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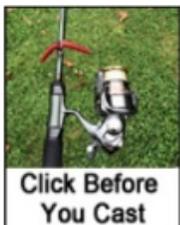
## Top 5 Things to Know

1. Largemouth bass fisheries enrich lives and support diverse businesses. Popular fisheries in 2020 included southern and central Maryland ponds and lakes and tidewater of Potomac River and upper Chesapeake Bay.
2. Catch - Photo - Release tournament popularity increases; new permit conditions promote bass survival and encourage better battery management for live wells.
3. Report tagged bass from Potomac River in 2021 as part of a new way to monitor the black bass fishery.
4. NEW conservation webpage summarizes the best of expert science on protecting bass.
5. Bass Black Blotchiness is likely caused by a virus and has been found in 14 states, but not considered lethal.

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## PLAN YOUR NEXT TRIP



Larry Hogan, Governor | Jeannie H. Haddaway-Riccio, Secretary  
 Fishing and Boating Services | 580 Taylor Ave B-2 | Annapolis, MD 21401  
 In Maryland: 410-260-8257 | Out of state: 877-620-8367  
 TTY Users call via the Maryland relay

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 3/2021 DNR 17-021921-268      dnr.maryland.gov/fisheries

THANKS FOR BUYING A FISHING LICENSE  
 GRACIAS POR COMPRAR UNA LICENCIA DE PESCAR  
[FISHING REGULATIONS \(CLICK HERE\)](#)  
[REGLAS DE PESCA \(EN ESPAÑOL\) \(CLICK AQUÍ\)](#)



## Fishing in a Pandemic

Bass fishing in 2020 began with a pandemic that reshaped the sport in Maryland. In spite of the undeniable hardships, people found ways to fish for bass. Anglers shared their fishing stories and pictures by email to the Angler’s Log:

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

Anglers submitted more [Volunteer Angler Surveys](#) in 2020 than the past five years. They fished 499 hours collectively and 42 percent of them fished for largemouth bass. The majority of those anglers fished in non-tidal waters, especially in southern and central Maryland. Anglers mainly fished impoundments and farm ponds. Bass anglers outspent other anglers by about \$10 per person, per fishing trip.

### [2021 List of Permitted Bass Tournaments \(so far\)](#)

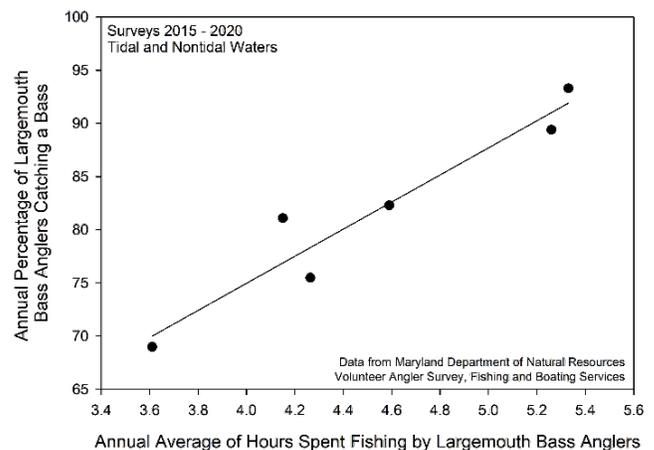
Anglers fished bass tournaments mostly in tidal waters. During the pandemic, tournament directors changed the way they organized their tournaments. Some held socially distanced dockside weigh-ins, while others had tented weigh-ins that complied with COVID-19 guidance such as requiring all crew to wear masks. More tournaments were reported in the upper bay than any other year on record. Potomac River was the second most popular tidewater fishery for tournaments. Because of the pandemic, some large tournaments on the Potomac River were canceled or had reduced attendance.

Anglers weighed an average of between one and three bass per angling-day from upper Chesapeake Bay. Anglers who fished the Potomac River weighed an average of between two and three bass per angler-day. Prior to releasing fish, water quality in fish recuperation tanks and release sites generally – but not always – exceeded standards.



### *Spend More Time Fishing*

Most bass anglers submitting Volunteer Angler Surveys to the department in 2020 successfully caught a bass (81 percent). More time fishing led to more anglers catching a bass.



Send your photos to  
[fishingreports.dnr@maryland.gov](mailto:fishingreports.dnr@maryland.gov)

## MANAGEMENT

### Subcommittee Highlights

The [Black Bass Advisory Committee](#) is an appointed public stakeholder group that advises the department on management needs for black bass fisheries in the state. In 2020, they:

- Discussed a mechanism for anglers to donate money to black bass causes via COMPASS.
- Recommended changes in permits issued to tournament directors.
- Recommended banning Alabama Bass in Maryland because of problems they cause
- Supported initiative by Maryland Bass Nation to install reefs in Wades Bay and Blue Banks.
- Discussed illegal bass guiding on Potomac River and the fines issued to offenders.



All meetings are currently held virtually by webinar. Future meeting dates are: April 5, July 12, and October 4.

### Potomac River Bass Management – Take Two

After a delay owed to the pandemic, an inter-jurisdictional initiative has been rekindled to monitor the largemouth bass fishery on the Potomac River. To work during the pandemic, the Maryland Department of Natural Resources adopted new field work policies to help ensure the safety of its biologists and prevent the spread of coronavirus. Objectives of the inter-jurisdictional initiative are:

- Estimate abundance of stock size largemouth bass ( $\geq 8$  inches) from tidal freshwater of Potomac River using a mark-recapture project and recreational creel data;
- Estimate abundance of quality ( $\geq 12$  inches) and preferred size ( $\geq 15$  inches) largemouth bass from tidal freshwater of the Potomac River using a mark-recapture project and tournament creel data.

**What can you do?** Bass will be tagged in spring 2021. If you catch a tagged largemouth bass, please report it. Anglers may report the tag number and date by calling the hotline (1-804-367-2925), email to [basstag@dwr.virginia.gov](mailto:basstag@dwr.virginia.gov) or through the department’s [Volunteer Angler Survey](#) or QR code for freshwater fishes.

# ATTENTION ANGLERS



**TAGGING STUDY**  
Largemouth bass in the Potomac River are currently part of a region-wide monitoring project. If you catch a tagged fish, we ask that you report it by calling 1-804-367-2925.

**RECORD THE FOLLOWING INFORMATION:**

<ol style="list-style-type: none"> <li>1. Tag number <small>Colors may conceal the tag but can be easily scraped away to reveal the number.</small></li> <li>2. When caught</li> <li>3. Where caught</li> </ol>	<ol style="list-style-type: none"> <li>4. How big (nearest 1/2 inch)</li> <li>5. Where released, if released</li> <li>6. When released, was tag intact?</li> </ol>
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**DO NOT REMOVE THE TAG FROM FISH**  
Once the information is recorded, we strongly encourage you to release all tagged fish so that we may continue to learn from them. Any angler who reports a tagged fish will be eligible for a reward.

TAG NUMBER
FISH LENGTH

VA/MD/DC BASS FISHERY MGMT 0001
CALL 804-367-2925



Report tag by calling 1-804-367-2925

See Website Reporting by scanning the QR Code below with your cell phone camera.








200 Taylor Ave. S.E.  
Annapolis, MD 21401  
410.261.8300  
[www.dnr.maryland.gov](http://www.dnr.maryland.gov)

### Tidal Bass Fisheries in Maryland

The [Tidal Bass Program](#) uses boat electrofishing to sample largemouth bass during fall. Data are used to assess the status of the population. The assessments that follow include results from the Tidal Bass Survey as well as information reported by tournament directors and anglers.



Measuring largemouth bass total length.

*Potomac River**Status: Great*

Though some anglers struggled finding bass later in 2020, catch indices for the Tidal Bass Survey were generally normal relative to years prior. Reported catch rates for tournament anglers during the 15-inch and 12-inch seasons averaged approximately three bass per fishing day. Juveniles were collected in good numbers across most sites. Body growth and robustness was good, though growth rates for younger bass were marginally lower than normal. No bass with any external signs of disease or hooking injury were collected. Additionally, only 2 of 20 sampled bass had Largemouth Bass Virus, which is a low rate of prevalence. Learn more about testing for largemouth bass virus on the [department's pathogen website](#). **Because of good reproduction, normal catch by tournament anglers, and generally great growth and fish health, the status of bass in tidewater of Potomac River is great.**

*Upper Chesapeake Bay**Status: Good*

Catch indices were below average for bass older than age 0, but reproduction indices were either normal or above average. Growth indices generally reflected good body growth and condition. The majority (over 99%) of the bass had no external signs of disease. However, of 20 bass sampled, 16 tested positive for Largemouth Bass Virus, which indicates that the virus is prevalent. Learn more about testing for Largemouth Bass Virus on the [department's pathogen website](#). Extra handling care is of utmost importance when handling bass during summer. Reported catch rates for tournament anglers during the 15-inch and 12-inch seasons (one to two bass per angler, per fishing day, respectively) was lower than the previous two years, but similar to catch rates reported from years prior. **Because of good reproduction, but high prevalence of Largemouth Bass Virus and lower than normal abundance of age 1+ Chesapeake Bay was conditionally good.**

*Pocomoke River**Status: Good*

Comparison of catch indices to reference points indicated that catch in 2020 from Pocomoke River was below average for juvenile and older bass. Reference points were possible in 2020 thanks to completion of a 10-year baseline data set. Fewer 15-inch and greater bass were collected than normal. Growth metrics generally indicated that bass, on average, were healthy.



*Pocomoke River.*

Three of forty-four fish had lesions, with one having a relatively high level of infection. While sample size was low, tournament catches during the 15-inch and 12-inch seasons averaged between 2 and 2.5 bass per fishing day, which is normal for this fishery. **Because of low catch measured by the Tidal Bass Survey, but good growth metrics and normal catch rates reported by tournament anglers, the population status of bass in Pocomoke River is good.**



*Recording data on Pocomoke River.*

Anglers should take care during warm weather to quickly return bass to water and minimize unnecessary handling stress.

*Gunpowder River**Status: Good*

The catch index for age 1 and older bass was greater than the previous seven years of monitoring. Unfortunately, less than one third of the sites surveyed had juveniles, which were also less abundant than in previous years. While not unusual for the area, this finding further supports observations of limited spawning habitat in tidewater of Gunpowder River. Growth indices showed healthy bass. No fish were found with lesions or hooking injuries. **Because of steady increases in catch indices and normal levels of growth and robustness, the population status of bass in tidewater of Gunpowder River is good.**



Staff electrofishing during Tidal Bass Survey.

*Middle River**Status: Unknown*

Catch indices for juveniles and adults collected during the Tidal Bass Survey were lower than in the past two years. No fish greater than 15-inches were collected. Relative weights (or robustness) were lower, on average, than that observed for other rivers. No tournament catch data were available to aid in the assessment of this stock. **Because of too few years of monitoring, the population status of bass in the Middle River is unknown at this time.**

Tell us about Fishing.  
Take the  
[Volunteer Angler Survey](#)

*Bush River**Status: Unknown*

The catch index for juveniles caught during the Tidal Bass Survey was lower than in the past two years, but slightly greater for post-juveniles. The bass that were caught were mostly larger than 15-inches. Body growth and condition were normal. No tournament catch data were available to aid in the assessment of this stock. **Because of too few years of monitoring, its population status is unknown at this time.**

*Florida Bass Hybrids in Maryland*

Florida Bass, a distinct strain of largemouth, were a hot topic of discussion in bass fishing circles in the 1990s because the species got big. Florida bass is native to Florida and is nearly identical in appearance to largemouth bass. Both species hybridize and hybrids have been stocked in places outside of its native range, like Texas, Virginia, and Maryland because of an assumed growth advantage.

Florida bass, adapted to Florida waters, do not reproduce or grow as well in Maryland or other northern states. Because its genes can pass those inferior traits to future generations of largemouth bass, bass clubs stopped stocking hybrids in Maryland in the 1990s. At that time, hybrids were found in most riverine populations, with many hybrids (84%) in the Choptank River.

Did these hybrids' offspring disappear? In 2020, the Maryland Department of Natural Resources took steps to determine whether hybrids persisted in tidal rivers of Maryland. We clipped fins for 25 largemouth bass from Pocomoke River for analysis at Auburn University. We learned 28 percent of those fish were hybrids, when in 1998 only 19 percent were hybrids. This finding demonstrates that hybrids are persisting in tidal rivers nearly 25 years later. Additional testing for other river populations is being planned for 2021.

## Non-Tidal Bass Fisheries in Maryland

Non-tidal black bass fisheries in Maryland stretch from Deep Creek Lake and Youghiogheny River in western Maryland to eastern shore farm ponds and impounded waters, such as Johnson's Pond and Tuckahoe Lake. In 2020, anglers sent more reports from impounded waters of central Maryland (near Baltimore) and southern Maryland than other areas. The non-tidal Potomac River (or upper Potomac River) also draws bass anglers and tournaments every year. These fisheries are routinely assessed by regional biologists within the Maryland Department of Natural Resources' Freshwater Fisheries Program. Stay current with information of interest to you by visiting the [Freshwater Fisheries Program's website](#).



### Deep Creek Lake (2018)

Deep Creek Lake is Maryland's largest freshwater impoundment. Catch indices, body condition, and size structure for smallmouth bass represented a normal and healthy population in 2018, but not so for largemouth bass. Surveys caught fewer largemouth bass, including juveniles than usual. Catch rates reported by tournament anglers were similar to previous years so the problems with largemouth bass recruitment may not yet be affecting anglers.



### Non-Tidal Potomac River (2020)

Over the past ten years, reproduction of smallmouth bass has been poor because of unusually high river flow during and immediately after spawning. Smallmouth bass year-class strength has been monitored on the upper Potomac River annually since 1975 using shoreline seine surveys. Reproduction and recruitment problems have led to fewer adult smallmouth bass in the river. To help offset poor reproduction, roughly 35,000 juvenile smallmouth bass were stocked into the upper Potomac River in July 2020. Future monitoring efforts will focus on how this stocking program benefits overall adult smallmouth bass numbers.

### Prettyboy Reservoir (2018)

Prettyboy Reservoir impoundment, in the Piedmont region of central Maryland, serves as a public water supply and fishing spot. Fishing is permitted from shoreline and from boats with a [Baltimore City Reservoir permit](#). Largemouth bass had a strong 2018 year of reproduction, which could translate to good fishing years in 2021. Body condition was subpar so fat fish are uncommon. Smallmouth bass reproduction and recruitment have been variable. Surveys suggest that there is a quality fishery for both largemouth bass and smallmouth bass.

### Triadelphia Reservoir (2020)

Both largemouth bass and smallmouth bass can be caught in Triadelphia Reservoir, which is a large impoundment of the Patuxent River in southern Maryland. The reservoir provides a water supply for Montgomery and Prince George's counties. The catch of largemouth bass (> 10 inches) during the 2020 survey had increased by five-times since 2013. However, the catch of big fish over 14-inches has declined since 2018, possibly large adults were too deep to catch or because the several years of low pool levels due to dam repairs had negative consequences on lifespan. Biologists noted good reproduction and growth. Come visit the improved launching facilities at Green Bridge!

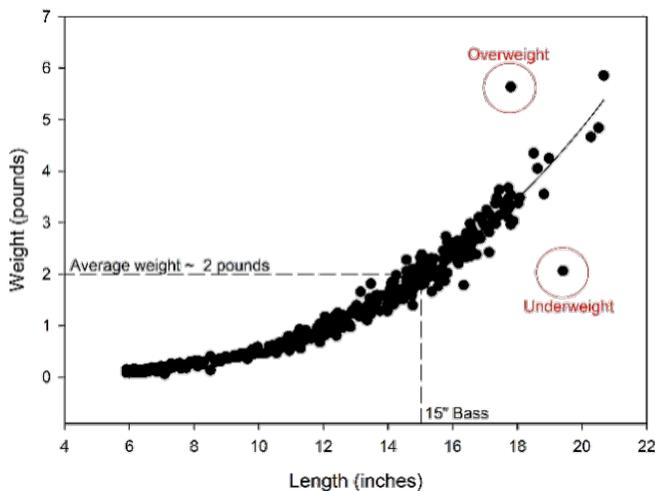
*Conowingo Reservoir (2020)*

Conowingo Reservoir, a large impoundment of the Susquehanna River, was created for hydroelectric power but also provides for popular largemouth and smallmouth bass fisheries. Catch rates for both species were lower than previous surveys, but both had multiple age and size classes represented. While widely reported for smallmouth bass in the Susquehanna River, disease prevalence has been variable in Conowingo Reservoir. Lesions were noted on 10 percent of smallmouth bass caught in 2019, but only 1 percent in 2020. The fishery remains good and offers quality fishing opportunities.

**THE SCIENCE OF PREDICTING BASS WEIGHTS**

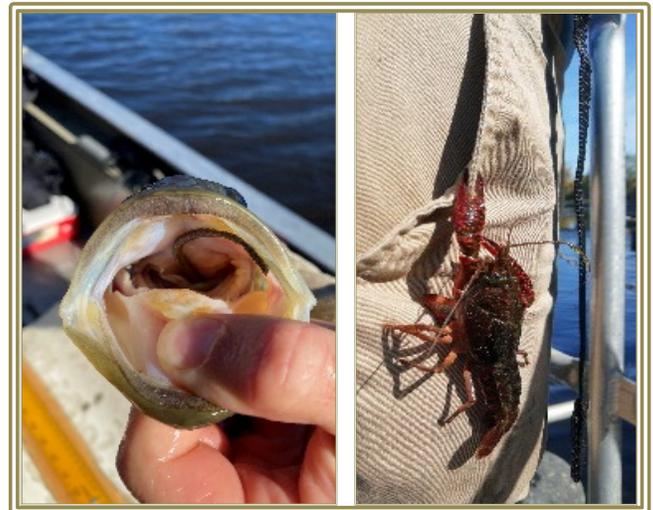
Is your bass fat or skinny? Similar to a height-weight chart for humans, a length-weight chart for fish helps determine if a bass is overweight or underweight, or about normal. Fishery scientists refer to this as “body condition.”

What is a length-weight chart? For a large sample of fish, scientists measure the length and weight of each individual fish. Then, an axis of length that ranges from the smallest to the largest fish is created. For each fish length, its weight is plotted on a perpendicular axis. Circled are two examples of “outliers,” with one fish being heavier than its length would predict



(overweight) and the other being lighter than its length would predict (underweight). For bass that are 10 inches or longer, weights vary more than for bass that are 6 – 10 inches.

Bass differ in body condition because of what and how much they are eating. When a bass is fighting severe disease or infection, it may be underweight. Body condition can also indicate issues with forage, water quality, or habitat.



Largemouth bass eats all kinds of food, not just fish. Also crayfish (right) and the occasional rodent that falls into the water.

**CONSERVATION**

*NEW Conservation Webpage*

The cornerstone to black bass fishery management in Maryland is conservation. After several years of content gathering, the Maryland Department of Natural Resources launched its [Bass Conservation webpage](#). The purpose of the page is to provide Marylanders and the general public information on black bass diversity, handling strategies for catch-and-release fishing, and things to protect bass habitat. For more information, please visit:

[Our Conservation Webpage](#)

## *Black Bass Blotchiness*



Dr. Luke Iwanowicz from Leetown Science Center (U.S. Geological Survey, Kearneysville, West Virginia) presented research on black blotchiness disease at the American Fisheries Society virtual annual meeting in 2020.

Many Maryland anglers and biologists recognize this abnormal pigment on the skin of largemouth bass and smallmouth bass. The disease has been reported from sixteen states.

Blotchy bass syndrome is related to the occurrence of adomavirus (MdA-1), which varies in severity. The blotchiness can range between one or two spots to full body coverage. This adomavirus is a new group of viruses first reported in a guitarfish (a type of shark) in 2018. Now scientists have a way of looking for the virus and they are finding it in other fish and reptiles. Today, most of the work with the virus has been done with smallmouth bass.

There is no cure for black blotchiness but it does not appear to be lethal. The more well-known, largemouth bass virus, can increase risk of death during hot summers or stressful periods.

Read More about [Black Bass Blotchiness Here](#).



## *Catch-Photo-Release Tournaments in Bass Conservation*

Competitive bass fishing began in earnest in the 1960s with the formation of the Bass Anglers Sportsman Society (B.A.S.S.) and other groups. Anglers sought a limit of black bass to bring to scales, and the winner had the heaviest bag. Tournament fish were kept after weigh-ins, and piles of dead fish were commonplace. Since the early 1970s, the focus of bass tournaments has shifted to conservation and keeping fish alive. Now, many tournaments have boat-based anglers catch a fish, keep it in a live well, weigh it on stage, and return it to the water. The fish survives, reproduces, and can be caught again. In many cases, over 95 percent of fish are returned to the water. Some fish die and such mortality can be substantial (up to 30 percent of catch during summer). A growing number of anglers have sought to reduce it.

Catch-Photo-Release (CPR) tournaments are growing in popularity. Their aim is to reduce delayed mortality and make competitive bass fishing more accessible. These are “no-possession” tournaments where a fish is caught, measured (usually by length but sometimes weight), documented with a photograph, and immediately returned to the water. This reduces handling stress relative to traditional weigh-in tournaments and can lessen delayed mortality. Major League Fishing, one such national organization, began in 2011 and features some of the biggest names in bass fishing. The CPR tournaments also make competitive bass fishing more accessible to kayak anglers, which is growing in popularity nationwide. Last year, B.A.S.S. held its inaugural kayak series. The CPR format also gives anglers access to otherwise closed fisheries, such as Maryland’s non-tidal waters during spring, where possession of bass is prohibited. Fishing clubs adding CPR trails not only take another step toward bass conservation, but expand the sport for new anglers casting their line into the future of black bass fishing.

*How Stocking Supports Conservation*



Stocking is one tool that fishery managers use to increase abundance for fisheries in decline. The Maryland Department of Natural Resources maintains an annual stocking program for the tidal bass fishery. Adults are collected from tidewater during spring, transported to hatcheries where they spawn, and

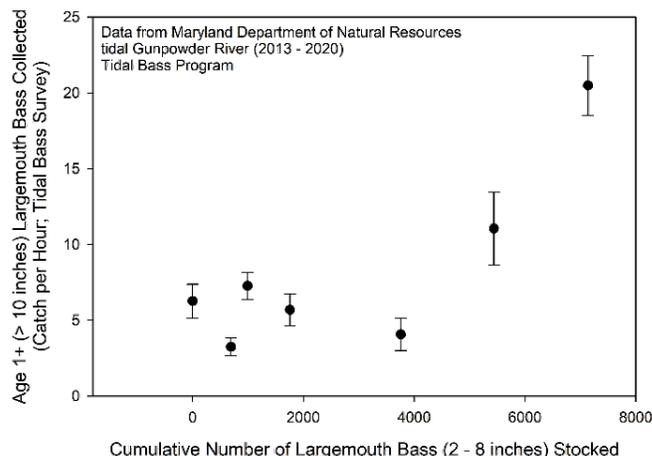
are then returned to their home water. Their offspring (also known as fry) are raised on a high quality diet until they reach a desirable size, and then stocked into select tidal rivers. Spawning success in tidal rivers can vary annually. This program ensures a small portion of the population will successfully spawn in the hatchery and provides the department with enough bass to stock waters that have suffered from poor reproduction. In 2020, the department stocked over 48,000 largemouth and smallmouth bass in Maryland waters.

Since 2013 the department has worked in partnership with Wheelabrator Technologies Inc. and Maryland Bass Nation to stock tidewater of Gunpowder River. This fishery was once so popular that a weigh-in station was built by Maryland Bass Nation at Gunpowder State Park. However, deteriorating habitat conditions caused the population to decline. Fortunately, cumulative years of stocking has increased the abundance of age 1+ largemouth bass in Gunpowder River, and based upon the 2020 assessment, it is showing signs of recovery.

**PLEASE TELL US WHAT YOU THINK OF THE BLACK BASS ANNUAL REVIEW**

[Take the One-Question Survey](#)

**Can stocking work?** Cumulative years of stocking has increased the abundance of age 1+ largemouth bass in Gunpowder River.



**Can these results be replicated?** In January 2021 the Black Bass Advisory Committee recommended that biologists consider stocking an eastern shore stream beginning in 2021 to determine if stocking can also improve this fishery in decline. Department staff are working on a plan for summer of 2021.

Date	Bass	River	Number	Size (inches)
10/28	Largemouth	Gunpowder	642	4 - 8
8/12	Largemouth	Tidal Potomac	5,000	4 - 8
7/15	Smallmouth	Non-tidal Potomac	35,000	2 - 4
7/2	Largemouth	Tidal Potomac	8,100	2 - 4

**Stocking Locations 2020.**



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Questions? 1-800-688-3467