WELAKA NATIONAL FISH HATCHERY NEWS

September 2016

Welaka Wildlife Fact:

Alligators have fairly poor eyesight. They have a “nictitating membrane” to protect their eyes so that they can see underwater. Alligators hear with ears that are located behind their eyes and are very sensitive to vibrations in the water.

For more information about Alligators check out http://srelherp.uga.edu/alligators/

Fish Passage Project Benefits Rare Fish in Tennessee

Walden Ridge is part of the Cumberland Plateau located in east Tennessee and is home to six small streams that are inhabited by the federally endangered Laurel Dace. The Laurel Dace is a beautiful fish that during its spawning season develops colors of bright red and gold, and deep black. This species was listed as federally endangered in 2011. Some of the reasons they were listed are because of their limited range and threats such as loss of vegetative riparian zones and increased timber harvest which increases sedimentation in the streams. This increased sedimentation can impact the Laurel Dace's spawning efforts by depositing on top of and smothering their eggs. As Laurel Dace travel up and down these streams looking for suitable spawning habitat, barriers to their movement's further limit their ability to remain self-sustaining.

The Region 4 Aquatic Habitat Restoration Team made up of Fish and Aquatic Conservation personnel, the Tennessee Ecological Services Field Office, and the Partners for Fish and Wildlife Program, spent a week in September in Dayton, TN helping improve Bumbee Creek for the Laurel Dace. The Team removed two 4 foot culverts from under Pine Creek Road that were impeding fish movement up stream and replacing them with one 8 foot arched compressed culvert that will allow fish to swim freely along Bumbee Creek. It is hoped that by removing this barrier in Bumbee Creek and by working with land owners to protect the surrounding landscape, Laurel Dace populations can once again begin to increase.

Right: Allen Walker (Welaka NFH) and Tripp Bolton (Bears Bluff NFH) are assembling the culvert.

Left: The 8 foot arched compressed culvert used to in Bumbee Creek to improve fish passage.

Above: A male Laurel Dace showing off its breeding colors.

Freshwater Mussel Propagation for Restoration Class Taught at NCTC

The Freshwater Mussel Propagation for Restoration course is the brain child of Matthew Patterson, Course Leader at the U.S. Fish and Wildlife Service's National Conservation Training Center (NCTC). Four years ago, Matthew recruited seven U.S. Fish and Wildlife Service biologists experienced in the art of freshwater propagation and culture to help design the course. Representing three USFWS regions (R3, R4, and R5) and three USFWS programs (National Fish Hatcheries, Ecological Service Field Offices and Fish and Wildlife Conservation Offices), these biologists wrote a manual for the course that was recently accepted for publication by Cambridge University Press. The authors hope the new hardbound book will be available for purchase sometime in 2017.

In September, the Freshwater Mussel Propagation for Restoration course was offered at the NCTC in Shepherdstown, WV after being held at the Bozeman Fish Tech Center in Bozeman, MT in 2015. Rachel Mair (Harrison Lake National Fish Hatchery), Nathan Eckert (Genoa National Fish Hatchery), and Tony Brady (Welaka National Fish Hatchery) joined Patterson to teach the third offering of this class. In addition to classroom lectures and hands-on practical labs, the students got to take a snorkeling trip to the Potomac River to look for gravid mussels. This time of year the river was loaded with gravid female Lampsilis cardium that were using their mantle lures to attract a host fish. In this case, the host fish is a small mouth bass, so the lure mimics a small minnow swimming in the water. It was a real treat for the students to see this unique life history strategy firsthand.

One of the highlights of the NCTC course is a field trip to Harrison Lake National Fish Hatchery. At the hatchery, students get to see an active mussel culture facility in action. When students get to see all the different culture techniques in person, they gain a better understanding of how they are built and how they work. There is just no substitute for seeing something in person and after the tour questions always come up that do not come up during the lecture portion of the class. When asked if they thought the drive to Harrison Lake NFH was worth the time, all the students agreed in unison that it was one of the better parts of the class.

If you are interested in attending this or any of the freshwater mussel classes offered by NCTC, please contact Patterson (matthew_patterson@fws.gov, 304-876-7473). The Freshwater Mussel Propagation for Restoration Class is scheduled to be taught again September 18 – 22, 2017 at NCTC.

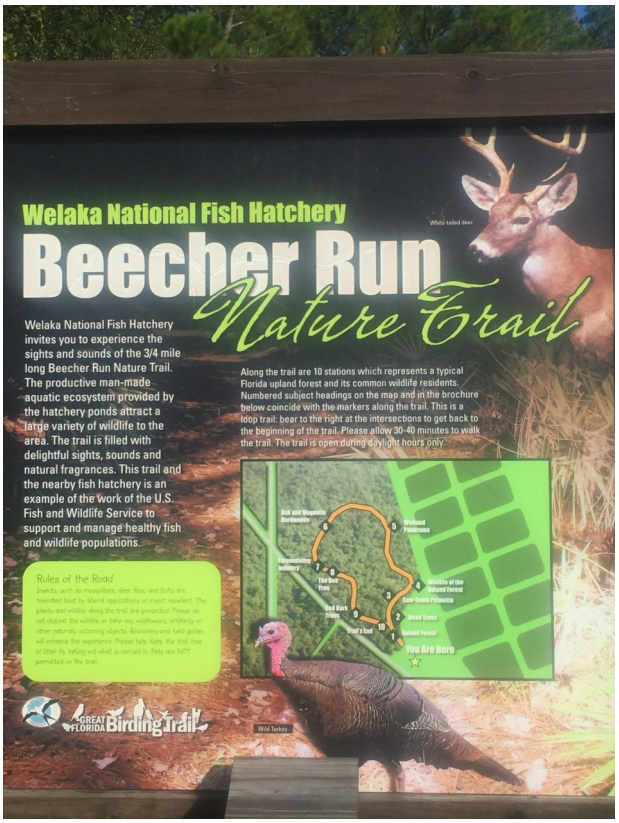
Byron Hamilton from Orangeburg NFH extracts glochidia from a gravid female mussel.

Ben Davis from Harrison Lake NFH shows the class one of the mussel culture systems used at their facility.

New 3-D Archery Range Now Under Construction at Welaka NFH

Welaka National Fish Hatchery has begun the construction of a 3-D archery shooting range on the hatchery's nature trail. The nature trail is a 0.75 mile trail that is open to the public and is located on the Beecher Unit of the hatchery. Hatchery staff walked the trail and determined 7 locations where shooting lanes could be created that would allow archers to shoot without shooting in the direction of another target, because safety is paramount when it comes to the archery programs at Welaka NFH. Allen Walker then used a skid steer with a mowing attachment to cut the shooting lanes that were marked. Each shooting lane is roughly 40 yards long and will give archers a wide variety of practice ranges for shooting 3-D targets. As you may remember from last month, the hatchery staff will be working with the Putnam County 4-H to host an archery club here at the hatchery. Providing this 3-D course will help the 4-H archers prepare for competition and will also help the hatchery connect kids with nature.

The nature trail will also be getting a face lift with new sign markers educating folks about the unique habitat, animals and plants found in Northeast Florida. Users of the nature trail will not have to worry about safety, because the 3-D targets will only be placed out on the trail during designated practice times and the entrance to the trail will be clearly marked that the trail is closed due to archery practice. Other groups that are interested in archery at Welaka NFH can contact the hatchery office at 386-467-2374.



Above left: The kiosk that shows the nature trail on the hatchery and tells a little about what folks may see on their walk. Above right: A newly cut shooting lane off of the main nature trail.