



UD awarded Fish America Foundation grant to help restore American shad

9:54 a.m., Feb. 7, 2011----The Water Resources Agency (WRA), a unit of the University of Delaware's Institute for Public Administration (IPA), was awarded a \$42,000 grant from the FishAmerica Foundation (FAF), part of the American Sportfishing Association, to supplement ongoing work to help restore American shad, hickory shad, and other anadromous fish to the National Wild and Scenic White Clay Creek near UD's Newark campus.

The FAF funds will be used for research, design, and investigative studies for the removal of Dam No. 1 at Delaware Race Track in Stanton, Del., seven miles downstream from the UD campus. Fish-abundance studies conducted by Delaware Department of Natural Resources and Environmental Control (DNREC) fisheries biologists last spring confirmed that this dam is indeed a barrier to migration and spawning of anadromous fish; up to 1,000 hickory shad were detected downstream from the dam and none upstream.

Removal of Dam No. 1 would reopen four miles of the White Clay Creek to passage of shad and striped bass for the first time since the American Revolution. DNREC biologists noted that this would be the state's first dam removal for fish passage.

Principal investigators WRA director Gerald Kauffman and assistant policy scientist Martha Corrozi Narvaez are leading a multidisciplinary research and design team that includes IPA associate policy scientist Andrew Homsey; School of Public Policy and Administration graduate students Erin McVey, Stacey Mack, and Sarah Chatterson civil and environmental engineering undergraduate students Dustin Briggs, Taylor King, Davis Specht, Kim Teoli, Lawrence Latour, and Colin Nagle; and geography undergrad Kayla Iuliano.

Students working in connection with this project have uncovered historic documents that indicate Dam No. 1 was built circa 1770 to divert water to a millrace and mill at the historic Hale-Byrnes House in Stanton.

Kauffman noted, "This is a fascinating research endeavor that combines watershed restoration, fisheries revitalization, and historic preservation in an interdisciplinary effort that relies heavily on our UD student team in engineering, planning, and geography."

Once the snow melts this winter, the project team will perform a field survey and conduct hydraulic engineering, water- and sediment-quality, stream geomorphology, and historic-preservation studies.

"Our hypothesis is that with improved water quality, removal of the dam will reopen long-closed spawning habitat along another four stream miles, thus spurring reintroduction of American shad upstream," Kauffman said. "After the dam is removed, we plan to conduct future research with DNREC fisheries biologists to monitor restoration of the shad population and test this hypothesis."

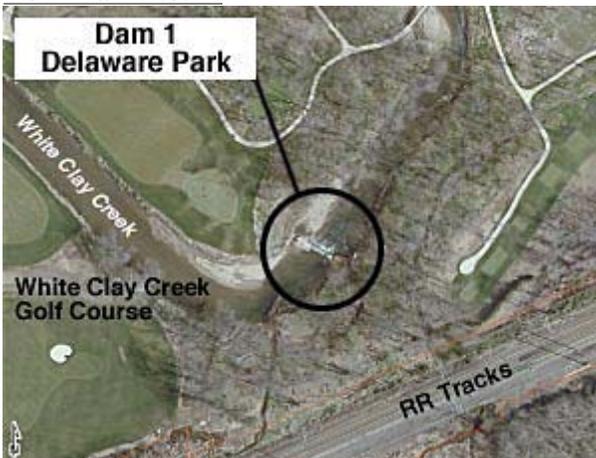
Removal of this initial dam is the first step in a five-year strategic plan developed by WRA under funding by the National Fish and Wildlife Foundation and U.S. National Park Service to remove six dams and reopen fish passage along 14 miles of the National Wild and Scenic White Clay Creek between tidewater at Stanton to the Pennsylvania state line.

This work is a public-private-academic partnership among UD and DNREC's Division of Fish and Wildlife, Duffield Associates, Delaware Race Track, Kim Burdick (curator of the Hale-Byrnes House), and the White Clay Creek Watershed Management Committee.

Article by Mark Deshon



DNREC fisheries biologist Matt Fisher shows an American shad found in the White Clay Creek downstream from Dam No. 1.



Aerial view shows location of Dam No. 1 at Delaware Park.



Removal of Dam No. 1 will facilitate fish passage four miles farther upstream.