

Black Bass Advisory Subcommittee

August 9, 2016

C-1 Conference Room

6:00 pm – 8:30 pm

Agenda



Tentative Agenda

- 6:00 pm Opening Remarks – Dave Blazer (Fisheries Director, Fisheries Service)
Desired Outcome: Inform
- 6:10 - 6:30 Vote on Chair and Vice-Chair – Gina Hunt (Deputy Director, Fisheries Service)
Desired Outcome: Appoint Chair and Vice-Chair to two year terms
- 6:30 - 6:45 Discussion – Subcommittee Members Outline Efforts to Disseminate
July 6 Information to their Constituents
Desired Outcome: Inform Group of Constituent Input Regarding Management
Options
- 6:45 - 6:55 Input from Other States: Implementation of Closed or Catch-and-Return Areas as a
Management Strategy – Tony Prochaska
Desired Outcome: Inform
- 6:55 – 7:10 Potential Effectiveness of Proposed Management Actions in Maryland Tidewaters –
Joe Love
Desired Outcome: Inform
- 7:10 - 7:40 Discussion - Method 1 - Subcommittee Members
Desired Outcome: Motion on an Option for Method 1
- 7:40 - 8:20 Discussion - Method 2 - Subcommittee Members
Desired Outcome: Motion on an Option for Method 2
- 8:20 – 8:30 Agenda Topics for Next Meeting and Public Comments* - Chairperson
- 8:30 pm Closing Remarks/Adjourn

Goal



The goal is to increase catch indices above reference points by reducing the number of harvested or killed adults by implementing action(s) that are:

- Enforceable
- Measurable
- Fiscally Responsible

Bass Seasons: North America



Philipp, D.P., and M.S. Ridgway, editors. 2002. Black bass ecology, conservation, and management: American Fisheries Society, Symposium 31, Bethesda Maryland.

Members: Northeast Fisheries Administrators Association



State	Closed or Catch-and-Return Season/Area	Management Trigger	Constituent Suggestion	Goal	Goal Achieved?
Vermont	Yes	No	No	The goal of the closure (December 1 – mid-June) was based on a review of old documents, to protect bass from harvest during spawning (beginning in 1881). Since 1991, the closure was changed to a catch-and-return season (excludes ice fishing) with artificial lure requirement to provide more recreational opportunities for anglers while protecting individuals from hooking mortality.	Surveys were not conducted .
New Hampshire	Yes	No	NA	NA	NA
New York	Yes	No	Yes	Provide angling opportunities while protecting spawning stock during winter and spring	Yes: no negative impacts by changing a no-target season to catch-and-return – some no target areas still exist
Pennsylvania	Yes	No	Yes	<u>Statewide - prior to 2000</u> - closed season from mid April to mid-June. 2000 to present – Catch and Release now during same period (streams, rivers, lakes and reservoirs) with goal to create fair fishing regulations throughout state. <u>Site Specific - 2011</u> Middle Susquehanna/Lower Juniata: Protect black bass abundance from harvest at a time when disease was negatively influencing reproduction. Includes Catch and Release and Closed Season	Site Specific: on-going analysis; disease levels appear to be decreasing to pre-rule change and conservative harvest rules that can be applied and removed as needs dictate are being considered.
Virginia	No for most, yes for one lake	NA	NA	NA	NA
RI, CT and MA	No	NA	NA	NA	NA

Neighboring States



- Virginia, VADGIF: “No – we have no closed areas and/or black bass pure catch-and-release waters...the very high voluntary release rate (over 99%) combined with relatively low total annual mortality (...26% this year...) would not likely result in a favorable management outcome and would likely needlessly inconvenience anglers”
- Delaware, DNREC: “We do have one small cove in Broad Creek...that is posted as a bass spawning area and ask...that no fishing take place from April 1 – June 30th, but it’s not regulatory. Also when we are trying to rebuild the population after a pond drawdown, we post signs & put out a press release asking anglers to catch and release bass for at least a year....it’s just a request.”
- North Carolina, NCWRC: “While there has been some discussion about season and area closures...the current and prominent practice of catch-and-release of black bass needs to be evaluated in context of total mortality and whether seasonal or area closures would be of significance to improve the population when the vast majority of fish are being released...additional restrictions on angler access and opportunity must be clearly supported and justified...natural mortality events can wreak havoc on our populations and area closures could be looked as potential areas of recovery...anglers generally avoid an area after major hurricane[s]...and often times tournament directors will steer away from the area until...the population improves.”

Method 1: Review



Method One: Extend Maximum Size Restriction

Option 1. Continue tournament permit condition

- a) Implemented on June 16, 2016 for Potomac River and the most popular upper Chesapeake Bay weigh-in sites;
- b) Allows a 5 fish possession with a 12-inch minimum, but only 1 of those fish may be greater than 15-inches (fishable slot) between June 16 and October 31, or
- c) Requires tournament director and anglers to adhere to a standard of conditions when conducting a tournament to maximize fish care/survival.

Option 2. Institute statewide regulation

- a) Propose statewide regulation for all tidewater anglers
- b) Allow a 5 fish possession with a 12-inch minimum, but only 1 of those fish may be 15-inches or greater, June 16 – end of February
- c) Similar in style to management of bass fisheries in Florida by the Florida Fish and Wildlife Conservation Commission - on July 1, 2016, regulations will change statewide to include a 5-fish creel with only one allowed that is 16-inches or greater, unless a waiver is provided by the State.

Method 1: Potential Outcome



- Implementing Option 2 would reduce daily harvest of large bass by harvest anglers and provide a baseline standard for tournament operating procedures to improve fish care
- When considering only the impact of lowering daily harvest, implementing option 2 could result in a 7% reduction in the number of bass harvested per year, which would result in a 3.8% increase in the proportion of age 4 and older fish.
 - This work is contingent on the accuracy of harvest rate, population size, and the relative change in harvest rate as a result of implementing Option 2.
 - The percent increase in the proportion of age 4 and older fish as a result of implementing Option 2 is not statistically different from current conditions.

Method 1: Potential Outcome

Table 1. Possible outcome from implementing Option 2, relative to Option 1 (i.e., Reference). The percentage of harvested fish for the Option 2 scenario was adjusted to assess the expected relative reduction in harvest and subsequent increase in age 4 and older largemouth bass.

<i>Option</i>	<i>Harvested Fish (% of population)¹</i>	<i>Relative Reduction</i>	<i>%Increase in Age 4 and Older from Reference</i>
Option 1	18% per year	Reference	Reference
Option 2	11% per year	-7%	+3.8%

¹The proportion of harvested fish may be greater if population size is actually smaller. In early 2000's, mark-recapture work indicated that population size may be closer to 50,000 which would essentially double the proportion of fish harvested from the population. However, the difference in the proportion of age 4 and older fish was similarly 4%. Projects to determine more accurate estimates of population size and harvest rates are on-going.

Method 2: Review



Method Two: Implement Closed and/or Catch-and-Return Areas

Option 1. Institute year-round no target in 2 areas – one location in Upper Bay and one in Potomac River

Possible locations: all or upper Chicamuxen Creek; all or portions of Furnace Bay

Option 2. Institute year-round catch-and-return in 2 areas- one location in Upper Bay and one in Potomac River

Possible locations: all or upper Chicamuxen Creek; all or portions of Furnace Bay

Option 3. Institute year-round catch-and-return in four areas - two locations in Upper Bay and two in Potomac River

Possible locations: Piscataway Creek and upper Mattawoman Creek; all or portion of Furnance Bay (Mill Creek) and Swan Creek

Method 2: Review



Method Two: Implement Closed and/or Catch-and-Return Areas

Option 4. Institute spring (March 1 – June 15) catch-and-return in four areas - two locations in Upper Bay and two in Potomac River

Possible locations: Piscataway Creek and upper Mattawoman Creek; all or portion of Furnance Bay (Mill Creek) and Swan Creek

Option 5. Institute a mix of no target and catch-and-return during spring - two locations in Upper Bay and two in Potomac River

Possible locations: Piscataway Creek (no target) and upper Mattawoman Creek (catch and return); all or portion of Furnance Bay (Mill Creek) (no target) and Swan Creek (catch and return)

Option 6. Statewide, spring catch-and-return

Location: Statewide

Method 2: Potential Outcome



- Implementing a no-target option has potentially the greatest relative reduction in the number of dead bass from fishing pressure, followed by a mix of no-target and catch-and-return areas during spring and a year-round catch-and-return season.
- In all option scenarios, relative reduction in dead fish was greater than 65% per day in the specific fishing zone.
 - This work is contingent on the accuracy of catch rates, estimates of angling pressure, and mortality rate estimates.
 - No mortality was assumed in no-target areas, though bass will be inadvertently caught and subjected to handling stress.
 - Implemented options would prevent death of bass but the impact of these survivors may yield minor improvements for the population.
 - Option 6 was not evaluated because of poor data availability and it is a larger scale version of Option 4.

Method 2: Potential Outcome



Table 2. Possible outcomes from implementing options related to a year round (YR) or spring (spr), no target (NO) or catch-and-return (CR) periods for largemouth bass. Scenarios differed by catch rates and effort that affected the possible number of dead fish relative to an open fishery. The relative reduction in the percentage of dead fish and subsequent increase in age 4 and older fish are provided to compare among scenarios.

	<i>Option</i>	<i>Fishing Zone or Stream</i>	<i>Recreational Catch Rate (bass/day)</i>	<i>Tournament Catch Rate (bass /day)</i>	<i>Anglers per Fishing Zone</i>	<i>#Dead in Open Fishery/day</i>	<i># Dead Bass for Option/day</i>	<i>Relative Reduction</i>
Option 1	YR-NO	Chicamuxen	5.5	2.0	4	6.4	0	
Option 1	YR-NO	Furnace	3.9	1.9	6	8.2	0	
<i>Total</i>						<i>14.6</i>	<i>0</i>	<i>100%</i>
Option 2	YR-CR	Chicamuxen	5.5	2.0	4	6.4	2.4	
Option 2	YR-CR	Furnace	3.9	1.9	6	8.2	2.5	
<i>Total</i>						<i>14.6</i>	<i>4.9</i>	<i>66.4%</i>
Option 3	YR-CR	Piscataway	0.6	2.0	4	4.2	0.2	
Option 3	YR-CR	upper Mat	4.7	2.0	6	9.0	3.0	
Option 3	YR-CR	Furnace	3.9	1.9	6	8.2	2.5	
Option 3	YR-CR	Swan	3.9	1.9	4	5.5	1.7	
<i>Total</i>						<i>27.0</i>	<i>7.5</i>	<i>72.2%</i>
Option 4	sprCR	Piscataway	0.6	1.8	4	3.8	0.2	
Option 4	sprCR	upper Mat	4.7	1.8	6	8.4	3.0	
Option 4	sprCR	Furnace	3.9	1.5	6	7.0	2.5	
Option 4	sprCR	Swan	3.9	1.5	4	4.7	1.7	
<i>Total</i>						<i>24.0</i>	<i>7.5</i>	<i>68.7%</i>
Option 5	sprNO	Piscataway	0.6	1.8	4	3.8	0	
Option 5	sprCR	upper Mat	4.7	1.8	6	8.4	3.0	
Option 5	sprNO	Furnace	3.9	1.5	6	7.0	0	
Option 5	sprCR	Swan	3.9	1.5	4	4.7	1.7	
<i>Total</i>						<i>24.0</i>	<i>4.7</i>	<i>80.3%</i>
Option 6	sprCR	all tide water	NA	NA	NA	NA	NA	NA