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# PLAN YOUR NEXT TRIP







**Fishing Map** 







**Crime Stoppers** 443-433-4112



## **Top 5 Things to Know**

2024

- 1. NEW! Black Bass Conservation Fund was created to receive public donations that will be used in bass conservation projects throughout the state.
- 2. Black Blotchiness Syndrome, an immune response to a newly discovered adomavirus, is widespread east of the **Rocky Mountains, including many areas** of Maryland.
- **3.** After three years of stocking and better habitat, the smallmouth bass population in non-tidal Potomac River makes a comeback.
- 4. Largemouth bass fisheries remain highly productive in upper Chesapeake Bay and gain attention for an increasing number of bass tournaments.
- 5. Maryland, Virginia, and Washington D.C. working in 2024 to continue cooperative, long-term monitoring project that depends on anglers for its success.



**Guide to Fishing and Crabbing** Reglas de Pesca (en Español)

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. 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 a disability. 3/2024 DNR 17-022024-1 dnr.maryland.gov/fisheries

# 2024

# NEW! BLACK BASS CONSERVATION FUND

Introduced as bills to the General Assembly and signed into law by Governor Wes Moore, the Black Bass Conservation Fund allows the general public to directly donate money to largemouth bass and smallmouth bass conservation in Maryland. Gifts will be used for enhancing aquatic habitat, bass stocking, <u>supplies to</u> <u>support bass conservation</u>, or similar efforts. Projects will be considered each year by the department and its Black Bass Advisory Committee, a body of advisors made up of public stakeholders.



Governor **Wes Moore** signed legislation introduced by Senator **Jack Bailey** and Delegate **Jackie Addison** in support of actions taken by **Roger Trageser**, President of the Maryland Bass Nation, and Chair of Black Bass Advisory Committee, to establish the Black Bass Conservation Fund

People are invited to provide any amount of money to support black bass conservation in Maryland. The amount given is not taxdeductible. Login to <u>COMPASS</u>, go to Purchase Merchandise, and click on the Merchandise section to find the Black Bass Conservation Fund option. Donations by check or money order to the Black Bass Conservation Fund are also appreciated. For donations by check of \$1,000 or less, please pay to the order of the Maryland Department of Natural Resources and include in the memo, "Black Bass Conservation Fund." Mail checks to: Martha Bruder, 580 Taylor Avenue, B-2, Annapolis, MD 21401.

For donations greater than \$1,000, please contact martha.bruder@maryland.gov.

## MONITORING BLACK BASS BLOTCHINESS SYNDROME

During Major League Fishing's bass conservation meeting in December 2023, Dr. Clayton Raines (USGS) presented new information about Black Blass Blotchiness Syndrome.



Black Bass Blotchiness Syndrome has been commonly observed by anglers fishing Maryland waters for decades.

Black Bass Blotchiness Syndrome was first thought to be caused by adomaviruses in 2018. Viruses are nothing new to black bass anglers. Largemouth Bass Virus has been known by black bass anglers for decades because of its ability to kill bass, especially during stressful periods like summer. That virus also received some recent notoriety as it was implicated in the death of juvenile smallmouth bass in Susquehanna River.

Unlike Largemouth Bass Virus, though, the adomavirus associated with Black Bass Blotchiness Syndrome is not considered to be lethal. Consequences continue to be studied because much about the disease is not known. The hyperpigmentation or blotchiness described by Dr. Raines, is related to the immune response of the bass to the virus, rather than directly caused by the virus itself. Researcher observations have indicated that areas of the skin with black blotchiness tended to be thinner and to fragment easier, and that the intensity and pattern of blotchiness can vary over time.

Surveillance between 2019 and 2021 of the syndrome in the United States indicated that it has been found in most states in the continental United States, but not commonly west of the Rocky Mountains. The Maryland Department of Natural Resources has begun recording incidences of black blotchiness during the health assessment of its Tidal Bass Survey. Black blotchiness has been found in all tidal rivers where bass has been surveyed, as well as many non-tidal impoundments. Generally, only a small fraction of the sample exhibits black blotchiness.

Until February 2024, anglers who caught a bass showing signs of black blotchiness were able to report their catches with photos as part of the Blotch Bass Bonanza. In addition to being entered into a raffled prize, these anglers also helped researchers from the United States Geological Survey and West Virginia University to learn more about the distribution and prevalence of blotchiness in the continental United States.

Researchers continue collecting data on Black Bass Blotchiness Bass Syndrome. The virus has never been identified in humans or common domestic pets. As long as the fish are in good condition, they're safe to handle and eat if cooked properly. For more information:

www.usgs.gov/centers/eesc/science/investigati ng-blotchy-bass-syndrome-black-basses



Last year's Bonanza proved to be a huge success and provided researchers with valuable data on the occurrence of Black Bass Blotchiness Syndrome. Did you see a bass with blotches? Show us your photos by mailing your fishing stories to fishingreports.dnr@maryland.gov.

## **New to Black Bass Fishing?**

Unless you're exempt, **buy a fishing license**, online with <u>COMPASS</u>, and learn <u>Fishing</u> <u>Regulations</u> for fishing black bass.

Find a rod with an artificial rubber worm, or borrow one from the <u>Tackle Loaner Program</u> at a library near you. Bass anglers use lots of artificial tackle, from worms to creature baits to spinners. Of all the bait types, rubber worms are probably the cheapest and most common.

Want to Watch or Fish a Bass Tournament?

Click Here for the 2024 tournament schedule!

# 2024

# 2024

## MANAGEMENT

### **BBAC** News

The <u>Black Bass Advisory Committee</u> is an appointed public stakeholder group that advises the department on management needs for black bass fisheries in the state. In 2023, they:

- Toured the <u>department's Joseph</u> <u>Manning Hatchery</u> at Cedarville State Forest to learn more about raising largemouth bass for stocking purposes.
- Worked together with the department and legislators to help establish and promote the first-ever online donation system that supports black bass conservation in Maryland.
- Worked together with the department to develop three new Black Bass Conservation videos starring professional angler, Mike Iaconelli.
- Identified and worked toward permitting Wades Bay as a reef site that could attract sport fishes for anglers.



Sean Knowles (Hatchery Manager) explaining operations to members of Black Bass Advisory Committee.



All meetings are currently held virtually by webinar. Meeting dates in 2024: April 8; July 10, and October 9; all meetings start at 6:00 pm.



About 85 percent of tournaments in 2023 used reduced creel limits or did not allow possession.

## Black Bass Fishery Assessments

The Tidal Bass Survey uses boat electrofishing to sample largemouth bass during the fall. Data are used to assess the status of the population.

#### Potomac River

We caught 469 largemouth bass, including 277 juveniles. Eleven of these fish (or two percent) showed signs of hooking injury or disease. Relative abundance or catch indices were normal. Anglers weighed between three and four bass per tournament fishing day (on average), which was the highest recorded since 2012. Reproduction was good and juveniles were caught at 88 percent of prime habitats, which was above average. Growth indices were normal for the population and annual mortality tended to be lower than average, suggesting good recruitment and survivorship. Because of generally average survey statistics, the status of this fishery was designated as Good.

# 2024

### Upper Chesapeake Bay

We caught 131 largemouth bass, including 75 juveniles. Three of these fish (or two percent) showed signs of injury and/or disease. Relative abundance or catch indices were within normal ranges for the fishery. As has been typical for the fishery, anglers weighed about two bass per tournament fishing day. Reproduction appeared to be good with 86 percent of high-quality habitats having juveniles, which was above average. Recruitment may have lagged in recent years as indicated by the size structure of the population. Growth rate indices also tended to be lower than normal. Because of generally good catch statistics and reproduction, the status of this fishery was designated as Good.



Release boats carry black bass caught during tournaments away from docks during some big bass tournaments. Most tournaments do not use release boats and instead, may use chutes or their own anglers to redistribute bass after a tournament.

#### Gunpowder River

We caught 47 largemouth bass, including one juvenile. Three of these fish (or six percent) showed signs of injury and/or disease, a greater proportion than that observed for Potomac River or the upper Chesapeake Bay. Catch indices were above average, likely owed to significant stocking efforts in the river. Anglers weighed about two bass per tournament fishing day, similar to the upper Chesapeake Bay. Juveniles were just two percent of the sample and found in only six percent of prime habitats, suggesting limited reproduction. Growth rates tended to be below average for the population. Because of above average catch statistics, likely owed to stocking, but below average growth and limited reproduction, the status of this fishery was designated as Rebuilding.

#### Middle River

We caught four largemouth bass, including one juvenile. No fish collected showed signs of injury and/or disease. Low levels of catch for this population do not allow for a robust assessment. Possibly owing to saltier and more challenging survey conditions, few fish were collected during survey efforts. However, anglers have reported a resurgence of the fishery. Led by Scott Sewell (Conservation Director, Maryland Bass Nation), Middle River has benefited from significant releases of purchased and hatchery-reared bass and will likely remain a focus for supplemental stocking. Because a reference dataset for comparison is on-going and not yet completed, the status of this fishery has been designated as Unknown.



Bass tournament anglers use hand scales to weigh fish during catch-photo-release (CPR) tournaments.

# 2024

#### Bush River

We caught 35 largemouth bass, including six juveniles. Five fish collected (or 14 percent) showed signs of injury and/or disease, a greater proportion than that observed for Potomac River and upper Chesapeake Bay. Catch has slowly increased since 2018 and was at its highest average in 2023. Reproduction tended to be limited in Bush River, but 44 percent of high-quality survey sites had juveniles even though juveniles constituted a relatively low proportion of the sample (just three percent). Growth rates were similar to those observed for fish from Gunpowder River. Because a reference dataset for comparison is on-going and not yet completed, the status of this fishery has been designated as Unknown. fisheries in Maryland. The Maryland Department of Natural Resources' Freshwater Fisheries and Hatcheries Division follows a standardized operating protocol for surveying non-tidal waters. These procedures and the indices they generate help guide managers to take various actions that improve fishing for anglers. Learn more by visiting our Division Webpage at:

dnr.maryland.gov/fisheries/pages/inland.aspx



Nathan Fernandez caught this beautiful largemouth bass on Lake Needwood.

## Non-Tidal Bass Fisheries

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 2023, anglers sent more reports from impounded waters of southern Maryland and central Maryland than other areas.

The non-tidal Potomac River (or upper Potomac River) boasts one of the best smallmouth bass

Evan Paugh fishes two largemouth bass from Deep Creek Lake.

#### Deep Creek Lake

The largemouth bass fishery in Deep Creek Lake continues to be characterized by a relatively low density but a high proportion of large fish. The results suggest that growth rates are sufficient to support a high-quality fishery; however, recruitment to stock size may be limited. Smallmouth bass are the most abundant black bass species in Deep Creek Lake and provide a quality fishery for anglers for both numbers and quality fish.

#### Piney Run Reservoir

Largemouth bass of Piney Run Reservoir have relative weights indicative of fish of good condition. The bass fishery in Piney Run Reservoir is sufficient to provide anglers with a quality fishery.

#### Little Seneca Lake

Largemouth bass are the dominant predators in Little Seneca Lake. The results of the 2023 electrofishing survey suggested that the population continues to maintain a size structure that is desirable to anglers. Catch for largemouth bass was lower than the previous fall electrofishing survey. Future surveys will attempt to assess if low catch is due to increased competition and/or predation from northern snakeheads.

#### Wheatley Lake

Largemouth bass catch was moderately high and numerous stock-sized fish were collected. Few fish that were one year and older were observed, which suggested poor recruitment during 2022.

#### Rocky Gorge Reservoir

More largemouth bass were caught during the survey than other sportfish. However, we surveyed fewer substock largemouth bass than previous surveys, continuing a declining trend from 2019. This size group has declined and should be closely monitored in the future because the trend suggests problems with reproduction. As a result of fewer substock largemouth bass in samples, population structure has shifted toward larger individuals with healthy, robust weights. The healthy weights could be explained by gorging on prey concentrated at low water levels.

## What Do YOU Think?

Take our <u>SURVEY</u> about this year's annual review or call <u>joseph.love@maryland.gov</u> at 410-260-8257. What do you want to read more about?



*Lil Chuck caught his first smallmouth bass fishing the Monocacy River.* 

#### Conowingo Reservoir

Smallmouth bass abundance and size structure is and should provide excellent good fishing. Largemouth bass abundance continues to be low. High flow and turbidity events in the spring have likely contributed to the erratic recruitment. Along with direct impacts to nesting behavior, high turbidity has also likely affected the amount of submerged aquatic grasses within the impoundment. These grasses are the preferred habitat for juvenile largemouth bass and decreased availability may affect their survival. Fewer exterior lesions than last year were noted, just four percent of smallmouth bass and seven percent of largemouth bass. Diseases affecting smallmouth bass in the Susquehanna River watershed have been well documented. Hooking injuries were observed for 16 percent of smallmouth bass and 20 percent of largemouth bass.

# 2024

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#### Upper Potomac River

Smallmouth bass year-class strength has been monitored annually since 1975 using shoreline seine surveys. The mean number of juvenile smallmouth bass per seine haul is used as a metric of smallmouth bass recruitment.



Catch-Photo-Release (CPR) tournaments for smallmouth bass include measuring the fish, taking a photo for the competition, and releasing the fish at the site of capture.

Over the past ten years, mean annual recruitment was below average. The department documented poor recruitment for smallmouth bass when stream flow or discharge was above average in May and June. This follows closely with other smallmouth bass research showing that annual recruitment was closely tied to flow conditions during and immediately after spawning. Additional factors that are not specifically monitored, such as turbidity, temperature, parasite loads, and intersex levels also could affect populations.

With the observed declines in adult smallmouth bass population metrics in 2019 to 2020 and limited juvenile recruitment over the past ten years, the management decision was made to start a supplemental smallmouth bass stocking project to try and improve the fishery. The goal of the project was to produce smallmouth bass juveniles in a controlled hatchery environment and then stock them into the mainstem river. In 2020, the project successfully stocked 35,000 juvenile smallmouth bass in the river. Working with bass tournaments to obtain adults that would spawn in hatcheries, departmental efforts in 2022 and 2023 were again successful and a total of 53,000 juvenile smallmouth bass were stocked in the upper Potomac River. Recent resurgence in population status has been good news for the fishery and stocking efforts in 2024 will not be necessary.



Smallmouth bass juveniles released by bucket into the upper Potomac River.



Daylina Filhiol found this largemouth bass in Annapolis Waterworks Park. Find it and more fishing spots with the Public Access Fishing Map.

# **CONSERVATION CORNER** NEW! Videos Promote Conservation

The Maryland Department of Natural Resources uses numerous videos and graphics to help convey messages of potential value to its customers. New for 2024, the department has worked with its Black Bass Advisory Committee and professional angler, Mike Iaconelli to convey three simple messages regarding black bass fishing in the state.

The first of three messages encourages people to go bass fishing. Maryland offers wonderful opportunities to fish for sunfish and catfish, along with bass. In <u>Fishing the Upper Bay</u>. Mike talks about fishing the upper Chesapeake Bay. There are many places in Maryland worth exploring.

The second of the three messages encourages bass anglers to land and handle bass without causing it injury. In <u>Bass Handling</u>, Mike talks about using a rubber net to land bass and shows people how to remove a barbed hook from the throat of a bass.

The third video conveys important tips specific for bass tournament anglers who might be new to live well maintenance. In <u>Live Well Tips</u>, Mike encourages people to use ice to chill water, recirculation, and water exchanges to flush out bad water and bring in good.

Watch these videos and more on the department's Black Bass Conservation webpage. Watch these videos and more on the department's Black Bass Conservation webpage.



## Potomac River Bass Management

The largemouth bass fishery of tidal Potomac River is among the most popular in the Mid-Atlantic region and the United States. This fishery is managed by resource agencies from four jurisdictions that include Maryland, Virginia, District of Columbia, and Potomac River Fisheries Commission.



The Potomac River bass fishery faced problems between 2010 and 2015 when fewer bass were being caught by Maryland Department of Natural Resources. Some anglers also expressed concerns and more tournaments moved to the upper Chesapeake Bay. The change in the fishery was partially owed to slightly higher than usual annual mortality (2009 – 2011) followed by a decline in submerged aquatic vegetation, which is used as nurseries for bass in the river.



Catch index is catch per electrofishing hour.

#### Habitat modeling of the largemouth bass fishery has shown that when submerged aquatic vegetation abounds, slightly higher than usual levels of annual mortality can be sustained in the fishery in part because of good reproduction. However, when this habitat declines, abundance can become more variable but increases following a period of lower annual mortality and increasing habitat availability.



Trends in submerged aquatic vegetation and catch indices for upper Chesapeake Bay.

Because habitats and fishing effort vary among jurisdictions and their respective fisheries, a broader monitoring strategy that was bigger than any one jurisdiction was needed. Biologists worked together to create a monitoring plan that began with discussions in 2018 and formally started in 2021. It includes mark-recapture work and angler surveys. In 2023, the first report of work became available.

#### **Major Findings**

- Largemouth bass was the most targeted fish in Virginia by 75 percent of anglers and in Maryland by 68 percent of anglers.
- Potomac River population size estimated as roughly 100,000 fish of 12-inches and greater and a density of approximately 12 bass/ha, which is in-between estimates from 1989 (6 bass/ha) and 1993 (28.6 bass/ha).

 Approximately 258 bass or 0.2 percent of the population had been harvested.

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 Approximately 58 percent of the population was caught and released during most of the fishing season.



Largemouth bass with orange tag caught during a bass tournament.

New tagging work will begin in March 2024. Agencies will catch largemouth bass using boat electrofishing to count and then tag bass that are 12-inches or greater in length. Staff will work with tournament organizers at Smallwood State Park (Maryland) to document recaptures and estimate abundance. Anglers who catch a tagged bass can help agencies understand movement of bass in the river by calling the phone number on the tag and reporting the four digit tag number.

The collaboration with anglers is essential for this monitoring project to work. The information will be used to monitor trends in movement patterns, abundance, and harvest over the next century. These data improve the scale of managing one of the most important bass fisheries in the Chesapeake Bay watershed.