Maryland Department of Natural Resources

Maryland Smart, Green & Growing

Fisheries Service
Inland Fisheries

Black Bass Annual Review

Photo submitted by Trevor Tufty (Potomac River)

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ANGLER CONCERNS 2012 BASS ROUNDTABLE

Stocking locations for 2012 were discussed and chosen to include: Wicomico River, Sassafras River, and Worton, Still Pond, and/or Fairlee creeks. The size of Largemouth Bass that were stocked ranged from three to eight inches.

Roger Trageser (President, Maryland Bass Federation Nation or MBFN) suggested a permit video be created for viewing by tournament directors seeking a permit. This video was endorsed by others at the roundtable, including Capt. Steve Chaconas who assisted in developing some of the key points in the video. Roger worked with the Tidal Bass Program on filming the video, which was finalized in August.

The problem with parking lot access during big tournaments was discussed. During some weekends, parking lots can get overcrowded by boats. We took a look at 4 days of large black bass tournaments to determine how crowded parking lots were. Parking in the upper Bay may be difficult some days; check the Tidal Bass Program's list of tournaments to see whose fishing near you:

http://dnr.maryland.gov/fisheries/bass/ta.asp

The low price of a non-resident, Chesapeake Bay sport fishing license was heavily debated. This issue was discussed internally and with anglers. It will be a topic of conversation for the roundtable in 2013.

Capt. Scott Sewell (Conservation Director, MBFN) noted that soft plastic lures are starting to receive attention by BASS because of their ingestion by bass. Because many plastic lures are discarded by anglers every year, Capt. Sewell and Joe Love worked together to write a report for Maryland's Natural Resource regarding the problem of soft plastics:

http://goo.gl/hqeGc

Capt. Ken Penrod (Penrod's Life Outdoors Unlimited) raised concerns of Largemouth Bass Virus (LMBV) in Maryland. The virus was found several years ago. The Tidal Bass Program continued testing in 2012 for Pocomoke River, where it was found. DNR Biologists will survey and test bass from Gunpowder River in spring.

2012 Work in Response to Angler Concerns

Largemouth Bass Virus

There were 11 Largemouth Bass tested for Largemouth Bass Virus or LMBV in 2012. Of 10 bass from Pocomoke River, 6 of them tested positive for LMBV. There are 7 major drainages of the Bay where the virus has been found.

One fish from the Northeast River tested positive for LMBV. This fish swam lazily at the water surface. It had multiple lesions and fungal infections. It did not have internal signs of LMBV disease, but did have the virus. Please report bass that are swimming poorly at the surface of the water by calling the Maryland Department of the Environment (MDE) at 800-285-8195 (M-F 8-4:30) or 877-224-7229.

Prevent Spread of LMBV

1. Never transfer live fish from one body of water to another
2. Never discard fish parts or unused bait to any body of water
3. Drain water from boat and clean trailer before leaving the launch area
4. Disinfect live well daily with a chlorine solution and rinse.

Parking Lot Access during Tournaments

During some weekends, parking lots can get overcrowded by boats. We took a look at 4 days of large black bass tournaments to determine how crowded parking lots were.

On 5/17, parking at Marshall Hall was reserved by the FLW (~ 200 boats). On that day, there were available spots at Smallwood State Park (92% available), Slavin's Wharf (82% available), Fort Washington (42% available), and Belle Haven (38% available). A second large tournament on 6/23 (~ 200 boats) only led to high occupancy at Smallwood State park (39% available).

Trailer spots in the upper Bay seemed slightly more crowded than those from lots on Potomac River. On 5/19 (~ 50 boats), the lots at Tyding's Marina (6% available) and Lapidum (15% available) were occupied by vehicles registered in Maryland. For a different tournament, the lot at Elk Neck State Park (54% available) was occupied by mostly vehicles from Pennsylvania and New Jersey. On 6/22 (~ 50 boats), there was slightly more availability at Elk Neck State Park (97% available) and Tyding's Marina (39% available).

For anglers interested in tidal freshwater fishing, parking can sometimes be a problem, especially in the upper Bay watershed. Knowing who is going to be where can help make for a better day of fishing. A list of tournaments, their locations, and their sizes is provided here:

http://dnr.maryland.gov/fisheries/bass/ta.asp

Alabama Rigs

The Alabama rig has gained popularity among Largemouth Bass anglers because of its ability to catch a lot of bass relatively quickly. To be legal in Maryland, the standard Alabama rig must be modified by simply reducing the number of baits or lures with hooks to 2.

Bass & Stewardship, Soft Plastics

Since soft plastic lures were introduced to the market, sales have skyrocketed and the range of products has exploded to include soft plastic worms and critter baits. Some lures are designed to float because they are filled with air pockets. Other plastic worms have a curly-tail feature to create movement during descent. The essential advantage of soft plastic lures is that they are somewhat buoyant, which increases their drop time in the water.

The discard or abandonment of soft plastic lures in the environment causes problems when bass and other fish species mistake them for food and eat them.

Anglers have begun recycling their soft plastics. This movement was largely led by B.A.S.S. Bassmaster. Recycling soft plastics keeps them out of the water and out of the bellies of bass. At the 2012 Bass Pro Shops Southern Open, Florida Bass Federation Nation Conservation Director Eamon Bolten recycled 17 pounds of soft plastics!

For more information on this, read:

http://goo.gl/hqeGc

Bass Sanctuaries in Gumtree Cove and Chicamuxen Creek

Between March 27 – June 20, no Largemouth Bass were observed in Gumtree Cove, an off-limits bass sanctuary during spring. Though coves are used for reproduction, there was no grass in this sanctuary. Occasionally, grasses form in the cove, but are not consistent.

Unlike Gumtree Cove, the sanctuary in Chicamuxen Creek does have consistently thick grasses; at times, though, grasses are so dominant that they may limit the number of adults who use the cove. Both areas can be enhanced by improving diversity of habitat types within it.

To help improve both the availability and diversity of habitat during spawning season, MDDNR was permitted by Maryland Deptmartment of Environment in August to place habitat structures into both Chicamuxen Creek and Gumtree Cove. These structures were built by the youth chapter of Maryland Bass Federation Nation and biologists with Inland Fisheries. These structures will be placed in the sanctuaries during the no-admittance time (1 March – 15 June). The Tidal Bass Program will perform additional surveys in the next 5 years to determine whether more Largemouth Bass use the sanctuaries during the spawning season.

Stocking Strategy

Most fish were stocked by MDDNR into Sassafras River and Wicomico River in 2012. These fish were advanced fingerlings, ranging in size between three and eight inches. In a hatchery pond, a typical female produced between 18 and 156 advanced fingerlings. Survivorship in hatcheries was high (76.9% - 79.4%) and greater than that estimated from fish in the wild (62.5% - 74%). Growth rates for advanced fingerlings was approximately 0.8 inches/month (or 19.5 mm/mo; June – August). This growth rate is greater than that observed from wild caught fish from Choptank River (3 mm/mo) and Chester River (15 mm/mo). On average, hatcheries account for about 15% of the population in Patuxent River. A more thorough analysis on hatchery contributions will be done by 2015.

To see how fish are stocked, check out this video created by *Outdoors Delmarva*:

http://goo.gl/ll0l3

Snakehead Angler's Log Contest

Northern Snakehead (NSH) has been in the Potomac River since at least 2004. The Tidal Bass Program found that their number of sampled sites with NSH in the Potomac River has doubled since 2010 to nearly 40% in 2012. Several NSH have also been caught in the Patuxent River, Nanticoke River, and Wicomico River drainages. Possession of live NSH is illegal in Maryland, Virginia, and Delaware. To help control the spread and impact of this invasive species, recreational and commercial anglers target NSH.

Since 2011, at least 1290 NSH have been caught and killed by anglers during a MD DNR Anglers' Log contest and by commercial watermen. The NSH were mainly caught during spring, near

submerged structure, grasses, and often in shallows. They attacked a variety of tackle used in bass fishing, commonly spinners, worms, and frogs. Bow hunting for NSH was particularly popular at night. The largest NSH killed by an angler and reported was about 18 pounds.

BASS LESIONS

Every year, we get several calls about Largemouth Bass with lesions. During the survey, we photographed several Largemouth Bass with lesions to help determine what caused them. On Marshyhope Creek, one fish was observed with a swimming deformity and another fish had a hooking injury. Few bass had lesions from Patuxent River (3), Wicomico River (1), and Pocomoke River (1). The majority of infections were from Potomac River, 12 fish (or 4.5% of those caught).

Infections were generally minor and caused by bacteria. One infection in which there were sores on the fin is likely a result from handling stress. A Largemouth Bass with skin ulcers covered by a fungus was collected from Potomac River; the infection was considered moderate to severe (pers. comm., M. Matsche, Oxford Cooperative Laboratory). Infections of Viral Hemorrhagic Septacimia (VHS), which can be more lethal than LMBV, are screened during testing for LMBV; no cases of VHS have been documented for tidal bass in Maryland.

CURRENT STATUS OF POPULATIONS

MIDDLE RIVER

Since 2001, 25,751 Largemouth Bass have been stocked into Middle River. Stocked age 1 fish remained in Middle River at least for a year or two. Surveys in April 2012 resulted in the capture of 22 fish, 8 of which were subadults or juveniles. Many fish were collected from Frog Mortar Creek, particularly juveniles. These juveniles were not stocked. Body weight was normal and fish were in good health. Average catch was moderate: lower than that for upper Bay and Potomac River fisheries, but greater than that for Wicomico or Choptank rivers.

Summer 2012 was a very dry year and the Tidal Bass Program deployed a water quality probe at Midthorn Park to assess habitat conditions. Salinity levels increased steadily between 3 to 10 ppt, which is pretty high for rivers with good bass fisheries. The pH (around 5.5) was pretty low and may impair reproduction. Near the mouth of the river, however, pH was better - around 7.8 – 8.1. Water clarity and dissolved oxygen were suitable for Largemouth Bass.

Middle River bass fishing may depend on a naturally, small population that is strongly influenced by tide and rainfall. While some areas appear to be bad for Largemouth Bass in Middle River, Frog Mortar Creek is used for reproduction. To protect this fishery, it is recommended to minimize harvest, keep the

bass in the river, and protect the spawning habitats from pollution.

Gunpowder River

The Gunpowder River is a popular site for Largemouth Bass anglers. We attempted to survey 10 sites in fall 2012. Unfortunately, sampling conditions did not result in good samples. The population will be re-surveyed in spring 2013.

Marshyhope Creek

The fishery on Marshyhope Creek is popular for anglers from Maryland and Delaware. The bass population has not changed much relative to earlier surveys.

Reproduction in Marshyhope Creek appears steady. This creek is a good area for reproduction in Nanticoke River drainage.

Upper Chesapeake Bay

The upper Chesapeake Bay includes the Susquehanna River, the flats, and Northeast River. It has a very popular fishery among bass anglers. Anecdotal evidence from anglers in spring 2012 indicated that the Largemouth Bass were abundant and fat. While catch rates by anglers are lower in the upper Bay than Potomac River, the fish tend to be slightly heavier.

The Tidal Bass Program does not routinely survey Sassafras River or Bush River. However, those are also popular areas of the upper Bay.

The Tidal Bass Program caught fewer bass than usual, possibly because fewer juveniles were available during the survey. Reproduction in the upper Chesapeake Bay appeared poor in 2012. This may be related to poor grass coverage or high flows during spring. Anglers have also noted that juveniles were in areas different than those sampled using a boat electroshocker.

Potomac River

The Potomac River population has been the center of a popular fishery for decades. The population is not very different than earlier assessments. Population structure and survivorship were typical for the population. Catch rates were low, but that may be related to survey conditions. Retreating or diminished grasses in the Potomac River were reported as early as spring 2012. The lack of grasses could have negative consequences on catching fish or reproduction. The distribution of grasses for 2012 is not available from Virginia Institute of Marine Sciences, but should be evaluated by 2014 to identify any problems with coverage.

Reproduction in the Potomac River was normal relative to earlier years.

Patuxent River

Offering a small, quiet and nearby fishery relative to the Potomac River, the Patuxent River population has benefitted from a fairly consistent stocking program. Catch estimates have not changed appreciably. Size structure has been fairly stable. Catch estimates have not remarkably increased despite intensive stocking; it is possible that the population has reached its carrying capacity. It is currently being used to assess the contribution of hatchery stocking by releasing marked fish; a full evaluation should be completed by 2015.

Natural reproduction is occurring in the Patuxent River and is supplemented by stocking hatchery fish. Reproduction for Patuxent River is steady, supporting a small population of Largemouth Bass, and may be buffered by consistent stocking efforts.

Wicomico River

The upper Wicomico River is nestled in Salisbury, a large city on the eastern shore of Maryland. A relatively small number of bass clubs, bass anglers, and bass guides rely on this fishery.

Catch has been poor on the upper Wicomico River and was poorer in 2012. Several older Largemouth Bass and a few juveniles were collected during this survey. This may be a result of the Tidal Bass Program's survey design. Most of the habitat downstream of Salisbury includes areas frequented by Striped Bass and Atlantic Menhaden. It is possible that Largemouth Bass are more limited to areas near Salisbury. Thus, the current sampling design may need to include more effort near Salisbury in order better represent the population of Wicomico River.

The number of juveniles caught in 2012 was lower than it was in 2011. Because resources appear reasonable to support growth, the poor catches of younger age classes may not be related to insufficient prey. Stocking conducted in 2012 may help bolster young age classes in this population, thereby contributing to a more sustainable population.

In 2012, wastewater treatment plants (WWTP) spilled sewage into the upper river, but it is not certain how these spills affect food webs or Largemouth Bass production. These spills were discussed between MDDNR Inland Fisheries and Maryland Department of Environment. By 2015, upgrades to the WWTP at Salisbury (MD) should lead to lower nitrogenous waste to the upper Wicomico River. Storm water management strategies are also becoming less reliant on WWTP. So, fewer spills should be caused by high storm water in the future.

A database of sewage overflows is at:

http://goo.gl/BGukR

Fish consumption advisories:

http://goo.gl/61q4U

Pocomoke River

Some anglers and biologists think that the Pocomoke River population has few big Largemouth Bass. Few 15 inch fish or bigger bass were caught during the survey. Big fish may be caught and eaten, or suffer from poor growth. While harvest is not well-known for the population on Pocomoke River, it appears that growth rates are typically lower than general reference points. This may be related to the environment, which has a natural low pH and is mostly a deep river bounded by cypress swamp. As such, it is very different than any other river system surveyed by the Tidal Bass Program. We may conduct a survey of resource availability

and primary production, which could limit growth of Largemouth Bass and other top predators (e.g., Longnose Gar (*Lepisosteus osseus*)). Alternatively, few big fish may also indicate unusually high levels of natural or fishing mortality.

Reproduction in Pocomoke River appears steady and slightly better than in 2011.

For a video of how the Pocomoke River was surveyed, check this out from *Delmavara Outdoors*:

http://goo.gl/ll0I3

TOURNAMENT FISHING

For 128 tournaments from tidal rivers of the Chesapeake Bay, 4297 anglers fished an average of 8.5 hours per day and reportedly caught 22,196 fish (55,463 pounds). Anglers from Potomac River and upper Bay had high catch rates, averaging about 1 fish every 3 hours during the 15" season. During the 12" season, anglers had higher catch rates in the upper Bay than previous years.

Anglers reported survivorship greater than 97.6% (on average), ranging between 81.2% and 100%. Thanks to all of the tournament anglers and directors who reported their results so we can more efficiently identify issues with a fishery.

To help provide guidance on improving survivorship, the Tidal Bass Program conducted a study into live well conditions during July. After only 1 hour, the live well offered poor conditions for a 9.4 pound bag of fish in a 21 gallon live well. Adding 1 gallon of ice dropped the water temperature too much. Oxygen was also poor, even when using recirculation.

To improve temperature and oxygen conditions, and improve survivorship of bass:

1) exchange live well water with fresh water for 3 – 5 minutes, every 30 minutes;
2) clean live wells after every use.

Delayed Mortality

Delayed fish mortality is experienced after it is caught, transported to be weighed, and then released. Delayed mortality was measured during summer, when expected to be high. After a large bass tournament on Mattawoman Creek, delayed mortality was determined to be 39.2% (or 61.8% survivorship). This percentage is very similar to the value measured last year, during the same period of time and for a different tournament organization.

Additional work by the Tidal Bass Program indicates that this level of mortality does not negatively impact the Largemouth Bass population of Potomac River, unless reproduction is very poor. If reproduction begins to become very poor, then high levels of delayed mortality can have a negative impact on Largemouth Bass populations. It is important to protect and enhance spawning habitats even if those habitats differ in productivity among years.

Tournament Permitting Now In Effect!

To improve black bass fisheries management, the Maryland Department of Natural Resources (DNR) Fisheries Service now requires qualifying black bass tournament directors to obtain free permits and report catch information. This regulation has been established to increase communication between tournament directors and fisheries managers, and improve data reporting.

The regulation went into effect for both tidal and non-tidal waters on October 28. The requirement only applies to tournaments that have at least 10 boats, offer any reward for winning, and feature staged weigh-ins. The online application,

http://tinyurl.com/8oanmug

is quick and simple. DNR will maintain a comprehensive online listing of these tournaments to help anglers plan their own fishing adventures for the year.

http://dnr.maryland.gov/fisheries/bass/ta.asp

All comments on this report can be submitted to *Joe Love* at jlove@dnr.state.md.us. A comprehensive report can be requested. Work was paid by fishing license dollars and funds from Sport Fish Restoration Act.

PROPOSED 2013 WORK

Black Bass Roundtable 2013

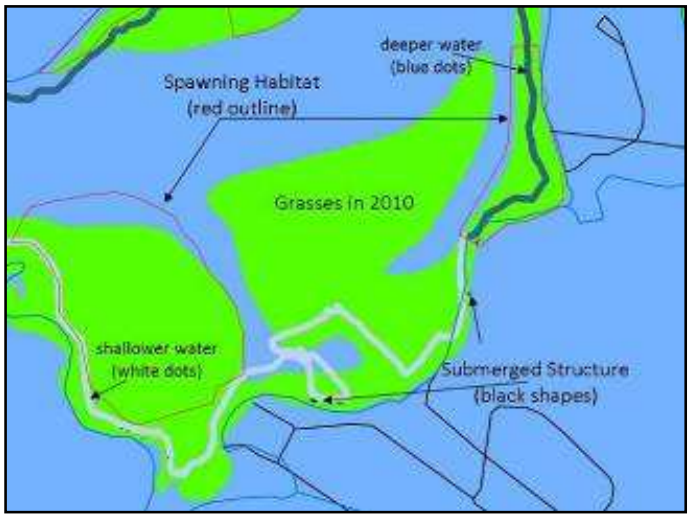
The Black Bass Roundtable will be held on February 27, 9 am – 12 pm in C-1 of the Tawes Building in Annapolis Maryland. Most of the topics to discuss were suggested by anglers. If you have other concerns, please contact Joe Love ASAP. The tentative agenda is:

1. Keeping Bass in their Rivers
    a. Is it a problem to move fish from one river to another?
    b. How much of a problem is it? Do we need additional studies?
    c. Move weigh-in sites around – Branson Williams
    d. What are the solutions?
        i. stocking?
        ii. DNR moving bass around – Scott Sewell?
        iii. Lower creel limits?
        iv. No possession laws?
2. Licensing Concerns
    a. The "cork in the bottle" for a reciprocal license with DE
    b. Discussion by anglers regarding MD non-resident license fees
3. Possible rewards for creel surveys?
4. Stocking Strategy for 2013
    a. Targeted river is Choptank River
    b. Other systems, if possible?
5. Watershed Management Issues
    a. Coordinated methods of getting concerns of WWTP or land planning to relevant parties?
    b. How do Conservation Directors handle these situations?
6. Invasive Species
    a. Northern Snakehead and Blue Catfish threats, are they a problem and are we on the right track – Mary Groves?

Side Scan Sonar

The Tidal Bass Program needs better habitat data to improve their survey and identify important areas for reproduction of tidal Largemouth Bass. During spring, shoreline habitats of the Potomac River were mapped using side scan sonar. Data for bathymetry, submerged structure, and substrate type were mapped out with Largemouth Bass relative abundance data. Additional rivers will be surveyed in the future.

If anglers are interested in these data, then contact Joe Love.



Creel Survey

A statewide, volunteer angling survey is being created and should be online this spring. The survey allows recreational anglers to provide feedback on their catches to MDDNR. The information will be used to help determine good and bad areas and measure harvest. In the past, anglers have received hats and other small awards for participating in these types of creel surveys. These data will inform management and help to define stocking strategies for providing better fisheries for anglers.

Tidal Bass Survey 2013

Rivers targeted by the Tidal Bass Program for 2013 may include: Gunpowder River (spring), upper Bay area (fall), Patuxent River (fall), Choptank River (fall), Wicomico River (fall), and Marshyhope Creek (fall). During the survey, The Tidal Bass Program will continue recording incidence of disease, habitat conditions, and occurrence of other species. A small proportion of individuals from selected drainages will be sacrificed to determine if LMBV is present in the drainage.