INLAND FISHERIES MONTHLY REPORT JANUARY 2011

Atlantic Sturgeon

- The Maryland Sturgeon Reward Program recovered two Atlantic sturgeon from Chesapeake Beach and Fells Point, MD in January. Since 1996, Maryland watermen have voluntarily reported their live catches of sturgeon to the USFWS Maryland Fishery Resources Office. A \$50.00 reward is offered for each live sturgeon (less than 6 feet long total length) turned into the program. A \$250.00 reward is offered for any live Atlantic sturgeon measuring more than 6 feet long. These new sturgeon will be added to the captive brood stock with hopes that they will grow to become mature, ripe adults. Currently, 36 wild sturgeon are part of the captive brook stock, with some individuals weighing as much as 90 pounds. See link below for reporting information.
 - http://www.dnr.maryland.gov/fisheries/recreational/2007-08SturgRewardletterandmethods.pdf
- Fisheries Service personnel prepared comments in response to the National Marine Fisheries Service proposal to list Atlantic sturgeon under the Endangered Species Act (ESA). Fisheries Service realizes that an ESA listing would promote public awareness of the threats to sturgeon populations. However, it would also negatively impact current and proposed research and restoration activities of Fisheries Service. The Atlantic States Marine Fisheries Commission (ASMFC) has a management plan in place for this species and the recommended conservation strategies have not been given sufficient time to work. Fisheries Service recommends that management authority should remain with ASMFC and the current conservation activities should continue.

American and Hickory Shad

• Fisheries received funding approval for a shad and herring restoration project in the Patapsco River. The Maryland Port Authority is funding this project as mitigation for port dredging work. The project will include: Manning Hatchery upgrades in year one; species culture, marking and stocking in years two through four; and, larval, juvenile and adult monitoring and assessment in years two through six. American shad, Hickory shad, Blueback herring and Alewife are the species of interest for the project.

Trout

- Unicorn and Manning Hatchery staff continued rearing Rainbow trout for local stocking. The ponds at these facilities are used for grow-out of fish received from Albert Powell Trout hatchery in the fall. Hatchery staff battled culture pond icing which threatens rainbow trout survival through reduction of dissolved oxygen levels and prevention of feeding.
- Central Region manager Mark Staley participated in a conference call with fellow members of the Eastern Brook Trout Venture-Project Review team, regarding potential changes to scoring and review of habitat projects submitted to the EBTJV for funding.. The team is working on a coordinated effort on the east coast of the United States to preserve and protect eastern Brook Trout populations. The group supports regional efforts for the species. Cooperation

- between the state and federal agencies helps to develop a broader management strategy that is not restricted by state lines or land boundaries.
- Central Region Fisheries Manager Mark Staley provided a PowerPoint
 presentation on the 2010 results of the Gunpowder Falls trout survey to the
 Maryland Chapter of Trout Unlimited in Towson, MD. He also answered
 questions about the local fishery and discussed the didymo infestation of the
 Gunpowder.
- Western Region II staff repaired and replaced informational signs at the
 designated parking areas for the Beaver Creek catch-and-return trout fishing area
 limited to artificial flies. This spring-fed stream is popular for winter fishing
 because the relatively constant temperatures keep fish active and the stream icefree.
- Western Region II manager John Mullican met with a Beaver Creek landowner to
 discuss his recent problems with trout anglers and potential solutions that will
 continue to allow access. Some possible solutions may include posting
 informational signs, fencing, or possibly even changing management from putand-take to 2 trout per day statewide regulations with no stocking of hatchery fish.
 An excellent population of wild Brown trout has developed in this section of
 Beaver Creek and provides a different experience for anglers.

Outreach

- Southern Region biologists braved the cold and ice to seine one of the ponds at Cedarville Hatchery that contained display fish for the winter shows. Fortunately, the fish cooperated for once, and only one haul was needed to collect enough fish for the 180-gallon live fish display at the Bass Expo at the Maryland State Fair Grounds in Timonium.
- Inland Fisheries biologists represented DNR Inland Fisheries at the 27th annual Fishing Expo & Boat Show at the State fairgrounds in Timonium. Biologists were present to answer questions concerning inland fisheries management within the State. Several Inland Fisheries biologists and managers participated in a short Largemouth Bass Virus (LMBV) seminar at the show. Anglers at the show wanted more information on LMBV. Tidal Bass biologist Joseph Love discussed the characteristics of the viral disease, sites of infected populations found to date, and a future study to check for the presence of the virus in key watersheds across the state.
- Western Region II manager John Mullican provided a recap of 2010 Fisheries
 activities conducted on the Potomac River for the Fisheries Webpage. The status
 of the popular Smallmouth bass, Walleye, and Muskellunge fisheries were
 presented as well as highlighting the fishing opportunities.

Invasive Species

 Southern Region manager Mary Groves continues to work on revisions on a paper titled "Ecological Role of Blue Catfish in Chesapeake Bay Communities and Implications for Management". The paper is a cooperative effort between Maryland DNR, Virginia Dept. of Game & Inland Fish, the Virginia Commonwealth University and VIMS. If accepted, the paper will be published in the book "Catfish 2010", an AFS publication containing presentations from the International Ictalurid Symposium which was held in St. Louis, Mo. last summer. Some information from the paper was presented at the Fisheries Summit at New Germany State Park earlier in this month.

Impoundment Studies

- Federal Aid impoundment reports. The analysis shows that Greenbelt was overpopulated with Largemouth bass and stock size Bluegill. Staff found that overpopulation contributed to low relative weights (<90%) in the Largemouth bass and Bluegill. Additionally, no quality-size Black crappie were collected in the survey and quality-sized Bluegill were hard to find. One positive angle to the over-crowded fish population in Greenbelt is that the lake is located in a heavily populated area and gets a fair amount of fishing pressure from young folks. These kids may not be hooking into citation fish every cast but the yearly survey did bag a really nice largemouth bass that weighed over 6 pounds. Hopefully, one of these young anglers will find this lunker on the end of their line in 2011.
- Western Region I staff completed the Savage River Reservoir Fish Population **Study** Federal Aid Final Report. The reservoir was completely drained starting in the fall of 2009 to replace failing water release gate systems within the dam structure. Repairs began in November 2009 and the project was completed on schedule. The reservoir was completely refilled in March 2010, and the fishery restoration plan was implemented shortly after. Prior to the draining, the reservoir supported a diverse panfish fishery including Rock bass, Bluegill, Pumpkinseeds, Black crappie, and Yellow perch. Gamefish species included Largemouth bass, Smallmouth bass, and Walleye as well as stocked Rainbow trout. Fishery restoration efforts and natural re-colonization from the upper Savage River and the reservoir's coldwater streams accounted for fifteen fish species in the reservoir during 2010. Warmwater fish species produced at the Manning Hatchery were stocked during 2010 including: 12,000 Largemouth bass fingerlings, 18,000 Black crappie fingerlings, 108,780 Bluegill fingerlings 9,120 Redear sunfish fingerlings, and 800,000 Walleye fry and 25,000 fingerling Walleye. Natural reproduction of Smallmouth bass, Largemouth bass, Rock bass, and Yellow perch was documented. The Savage River Reservoir receives an annual spring stocking of 3,850 adult rainbow trout, and correspondences with anglers during 2010 indicated that rainbow trout were caught throughout the spring and summer months.

Major Rivers

Western Region I personnel completed the North Branch Potomac River Major River Study five-year final report for Federal Aid in Sport Fish
Restoration. Four trout species were collected within the upper Catch and
Return Trout Fishing Area (C&R TFA) during this study period. The
population is dominated by Rainbow and Brown trout, with Brook trout and
cutthroat trout found in low abundance. Natural reproduction of Brook, Brown,

- and Rainbow trout species has been documented within the C&R TFAs during this study period; however, the number of young-of year (YOY) collected in the fall surveys was generally low. As nitrogen gas super-saturation episodes associated with the operation of the Jennings Randolph Lake Dam occur, continued stocking of fall fingerling Brown trout and adult Brown and Rainbow trout will be necessary to maintain a recreational fishery.
- A new regulation took effect on the North Branch of the Potomac River below Jennings Randolph Lake. The new upper boundary for the C&R TFA was extended upstream 400 feet effective 1 January 2011. This expanded area lies close to the Paul Sarbanes Trail and will improve angler access to the river.
- A Zero Creel Limit Trout Fishing Area (ZCL TFA) for all trout species was established in 2003 between Westernport and Pinto, MD, a distance of about 18 miles. The intent of the regulation was to eliminate angler-induced mortality of trout in order to develop a high quality coldwater fishery supported through put-and-grow management with fingerling Rainbow and Brown trout. This management objective was achieved by the increased growth and survival of the fingerlings. Multiple year-classes for both trout species have been documented in the ZCL TFA, and many specimens exceeded the quality-size standards. However, the summer of 2010 was characterized by drought conditions and higher than normal warm temperatures. River flows were too low to conduct the annual fall survey in 2010, so staff was unable to document the status of the trout population in response to the warm river temperatures.
- Western Region I requested a regulation change several years ago to establish a Catch and Return Bass Fishing Area (C&R BFA) on the North Branch of the Potomac River. Studies over the last five years show that the area supports a reproducing Smallmouth bass population characterized by a diverse age and size structure. The objective to establish a high quality smallmouth bass fishery has been achieved. Largemouth bass were less abundant than Smallmouth bass within the C&R BFA; however, anglers tell us that Largemouth bass are routinely captured within this special management area. Also, Tiger muskie fingerlings have shown survival to adult size in this section NBPR and offer a unique river trophy fishery. Tiger muskies were last stocked in the NBPR during 2006 when 1,200 fingerlings were stocked between Pinto and Cumberland.

Angler Access and Land Acquisition

- Land acquisitions along the North Branch Potomac River continued during this study period in order to provide angler access and watershed protection. In 2010, a 6 acre parcel was purchased and included into the 125-acre Folly Run tract of the North Branch Potomac River Fishery Management Area (FMA). Two grants were obtained from the MD DNR Boating Services to improve the boat launches at the McCoole and Gary A. Yoder FMAs. Both are in the design phase and construction should begin in 2011.
- Western Region II manager John Mullican provided comments for the stewardship review of the Castle property for Land Acquisition and Planning.

Economic Impact of Fishing Opportunity

A study commissioned by Garrett County in MD, the Appalachian Regional Commission, Maryland Department of the Environment (MDE), and MD DNR Fisheries Service was conducted in 2010 to determine the **benefits of acid mine drainage (AMD) remediation in the North Branch Potomac River (NBPR)**. The study calculated the local economic benefits generated in Garrett and Allegany Counties in MD stemming from AMD remediation in the NBPR. This information will be used by policy makers to make informed decisions about future funding to ensure that this remediation continues. The study showed that angling in the NBPR was not possible decades ago due to pollution, but now provides the foundation for most of the local economic benefits associated with the river. NBPR anglers and boaters spend an estimated \$2.1 million dollars per year in the region, with an economic impact of \$3 million. Anglers and boaters are willing to pay even more for their recreational experience (about \$4.1 million per year). The study concluded that increased angling opportunities make the region a more attractive place to live and work based on its improved quality of life

Coldwater Streams

- Western Region I completed the Federal Aid Five-Year Final Report for the Youghiogheny River Catch and Return Trout Fishing Area monitoring study. Studies in 2010 show the trout population has completely recovered after the record hot summer of 2005. Record density and standing crop levels were reached in 2010, with both survey areas at Hoyes and Sang Run exceeding the management objective of 1,000 trout per mile. Brown trout and Rainbow trout stocked as fingerlings were documented to grow to lengths greater than 20-inches during this study period. Annual stockings of fingerling Brown trout and warmwater-strain Rainbow trout support this fishery. Temperatures in the river are maintained through a cooperative agreement with the Deep Creek Lake Hydro-station to maintain the coldwater habitat through temperature enhancement releases during the critical summer period.
- After documenting the decline of trout populations in **Hoyes Run**, MD DNR Inland Fisheries Division partnered with several other governmental agencies, non-profit groups, private industries, and private landowners in a cooperative effort to correct water quality problems and restore trout populations to former levels. Total restoration funding is more than \$300,000. The Maryland Department of the Environment assisted with enforcement actions against environmental violations in the watershed. Restoration efforts initially appeared to have had a positive effect on the trout population; however, from 2005 to 2010 staff observed a continued decline in both adult and young of year trout densities. The State Highway Administration's Transportation Enhancement Program (TEP) awarded \$113,479 to Garrett County and the Youghiogheny River Watershed Association for the Hoyes Run Erosion Repair Project. This project will stabilize

- the banks and channel of an eroding headwater stream in the Hoyes Run watershed. Construction should begin in 2011. There are still threats to the Hoyes Run aquatic ecosystem, namely water appropriations permit applications to withdraw groundwater for a municipal water supply and golf course irrigation.
- Western Region I staff completed the five-year Federal Aid report for the Trout Population Study in the **Savage River Trophy Trout Fishing Area (SRT TFA)**. Combined trout species standing crops and densities were stable from 2006 2009, however about a 20% decline was documented from 2009 to 2010. The river experienced adverse conditions during the draining of the Savage River Reservoir for dam repairs. Brook trout standing crops in the SRT TFA have decreased significantly during this study period compared to the previous five years, reaching the lowest observed level in 2010. Brown trout standing crops were also relatively stable during 2006 2009, but decreased 24% by 2010. Brown trout continue to make up the majority of the combined species population, comprising about 79% of the total number of trout during this study period. At this point in the history of the Savage River Trophy Trout fishery, successful reproduction by brook trout is imperative in 2011. Measures for maintenance of flows during the critical egg and fry stage are necessary to ensure optimal condition for brook trout year-class success.

Staff Enhancement

• Inland Fisheries staff from many units attended the annual Fisheries Summit at New Germany State Park. Western Region II tech Josh Henesy planned and conducted a first aid and CPR recertification training class for staff. Presentations at the summit included: a discussion of the state of Fisheries; personnel issues; the status of Blue catfish; marketing; fish passage; education; and new outreach techniques. Staff used break time to network with other staff and to brainstorm on current and future projects.

Environmental Review

• Western Region II manager John Mullican provided comments to the DNR Environmental Review section regarding Washington County's proposal to repair the aging dam on Antietam Creek at Devils Backbone Park. Dam Safety has deemed the dam to be in an unsafe condition and in need of immediate repair. Fisheries Service is working with other State and County agencies to protect the resident fish resources and the put-and-take trout fishery while the dam repairs are made. Devils Backbone Park is one of the most popular trout fishing areas in Washington County.