# Hatchery Highlights

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



#### **Summer 2012**

# Alligator Gar, a Growing Success at Warm Springs

Warm Springs NFH participates in the alligator gar restoration program covering the Mobile and Mississippi River Basins. Working in cooperation with Private John Allen NFH (source of our fry) along with other state and federal agencies, Warm Springs NFH is able to achieve the management objectives for this top level predator. Soon after fry were spawned at Private John Allen NFH, Carlos Echevarria (Hatchery Manager of WSNFH) brought back 2,435 fry on May 42012 to WSNFH to be reared.



This is our sixth year of production; we have approximately 1,770 fish on hand at the end of June ranging between 5.5 to 9.0 inches in length. Although, we have fewer fish this year compared to 2011, we do have a significantly higher survival rate this year as compared to last year, 72% versus 25%.

Keeping to the protocol used last year we used the same amounts of the rations as last year, these fish were feeding on commercial rations and brine shrimp their first days at Warm Springs. As in 2011, the gar are exhibiting uniform growth with little cannibalism. One change this year was the use of older fish from Private John Allan NFH this year. In early July the gar will be tagged with coded wire tags and distributed into tributaries of the Mississippi River in Tennessee.

Josh Simmons is pictured caring for some of alligator gar reared this year at Warm Springs.

# **Striped Bass Phase I Production Completed**

Warm Springs NFH staff distributed Gulf Coast striped bass fingerlings in support of restoration objectives set for the species throughout river systems of the southeast. Working in cooperation with state and federal agencies, fry were received, stocked into ponds, reared, harvested, chemically marked and distributed between April 1<sup>st</sup> and May 8<sup>th</sup>, 2012. A combined total of 912,000 five to seven day old fry were received from Welaka National Fish Hatchery and Florida's Blackwater SFH between April 1<sup>st</sup> and April 5<sup>th</sup>. Due to warmer spring temperatures in 2012, resulted in fry being stocked several weeks in advance of those received in 2011.

Twelve ponds totaling 6.62 surface acres were stocked at rates ranging between 100,000 to 177,000 fry per surface acre. Following 30 to 32 days of culture, all ponds were harvested, fish marked and then distributed; no fish were held for Phase II production. The average rate of return was 23.6%, equaling 32,535 fish per surface acre. All fish were marked with oxytetracycline at concentrations of 600 ppm for 6 hours prior to distribution.

A total of 215,382 Gulf Coast striped bass, weighing 88 pounds (2,448 fish per pound) were distributed to the following sites:

5/01/2012	Ochlockonee River State Park,	FL Ochlockonee River	22,530 fish	6.2 lbs.
5/01/2012	Lake Talquin, FL	(impoundment on the Ochlockonee river)	29,940 fish	11.6 lbs.
5/03/2012	West Point Reservoir, GA	(ACF Basin)	27,637 fish	15.5 lbs.
5/03/2012	Choctawhatchee River, FL		21,230 fish	12.3 lbs.
5/09/2012	Goat Rock Lake, GA	(ACF Basin)	4,731 fish	1.5 lbs
5/09/2012	Lake Oliver, GA	(ACF Basin)	10,800 fish	4.5 lbs.
5/09/2012	Lake Talquin, FL	(impoundment on the Ochlockonee river)	47,552 fish	13.7 lbs
5/09/2012	Apalachicola River	(ACF Basin)	50,962 fish	22.7 lbs.

## **Lake Sturgeon production news**

Warm Springs NFH works collectively with numerous state and federal agencies to meet restoration goals for this species. There are many tasks to accomplish to meet our goals such as; hatching, rearing, distributing, marking and assessing the success of stocked lake sturgeon. Working at the southern end of their historical range, Warm Springs NFH distributes fish that are stocked and monitored near the confluence of the Lower French Broad River and Holston River in Tennessee. Propagation and care of lake sturgeon follow genetic management and quarantine protocols established for the species at Warm Springs NFH.

Carlos Echevarria and Chad Shirey traveled to Wisconsin between March 26<sup>th</sup> and April 5<sup>th</sup> in order to spawn lake sturgeon and then transport fertilized eggs to Warm Springs. However, fluctuating water temperatures set back spawning in the Wolf River and no fish in spawning condition were available to spawn during the time they were there. As a result, fertilized eggs and fry were shipped to Warm Springs from Genoa NFH in Wisconsin on the following dates:

4/12/2012	lot LSN-2012-Wolf-GEN	50,000 eyed eggs (spawned 4/09/12)
4/25/2012	lot LSN-2012-Wolf-FR	10,000 fry
5/07/2012	lot LSN-2012-Wolf-FR	10,000 fry



Carlos Echevarria and Bill Bouthillier disinfecting and sampling lake sturgeon eggs received from Genoa NFH in April.

Following a period of quarantine and culture, fingerling lake sturgeon averaging 1.12 inches long were transferred to other stations for continued culture prior to their eventual distribution later in 2012.

5/24/2012	Private John Allen NFH	6,515 fish	2.22 lbs.
5/24/2012	Mammoth Springs NFH	9,435 fish	3.22 lbs.
5/23/2012	Orangeberg NFH	7,325 fish	2.50 lbs.
5/23/2012	Tennessee Aquarium, TN	2,019 fish	0.69 lbs.
6/14/2012	Univ. of Tennessee	2,100 fish	0.85 lbs.

Approximately 6,000 lake sturgeon are being held at Warm Springs for continued culture through the summer and fall of 2012.

## **Atlantic Sturgeon Update**



In April 2012, the Atlantic sturgeon was listed as an endangered species. Warm Springs currently is culturing 15 Atlantics, transferred from Bears Bluff NFH to Warm Springs in 2011. These fish are now averaging 18 to 20 inches in length.

### Mussels



Andy Hartzog evaluating survival and growth of juvenile mussels produced at Warm Springs NFH in 2012. Andy's position at Warm Springs was transferred to Panama City Ecological Services / Fish and Wildlife Coordination Offices in mid June due to lack of funding for the position at Warm Springs. Andy had great success working with mussels while at Warm Springs and we wish him the very best with his new tenure within PC ES/Fisheries!

# **Maintenance and Operations**

Several significant maintenance operations were undertaken during the Quarter. Plans to build a handicapped accessible boardwalk for fishing events progressed with sources to obtain donated lumber identified. A pond was emptied in preparation for the upcoming construction work to build the pier.

The alligator enclosure located in our habitat pond was drained for maintenance and repairs. A concrete floor was poured throughout the enclosure to seal existing chain link fencing and eliminate any chance of animals borrowing out under the fence.



Josh Simmons putting on the finishing touches by showing his technique in smoothing out the concrete floor of the alligator enclosure.

An energy saving project was completed in June on our mussel building. The existing metal roof was coated in a reflective coating to lessen heat absorbance and reduce our cooling costs for the building. This project required several days of no rain to complete the curing process.



Carlos Echevarria and Chad Shirey sealing bolts with patches and priming, prior to painting the entire roof. A 55 square foot masonry building (code # 10014276) constructed in 1963 and abandoned since the mid 1970's was demolished in late June. The building was part of an unsuccessful and early attempt to treat spring water with hydrated lime.



The demolition of the old lime mill

Ever so slow progress is reported on reroofing the administration building at Warm Springs. Holes in the roof are protected with a blue tarp for the time being. A metal roof to replace the existing shingles is in the works.

The outreach touch screen kiosk along with the security camera and monitoring system located at the Aquarium building was renovated in late June. The new hardware will provide the visiting public a better understanding of Warm Springs RFC resource responsibilities and information on natural resources.

Considerable time is dedicated this time of year by staff for setup, operation and maintenance of intensive culture systems required for high priority work with lake sturgeon and alligator gar. Work also included maintaining water treatment equipment for the entire Center.

# **Administrative & Meetings**

Safety programs and necessary updates were undertaken. Haile Macurdy completed Safety Officer Certification training during the Quarter. Safety plans such as the Hurricane Preparedness Plan and editing the station's fire management plan to meet new FWS plan requirements were undertaken. Haile met with Terry Jenkins, Fire Management Specialist, at Okefenokee NWR to review our developed fire management plan and to inspect property and grounds at Warm Springs. A safety audit was also conducted.

Haile Macurdy assisted with other water quality team members of the Saint Marys River Fisheries Restoration Committee working to deploy water quality data collecting sonde units in the Saint Marys River. Two units are now deployed at the I-95 Bridge and upriver at the White Oak Plantation. This effort is undertaken to establish baseline water quality data in suspected critical habitat areas of the river. Funding was obtained to cover purchase of reagents, maintenance kits for the Hydrolab sonde units used to collect water quality data. The funding also covers travel expenses to service the units and download data.

#### **Volunteers:**

During the Quarter we had several students show an interest in volunteering at Warm Springs. Two new students are currently volunteering with us. Daniel Thomas, a Moreland, GA resident and UGA student; along with Christie Jackson, a Thomaston, GA resident and Gordon College student, are working with us this summer. Both are driving a good distance to help. We are providing varied experiences that involve the students in projects such as care of lake sturgeon, monitoring water quality, pond management and maintenance tasks.

#### **Outreach:**

Warm Springs NFH is a valued asset and venue to demonstrate the Service's commitment to environmental leadership. To that end the station provides facilities, kiosks, public access and some scheduled events that allow demonstration and communication of our goals and accomplishments. In addition to facilitating onsite professional tours, staff also provided (volunteered) time for occasional off site programs as time permits. The primary onsite event during this quarter is the annual kids fishing event held in support of National Fishing Week.

The number of kids participating this year increased from 2011 with 291 kids participating this year in the Hatchery's Annual Kids Fishing Day on June 9<sup>th</sup>. Geared to teach young children how to fish, almost everyone caught fish with over 800 catfish taken during the event. In addition to all the Regional Fisheries Center staff and members of our Friends group, we had the able assistance of the Benning Bass Club assisting with the event. Additionally, WenMarr Mgmt Corporation (Wendy's) provided food for hungry anglers after the event.

In June, Bill Bouthillier hosted a meeting at Warm Springs NFH of the Pine Mountain Chapter of the Georgia Forestry Association. He gave a tour of the facilities and a PowerPoint presentation of fish passage concerns and stream crossings for forestry operations. In addition to the tour the Chattahoochee River Warden gave an update briefing on the Tri-State Water War. There were over 25 foresters were in attendance.



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