

Tishomingo National Fish Hatchery

Monthly Report
July 2015



Aquatic Species Conservation and Management

The 2015 year class alligator snapping turtle has set another record. On July 28th, the first egg pipped and completed hatching the next day. It pipped on Day 78, the earliest we have on record since our culture program began in 2000. The egg was a part of Clutch 2, found on May 28, 2015. The hatchling is healthy and behaving normally, both being a concern with eleven days of incubation remaining when hatched. The alligator snapping turtles will continue to hatch through August.



Tagging paddlefish began in July at the Tishomingo NFH with several new faces lending a hand. The YCC employed at Tishomingo NFH learned about the tagging process. Daniel Gallegos, a Pathways Intern from Mora NFH, was on station for a week detail with us during tagging. During his detail here, he was also an asset performing multiple fish culture duties. Courtney Anderson, an SCA resource assistant, and Gary Hall, a temporary employee, both from Hagerman NWR were also assets to the tagging team and even got to harvest fish from a pond after tagging. The flood conditions at Hagerman NWR allowed these employees to assist Tishomingo NFH during the tagging.



Daniel Gallegos and Regan Hefner scan coded wire tags in paddlefish.



Courtney Anderson and Gary Hall of Hagerman NWR assist with paddlefish tagging.



Courtney Anderson, SCA at Hagerman NWR, holds paddlefish.

Fish Distribution

- 13,788 paddlefish, ranging in length from 10 – 11 inches, were tagged with coded wire tags and stocked in Lake Eufaula.
- 5,025 paddlefish, ranging from 8 – 9 inches in length, were tagged by the Tishomingo NFH and stocked by Kansas Department of Wildlife Parks and Tourism in John Redmond Reservoir. This reservoir is on the Neosho River system that feeds into Grand Lake O' the Cherokees.



LEADERSHIP IN RESEARCH AND DEVELOPMENT

Sarah Spangler, a research assistant from Missouri State University under the leadership of Dr. Day Ligon, has begun preliminary preparation for a study on alligator snapping turtles. She is going to attach 1.5 gram radio transmitter on 20 hatchlings. Ten will be released in one of our smaller ponds and ten will be released in a section of Pennington Creek. Each location will be checked every other day for movement, temperature, and habitat selection. This data should indicate the turtles' home range and preferred habitat. This study will be the first performed with newly-hatched alligator snapping turtles.

Ms. Spangler also is assisting Denise Thompson, doctoral student from Oklahoma State University, by collecting data on alligator snapping turtles already released in ponds at Tishomingo NFH using newly-installed radio antennae. The data is being used to study behavioral and physiological aspects of their reproduction.

A partnership between the Veterinary Technology Program at Murray State College and Tishomingo NFH involving alligator snapping turtles has developed from the research of Dr. Day Ligon and Denise Thompson. When Dr. Ligon finds an adult female turtle that has not nested during the typical nesting season, he performs an ultrasound to determine if eggs are present. If eggs are present, he takes the turtle to the Veterinary Technology

teaching hospital for an x-ray to allow measuring and counting the eggs. That is when a great hands-on teaching opportunity is provided the students and staff at the college. Working with the research on this conservation concern provides a great deal of knowledge on turtle biology, enhances the uniqueness of the program at Murray State College, and furthers the goal of Ligon and the Tishomingo NFH to reestablish the species across its historical range until it is no longer a conservation concern.



Sarah Spangler taking measurements of alligator snapping turtle (left); new antennae for turtle monitoring (right).

FACILITIES

The annual safety inspection was performed on Tishomingo NFH by our assistant manager, Ralph Simmons, and the manager from Tishomingo NWR, Kris Patton. As part of this team effort with the Refuge, Simmons performed the safety inspection for Tishomingo NWR also.

Our two YCC employees painted the exterior lumber on the Fuel House and one of the Holding Houses as facility improvement projects. YCC workers finished their term of employment at the end of July.

YCC Regan Hefner paints Holding House.



Stockpiles of gravel and top soil were delivered in order to begin levee and road rebuilding. The roads and levees were washed badly in the May and June floods.



Material needed for flood repair of roads and levees.

Visitors and Outreach

There have been increasingly more visitors daily at the Tishomingo NFH wanting tours. Most people are curious to see the current water level of Pennington Creek after flood waters pushed it to historic levels in June.

A student from Oklahoma State University visited Tishomingo NFH to sample invertebrates in Pennington Creek for his research project.

Scheduled Tours Given in July:

- The Nature Conservancy requested a tour for their Summer Youth Interns and Land Steward. There is a couple of their management areas located in close proximity to the Tishomingo NFH.
- The Tishomingo National Wildlife Refuge YCC workers and their group leader toured the Tishomingo NFH.



Sunset over the Tishomingo NFH.

U.S. Department of the Interior
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