season during the bass spawning period, even on an experimental basis, is currently unjustified. Accordingly, the suggestion to pursue an experimental catch and release season has been removed from the Bass Action Plan. However, the Fisheries Division remains open to considering a catch and release season for bass in the future should research and management evaluations on the issue shift the weight of evidence in favor of such a policy.

#### References:

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