



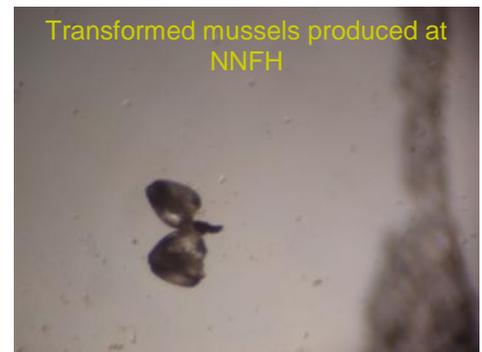
Manager's Corner

By: Karen Kilpatrick

January is usually a quiet month at Natchitoches... and this January was no exception. However, though this January proved to be relatively quiet there was still a lot accomplished. The biggest news of the month is that the State of Louisiana met with me and the Assistant Manager, Jan Dean, concerning future work, on a state level, with the alligator snapping turtle (more on that in another article in this issue!). The other big news is that the Caddo Education Program grant is coming along nicely and progress is being made with the coloring books and teachers manuals. And finally, we are

beginning the journey of updating our hatchery brochure, website, and public use presentations to reflect the species changes we made at the beginning of this fiscal year. Those changes involved shifting from striped bass, paddlefish, and pallid sturgeon into alligator gar, alligator snapping turtle, and Louisiana pearlshell mussel work. Our commitments to recreational fishing species has never changed but the need to refocus on our flagship species came as a result of sev-

eral things including success in reaching some goals, lack of ability to reach other goals, and changes in the Service's approach to resource management. All in all, January brought a settling to the hatchery...settling in to new priorities, new outreach, and new ventures. A great way to start a new year!



Transformed mussels produced at NNFH

A new year and a new species at NNFH

By: Tony Brady

Happy New Year! Wow, what a better way to start off the new year than propagating a new species at Natchitoches National Fish Hatchery (NNFH). In December the staff at NNFH artificially introduced the larval form (glochidia) of the Little spectaclecase mussel to the gills of five bluegill sunfish. These glochidia spent about three weeks attached to the gills of the bluegill host fish where they underwent a metamorphosis that, when completed, allowed the newly transformed mussels (transformers) to break free from the bluegill and start living a life inde-

pendent from the fish. This artificial infestation is a method used to increase the number of glochidia that become attached to a host fish, thus increasing the number of transformers available to culture for research, restoration, and recovery activities. From these five artificially infested bluegill, a total of 2,213 transformers were produced. As a comparison, eight naturally infested sunfish were collected in April of 2010 and those eight host fish produced a total of 41 transformers. In this simple comparison, you can see how the artificial infestation method

greatly increased the number of mussels produced. You may ask why we would want to propagate mussels in the winter time. Well, the reason for this propagation effort was to test our systems before we begin propagation efforts for the federally threatened Louisiana pearlshell mussel that currently is known to occur in two parishes here in Louisiana. Ongoing research at NNFH is designed to determine what host fish the Louisiana pearlshell uses to undergo their metamorphosis and to develop the techniques to culture this threatened species should the need arise.

Florida Largemouth Bass Broodstock held for the State of Louisiana

By: Jan Dean

Natchitoches National Fish Hatchery (NFH) transferred three ponds of Florida largemouth bass broodstock to the Louisiana Department of Wildlife and Fisheries (LDWF) in January 2011. These 171 largemouth bass averaged 2.2 pounds, or 1.03 kilograms, each and included the St. Johns, Tyler and Natchitoches strains. Natchitoches kept the broodfish for a few months for the LDWF while ponds at the LDWF Booker-Fowler Fish Hatchery and the nearby Beechwood Fish Hatchery were being renovated. Both State hatcheries are near Woodworth, Louisiana just over an hour south of Natchitoches. The LDWF probably has been our longest and strongest partner over the years, and we rear recreational fish (Florida largemouth bass, bluegill sunfish, redear sunfish and usually channel catfish) for them each year as our part of a Memorandum of Understanding (MOU) with the State of Louisiana. Their part of the MOU primarily has been to supply us with striped bass fry, but they also supply the largemouth bass fry and catfish fry and feed for the catfish. Through this joint effort with the State of Louisiana, Natchitoches NFH is able to stock recreational fish into federal waters including the U.S. Forest Service, U.S. Army Corps of Engineers, the Natural Resource Conservation Service, Department of Defense lands like Ft. Polk, and National Wildlife Refuges. The Booker-Fowler Fish Hatchery has large concrete raceways and spawning mats for spawning the Florida bass and several smaller in-

door fiberglass raceways for hatching the fry. They have access to both well water and surface water from a nearby reservoir, so they can control water temperature for spawning. The result is an extended bass spawning season and the ability to get two or three spawns from each female. They bring the days old fry to us for rearing in our earthen ponds. When we harvest the ponds in three to five weeks, the phase 1 fingerlings are about an inch long or a little more. The young fish are brought into our holding house where they are weighed, and a sample count is taken to determine the number per pound. Those two pieces of information are used to load LDWF or Natchitoches NFH distribution trucks for stocking various bodies of water throughout

Louisiana and surrounding states. Over the years, Natchitoches NFH has produced about 1 to 1.5 million largemouth bass fingerlings annually. As more LDWF ponds are renovated and used at their hatcheries for bass production, there will be less of a need to rear them at Natchitoches. That trend, combined with changes in our involvement in the striped bass program, has resulted in the need to modify our Memorandum of Understanding with the State of Louisiana. Whatever the future holds, we expect to provide some level of recreational fish production at Natchitoches and to continue our strong relationship with the Louisiana Department of Wildlife and Fisheries.



Biologist from NNFH and BFSFH harvest Largemouth bass from a pond.

Update on Alligator Snapping Turtle Work

By: Karen Kilpatrick and Jan Dean

On January 4, 2011, hatchery staff met with members of the Louisiana Department of Wildlife and Fisheries (LDWF) to discuss partnering on alligator snapping turtle (AST) work. Amity Bass, LA Natural Heritage Manager, and Jeff Boundy, State Herpetologist, joined Hatchery Manager Karen Kilpatrick and Assistant Manager Dr. Jan Dean to discuss the potential of working together to develop management goals and objectives for the alligator snapping turtle on a State level. There is some data on habitat requirements and on trapping of populations but the State does not currently have an official management plan for ASTs. Additional discussion revolved around what facilities the hatchery could provide to help culture turtles for release. The group agreed that the hatchery could ultimately hold up to 1200 hatchlings which would be provided by the State from in-state broodstock. The hatchery also has a holding pond for grow out beyond one year. The hatchery would be working in conjunction with the Monroe State Fish Hatchery.

For the past three years, Natchitoches' primary emphasis has been overwintering turtles for another federal hatchery, Tishomingo National Fish Hatchery in Tishomingo, Oklahoma. They breed the adults and furnish Natchitoches with hatchlings in the fall which are overwintered in a system having heated water (26-27°C) which enables them to grow throughout the winter. This accelerated growth is called "headstarting" and is used for other species as well. The head-

started turtles are returned to Tishomingo in late spring. The hatchery has conducted a feed comparison study and tried different marking techniques with these turtles and has also reared turtles from the University of Louisiana at Monroe. In the latter case, the oldest turtles were put into a fish pond which had been modified with a chain-link fence to enclose the turtles. The Monroe turtles usually are implanted with a PIT tag for unique identification, and a one-year PIT tag retention study was conducted using Monroe turtles. All of the Monroe turtles have been returned and released on Black Bayou National Wildlife Refuge; the intent being to increase the wild population there as well as to provide an opportunity to study their movements and survival in the wild. Contacts for the Tishomingo turtles are Kerry Graves and Brian Fillmore (580-384-5463; kerry_graves@fws.gov, brian_fillmore@fws.gov) and for the Monroe turtles is Dr. John Carr

(318-342-1796; carr@ulm.edu). The contact for Natchitoches efforts is Dr. Jan Dean (318-352-5324; jan_dean@fws.gov).

Wild alligator snapping turtles face many challenges in the wild, and a critical time for their survival is in the egg through the hatchling stage. Fire ants, raccoons and other predators can kill them when young. By headstarting them in hatcheries, we can eliminate or counter the detrimental effects of some natural situations such as non-native interaction (fire ants) and nesting habitat areas being concentrated and easily accessible to predators. By partnering with various entities to develop culture and monitoring techniques, the hatchery can contribute to the development of long range management plans in hopes of keeping these unique creatures from ever having to be listed as threatened or endangered.

Alligator snapping turtle hatchling.

Photo: Gypsy Hanks/USFWS





NATCHITOCHES NATIONAL FISH HATCHERY

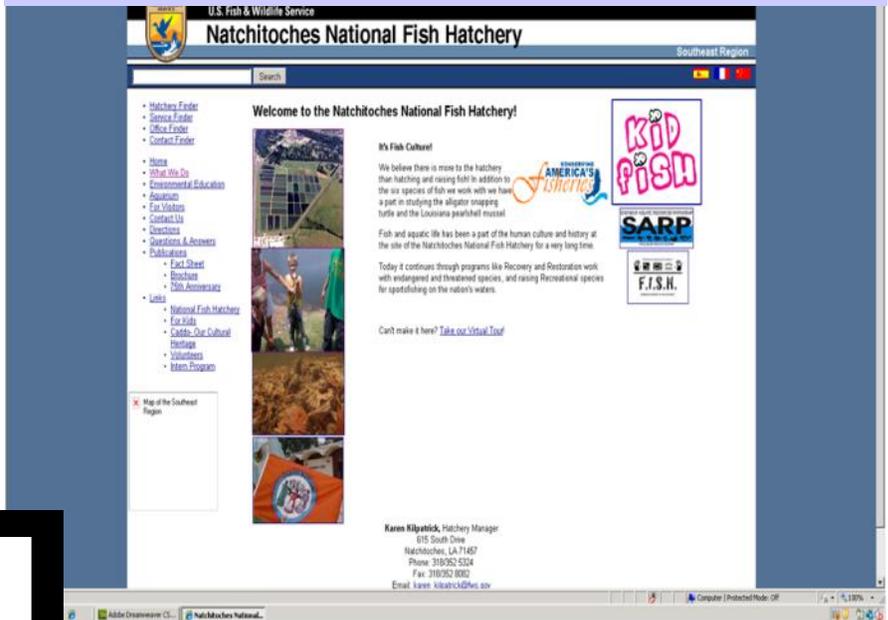
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*Saving the world, one species
at a time.*

The new hatchery web page is currently under construction.
www.fws.gov/natchitoches



<http://www.fws.gov/natchitoches>

www.facebook.com/natchitochesNFH

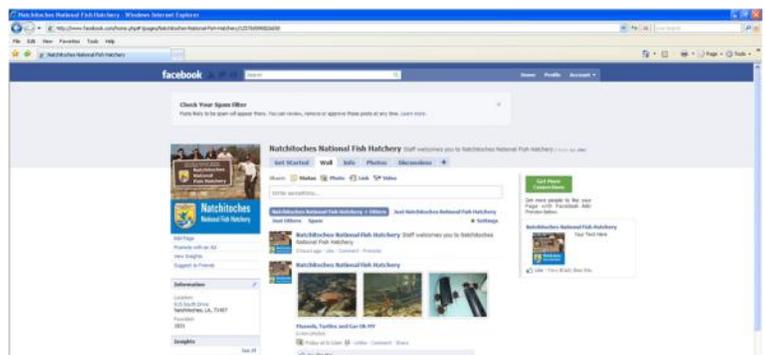
Change Inside and Out

By: Karen Kilpatrick

Whew!!! The hatchery made some programmatic changes in 2010 that better aligned the hatchery with Service policies and philosophies. The changes involved refocusing flagship species, but the changes are not only internal! They are also public use/outreach related. What we do on the hatchery must be conveyed to external partners and the public that we serve. So, along those lines, January also brought about the beginning of updating the hatchery website, brochure, station fact sheets, and public use presentations! Hatchery volunteer Kemper Kilpatrick is heading up the revision of the brochure.

Tony Brady, Mussel Biologist, is heading up overhauling the hatchery website. He is also trying to set up and manage a hatchery Facebook page. Manager Karen Kilpatrick is working on the station fact sheets. Assistant Manager Jan Dean, along with Brady and Kilpatrick, are all working on updating and developing powerpoints and

videos for the new focus species. It is an exciting time to expand outreach efforts and to let the world know about the great work being done at the hatchery! Keep posted!



Natchitoches NFH is now on Facebook.
www.facebook.com/natchitochesNFH