

Managing Maryland's Tidal Largemouth Bass

by Jim Markham, Tidal Bass Specialist



I am sure I will never forget these words. I was on my way to give my first talk as Maryland's Tidal Bass Specialist and was accompanied by co-worker Marty Gary and avid -fishermen Tom Hughes. The conversation topic, as you would expect, was fishing, and at this point had wandered to largemouth bass in our tidal rivers. The comment came too honestly from Tom's mouth - "I don't think that Maryland does much for our tidal bass populations." My mind raced. What did he mean? He continued talking, but I had to make him stop. "Tom, you have to back up a second. Can you clarify what you meant by the comment that we don't do much for our tidal bass fishery?" Tom replied back, "I didn't mean any disrespect, but in all honesty I had no idea that you guys even sampled them or did any work at all on tidal bass." Boy, talk about a two-by-four hitting you where it hurts! I opened my talk that night by asking the 30 members of the Fish-On Bass Club whether any of them knew that the Maryland Department of Natural Resources did any work with tidal largemouth bass. The room went silent and not one hand was raised. The reaction is the same at a few other talks I have attended since then. At least I knew I had only one direction to go! The MD DNR does indeed sample our largemouth bass populations in Chesapeake Bay tidal rivers. In fact, we have been looking at tidal bass populations from the Potomac River to the Susquehanna Flats and

back down the Eastern Shore to the Wicomico River since 1987. Population distribution, age structure, and population size are a few of the parameters that we monitor. A few fish have even been followed using radio telemetry equipment to see where they are moving.

The tidal rivers of Chesapeake Bay have developed into one of the premier largemouth bass fisheries in the country. An untold number of recreational anglers and hundreds of bass tournaments from clubs in Maryland and surrounding states, including a few national events, generate millions of dollars for the state and local economy. The most popular destination is the Potomac River from D.C. down to Port Tobacco. This stretch is ranked annually in the top 5 of best bass fishing places in the United States, and this year was ranked #1 in Field and Stream magazine. The Upper Chesapeake Bay is another hot spot and will only get better as the submerged aquatic vegetation (SAV) continues its comeback in the Flats. While the boat traffic is a bit lighter in Eastern Shore rivers such as the Choptank, Nanticoke, Pocomoke,



and Wicomico, don't let that fool you. Excellent fishing exists and, in most cases, without the crowds present in the Potomac and Upper Bay. Largemouth bass are considered one of the most important gamefish worldwide and are found from large lakes to tidal rivers to farm ponds. Yet, many people don't realize that largemouth bass are not a native species to Maryland. They were introduced here in late 1800's. Maryland's tidal largemouth bass populations are tenuous, fluctuating with the availability of SAV's. They also exhibit low reproductive rates due to a lack of proper spawning habitat and tidal influence. These factors, combined with increasing recreational and tournament fisheries, makes it necessary to monitor yearly population trends. Last year began a new era for management of this valuable resource. Rick Schaefer (Eastern Regional Manager), Don Cosden (Southern Regional Manager), and myself developed a new sampling program to produce a population abundance index, which will help us better track population trends. This new design involved habitat mapping, which categorized shoreline areas into prime, average, and marginal habitat for largemouth bass.

This information was then used to generate [computerized habitat maps](#) using GIS software, and eventually to choose sampling sites. Initially, we chose 5 areas to start this new sampling program: the Tidal Potomac River, the Patuxent River, the Susquehanna Flats in the Upper Chesapeake Bay, and the Chester and Choptank Rivers. Results from the first year of sampling indicated that our tidal river adult bass populations are in good shape. Fish up to 21" and over 6 pounds were sampled during the fall electrofishing survey. Most of the bass sampled were age 7 or younger, but some fish up to age 10 were found. Unexpected numbers of young bass (age 0 and 1) were found in the Upper Bay and the Potomac River, but were absent in the other systems. The survey did succeed in producing a precise index of abundance, and while that was promising, the real test will be to see how the sampling design performs over the first 3 years. So what is the future of tidal largemouth management in Maryland? Well, we are going to continue our present monitoring program over the next few years, and will eventually expand it to gather additional information on other important tidal river bass populations. We are also starting a juvenile assessment program to gauge future populations. Other ideas include a tagging program and a Volunteer Angler Survey to gather information from recreational and tournament fishermen, involving you in the management of Maryland's tidal bass fishery. If you have questions, comments, would like more information on tidal largemouth bass, or are interested in the Tidal Bass Volunteer Angler Program, please contact Don Cosden at customerservice@dnr.state.md.us.

Good Luck Fishing!