

# INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN

30 West Gude Drive, Suite 450, Rockville, Md. 20850 (301) 984-1908; FAX (301) 984-5841 E-MAIL: info@icprb.org; URL: www.potomacriver.org

## THE POTOMAC RIVER AMERICAN SHAD RESTORATION PROJECT



Gill-net collections of spawning shad in the tidal Potomac with the help of volunteers and Virginia watermen. Photo Credit: David Hawxhurst



Field stripping and fertilization of shad eggs for delivery to the USFWS's Harrison Lake Hatchery. Photo Credit: David Hawxhurst

The American shad was once one of the East Coast's most abundant and economically important fish. By the mid-1970s, water pollution, over-harvesting, and the blocking of spawning habitat by dams led to their decline, resulting in imposition of harvest moratoria that still are in effect. Despite significant improvements in water quality made during the last several decades, American shad stocks remained depressed in the Potomac River until the mid-1990s. Then, in 1995, the Interstate Commission on the Potomac River Basin (ICPRB) began leading an American shad stocking project with the assistance of local watermen and the U.S. Fish and Wildlife Service's (USFWS) Harrison Lake National Fish Hatchery. The stocking program was designed to imprint shad to the historic spawning and nursery waters and help rebuild Potomac River American shad stocks.

Since 1995, when the stocking program began, more than 22 million American shad fry have been



American shad are back in the Potomac River, and fishing for them is increasing in popularity, but they must be released unless harvest moratoria are lifted.

Photo Credit: Mike Bailey

stocked in the Potomac River, and another 40 million in the Rappahannock River in Virginia. The number of adult shad returning to spawn has increased tenfold (Figure 1). Young shad also have become

substantially more numerous in the Potomac, eclipsing records for 11of the last 14 years in Maryland's shore monitoring surveys that have been performed since 1959 (Figure 2).

While the Potomac is leading the comeback of American shad, strong efforts are being made to restore the fish in other Chesapeake Bay tributaries. The Potomac is now the egg source for restorative efforts from the Susquehanna to the Rappahannock. Since 2003, ICPRB has been working with the Virginia Department of Game and Inland Fisheries to restock the Rappahannock.

The American shad population in the Potomac is again strong enough to allow some harvest. Since 2003, the commercial fishery has opened a bit, allowing watermen to keep two bushels a day. Potomac shad are back in the marketplace. The recreational fishery, which is primarily at and upstream from Washington, D.C., remains closed. Until necessary regulatory hurdles are passed, anglers can practice catch-and-release fishing for shad. This is a good way to again learn about shad; how much of a challenge they can be to catch on hook and line, how pretty they are, and their importance to the ecosystem. Perhaps the most spectacular setting for this is the stretch of river from Great Falls to Fletcher's Boat House near Little Falls. In the not too distant future expect to be able to catch, take home, and enjoy the fish as our ancestors once did.

The restoration project reached out to the public in a very large way. Hundreds of volunteers have helped during the late-night hours of spring brood-stock collections. Thousands of students from dozens of area schools have participated, both on the river and raising shad fry in classrooms through a "Schools in Schools" partnership with Living Classrooms, of the National Capital Region, the Anacostia Watershed Society, with assistance from the Earth Conservation Corps (the Chesapeake Bay Foundation), and the Potomac Conservancy. Through the students' efforts, an estimated 700,000 additional fry also have been released. Interest in angling for American shad is growing rapidly, thanks to the strong public outreach and participation component.



Students participating in the Schools-in-Schools program, in cooperation with the Chesapeake Bay Foundation and others, stocking their shad-fry near Old Anglers Inn. Photo Credit-Jim Cummins

The ICPRB and USFWS successfully completed the eight-year American shad stocking program, a fishway (structure for fish to swim upstream) was constructed at Little Falls Dam in 2000 by the U.S. Army Corps of Engineers, and our understanding of the shad in the Potomac River has expanded. The efforts of the multi-state, multi-agency/organization Little Falls Task Force<sup>1</sup> are coming to fruition and fishing is being reopened.

#### **Future Needs**

Monitoring and keeping track of restoration progress are more important than ever if we want to reopen the commercial and recreational American shad fisheries so valuable to our economy. Unfortunately, funding support for these critical activities, normally hard to obtain, has become increasingly difficult. The recreational fishery should be opened to allow one adult shad per day to be kept by anglers. More public education is necessary to restore interest in this remarkable, delicious fish, one of the most important to the vitality of river and coastal ecosystems and significant in the country's history.

### **Past Funding Support**

The project has been supported from its inception in 1995 by a number of collaborating agencies and organizations, including the Virginia Chesapeake Bay Restoration Fund, Maryland Chesapeake Bay Trust, Potomac River Fisheries Commission, Living Classrooms of the National Capital Region, National Fish and Wildlife Foundation, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Chesapeake Bay Program, Maryland Department of Natural Resources, ICPRB, and private donations from Mirant Power and members of the Congressional Sportsmens Caucus.



USFWS stocking some of the 15-million shadfry at the Potomac River's Mather Gorge with the cooperation of the National Park Service. Photo Credit: Jim Cummins



Construction of the Little Falls Fishway. Photo Courtesy of the U.S. Army Corps of Engineers.

<sup>&</sup>lt;sup>1</sup> Members of the Little Falls Fish Passage Task Force come from Virginia, Maryland, the District of Columbia, ICPRB, Potomac River Fisheries Commission, USFWS, U.S. Army Corps of Engineers, National Biological Survey, U.S. Environmental Protection Agency, National Park Service, National Marine Fisheries Service, Montgomery County, Md., Chesapeake Bay Foundation, and the Potomac Conservancy.

Figure 1.

MD DNR Potomac River American Shad CPUE during MD Striped Bass spawning stock survey (1996-2013) (DataSource = Eric Durell, MD DNR, Chart = ICPRB)

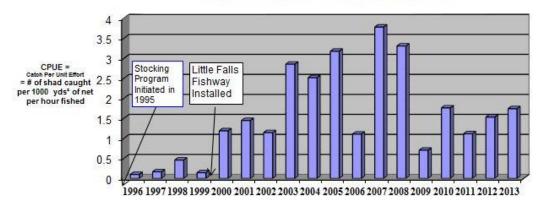
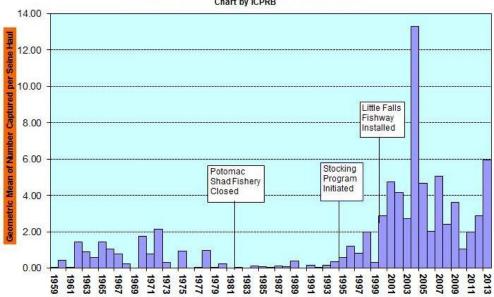


Figure 2.

#### Juvenile American Shad Captured in the Potomac River by the Maryland Shore Haul Seine Survey - 1959-2013

Data From MD DNR, Durell, E.Q., and Weedon, C. 20132. Chart by ICPRB



Created with an interstate compact by an Act of Congress in 1940, the Interstate Commission on the Potomac River Basin (ICPRB) is composed of commissioners representing the federal government, the states of Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia. The ICPRB mission is to enhance, protect, and conserve the water and associated land resources of the Potomac River basin and its tributaries through regional and interstate cooperation.

ICPRB accomplishes this mission through a variety of actions to conduct, coordinate, and cooperate in studies and programs in the areas of water quality, water supply, living resources, and land resources. The Section for Cooperative Water Supply Operations on the Potomac River (CO-OP), a special section of the Commission, was created as a technical operations center for management and coordination among the regional water utilities to avoid water supply shortages in Metropolitan Washington during droughts.

For additional information contact the Interstate Commission on the Potomac River Basin at 301-984-1908, or visit at <a href="http://www.potomacriver.org">http://www.potomacriver.org</a>.