By Steve Brimm

An American Heritage

The National Fish Hatchery System

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Fish biologist Molly Bowman moves an adult smallmouth bass to a new tank as part of a sedation study at the Aquatic Animal Drug Approval Partnership, co-located with the Bozeman Fish Technoloy Center in Montana.

Predawn on a summer morning a young college student crawls into the passenger side of a fish hatchery truck destined to journey across western Ohio, stopping at numerous Soil Conservation Service offices throughout the day to meet local farmers who needed fish for their farm ponds. That was my initiation into the work of the National Fish Hatchery System over 40 years ago. As a new trainee right out of college, I moved from one hatchery to another, each with different species of fish and a different role in fisheries conservation. I remember an early afternoon that we left the New London National Fish Hatchery in Minnesota and drove to Valley City National Fish Hatchery in North Dakota, to pick up a load of walleye. From Valley City we drove throughout the night back across Minnesota, almost hitting a bear at four in the morning. We arrived at the Lac Du Flambeau Indian Reservation at sunrise to meet tribal biologists to stock one of their lakes.

I just couldn't wait for my next trainee experience and loved learning the culture methods of various fish. While stationed at the Jordan River National Fish Hatchery in Michigan, I was so impressed with the caravan of trucks that would load up lake trout at mid afternoon and travel to Ludington, Michigan to board a car ferry and head into the night across

Lake Michigan. Around midnight the captain of the ferry would signal that we had reached our stocking zone over one of the historic lake trout spawning reefs. The back end of the ferry would rise and our four trucks were in position to release our finny cargo. Off into the dark waters went the lake trout that we had spent over a year rearing.

That's a glance at my first few years with the National Fish Hatchery System in the 1970s. Hatcheries have various roles in conservation as defined by legislation and by location. But all are connected by the desire to provide the best possible product to fisheries managers to meet conservation goals. America needs a system of hatcheries to address federal fisheries conservation responsibilities.

The National Fish Hatchery System has a rich and proud heritage. Over 140 years ago the New England states wanted federal leadership in fisheries because they realized that many species of fish crossed state boundaries and would require federal coordination. The first National Fish Hatchery was established by Livingston Stone in California to address salmon issues (see *Eddies*, Spring 2011). Following those historic moments in the early 1870s an infrastructure of facilities expanded across the country to address a whole host of fisheries conservation issues. I remember just how important that infrastructure was back in the 1980s when many of our warmwater hatcheries were re-tooled by a great need to restore striped bass along the Atlantic Coast. Without that existing infrastructure one can only imagine when—or even if—this important fishery would have been restored.

Other times during my career I witnessed our hatchery system gear up to help other hatcheries, both federal and state facilities, when natural disasters or disease outbreaks required them to temporarily close. For several years I coordinated our National Broodstock Program that provides eggs to federal, state, university, and research programs. Almost 50 million fish eggs of many species were distributed each year. I'm extremely proud of the leadership of our broodstock managers who would work closely with fisheries managers at many levels to ensure that they received the exact product at the precise time. The National Fish Hatchery System has provided our nation's fisheries managers with fish culture tools, technologies, and fish health policies and procedures since 1872. And speaking of health, fish are an excellent indicator of the environment and require healthy waters. Our National Fish Hatcheries were built where high quality water could be found. By default today, such critical waters are protected from over exploitation.

The value of using our National Fish Hatcheries for conservation education and connecting with our youth is critical to the future of conservation. Over my career, funding was naturally dedicated primarily to fish work, but we always found a way to support youth programs, curricula to schools, and host special events like National Fishing Week. From my very first duty station in Fairport, Iowa, followed by assignments at eight other National Fish Hatcheries, I'm sure I guided several thousand kids on tours and shared educational programs on fisheries conservation, always hoping that I might have made a difference. While I served as Director of the D.C. Booth Historic National Fish Hatchery and Archives, I had the opportunity to share my career experience with college classes at our local Black Hills State University. Recently, three years after one of those opportunities, a young man approached me at a National Wild Turkey Federation banquet and told me that my presentation led him to change his career path and pursue a master's degree in fish and wildlife management. He hugged me and thanked me and I barely held back a tear. Hundreds of National Fish Hatchery System employees share their work with youth throughout the year. They may never know if they are making a difference—but they do. And with an infrastructure of hatcheries throughout the nation

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Garrison Dam National Fish Hatchery manager, Rob Holm, expresses eggs from a wild pallid sturgeon brought to the hatchery.

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Eyed-egg stage is only one phase along the way in development. Depending on the conservation goal, some fish are raised to large sizes before being stocked. Some are never stocked at all, used either for future broodstock or in scientific research.

we influence the vast diversity of America's youth. Tomorrow's conservation leaders will be culturally diverse.

Fisheries conservation has been the primary mission of the National Fish Hatchery System since its inception. Our former conservation leaders understood the values of restoring fish populations and providing recreational fishing for Americans. What we didn't realize until recent years were the measurable economic values of our work. I was involved with economists who evaluated the economic impact of our 11 rainbow trout hatcheries. We were pleased if not shocked to learn that for each single federal tax dollar invested in our rainbow trout hatcheries, it created $32.20 in retail sales and $36.88 in net economic value. We've since learned more, and you can read about it yourself in the pages that follow. While we strive to save endangered fish, restore habitats and depleted stocks, and provide recreational activities, we cannot overlook the tremendous economic value derived from fisheries conservation.

Throughout my early days in the hatchery system I never met a person who didn't appreciate the value of our hatcheries. The wakeup call for me came as I moved higher in the management of hatcheries. Following a year of training at our Fisheries Academy in Leetown, West Virginia, my family had just moved to Wytheville National Fish Hatchery in Virginia. As a broodstock station and provider of fish for National Forests in West Virginia and Virginia, we were assured that the hatchery was safe as Congress prepared to close several hatcheries. With that assurance, my wife and I bought our first home and moved in around Thanksgiving time. Two weeks before Christmas we learned that Wytheville would close. Things would eventually work out for us, but I learned a valuable lesson in understanding how Congress worked and how important it was to make sure your local community and congressional legislators understand the value of each hatchery program. When I moved to the Washington office in the late 1980s, I also found colleagues in academia and co-workers who didn't share my values. Understanding their perspective helped me strive to clearly articulate the entire values of the hatchery system, to make sure we were using the best science available to conduct our work in a most efficient manner, and to make outreach a priority of our work.

As I finished my career working in the collection of historic artifacts and archives at the D.C. Booth facility, I connected like never before with the rich American heritage of fisheries conservation. I realized that the National Fish Hatchery System is not museum artifact, but an infrastructure of facilities uniquely poised to meet future needs of our nation. ✦

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