



White Sulphur Springs

National Fish Hatchery

Conserving America's Fisheries



Connecting People with Nature *Local Adventure Club Helps with Trout Spawning*

Local school children from the Adventure Club at Eastern Greenbrier Middle School in Lewisburg, WV piled in a bus last month and headed for White Sulphur Springs National Fish Hatchery to see the rainbow trout spawning in person. After hatchery staff gave a lecture on trout spawning and mussel propagation at the monthly Adventure Club meeting, Tracy Asbury, faculty advisor



Evan Shafer counts trout eggs using the Von Bayer method while classmates Nick Carrington (left) and Davis Wood (right) observe. Photo by Matthew Patterson.

for the Adventure Club and local guide with West Virginia Outdoor Adventures, suggested a field trip to the hatchery to combine the lecture material with a more hands-on experience. During their trip to the hatchery, Adventure Club members (many of them avid fishermen and outdoor enthusiasts) got a rare behind-the-scenes look at the eggs being stripped, fertilized and treated with iodine as well as procedures for counting and placing the eggs in the incubators. Some of the students jumped right in, learned the Von Bayer method and assisted hatchery biologists with the egg counting. When they are not helping with rainbow trout spawning, the Adventure Club members participate in other

outdoor activities including fly-tying, fly-fishing and archery classes.

This year, the club plans to set up a booth at the 4th Annual Freshwater Folk Festival (October 4th) to tell people about their group and sell hand-made flies.

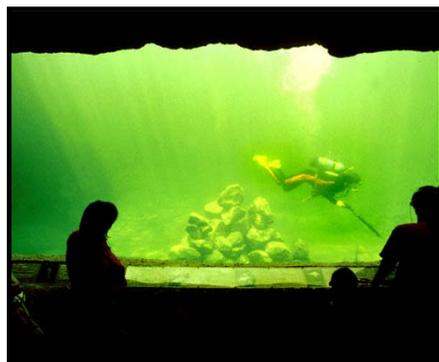
The extra money will go toward their next field trip.



Tommy Watkins (a.k.a. Trout) shows the adventure club how to count trout eggs. From the left: Elby Feury, Evan Shafer, Davis Wood, Owen Wood, Brandon Vance. Photo by Matthew Patterson.

Partnerships *WSSNFH Chosen as Location for National Outdoor Classroom*

The U.S. Fish and Wildlife Service, Fisheries Division chose White Sulphur Springs National Fish Hatchery for the first National Outdoor Classroom pilot project. The National Fish Hatchery System Volunteer Act of 2006 calls for the creation of outdoor classrooms on national fish hatcheries across the country to help connect children, their families and local communities with nature. Project partnerships for the outdoor classroom at WSSNFH have already been developed with local civic organizations like Friends of the White Sulphur Springs National Fish Hatchery, Boy Scouts, Girl Scouts, 4-H, Main Street White Sulphur Springs Rotary Club, Eastern Greenbrier Middle School and other federal agencies. The outdoor classroom will include a self-guided walking



A vision for the Aquarium of the Appalachians. Photo: St. Louis Zoo.

trail that connects the existing trout and mussel propagation programs to a wetland boardwalk, wetland gazebo, stream restoration and alternative energy demonstration projects, the Aquarium of the Appalachians, the Freshwater Folk Festival Amphitheater and a wildlife nature trail. Future plans include connecting the walking trail to a new Hike/Bike Trail proposed by Main Street White Sulphur Springs and to the adjoining Monongahela National Forest.



An outdoor amphitheater example. Photo courtesy of Columbia County, GA.

Aquatic Species Conservation***WSSNFH to Begin Propagation of the Endangered James spiny mussel***

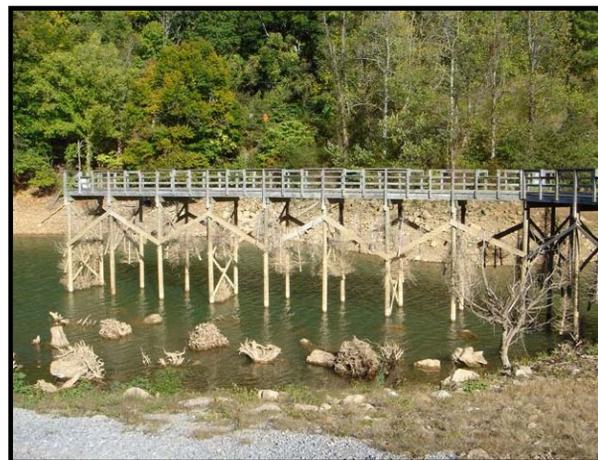
Biologists with the Aquatic Resource Recovery Center at White Sulphur Springs National Fish Hatchery are partnering with the Virginia Department of Game and Inland Fisheries and the West Virginia Division of Natural Resources to begin propagation of the federally endangered James spiny mussel. Over the last 20 years, this species has declined rapidly and can now only be found in small streams of the upper James River basin in Virginia and West Virginia and the upper Roanoke River drainage of Virginia and North Carolina. Baby James spiny mussels grown at the hatchery will be used to help stabilize existing populations and establish new populations in an effort to prevent extinction of this unique species.



The James spiny mussel. Photo by Matthew Patterson, USFWS.

Cooperation with Native Americans***WSSNFH Provides the Cherokee Nation with over 6,000 Pounds of Rainbow Trout***

White Sulphur Springs National Fish Hatchery provided the Cherokee Indian Reservation (Cherokee, NC) with over 6,000 pounds of rainbow trout broodstock this winter to help them recover from the recent drought in the southeastern U.S. The drought in the Southeast was the worst in more than a century and 2007 was the driest year on record for the state of North Carolina, leaving many streams and lakes with little or no water. The three-pound trout given to the Cherokee were spent males and females that had recently been spawned at the hatchery. WSSNFH produces eggs for the National Broodstock Program and ships the eggs to other hatcheries across the country. The spawned adults are then available to state agencies and Native American tribes for stocking.



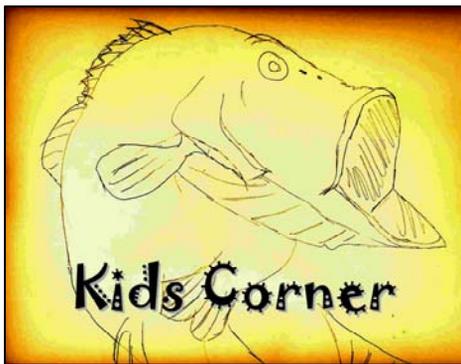
Drought conditions have left this fishing pier on Wautauga Lake 15 feet out of the water. Photo by Angie Johnson.

Friends of the WSSNFH***Friends of the WSSNFH Invited to Washington D.C. to Start National Friends Organization***

The Friends of the WSSNFH were invited to Washington, D.C. in March to help organize the first National Friends Organization for the Fisheries Division of the U.S. Fish and Wildlife Service. A national organization will provide a much needed national support network and will allow Friends Groups from across the country to have a collective voice in Washington. During their stay in the nation's capital, Ellen Broudy and Beth Smith (two members of the Friends of the WSSNFH) discussed the importance of the hatchery and the Fisheries Program to our nation's aquatic resources with congressional aides for Senators Robert C. Byrd and John D. Rockefeller as well as Congressman Nick J. Rahall II. They also got a chance to meet with Dale Hall, Director of the U.S. Fish and Wildlife Service and Gary Frazer, Assistant Director for Fisheries and Habitat Conservation to discuss the needs of the hatchery and the National Friends Organization. The mission of the Friends of the WSSNFH is promoting understanding, appreciation, and conservation of freshwater resources and celebrating the natural history and culture of White Sulphur Springs, Greenbrier County, West Virginia. Friends of the WSSNFH support the hatchery by organizing the Freshwater Folk Festival, education and fundraising. For information about joining the Friends Group, please visit their website: www.wsshatcheryfriends.org.



Friends members Ellen Broudy (left) and Beth Smith (right) meet with Dale Hall, Director of the United States Fish and Wildlife Service and Gary Frazer, Assistant Director for Fisheries and Habitat Conservation. Photo by Matthew Patterson, USFWS.



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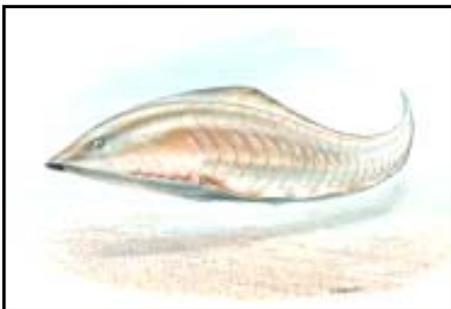
Hatchery Contact Information

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Fun Fish Facts

The World's Oldest Vertebrate: Myllo Who?

It appears as though the mighty fishes can now claim the title of oldest vertebrate in the world. A fish fossil called Myllokunmingia, about the size of a paperclip, was recently found in rocks of the Cambrian period (530 million years old) in southeastern China (Kunming City). Myllokunmingia appears to have a skull and skeletal structure made of cartilage (much like modern lampreys, which are also vertebrates). These fish fossils are thought to be 30 million years older than the next-oldest known vertebrate fossils, from a time early in the evolution of life from simple creatures to much more complex ones. Fossils give scientists an idea of the general shape and

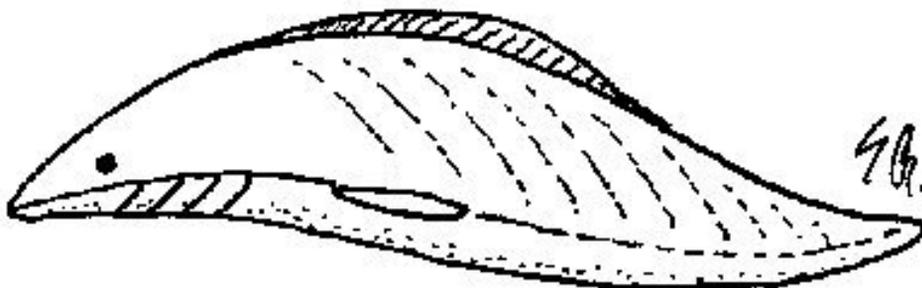


An artistic rendition of the Myllokunmingia by John Sibbick.

structure of an animal but little or no clues about how they might have moved, what they might eaten or even what color they might have been. John Sibbick, the artist that painted the Myllokunmingia in the picture above, let us know what he thought the fish might look like. Use your imagination and see if you can add some color to this fish below. While you are coloring think about what that fish might have eaten 530 million years ago.



Map showing the location of Kunming City in southeastern China.



Myllokunmingia
 the oldest fossil fish

Hatchery Mission

Working with partners to restore and maintain fish, mussels and other aquatic resources at self-sustaining levels for the benefit of the American public. Our seven priority areas include Partnerships and Accountability, Aquatic Species Conservation and Management, Public Use, Cooperation with Native Americans, Leadership in Science and Technology, Aquatic Habitat Conservation and Management and Workforce Management.

Hatchery Information

Established in 1900 to produce fish for the American Public, WSSNFH became part of the National Broodstock Program in 1976. Since then we have shipped millions of disease-free rainbow trout eggs to hatcheries across the country. In 1995, the hatchery



added a new program, freshwater mussel conservation. Today, we provide shelter for mussels threatened by pollution and raise baby mussels to improve wild populations.



Hatchery Tours

Tours are available free to the public M- F, 8AM to 3 PM. Call (304) 536-1361 one week in advance to schedule a tour.



Photo by L.E. McKinney for The Times of Greenbrier County.