

Releasing Bass, photo of Don Goff, director

## FROM THE DIRECTOR OF FRESHWATER FISHERIES

Greetings Fellow Anglers!

Welcome to the 10<sup>th</sup> edition of the Black Bass Annual Review. Like you, over 71,000 black bass anglers have received this report that captures the latest news specific to Maryland’s tidal black bass, including the department’s recent management, education, and conservation efforts.



**Director Tony Prochaska**, with Smallmouth Bass

One of the new initiatives for 2018 that I am pleased to announce is the development of the Black Bass Conservation Award given by the Director of Boating and Fishing Services. The primary purpose of this award is to recognize the efforts of youth anglers to educate themselves on the conservation of bass and water safety. This new initiative also creates an opportunity for directors of small bass tournaments that include youth anglers to receive fish care supplies or services worth up to \$500. These supplies could include non-piercing cull clips, aerators, and a mesh bag system, all designed to help protect bass.

Fishing and Boating Services staff have also worked diligently in 2017 to raise and stock more young bass in Maryland’s tidal rivers. Over 330,000 young fish were released in various locations, particularly the Potomac River. This represents a 200% increase over last year’s stocking efforts.

To learn more about the department’s Freshwater Fisheries Program and the dedicated staff working hard to maintain and improve angling in Maryland, please visit our [website](#). On behalf of the Freshwater Fisheries Program, I wish all of you an enjoyable and safe 2018 fishing season!

CONTENTS	PAGE
Management	
<a href="#">Subcommittee Highlights</a>	2
<a href="#">Enforcement</a>	2
<a href="#">Thirty Years of Tidal Fresh Fisheries</a>	3
<a href="#">Invasive Species Control</a>	3
Conservation	
<a href="#">New Conservation Award</a>	4
<a href="#">Reef at National Harbor</a>	6
<a href="#">Anglers Track Lives of Bass</a>	6
<a href="#">What's Next?</a>	7
Current Status of Tidal Bass Populations	
<a href="#">Catch</a>	8
<a href="#">Stocking</a>	9
<a href="#">Health, Reproduction, Diet</a>	10
<a href="#">Growth</a>	11
Fishing in 2018	
<a href="#">Find a New Fishing Spot</a>	11
<a href="#">Start Guiding Business</a>	11
<a href="#">What's New in Tournaments?</a>	12

Click the 2018 - 2019 Fishing and Crabbing Guide for the latest news!



## MANAGEMENT

### Subcommittee Highlights

The Black Bass Advisory Subcommittee, formed in 2016, advises the department on managing black bass fisheries in Maryland. The 13 member subcommittee met three times in 2017 and once in early 2018.

The subcommittee:

- Considered the utility of no possession spring fishing restrictions in tidal waters of Maryland.
- Recommended the department develop better online materials for fish handling and live well management; the subcommittee may organize a workshop on fish care during the Bassmaster Elite Series (July 2018).
- Convened a habitat workgroup to identify habitat needs for black bass and appointed Nick Kuttner (Potomac Riverkeeper Network) as a liaison to the department on habitat matters.
- Requested the department consider commercial haul seining effects on springtime black bass nesting habits and submerged aquatic vegetation.

Agendas and meeting times for the subcommittee are [posted on-line](#). The public is invited to attend and contribute to the meeting during the public comment period. Meeting minutes are drafted and posted online for those who cannot attend.

Go to the [Black Bass Advisory Subcommittee](#) website for more information.

### Enforcement

The Black Bass Advisory Subcommittee welcomed Major Lloyd Ingerson and Corporal Chris Warden (Natural Resources Police) to their October meeting to discuss concerns in enforcing existing regulations. These concerns included illegal guiding and insufficient officer presence on the water. The Natural Resources Police is the lead law enforcement agency for incidents on Maryland waterways that do not fall within jurisdiction of the Federal Bureau of Investigation or United States Coast Guard. The officers briefly discussed ways the public can report possible illegal activity. The public can call 1-800-628-9944 with such reports.



**Natural Resources Police** patrols National Harbor. Learn more Natural Resources Police by visiting their [webpage](#).

Regulations govern different black bass fisheries across the state. When anglers believe these regulations are insufficient or ineffective, they contact the Black Bass Advisory Subcommittee or the department to present their concerns. The process to add, remove, or modify regulations requires at least a year of review that includes multiple rounds of public input. To protect this process as well as ensure fairness when using resources, Natural Resources Police enforce current regulations.

## Thirty Years of Tidal Freshwater Fisheries

Fishing for some species has gotten better in tide water. The Department of Natural Resources compared recreational angler catches and preferences (May through October) for the two largest tidal freshwater fisheries (Potomac River and rivers of upper Chesapeake Bay) in the Chesapeake Bay watershed between 2017 to those performed about 30 years ago.

In the past 30 years angler preferences may have changed because of establishment of two invasive food fish species (blue catfish and northern snakehead) and widespread promotion of catch-and-release fishing for sport fishes such as largemouth bass. We conducted 335 angling interviews spread across eight places in Maryland's tidal freshwater of Potomac River and nine places in upper Chesapeake Bay.

Recreational anglers spent an estimated 13,541 angler-hours on Potomac River in 2017, which was at least 20-times less than that reported in 1990 and 1994. Another big difference on Potomac River was harvest rates of catfish, which have soared from 0.03 fish/angler-hour to 0.37 fish/angler-hour. Northern snakehead was a new but small fishery for Potomac River. We believe that we underestimated the participation in this snakehead fishery because our survey did not account for night archery, which is very popular for snakehead harvesting.

Angler effort in upper Chesapeake Bay in 2017 (23,301 angler-hours) was similar to that measured in 1987 (20,878 angler-hours). It appears that anglers spent about forty dollars more, on average, fishing in 2017 than 1987. Catch rates for catfish have changed little in the upper Chesapeake Bay (0.10 fish/angler-hour to 0.18 fish/angler-hour), possibly because blue catfish has only recently invaded that area. Very few people caught or harvested snakeheads, which has also just recently invaded that area.

Recreational anglers spent their time targeting largemouth bass (38.6 percent) and catfish (23.4 percent). These top ranks are similar to those of anglers about 30 years ago. Catch rates for these two top targets are now at least twice as high for recreational anglers. This may be owed, in part, to more abundant resources or to better targeting practices. The proportion of harvested fish has not noticeably changed, possibly reflecting little change in angler attitudes toward harvesting. During 2017 recreational anglers invested an estimated \$51,748,860 into fishing tidal freshwater of Potomac River and the upper Chesapeake Bay. This value underestimates investment into the fisheries because it does not include that invested by black bass tournament anglers or black bass tournaments, themselves.

Moderate changes in the fisheries of the two largest tidal freshwater areas of the Chesapeake Bay watershed have occurred in the past three decades, including a new but small harvest fishery for northern snakehead, greater ability to catch the top two targeted species by recreational anglers, greater catch rates of catfish on Potomac River possibly because of more abundant blue catfish, and much lower angling effort on Potomac River.

## Invasive Species Control

Anglers, archers, and agency staff united to combat invasive fish species in 2017. An invasive species is non-native and considered a nuisance or potential nuisance by scientists and the general public. Maryland's freshwater has three non-native fish species that have recently established populations that are nuisances or potential nuisances. These fishes include northern snakehead, blue catfish and flathead catfish. They are considered nuisances because of their physical size, their rapidly expanding population and their ability to negatively impact ecosystems by causing additional predation.



Please send comments to:  
Joseph Love  
Freshwater Fisheries, Tidal Bass Program  
joseph.love@maryland.gov | 410-260-8257



**Most anglers harvest snakeheads.** In their native home of China, northern snakehead sustains active harvest pressure from people. Harvest helps control their population size where introduced and lowers impact to Maryland's natural resources.

In 2017 commercial waterman reportedly harvested the greatest biomass of snakehead ever from Maryland waters: 6,714 pounds of snakehead from five rivers, with most coming from Potomac River. This is great for business and the ecosystem. Commercial harvest has increased every year since the department began monitoring. Anglers and archers relentlessly harvest northern snakehead in an effort to control their numbers. They target them fishing, during tournaments and charter boat guiding trips. Studies show harvest is working to control the number of snakehead.

Click Here to Learn More about [Snakeheads](#)

Blue catfish is found throughout tidal Potomac River, but flathead catfish is not. Both species are considered invasive because of their potentially negative



**Catfish is a popular target for anglers.** Blue catfish harvested by John Horgan at Swan Harbor in Harford County.

impacts on migratory fish like American shad and yellow perch, sunfish and other year-round freshwater fishes, as well as blue crabs. Many anglers enjoy fishing and eating catfishes. Commercial watermen harvested 506,317 pounds of blue catfish in 2017 from eight rivers, with most coming from Potomac River. Combined efforts of watermen and anglers help minimize impacts of these large predators.

Click Here for [Our Webpage about Blue Catfish](#)

## CONSERVATION

### New Conservation Award

The department worked with the Black Bass Advisory Subcommittee to launch a new program in 2018 called the Director's Black Bass Conservation Award. Each year the Director of Fishing and Boating Services will recognize the efforts of black bass tournament organizers to protect black bass resources. The award also recognizes organizers who include youth participants in their sportfishing tournament. A requirement of the award is for all tournament participants to successfully pass an online course in fish handling. The department worked with leading experts in black bass conservation to develop this so-called *Bass Class*. The class includes videos that are field narratives on current care practices and boater safety. By answering two or three questions per video, anglers will be tested on their understanding of the material and if the final score is 70 percent or better, will be sent a customized electronic certificate of completion from the department. Everyone is encouraged to test their knowledge in the *Bass Class*.

Organizers of small tournaments that include young adults have an opportunity to earn up to \$500 in supplies for the tournament. The Director of Fishing and Boating Service's Black Bass Conservation Award(s) is available each

year, depending on funding, for a tournament with: 1) an organizer or co-organizer who is a resident of Maryland; 2) tournament participants who have a Maryland fishing license, if required by law; 3) at most 49 boats; and 4) at least 50 percent of angler participants who are between 16 to 25 old.



**Tournament Director Don Goff** and son, Cooper Goff on Susquehanna River. Goff helped develop kayak based fishing tournaments in the upper Chesapeake Bay. His club, Susquehanna River Fishing Club, uses social media and on-the-water weigh-ins, which helps grow the competitive sport of bass fishing for boaters without live wells. Learn more by reading Bass Tournaments Popularize a Fishery on page 13.

Applications will be reviewed on these criteria:

*Criterion 1:* Organizer or co-organizer should identify at least one best management practice when obtaining a permit for the tournament from Fishing and Boating Services.

*Criterion 2:* All tournament participants should complete and pass Fishing and Boating Services' on-line *Bass Class*, which includes boater safety videos and conservation related videos starring state and national leaders in bass conservation.

*Criterion 3:* The organizer or co-organizer should write a brief (500 words or less) narrative that describes the supply needs of the tournament and the reason for their need. Examples of supply needs could include: a waiver of department costs for re-distributing fish; on-board hand scales or rulers for on-the-water weigh-ins; non-piercing cull clips; barbless tackle for tournament participants; thermometers for live wells; aerators; ice; mesh bags or bag systems for weighing bass; a shade canopy; cattle tank for offering highly oxygenated water conditions; rubber nets; or weigh-in systems that promote survival of largemouth bass.

Learn more about the Director's Black Bass Conservation Award by visiting our [website](#).

The facilities and services of the Maryland Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national origin or physical or mental disability. This document is available in alternative format upon request from a qualified individual with disability.

## Reef at National Harbor

Visit the National Harbor to experience the state's latest tidal bass reef. Marked by navigation buoys, two reefs constructed of reef balls and wood attract fishes and invertebrates of Smoot's Bay. Years ago Smoot's Bay lost much of its natural habitat when submerged

aquatic vegetation beds began to disappear. Submerged vegetation protects and supports aquatic life. And so do reef balls and wood.

Read More by [Bass Angler's Sportsmen Society](#)

To build these reefs in Smoot's Bay, the Department of Natural Resources worked with the general public and key staff from Chesapeake Bay Foundation, National Harbor, Maryland Bass Nation, Wetland Studies and Solutions, Maryland Artificial Reef Initiative and Maryland National Capital Parks and Planning. Over eighty mini-bay reef balls were constructed near National Harbor on Potomac River and added to Smoot's Bay in order to provide habitat for fish such as largemouth bass, as well as invertebrates and other fishes. Additional piles of wood and large logs were sunk in 2017 to provide a semi-natural environment for aquatic life.



**Assembling Wood Piles.** Wood piles were anchored in Smoot's Bay along with reef balls and smaller bundles of wood by Maryland Bass Nation. *Picture courtesy of Maryland Bass Nation.*

This is the first Maryland reef of its kind designed specifically for freshwater aquatic organisms. The reef will be sampled each year to determine its use by fishes and invertebrates.

Did you visit the reef? Tell us about your experience on the Fishing and Boating Service's Facebook or Twitter page!

## Anglers Track Lives of Bass

Most bass live after they are caught and released. If a bass swallows the hook, it has lower chances of survival when the injury leads to internal bleeding. In 2011 the department worked with youth anglers from Maryland Bass Nation to fish ponds for bass and learn the proportion of these so-called "gut hooked adults." Using that estimate and the chances of death from gut hooking, staff estimated that approximately 10.8 percent of the adults caught and released, died. Understanding that many factors influence fishing mortality, the department continued their work.



**Largemouth Bass Tagged** with an orange tag and released to Potomac River. Tagging fish is a common method biologists use to determine population sizes and track the lives of fish. The department continues to receive reports from anglers who catch tagged bass on Potomac River. Owing thanks, the anglers help to both estimate population size, which has not been done for over 10 years and provide the first ever estimate of catch-and-release mortality for the population.

The department conducted a follow-up study during 2017 to again, estimate the number of fish that died from catch and release angling. Staff tracked the lives of 43 adult largemouth bass in hatchery ponds for four days following angling, a time period earlier research showed was sufficient for determining mortality. Only 18 of the 43 adults were caught by anglers and only one of those died. That's 5.5 percent of the adults caught and released, died. One difference

between the 2011 and 2017 studies? The number of gut hooks. In 2011, five of the 35 caught bass had been gut hooked (14.3 percent) whereas in 2017, only one of 18 had been gut hooked (5.5 percent).

The department, recognizing the limits of pond studies, has tagged 683 largemouth bass adults from Potomac River since 2015 to manage the fishery with a more accurate estimate of catch-and-release mortality. Anglers helped the department by reporting 264 tagged bass. Catch-and-release mortality was estimated as 9 percent for 2015 tagged fish and 15 percent for 2016 tagged fish. This information helps to make smarter management decisions when protecting our natural resources.

The department also began studying the effects of piercing cull clips on adult largemouth bass. Five adults were clipped using piercing cull clips in May. All lived and four grew between one ounce and three ounces in weight after 15 days of feeding on about eight pounds of golden shiners. The fifth bass lost weight. It had been pierced into an area of the lower jaw that seemed to impair feeding. More work is planned for summer 2018.

### What's Next?

Concerns about the conservation of our precious black bass resources can be directed to the department and its Black Bass Advisory Subcommittee. Do you have a question about why a regulation is important or a concern about enforcement of black bass regulations?

Contact us!

General Inquiries to

<mailto:customerservice.dnr@maryland.gov>

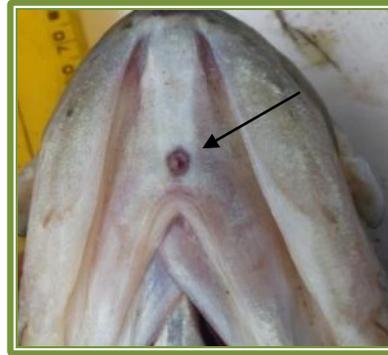
or

1-800-688-3476

Contact the Black Bass Advisory Subcommittee

Send E-mail to

<mailto:joseph.love@maryland.gov>



Bass pierced in center of lower jaw showed infection and lost weight

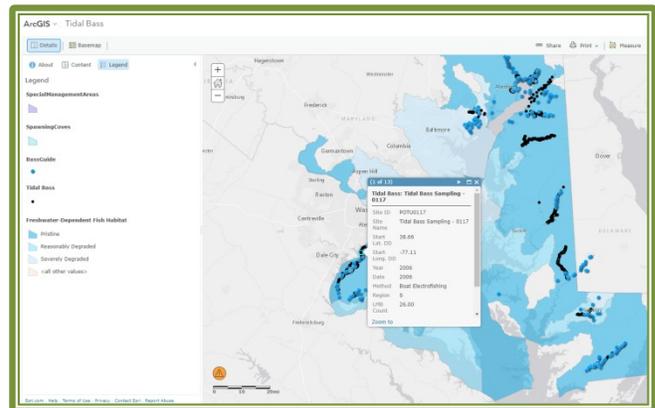


Bass pierced in jaw membrane showed infection but gained weight

All largemouth bass clipped with piercing cull clips showed sign of infection at site of clip during month of May .

Most of these bass gained weight. One bass did not gain weight. This was likely because of where the piercing clip was inserted.

Consequences of piercing cull clips during warmer water months, such as July, are not yet known but will be studied in 2018.



- Customer Resources.** Visit our [website](#) to get habitat quality information, bass guides' hot spots, and department's fall catch data. Other information:
- Maps of locations with largemouth bass virus and other pathogens
  - Volunteer Angler Surveys to teach us about your fishing experience
  - Public Access Fishing Maps to find new spots
  - Click Before You Cast! to find the fish

## CURRENT STATUS OF TIDAL BASS POPULATIONS

### Catch

The [Tidal Bass Survey](#) uses boat electrofishing to sample largemouth bass during fall in many of the major tidal freshwater rivers of the Chesapeake Bay watershed. Survey information for some rivers dates to the mid-1980s. This year, 147 sites were sampled and each site is about 800 feet long. After being measured and weighed, bass were released unharmed to where they were caught. In 2017 the Tidal Bass Survey sampled the upper Chesapeake Bay, Potomac River, Choptank River, and Gunpowder River.

The upper Chesapeake Bay fishery appears to have improved remarkably. Total catch of post-juveniles by the department in the upper Chesapeake Bay was greater than in the previous eight years. Average catch reported by tournament anglers in 2017 was greater than recent years and only slightly below long term averages. In the upper Chesapeake Bay, the department surveys the Northeast River, Susquehanna River, and the Susquehanna Flats. In order to maintain and increase the number of adult bass, the department routinely works with anglers to develop and raise awareness of catch-and-release strategies and implement an improved stocking policy.

Fishing on Potomac River was better than recent years, but not as good as it used to be. The department caught more post-juvenile largemouth bass from Potomac River than prior years, but catch still remains lower than that in the latter 2000's. However, average catch was much greater than record lows between 2012 and 2015. Catch of adults by tournament anglers was also slightly lower than department targets for the 12-inch season. Collaborative projects between anglers and the department



**Tidal Bass Survey.** The survey occurs every fall and follows a strict protocol that describes collection, data entry and management, and statistical analysis. Its procedures have been reviewed by the department, general public, and expert scientists across the country.

include raising awareness of catch-and-release strategies, working with bass tournaments, and implementing an improved stocking policy. The Smoot's Bay reef was completed in 2017 to improve survival of young largemouth bass. An on-line Bass Class was developed to improve communication of catch-and-release strategies among anglers and department staff.

Choptank River catches of post-juvenile bass by the department were typical of prior years. But notably the department caught a slightly greater proportion of 15-inch or larger fish than previous years. Few tournaments were held on Choptank River, but their data indicate that catch has been fairly similar since 1995.

Gunpowder River post-juvenile largemouth bass caught in tidal freshwater during 2017 was less numerous than other tidal rivers in Chesapeake Bay. Our catch has been low since at least 2013.

*The work in this report is supported by funds from license sales and sales of fishing equipment, tackle, and motorboat or small engine fuel.*

## Stocking

Management actions to improve the fishery include stocking as a tool to increase the number of adults. Do you know where largemouth bass is being stocked?

Visit our new stocking [website](#)



**Stocking Young Largemouth Bass** to tidal rivers of Chesapeake Bay.

The department worked with the public to give the state one of the best years for largemouth bass production, ever. The department raises young largemouth bass in hatcheries to help build or maintain popular fisheries where reproduction is not good enough to support quality fishing. Once released to the rivers, young largemouth bass grow for one to two years before being caught by anglers.

Over 300,000 juvenile largemouth bass were stocked to Potomac River in 2017. Nearly 6,500 juveniles were released to areas of the upper Chesapeake Bay. The department also released 2,000 fat largemouth bass to Gunpowder River by raising fish in partnership with Wheelabrator Technologies, Inc. The department was also able to secure funding to purchase and release 750 subadults (six inches to eight inches) to Choptank River.

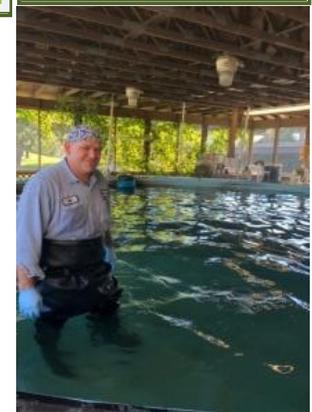


Staff remove young largemouth bass reproduced from hatchery ponds during spring.

Young largemouth bass are raised indoors and trained to eat protein rich, customized food. Most work occurs in hatcheries, but sometimes the work is shared with partners such as Wheelabrator Technologies, Inc.



Staff release bass to rivers by boating them to quality locations.



Most young largemouth bass are anywhere between 3 to 12 inches when released to rivers. Some may be smaller (2 - 3 inches). The department's stocking policy provides more details on stocking.



Staff typically release 50 -100 fish per location. There are many locations per river.



## Health

Only a small percentage of largemouth bass caught in 2017 during the Tidal Bass Survey showed any signs of injury or disease. Of 912 largemouth bass caught during the electrofishing survey in 2017, there were 13 with some sign of injury and/or disease. The most common injuries were abrasions (six fish) and physical damage such as hooking injuries (seven fish). Most injuries were mild.

For more information on bass health testing in the state, please:

Click Here for [Our Fish Pathogen Map](#).



**Extreme Disease** found for one individual of largemouth bass collected in 2015 in Northeast River. While such cases are exceptionally rare, each year, staff inspect bass for disease or injury during the Tidal Bass Survey.

## Reproduction

Reproduction and recruitment continues to improve in Potomac River and upper Chesapeake Bay. The average number of juveniles caught was either average (upper Chesapeake Bay) or above average (Potomac River) relative to all years of survey information.

In Potomac River, reproduction was observed at 80 percent of high quality habitats sampled by the Tidal Bass Survey. That percentage was slightly greater (82 percent) for similar type habitats in the upper Chesapeake Bay, which includes Susquehanna River, the Susquehanna River flats, and Northeast River.

The catch of juveniles in Gunpowder River was much greater in 2017 than in prior years and 50 percent of the high quality sites sampled had juveniles. This may be partially a result of stocking efforts in 2017.

Observations of juveniles from tidal freshwater of Choptank River were rare. Juveniles were caught in lower numbers, on average, than previous years and were found only at 17 percent of high quality sites.

## Diet

Staff examined diet habits for 249 largemouth bass that died during tournaments in 2017. Thirty-two of these mortalities originated from the upper Chesapeake Bay and the rest from Potomac River. The vast majority of bass (184 fish) had nothing in their gut. Most largemouth bass from Potomac River had eaten crayfish. About 13 percent of bass had eaten fish. More largemouth bass from upper Chesapeake Bay had eaten fish (74 percent) than crayfish. In both river systems, only 22 largemouth bass (or 8.8 percent) had a hook and/or soft plastic worm in their throat or stomach.



### Soft Plastic Lures

can end up on paved lots, trees, or water. Anglers are encouraged to recycle unwanted hooks or soft plastics.

## Growth

Growth rates for largemouth bass usually peak during the earliest years of its life. Body size, weight, and age all help determine growth rates for largemouth bass. From egg to its first birthday, a largemouth bass living in a tidal river of Maryland can grow up to eight inches long - and sometimes longer.

Growth rates for fish that are one to three years old tended to be greatest for fish caught from Potomac River (2.7 inches/year) and least for Gunpowder River (2.5 inches/year) and Choptank River (2.5 inches/year). Largemouth bass from the upper Chesapeake Bay grew slightly slower than those from Potomac River (2.6 inches/year).



**Marty Horn** at Lake Allen in Laurel, MD. Many black bass anglers fish impounded waters and lakes in the State of Maryland. Tell us about your quality fishing by posting to our Angler's Log by emailing your story and pictures:

[fishingreports.dnr@maryland.gov](mailto:fishingreports.dnr@maryland.gov)

GOT MORE QUESTIONS? CONTACT US AT:

[MAILTO:CUSTOMERSERVICE.DNR@MARYLAND.GOV](mailto:MAILTO:CUSTOMERSERVICE.DNR@MARYLAND.GOV)

OR 410-260-8300

*Illegal Guiding has been a serious issue raised by bass guides for several years. Licensed guides have training in first aid and boater safety. Customers may not know whether their guide is licensed and trained. The Department of Natural Resources offers a list of [Licensed Charter Boats & Fishing Guides](#)*

## FISHING IN 2018

### Find a New Fishing Spot

Interested in going bass fishing but don't know where to start? A lot of folks start fishing small farm ponds or lakes for bass. Similar to previous years, more reports in 2017 came from non-tidal black bass anglers (82 percent) who fished lakes and ponds near Baltimore..

Click Here for [Public Access Fishing Map](#)

Tell us what you are catching. Please take the multi-species, freshwater fishing survey.

Click Here to [Take the Survey](#)

If spending more time bass fishing is your New Year's resolution, then consider committing some bass fishing time to a bass guide or a tournament. To make it easy to find their contact information, the department has a listing of both.

Click Here for [List of Licensed Guides](#)

Click Here for [List of Permitted Tournaments](#)

### Start a Guiding Business

Charter boat guides provide personal service to their customers - enriching not only the bass fishing experience, but also the general experience on the water. They can also be great ecological historians. As stewards of the fishery, they often work with the Department of Natural Resources. Guides promote and protect the fishery by passing on a lifetime of quality fishing experiences to their customers within a few hours on the water. Want to be a bass guide?

Click Here to [Learn What You Need to be a Guide](#)

### What's New in Tournaments?

Visit the department's website for a list of upcoming bass [tournaments](#).

Directors reported 250 tournament fishing days in Maryland. The majority of those were held in Potomac River (26 percent) and upper Chesapeake Bay (32 percent). Directors reported more angler-hours fishing Potomac River (3,133 angler-hour) than upper Chesapeake Bay (2,545 angler-hour).

Reported catch was slightly lower than last year for Potomac River during the 12-inch season, but similar for the upper Chesapeake Bay. An angler weighed an average two bass per tournament for both areas.

Waterbody	Average Number of Bass Weighed per Angler, per Day	Total Number of Bass Caught and Reported for Year by Tournaments	Average Survival of Bass Weighed during Tournaments
Chicamacomico Ri.	1	22	100%
Choptank Ri.	2	106	73%
Conowingo Res.	3	887	98%
Deep Creek Lake	2	815	99%
Gunpowder Ri.	2	158	99%
Jennings Rand. Res.	1	5	100%
Lake Habeeb Res.	4	413	97%
Liberty Res.	NA	425	99%
Loch Raven Res.	NA	550	99%
Marshyhope Cr.	2	68	99%
Nontidal Potomac Ri.	2	168	96%
Pocomoke Ri.	2	579	97%
Potomac Ri.	2	8484	98%
Prettyboy Res.	NA	618	99%
Sassafras Ri.	NA	430	99%
Up. Chesapeake Bay	2	3859	99%
Wicomico Ri.	NA	70	100%

**Most Bass Live** when released following well-run bass tournaments. While many are hand released, some bass are released from large pontoon boats often called "release boats." In total there were 18,509 black bass weighed during tournaments and only 531 reported mortalities — that's 97.0% survival



### Free Signs

illustrating ways to reduce stress on caught bass. Signs are posted at weigh-in locations statewide. Are you a tournament director and want a copy of the sign? Contact Joe Love 410-260-8257.



*Thank You tournament directors and their anglers. Of 335 registered tournaments in 2017, 76% adopted at least one best management practice. Providing handling tips to anglers was the most common practice adopted by directors. Thank you for sharing in the appreciation of our resources via conservation!*

## An excerpt from an upcoming Maryland Natural Resource magazine

### Bass Tournaments Popularize a Fishery

by Dr. Joseph W. Love

Black bass fishing is synonymous with both largemouth and smallmouth bass. Its popularity in the latter 20<sup>th</sup> century exploded into a competitive sport that spawned fishing tournaments in Maryland and around the country. Bass Anglers Sportsman Society's (B.A.S.S.) founder, Ray Scott, transformed bass fishing tournaments when he championed the spirit of black bass conservation by requiring catch-and-release. Catch-and-release angling for black bass has guided the evolution of tournament organization over the past 50 years.

The methods underpinning competitive sportfishing have diversified over time to reduce fish stress and improve fish health prior to fish release. For example, some black bass anglers use oxygen infusers for live wells to ensure that their fish do not suffocate during the fishing day. These precious investments yield both a competitive edge and conservation practices that help keep bass alive.

Today the appearance of common sport fishing tournaments tend to be similar, no matter where they occur; a bass is caught, landed and added to a small tank on the boat called a livewell. A livewell simply pumps fresh water from a river or lake into the angler's boat and stores their catch for upwards of eight hours. Throughout the fishing day anglers may cull black bass to ensure they are keeping the five largest fish. At the end of the roughly eight hour day, anglers then place their black bass (up to five per angler) in bags to be weighed at a common stage located near a boat dock. Anglers

release their fish after the weighing using a diversity of methods, from releasing them at the dock to motoring them away from the dock using bass boats or larger boats with tanks called release boats.

One of the tenements of black bass conservation includes fish health. Keeping fish alive on a tournament day isn't easy, but thanks to millions of dollars and hours being spent on conservation efforts, it's often estimated that over 95 percent of caught bass during a tournament can be released alive. For those interested in fishing a tournament or coming out to watch one in action, the Maryland Department of Natural Resources maintains an on-line listing of most black bass tournaments.

In spite of conservation successes, directors and anglers have identified problems with their sport. Achieving conservation standards can be expensive and complicated during challenging summer months. As a service to tournament directors, the Department of Natural Resources often distributes educational information. Unfortunately, this information may not reach the hands of every angler or effectively solve the problems experienced by anglers.

Breakthroughs in technology and use of social media have effectively inspired the growth of a new branch of competitive sportfishing that significantly improves the survival odds of bass during summer months, in addition to growing its fan base.

Want to Learn More?

Read the rest of the story in upcoming Spring edition of Maryland's Natural Resource. Subscribe to the [Maryland Natural Resource](#)



Please send comments to:  
Joseph Love  
Freshwater Fisheries, Tidal Bass Program  
joseph.love@maryland.gov | 410-260-8257