## Freshwater Fisheries Monthly Report – July 2019

#### Stock Assessment

**Brook Trout Stream Assessments** - Western Region I staff conducted qualitative electrofishing surveys for the following streams in Garrett County:

- Unnamed tributary to Buffalo Run. This stream was fishless; however, aquatic macroinvertebrates and salamander larvae were observed.
- Unnamed tributary to the Youghiogheny River near Red House, MD. Despite
  recent massive flooding occurring in this area, one adult brook trout, one mottled
  sculpin, and abundant numbers of blacknose dace were found in this small
  stream.

**Green Ridge State Forest Stream Assessments** - Qualitative electrofishing surveys were conducted in Terrapin Run and Little Pine Lick in the Fifteen Mile Creek watershed. Blacknose dace, creek chub, fantail darter, and Potomac sculpins were documented in each stream.

**Smallmouth Bass Juvenile Surveys** - Staff initiated smallmouth bass juvenile seine surveys in the Monocacy River and Conococheague Creek. Sampling is conducted using a 30 foot seine to assess the number of young-of-year bass. Smallmouth bass recruitment in the Monocacy River looks good with above average juvenile numbers. Sampling will continue into August for monitoring stations on the upper Potomac River.



Juvenile smallmouth bass collected using a shoreline seine

**Electrofishing Demonstration** - Staff held an electrofishing demonstration for members of the Maryland Sport Fisheries Advisory Commission on Little Antietam Creek in Washington County. Both wild brown and rainbow trout were collected from a section of creek that was part of a recent stream restoration project. Little Antietam Creek is a very productive watershed with the largest brown trout coming in just under 20 inches in length.



Adult wild rainbow trout collected from Little Antietam Creek, Washington County

**Trout Surveys** - Staff has been conducting trout surveys in Frederick and Washington counties. Good numbers of both adult and juvenile brook trout have been collected in Fishing Creek, Clifford Branch and Little Hunting Creek. Brown trout numbers have looked good in sections of Black Rock Creek and Little Beaver Creek. Above average stream baseflows during the past year have probably contributed to the high numbers of juvenile trout in all of these systems.



Brook trout collected during sampling in a Frederick County stream

## **Habitat and Water Quality**

**Environmental Review** - Provided aquatic resource information for environmental review projects including:

 Provided comments to the Maryland Department of the Environment's Abandoned Mine Land Division proposed project to replace a mine seal damaged by a roof collapse in the Georges Creek watershed. Strict sediment control measures and pH monitoring and treatment will occur during the project construction period. The pH of the drainage is currently near neutral and the project site will be re-vegetated upon completion.

- State Highway Administration regarding a project in the Mill Run watershed (Garrett County) that includes replacement of the existing 36-inch failing culvert pipe, grading of eroded non-regulated ephemeral channels, construction of a riprap plunge pool and grass swales constructed within the median. This project may improve conditions at this location as the water quality is poor and the newly constructed wetlands may improve the water quality via retention time.
- Allegany County Department of Public Works regarding the replacement of the Town Creek Road bridge over Murley Branch, a designated coldwater stream.
- Maryland Park Service to replace the failing foundations of the historic Election House in Sang Run State Park. The structure is in the 100 year floodplain of Sang Run, but no instream work was required and there were no impacts to the coldwater resources.
- Washington County Board of Commissioners regarding the repair and stabilization of 240 linear feet of stream bank on Beaver Creek. Repairs include widening Benevola-Newcomer Road to construct a traffic barrier. Freshwater Fisheries supports the current design, which will incorporate three rock vanes and an imbricated stone wall to stabilize the bank with live stakes/fascines within the riprap and above to provide shade. Beaver Creek supports a naturalized population of brown trout.
- The installation of a 20 foot revetment for shoreline erosion protection on Deep Creek
   Lake. Shoreline protection projects on Deep Creek Lake require existing in lake habitat
   features to remain in place and rock clusters be placed for every 50 feet of revetment to
   mitigate the loss of shoreline habitat.
- State Highway Administration to restore positive drainage to an intermittent stream and stabilize the banks in a tributary to Little Youghiogheny River in Oakland. The project should reduce existing erosion and localized flooding and is not expected to impact any fish resources.

**Western Region Land Stewardship Committee** - Provided supportive comments for potential land acquisitions that included:

- A 52.16 acre parcel bordering the Upper Savage River. Acquisition of the property will
  provide angler access to about 5.5 miles of the Upper Savage River and several tributary
  streams for brook trout fishing opportunities. The Freshwater Fisheries Program
  considers this potential acquisition as a top priority in order to provide public fishing
  opportunities as well as stream habitat and watershed protection.
- A 63-acre parcel in the Laurel Run sub-basin of the Georges Creek watershed. The property borders about 300 feet of Laurel Run in the northwest extent of the property. Laurel Run supports a wild brook trout population and a portion of the stream is managed as a youth and seniors trout fishing area. Laurel Run also supports other native fish species including blacknose dace, Blue Ridge sculpin, and fantail darter. Acquisition of the land would ensure that the riparian area remains intact and water quality will be protected. A portion of the property would become part of the High Conservation Value Forest fifty foot no-cut buffer along both sides of the stream.

North Fork Crabtree Creek Embrace A Stream Project - Baseline fish population, water quality and stream habitat data were obtained on the stream restoration site on the North Fork of Crabtree Creek. Trout Unlimited Embrace A Stream funds were obtained to construct livestock exclusion fencing, a hardened watering area and tree plantings in the riparian zone. Seth Moessinger (Trout Unlimited Project Leader) and staff conducted the baseline fish population survey and documented Blue Ridge sculpin, blacknose dace, creek chub and a few juvenile bluegill within the restoration area. A water temperature logger was deployed to document baseline temperature conditions, and members of the Nemacolin Chapter of Trout Unlimited conducted stream substrate evaluations. Construction of fencing and hardened watering area is expected to begin later this year.

**South Branch Bear Creek Fish Passage Project** - Conducted a site visit after severe flooding event and documented further stream bank erosion as the collapsed culverts have formed a ten foot high debris dam. Contacted U.S. Fish and Wildlife Service personnel (funding agency) regarding the deteriorating conditions and they will be meeting with the bridge construction engineers later this month to plan the construction phase - hopefully it will begin this summer.

**North Branch Potomac River Temperature Monitoring** - Temperature monitors were placed at six locations in the river from the lower catch-and-return trout fishing area downstream of Laurel Run to the lower boundary of the zero creel limit trout fishing area at Pinto. These temperature data will be used to help monitor trout management efforts in the river.

Reef Balls - Staff worked with the Maryland Park Service's Maryland Conservation Corps (MCC) and Conservation Jobs Corps (CJC) to demonstrate the procedure to build small, concrete reef balls. The reef ball molds are on loan from Chesapeake Bay Foundation. The MCC and CJC crew members are making reef balls to be placed into freshwater lakes around southern Maryland. The first batch of reef balls is scheduled to be placed into St. Mary's Lake (St. Mary's County) in August 2019. There, the reef balls will augment a lack of natural habitat in certain areas of the lake.

# **Stocking and Population Management**

**Hybrid Striped Bass** - Hybrids raised at the Department of Juvenile Services Meadow Mountain Facility were stocked into Broadford Lake. About 450 advanced juveniles (6-9 inches) were stocked in the lake near the boat launch area. Broadford Lake supports a unique hybrid striped bass fishery with reports of legal size (18 inches) stripers being caught from previous stockings.



A hybrid striped bass ready to be stocked in Broadford Lake 7/3/19.

#### Outreach

Master Naturalist - Provided an aquatic ecosystems/freshwater fish class for the Maryland Master Naturalist Program at the Carrie Murray Nature Center, Baltimore City. Participants were instructed on the different aquatic ecosystems in Maryland, threats to stream ecosystems and the importance of stream protection (e.g., riparian buffers) for the resource. A presentation on the fishes of Maryland with focus on fish found in their region was also provided. Participants were then able to practice keying fish samples from most of the 23 families of freshwater fishes found in Maryland.



Future Master Naturalists learn Fish ID

Backyard Fishing Program Events - Staff partnered with Howard County Recreation and Parks to host a Backyard Fishing event at Warfield's Pond Park. A total of 28 young anglers and parents, mostly first timers, attended this clinic to learn the basics of fishing. We started the evening with learning about Maryland fish species, habitat, proper fish handling and gear followed by casting practice. Once the group was comfortable casting, the Howard County staff got them geared up with bait and ready to fish. Even though not everyone caught fish, the ones that did had a story to tell about their first catch. Unfortunately, another event scheduled for the next evening at Parkville Pond in Garrett County was rained out; we are hoping to partner with the Grantsville Library to host another event in the fall.







Youth anglers enjoy fishing and practice casting

Family Fishing Clinic – Staff partnered with the Town of Elkton to host a family fishing clinic at Howard's Pond. Approximately 20 youngsters and their parents braved the heat to join staff and volunteers to learn the basics of fishing. Stations were set up to teach basic fishing skills including fish ID, habitat, tackle selection, proper fish handling, and casting. As part of Elkton's Urban Stormwater Pollution Prevention Program, the Town of Elkton staff set up a recycling booth to teach and encourage recycling. All the youth that signed up were first time anglers, and all of them caught at least one fish, so they were encouraged to visit our website to get their "My first Fish" certificate.









Happy Anglers – All of these kids caught their very first fish

**Customer Service** - Responded to customer service inquiries with information regarding: Blue Ridge sculpin identification; fishing opportunities in the newly established Wolfden State Park; fishing conditions in the Youghiogheny River catch and return trout fishing area and Deep Creek Lake; tiger muskie fishing opportunities in the Western Region; blue catfish recipes; trout fishing in the zero creel limit brook trout fishing area of Crabtree Creek and Middle Fork, northern pike fishing opportunities in Deep Creek Lake, walleye stocking in Liberty Reservoir, smallmouth bass fishing in the Patapsco River, reduced smallmouth bass catch rates in the upper Potomac, and muskie fishing on the upper Potomac.

Maryland Outdoor Recreation Economic (MORE) Commission Presentation - Staff gave a presentation to members of the MORE Commission at a meeting held at the Discovery Center at Deep Creek State Park. The panel discussion on expanding recreational opportunities focused on recommendations to grow the state's outdoor recreation and heritage tourism economy. The Freshwater Fisheries Program presentation was entitled "The North Branch Potomac River – Western Maryland's Last Frontier." It highlighted the river's potential to support more eco-tourism and the need for riparian land acquisition to provide public access and to protect the viewshed.

**Junior Rangers** - Deep Creek State Park Junior Rangers descended upon Sang Run to learn all about the stream's aquatic macroinvertebrate community. The Junior Rangers used screen nets and kick nets to collect macroinvertebrates (and a few fish and salamanders) and placed them in a water filled tray to evaluate stream health. The Rangers identified caddisflies, hellgrammites, mayflies, stoneflies and the most popular critter – crayfish. Based on their findings, the Rangers deemed Sang Run as a clean coldwater stream.



The Deep Creek Lake State Park Junior Rangers collecting aquatic macroinvertebrates in Sang Run.

**Sang Run Open House** - A public open house sponsored by the Youghiogheny Chapter of Trout Unlimited was held at Sang Run State Park. The public was invited to take free fly casting lessons and learn about the mission of Trout Unlimited. Staff was present to answer questions on trout management in Western Maryland.



Youghiogheny Chapter of TU President Ken Pavol gives fly casting lessons at the public open house at Sang Run State Park.

Casselman River - Gave an ecology demonstration to 42 high school students from across Maryland enrolled in the Maryland Forestry Boards' Natural Resource Careers Camp held at Camp Hickory near Accident, MD. After a short lecture on watershed protection and restoration, the students participated in fish and aquatic macroinvertebrate surveys. We collected several fish species including fantail darter, longnose dace, mottled sculpin, northern hogsucker, river chub, rock bass and even a rainbow trout. The students enjoyed the aquatic macroinvertebrate lesson – caddisflies, dragonfly nymphs, hellgrammites, mayflies, stoneflies and water pennies were all collected, and the students found the Casselman River to have excellent water quality based on their findings.

**Maryland Conservation Jobs Corps** - Staff demonstrated boat electrofishing and basic freshwater fish identification at Maryland's Park Service's Maryland Conservation Jobs Corps annual enrichment day held at Merkle Wildlife Sanctuary (Prince George's County). Additionally, staff helped students make "fish print" shirts to take home. This marks the third year that staff from Fishing and Boating Services have participated in the event.

**'Es Mi Parque'** - Staff discussed invasive fishes in Maryland and performed a demonstration on filleting blue catfish at the 'Es Mi Parque' event held at Point Lookout State Park (St. Mary's County). The event aimed to provide environmental education and outreach to the Hispanic community of Maryland.

## **Angler Access**

Staff continued to mow, clear brush and downed trees, and perform trash removal, road maintenance, boat ramp maintenance, and fishing regulation informational sign replacement at the North Branch Potomac River and Evitts Creek Ponds fishery management areas.

Staff, along with Mr. Ryan Savage, representing wheelchair anglers, conducted a site visit to the Casselman River delayed harvest trout fishing area's Nemacolin Chapter of Trout Unlimited ADA access site to see if improvements could be made. Mr. Savage made the recommendation that the gravel path leading to the fishing area be hardened for easier wheelchair access. Pictures along with the recommendations were forwarded to the Nemacolin Chapter of Trout Unlimited for their consideration.

### **Brook Trout Program**

Initiated annual monitoring work in the Upper Savage River special management brook trout fishery resource (Garrett County). Results so far indicate an above average hatch of brook trout. All-time records for number of trout collected (adults and YOY) have been set at several of the monitoring sites, with the majority of sites still to be sampled. Numerous larger trout (8+ inches) have been collected and the quantity and quality of brook trout for our anglers in this unique resource remains tremendous.

Worked with technicians from YSI Corporation to update the real time water temperature monitoring probe in the Lower Savage River (below the dam). Temperature data are important to Fishing and Boating Services and US Army Corps of Engineers staff for helping with management of the tailwater trout fishery in the Savage River, which includes a native brook trout component.

Sampled the brook trout population in the Frostburg Pond restoration area. Once again the number of YOY and adult brook trout increased in the restored stream section. The in-stream fish habitat structures are working well, and the riparian buffer is continuing to increase in coverage and density, and is providing excellent canopy cover. This former in-line impoundment on the mainstem Upper Savage River that was restored to a flowing stream is now supporting a high quality brook trout fishery.



Brook trout collected in the Frostburg pond restoration area.

Met with Western Region I staff and statewide management staff to discuss and plan continuing northern pike sampling efforts and analytical analysis methodology for the Deep Creek Lake fishery.

# **Tidal Bass Program**

Staff assisted and provided a fish holding trailer for anglers at the Paralyzed Veterans of America bass tournament held at Smallwood State Park (Charles County) by the Maryland Bass Nation. The event featured just under 30 boats, competing for the heaviest five-fish limit of black bass. After the weigh-in, fish were returned to the water for this catch-and-release fishing event.