

# Hatchery Highlights

## U.S. Fish & Wildlife Service Warm Springs NFH News and Updates



October – December 2012

### Lake Sturgeon production news

Warm Springs NFH works cooperatively with numerous state and federal partners to secure, hatch, rear and distribute lake sturgeon. Warm Springs NFH works at the southern end of their historical range and is also actively conducting surveys in sections of the Lower French Broad River and Holston River in Tennessee to assess the effectiveness of the stocking program. Assessment work expanded this year to include sections of the Coosa River stocked with lake sturgeon by Georgia Department of Natural Resources (GDNR).

The last of our FY 2012 year class lake sturgeon were distributed at Seven Islands landing on the Lower French Broad River Oct. 3<sup>rd</sup> and Nov. 1<sup>st</sup>. A total of 3,644 averaging eight inches in length and marked by scute removal (number 7 and 8 on the left side) were distributed during the first Quarter of FY 2013. Their distribution completed culture work until Spring production gets underway. Press coverage as part of coordinated public outreach event by partners working with lake sturgeon was obtained on the Nov. 1<sup>st</sup> trip made by Josh Simmons and Bill Bouthillier.

Warm Springs NFH are working with Tennessee Wildlife Resource Agency (TWRA), GDNR and AL DNR to standardize assessment protocols and equipment that includes the trotlines used and data to be collected through data sheets provided to all boat crews. Techniques are improving each year and lessons learned are being applied to new river systems.

A five day effort to recapture stocked lake sturgeon was undertaken in Nov on the Upper Tennessee River between Knoxville to Chattanooga. Boat crews from TWRA, Tennessee Valley Authority (TVA), University of Tennessee (UT), USFWS ES staff (Mark Cantrell) and crews from Warm Springs, Private John Allan and Mammoth Springs and Orangeberg NFH along with Warm Springs Fish Health Center staff, participated. A total of 52 lake sturgeon were collected. In addition to sample data from the fish, data also include substrate and habitat information at the collection sites. Tissue samples for genetic analysis were collected and all fish were tagged with Passive Integrated Transponders (PIT) tags.



Chad Shirey and Carlos Echevarria WSNFH Collecting Lake Sturgeon

Assessment work on the Coosa River in Alabama and Georgia was also undertaken in November. Chad and Carlos worked with Georgia DNR biologists on a 75 mile stretch of river between Rome, GA and Weiss Lake. While no lake sturgeon were collected an understanding on how rapidly changing water temperatures may affect lake sturgeon seasonal migrations was gained. Boat crews will resample these river sections once temperatures stabilize.



**Setting trotlines to capture lake sturgeon.     A captured lake sturgeon showing marks by scute removal.**

Other work included data analysis, work on the Lake sturgeon annual production report for the Upper TN River, the 2013 Sturgeon Egg Request and annual report to Wisconsin DNR and coordinating the annual Sturgeon meeting scheduled for Jan. 2013 in Chattanooga, TN.

### **SickleFin Redhorse**

Our work with Sicklefins redhorse represents a cooperative effort by programs at Warm Springs Regional Fisheries Center, the Eastern Band of Cherokee Indians, USFWS Ecological Services, Asheville, NC, Conservation Fisheries Inc. and others to rear fingerling sicklefin redhorse for tagging, assessment & other studies developing under the research agenda created by members of the Sicklefins Redhorse Research Partnership.

Sicklefin redhorse are redhorse sucker in the *Moxostoma* genus, their status as a distinct species is currently under review.

The fish on hand at Warm Springs NFH average 1.5 to 2.5 inches in length and are being reared for use in a tagging study using experimental micro-PIT tags at a future date.

### **Atlantic Sturgeon**

Currently we have 15 Atlantic sturgeon, ranging between 24 and 28 inches in length on station. These sturgeon are part of a group hatched and transferred from Bears Bluff NFH as fingerlings to Warm Springs in November, 2011 and originally targeted for research and assessment work under recovery

plans for the species. However, as NMFS guidelines for use of hatchery reared Atlantic sturgeon has changed, their status is pending.



## **Freshwater Mussels**

The hatchery currently holds the Sculptured Pigtoe, Eastern Elliptio, Oval Pigtoe, & Little Spectaclecase and several mussels from the Altamaha River Basin.

## **Maintenance and Operations**

Station equipment, ponds and culture equipment were winterized or readied for use next Spring. This ongoing work included winterizing the lake sturgeon building, draining all striped bass production ponds, seeding pond bottoms with rye grass, removing, cleaning and repairing the air stones used to maximize oxygen levels in these ponds during the Spring production season. Additional ongoing work includes reworking screens and seines. Landscaping, leaf removal, road maintenance and other such activities were undertaken. Chad Shirey installed duct work and an exhaust fan in the genetics building. Work on reroofing the Administrative Building is currently scheduled to get underway in early January 2013.

Levees and banks in the two ponds used for outreach and in support of National Fishing Day activities have over the years eroded, resulting in narrower roadways with steep and undercut shoulders. Several banks were resloped and stabilized by placing rock along eroding edges during the Quarter.



Several forage ponds were harvested for use in support of maintaining our display pool and aquarium building fish displays. Catfish were obtained from Georgia's Dawson State Fish Hatchery for our use with kids fishing events during National Fishing Week activities.

## Saint Mary's River and Fish Passage Work

Staff participated within the Saint Marys Fisheries Restoration Committee (SMFRC) that is in part, developing habitat assessment strategies and recovery activities for coastal waterways of the southeast. The work will benefit multiple anadromous species. To this end, staff participates within the Committee's water quality working group. Concurrent with The aim is to capture data on possible short term derogatory transient effects to water quality as a result of storm surges and other high water events through that part of the Saint Marys River.

Habitat assessment work is underway as part of a regional initiative on the Saint Marys River. WSNFH staff are participating in the water quality sub-team of the SMFRC, tasked to document variations of selected water quality parameters in suspected critical habitat areas of the river and to capture data corresponding to changes in water quality suspected to be associated with heavy rainfall and river flows following such events as the passing of tropical depressions and hurricanes through the area. That data was captured in 2012 with the passing of tropical storm Debby as an extended depression in pH, oxygen levels and conductivity were noted following the heavy rainfall and subsequent high river flows produced following the passing of storm in late June.

These findings to date were summarized in a PowerPoint presentation to SMFRC members during the last week of October, 2012. Deployment of the Hydrolabs in order to collect additional data was continued through December when data collection ended. Concurrent with the listing of Atlantic sturgeon, budget cutbacks and demonstration of the effects of storm events, FWS participation is scheduled to be scaled back in 2013. Sonde units will be retrieved for the last time and data finalized after January, 2013. Shown below are Haile Macurdy Warm Springs NFH and Andy Jackson, Welaka NFH on the Saint Marys River. Hydrolab units were deployed in three locations (from left to right), at White Oak Plantation, on the I-95 bridge and in a cage deployed at Reeds Bluff.



**Haile Macurdy & Andy Jackson servicing Hydrolab units on the Saint Marys River**

Bill Bouthiller and Haile Macurdy submitted grant proposals for 2013 funding for work through SARP.

## Alligator Gar

Warm Springs alligator gar program is part of a restoration program covering both the Mobile and Mississippi River drainage basins. Approximately 75 FY 2012 year class alligator gar are being held back at Warm Springs in support of ongoing research on the species.

For further information on Alligator gar, visit the website: <http://www.sdafs.org/alligar/index.html>



## Administrative

Considerable effort was applied towards meeting year end requirements for personnel actions, budgeting and annual reporting requirements. Updates for staff EPAP's and IDP's were completed. Staff continued efforts to integrate FBMS guidelines into daily operations. Documentation of FY 2012 program accomplishments was undertaken through updates to the ECOS database. A 4<sup>th</sup> Quarter and annual report for FY 2012 was submitted. Several annual summaries were submitted for staff meetings and program reviews during the Quarter. Environmental Management, Energy and Safety activities, reviews and data submissions were also undertaken. Haile worked in cooperation with Terri Jenkins, Fire Management Specialist at Okefenokee to complete an inclusive fire management plan. This new plan meets requirements as identified in the National Fire Plan and the plan's Ten-Year Comprehensive Strategy that covers all FWS sites in the state of Georgia. Pesticide Use Proposals were submitted during the Quarter.

Staff participated in various meetings to plan and review work activities and schedules, funding and research for FY2013. Staff took "use or lose" vacation time during the Quarter.

## Outreach

The Annual Open House sponsored by WSNFH, was held for the community Saturday, October 13<sup>th</sup>. It featured exhibits and demonstrations from all WSRFC programs. Hatchery staff cooked hotdogs and provided bottle water to the attendees, the food and water was donated by the Friends Group. Over 150 visitors were on hand to view the exhibits and to chat with staff members from the entire Warm Springs Regional Fish Center.



**WSNFH staff Josh Simmons (left) & Bill Bouthillier (middle photo) providing information, kids feeding catfish (right)**

Volunteer Christie Jackson manned a booth for the Hatchery at the Annual Help the Hooch clean up on October 13th. The hatchery set up a touch tank featuring turtles, tadpoles and crayfish. This event had over 4,500 children attend the after clean up watershed festival. Christie was amazed by the number of children that were delighted to see the animals.



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