

# Hatchery Highlights

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



Fall 2008

### HATCHERY HOLDS ITS FIRST ANNUAL OPEN HOUSE



An open house was held on September 20th to highlight and showcase the work done at Warm Springs. This was the first open house for the hatchery and about 130 people showed up during the 4 hour event. It was held to improve communication and cultivate positive relationships among employees and the community through positive interactions. Attendants were able to learn about freshwater fish, mussels, and more through guided facility tours. A kid's coloring contest, a tour of fisheries equipment, and pond and fish demos were also available to participants. A hotdog lunch was provided by the Hatchery's Friends Group. Hatchery Manager, Carlos Echevarria, said he was happy with the turnout and ecstatic that the public came out to see and support the hatchery. The Fish Health Center and Fish Technology Center also participated with demos and displays. The successful event will now become an annual outreach activity for the hatchery.



### ANOTHER SUCCESSFUL STRIPED BASS HARVEST & STOCKING

Warm Springs NFH cooperates with regional and national efforts to restore Gulf strain striped bass populations throughout the southeast. During 2008, WSNFH participated in regional efforts to meet tasks as identified in several plans. The culture, management, harvest, inventory, marking and distribution of striped bass to meet stocking goals at locations designated by the Striped Bass committee for the purpose of restoring striped bass populations is also a goal of the National Fish Hatchery.



During May, 132,305 phase I Gulf Coast strain fish were produced & distributed to five locations: Lake Smith in Alabama, Three Georgia reservoirs and Talquin reservoir in Florida. All stocked locations have drainage to the Gulf of Mexico. These fry were obtained from Marion State Fish Hatchery, Alabama and Welaka NFH, Florida. Additional fish were reared in six ponds at the hatchery for an extra 5 months as Phase II fish. Over 14,700 Phase II gulf striped bass were harvested from six ponds during the first week in November. All striped bass were marked with OTC. The fish were stocked into West Point Lake at the Yellow Jackets Landing.



### HOW DO WE CONNECT PEOPLE TO NATURE? JACI ATTENDS THE VISITOR SERVICES AND OUTREACH WORKSHOP TO FIND OUT

Jaci Zelko traveled to Tennessee in October to participate in the Region 4 Visitor Services and Outreach Workshop. Jaci, hatchery biologist, was able to meet with other "outreachers" and develop strong friendships. Topics covered during the 3-day workshop included: Connecting People to Nature, Good Customer Service, No Child Left Inside, Demographics and Trends in the Southeast Region, and many others. Sessions offered to all participants showcased innovative connecting people to nature ideas. Networking breakouts and many social activities made this workshop more fun than work.



## TENNESSEE TECHNOLOGICAL UNIVERSITY STUDENTS ASSIST WITH LAKE STURGEON MARKING AND TAGGING AT THE HATCHERY



Six students from Tennessee Technological University traveled from Cookeville, TN to Warm Springs, GA to help hatchery staff tag and mark over 3,900 lake sturgeon in October. The lake sturgeon had two scutes removed and then were tagged with coded-wire tag as per the tagging protocol. These fish will be stocked in the Upper Tennessee River as part of the Lake Sturgeon Reintroduction Plan. The hatchery has been a partner in the lake sturgeon reintroduction efforts in Tennessee and Georgia since 2000. With all the extra hands available, the workload was greatly reduced for the staff and the students got hands-on fish culture experience.



## CHAD, JACI, JILL, AND HUNTER, TAKE A RIDE IN THE HARVEST HOE DOWN PARADE!

Hatchery employees Jaci Zelko and Chad Shirey, along with Fish Health Biologist Jill Popham recently participated in the village of Warm Spring's Harvest Hoe Down Parade in October. Harvest Hoe Down is a fall festival that showcases local artisans and shops in the Warm Springs area. Chad drove one of our big trucks while Jaci and Jill sat in the back to wave to the crowd and more importantly, throw candy to all the people lining the street. Chad's son Hunter, also rode with them and actually showed the girls the "proper" techniques of throwing candy without hitting someone in the head. All four had a great time and are making plans to participate in the parade next year.



Chad and Jill are prepared to throw candy to the crowds.

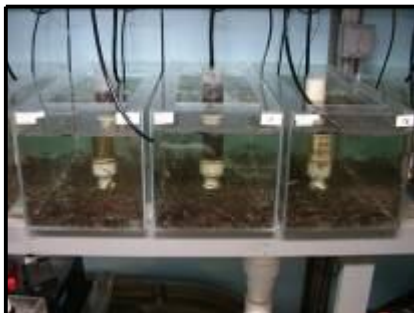
Chad's son, Hunter, is always a huge help!



## SURPLUS LAKE STURGEON REQUIRE EXTRA WORK THIS YEAR

It was a great year for lake sturgeon production but a long, arduous year for hatchery workers. Over 106,205 eggs were collected for culture during the hatchery's annual trip to Wisconsin to spawn broodfish collected from the Wolf River with several state and federal partners. Even though 38,000 eggs were transferred to Summerville State Fish Hatchery, it still left us 68,000 eggs to be hatched and raised!

Once the eggs were brought back from Wisconsin and safely settled into their new hatching jar homes, the real work began. Space quickly became a premium as the little fry began to out-grow their tanks. We normally try to keep density low, so that all the fry get a chance to eat and grow, but it was a real challenge since we only have a certain number of aquariums and tanks. Fingerlings were shipped out to other hatcheries as soon as possible during the season. Private John Allen NFH, Mammoth Springs NFH, Orangeburg NFH and Tennessee Aquarium's hatchery at Cohutta all received the maximum number of fish that they could hold. A total of about 26,000 fish were distributed, which is more than double from the previous year. Our hatchery kept about 12,000 fish to culture. The entire culture season was like a game of musical chairs; which tank can hold the most fish without slowing down their growth-rate?



In the fall, the hatchery stocked 6,100 fish into the Upper Tennessee River system. We stocked fish near Seven Islands Refuge in the French Broad River as well as at Nance's Ferry in the Holton River. The other facilities that raise lake sturgeon also made several stockings in the system. Their combined total of fish stocked was about 3,800. Overall, in a banner production year, Service hatcheries stocked a total of 9,926 fish in the Upper Tennessee River system in 2008.

Fry held in aquaria located in the incubation room in our lake sturgeon building.

## PERSISTENCE IS THE NAME OF THE GAME FOR ALLIGATOR GAR CULTURE

Several methods have been used to intensively raise alligator gar at Warm Springs for the past few years, but 2008 showed great progress in successfully raising these fish. Persistence and perseverance by hatchery workers finally paid off as over 1000 fingerlings were shipped out for research and grow-out, and an additional 159 young-of-the-year were stocked into the Mobile River.

The hatchery is working with two populations of alligator gar but the culture techniques to raise the fish up to stockable size is the same. The hatchery received about 2,400 fry to culture from gar that were spawned at Golden Ranch, Nicholls State University, Louisiana. The fish were raised for refugia and research purposes. Adult alligator gar from Alabama were transported to Pvt. John Allen NFH in Tupelo, MS and spawned. Several lots from these crosses were used in an egg de-adhesion study conducted by fish Technology Center personnel. At the end of this study, 1,300 fry were transported back to Warm Springs and transferred to us for grow-out as a second batch of fish.



Fry were first held in 25-gallon round, black tanks. Surface disturbances were kept at a minimum and air stones were removed from the tank while feeding. After about 10 to 15 days of culture, the larger fry were moved into 50-gallon oval tanks that had even more surface area. Fish were then moved into larger 130-gallon round tanks, concrete raceways, and eventually a 20' raceway. Fish were graded as time permitted to help minimize predation. In our observations in the past couple of years, we saw that the fish are surface feeders. However, any disturbance or if they see something it will send the fry to the bottom of the tank and they will not eat. We were also able to take more

time to observe feeding behavior at all stages of development this year so that feeding amounts and schedules could be changed accordingly. The fish were fed SilverCup pellets from Starter all the way up to 3.2mm.

We had relatively good success (41%) in culturing the batch of Louisiana fry. Our hatchery transferred 50 of these fish to Auburn University for a fish host mussel study, 450 fish to the University of Southern Mississippi for salinity studies, and 500 fish were sent back to Nicholls State University for continued culture and grow-out. Even though we had minimal success (12%) with raising Alabama fry, we were still able to ship out 159 fish that were stockable size (greater than 12"). These fish were stocked into the Mobile River by Alabama DNCR staff.



The hatchery learned a lot this year about the intensive culture requirements of alligator gar fry and fingerlings. Adjustments in the feeding protocol and improving water quality are just a few changes that will be made for next year's rearing season.

## NATIONAL FRIENDS CONFERENCE IN FEBRUARY

What may be the largest gathering of representatives of nonprofit Refuge Friends organizations and the U.S. Fish and Wildlife Service is planned for February 21-13 in Washington, D.C. The 2009 National Friends Conference, sponsored by the Service and the National Wildlife Refuge Association, will feature nearly two dozen training sessions and special forums, all under the conference theme of "Friends Unite!"



The conference is an unparalleled forum to energize the 200-plus nonprofit Friends organizations spread across the country. The conference theme - Friends United! - was selected to reflect the great need for committed wildlife and refuge supporters to come together and work toward our shared goal of securing America's wildlife heritage for future generations. For more information about the conference, contact National Friends Coordinator Trevor Needham at [Trevor\\_Needham@fws.gov](mailto:Trevor_Needham@fws.gov).



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