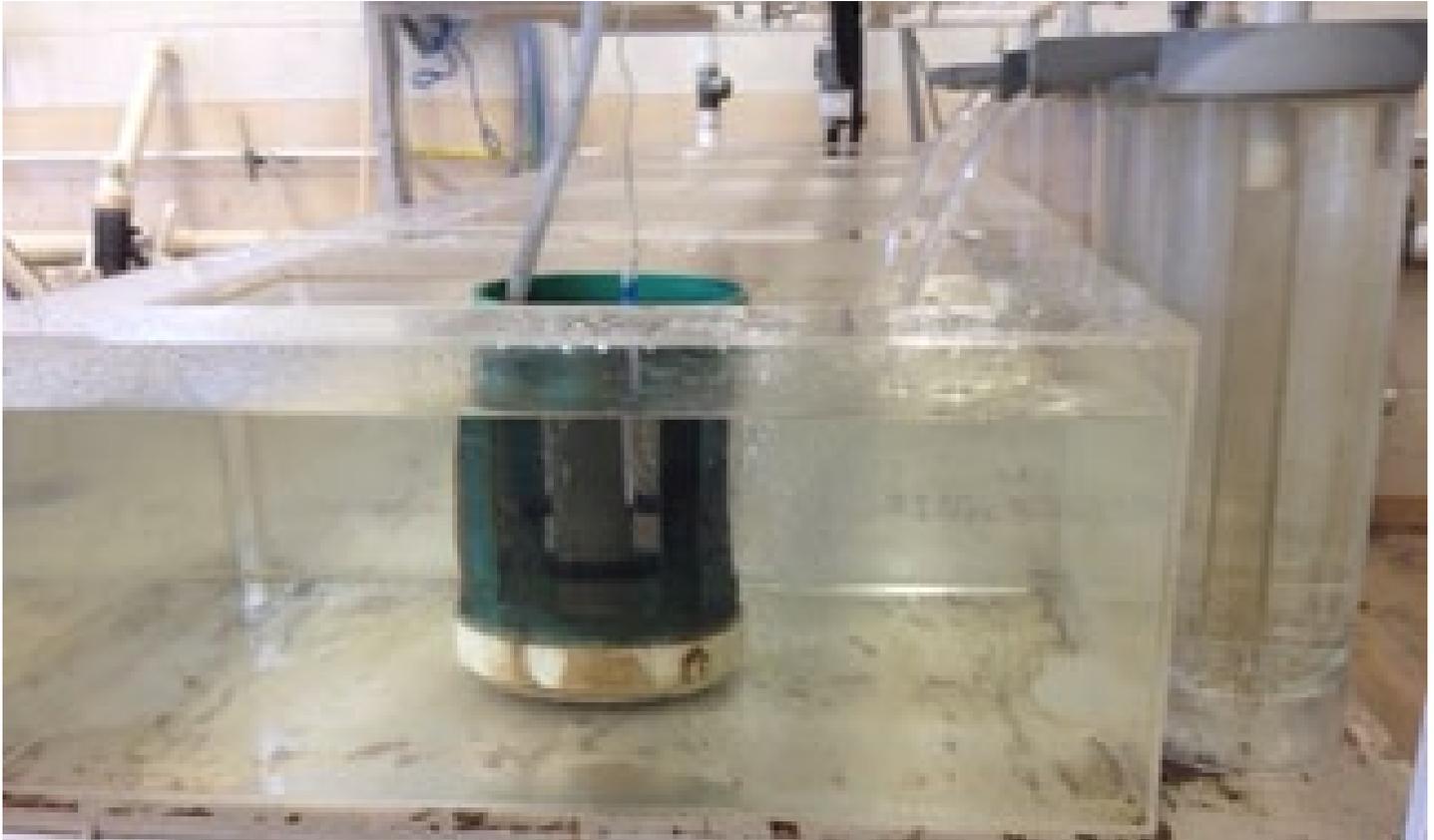


# FLEUR DE LIS FISHERIES

US Fish and Wildlife Service



The Pvt. John Allen NFH started a “Fish in the Classroom” program with the science classes at the Lawndale Elementary School in Tupelo, MS. This program was designed to give students a “hands on” approach to natural resource conservation. The hatchery will provide the school with paddlefish eggs and it will be the responsibility of the students, with the assistance of teachers and hatchery personnel, to raise the fish. A mobile hatching and rearing aquarium system was delivered to the school to allow the students and teachers to learn how the system works and how to maintain the water quality.

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# Winter is a Time for Planning

By: Tony Brady

The weather in Louisiana for most of February has been wet, cold and even snowing for one day, but at Natchitoches National Fish Hatchery we aren't letting this dreary weather dampen our plans for a busy spring. On the hatchery, we have been prepping 50 of our ponds to get ready for the start of our fish production season that will begin in early March. Prepping the ponds includes shoveling any mud that may have washed into the kettles, placing dam boards in the kettle wall so they will be set when the ponds are

NFH, a set of cages and a cage rack was delivered for Wolf Creek NFH to begin culturing mussels in Lake Cumberland, KY. The Wolf Creek NFH mussel program is a partnership between Wolf Creek NFH, Kentucky Fish and Wildlife Resources, and Natchitoches NFH. Wolf Creek NFH will be culturing the Painted Creek Shell, a species of interest for Kentucky Fish and Wildlife Resources.

Finally, before the end of February, Natchitoches NFH staff braved a blustery 32° F morning to join up with partners from the Kisatchie National Forest to begin collecting wild fish that will be used to research and propagate the federally threatened Louisiana Pearlshell Mussel. Building on the success of this research in 2014, plans have been made to repeat the host fish project with additional fish and to conduct the first ever recovery effort for this species in Moccasin Branch. Redspot Darters will be inoculated with Louisiana Pearlshell larva and will be released into Moccasin Branch where the mussels will complete their metamorphosis and drop off the fish into the stream. Moccasin Branch lost its Louisiana Pearlshell Mussel population in 2011 when a severe drought caused Moccasin Branch to dry up.



Working with Louisiana Department of Wildlife and Fisheries, Natchitoches NFH places filter socks over pond fill pipes.

harvested, and putting filter socks over the fill pipe to prevent any unwanted critters from being pumped in from our water source of Cane River Lake. The work of prepping the ponds has been a joint effort between hatchery personnel and staff from Booker Fowler Fish Hatchery. The two facilities have a partnership to conserve, protect and enhance native fish and reptile species for the continuing benefit of the American people. Off the hatchery, Natchitoches NFH staff made a trip to deliver mussel cages and cage racks to Dale Hollow NFH in order to expand the production capabilities of the mussel propagation program, now in its third year. In addition to expanding the program at Dale Hollow



Friends of Dale Hollow NFH's President drills holes in mussel culture cages in preparation for hardware cloth to be attached.

# Private John Allen NFH: Yazoo Darters, Logperch and Mussels Oh My!

By: Dan Schwarz

Private John Allen National Fish Hatchery (PJANFH), in Tupelo MS has been busy this winter making plans and setting up new systems to expand their capabilities to culture endangered fish and freshwater mussels. The Yazoo Darter is a range-restrictive fish endemic to the Upper Yazoo river basin. It has been listed as globally imperiled by the Nature Conservancy in 2013. It is also listed as a Tier 1 species of greatest conservation need in the Upper East Gulf Coast Plain Ecoregion by the Mississippi Natural Heritage Program. There may soon be a need to augment the population by performing reintroductions into other suitable habitat. Therefore, a need exists to develop propagation protocols for this species. The Pvt. John Allen NFH has been attempting to culture this species in intensive systems in a brick and mortar building with no success. Construction was completed on an outdoor intensive culture system. The idea is to allow natural photoperiod and temperature to induce the fish to spawn. Broodstock (2 males and 10 females) were collected from Musgray Creek near Holly Springs, MS. Progeny from these fish will be used to develop protocols for rearing Yazoo Darters.

By moving the Yazoo Darters to the outdoor rearing tanks, PJANFH will be able to use the indoor space previously occupied by the Yazoo Darters for other species such as Logperch and freshwater mussels. Logperch serve as a host for several endangered freshwater mussels in the nearby Mobile River Basin.

The Mobile River Basin once held the highest diversity of freshwater mussels in the western hemisphere. At least 17 mussels are presumed extinct and another 17 are listed as either threatened or endangered. The But-



The new outdoor rearing system for the Yazoo Darter.

tahatchie River located just to the southeast of Tupelo, MS is home to four of these 17 listed mussel species. Private John Allen NFH has been working with partners on current habitat restoration projects in certain sections of the Buttahatchie River. These habitat restoration projects are increasing the amount of suitable habitat where freshwater mussels can be reestablished. Techniques are currently being developed at PJANFH to culture freshwater mussels and, once they are successfully cultured at the hatchery, they can be stocked in these newly renovated areas to increase the total population.

Below is the retrofitted system that will be used for logperch and freshwater mussels



# Natchitoches NFH Helps Sponsor Local High School Fishing Tournament

By: Tony Brady

Three years ago, the Natchitoches Central High School Fishing Team began holding an annual fishing tournament on Cane River Lake in Natchitoches, LA. The team's coach and faculty sponsor wanted to make sure that the anglers had a conservation mindset during the tournament with an emphasis on releasing the fish back to the lake as healthy as possible. The mindset of fish health and care is written in the rules that only live fish will be weighed. The weighing of the fish is conducted with the fish out of water for the least amount of time possible. After the weight is recorded, the fish are brought to the Natchitoches National Fish Hatchery fish hauling trailer where they are placed in oxygenated lake water to recover. At the end of the tournament, once the fish have had plenty of time to recover, they are taken to a quiet spot on the lake and released. Natchitoches NFH has been assisting with this tournament from the beginning and will continue to be there to help educate young anglers on sustainable fishing practices.

The 2015 tournament featured 48 anglers making up 24 teams from 5 different high schools. Fishing conditions were not optimal on February 21st, where the air temperature was pleasant in the mid 60's, the on-again off-again rain showers and the wind made catching



From left to right are NCHS fishing coach Van Wiggins, Taylor Coutee, Wes Rollo and Boat Captin Jeff Rollo.

fish difficult for most teams. Second and third place finishers weighed in 5.77pounds and 5.03 pounds of fish. This year's winners were Natchitoches Central High School's Taylor Coutee and an 8th grader from NSU Middle Lab, Wes Rollo. Rollo was allowed to fish the tournament because fishing isn't a sanctioned sport in Louisiana High Schools . This remarkable team of Coutee and Rollo caught total of 12.86 pounds of fish, easily taking the title. Coutee will be graduating soon and will be missed at the tournament, but the staff at Natchitoches NFH look forward to seeing what Rollo does in the next four years.



Natchitoches NFH staff placing fish in the hauling tank after they were weighed.

# Gulf Coast Walleye Restoration

By: Dan Schwarz

Since the construction of the Tennessee-Tombigbee (Tenn-Tom) waterway in the 1970s and early 1980s, populations of the Gulf Coast Strain Walleye have been in a drastic decline. The decline of Gulf Coast Strain Walleye is due to a substantial loss of appropriate spawning habitat. The Walleye are extremely dependent on water flow and temperature to spawn, two requirements that were significantly altered when the Tenn-Tom waterway was constructed.

Currently there are only a few select areas along the river that provide habitat for natural reproduction. The Buttahatchie River is a tributary of the Tombigbee River and is believed to support a population of walleye. Walleye sampling was conducted in February on the Buttahatchie River with the assistance of the Wildlife Mississippi Foundation and Mississippi Department of Wildlife Fisheries and Parks staff. Fish collected during this sampling effort are being used in a telemetry study to track their seasonal movements. The information gained by this tracking study will allow biologist to determine the habitats used by the Walleye and select to new areas along the river for habitat improvements to aid in the recovery of this species.



Gulf Coast Strain Walleye getting tagged before going back to the Buttahatchie River



Gulf Coast Strain Walleye.

# Connecting People with Nature through Hunter's Education

By: Tony Brady

Natchitoches National Fish Hatchery, along with the Natchitoches Parish 4-H, held a Hunter's Education class for ten youngsters on February 17th in the hatchery's Harold B. Wales Environmental Education Building. The Hunter's Education program started out as a federal program that is now administered by the states. In Louisiana, a person must be 10 years of age to receive a permanent Hunter's Education card. In the class, participants learn hunting safety, how hunting is used as a conservation tool, respect for land owners and their property, as well as respect for the wildlife they are hunting.

Hunter's Education is a requirement for any 4-Her who wishes to compete in the 4-H shooting sports program. The class was evenly divided between boys and girls. Six participants are planning on competing

in the shotgun, rifle or BB gun events, while the other four participants are planning to compete in archery. Thanks to the Archery as an Outreach Tool course taught at the National Conservation Training Center, the hatchery has the equipment and a certified instructor who coaches the Natchitoches Parish 4-H archery team and who hosts archery practices throughout the school year, as weather permits. The Natchitoches Parish 4-H archery team is currently planning on sending seven archers to the North Regional 4-H tournament coming up in April. We will keep you updated on how well they shoot and if any qualify for the State Tournament.



4-Hers take Hunter's Education at Natchitoches National Fish Hatchery