

Hatchery Highlights

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



Spring 2007

GULF STRIPED BASS CULTURE AT WARM SPRINGS NATIONAL FISH HATCHERY



Warm Springs NFH cooperates with regional and national efforts to restore Gulf strain striped bass populations throughout the southeast. During 2007, WSNFH participated in regional efforts to meet tasks as identified in several plans. Those tasks include annual broodstock collections, evaluating stocking effectiveness of hatchery reared fish, sample collections for genetic evaluations, care and propagation of wild and or hatchery reared broodfish. 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. For 2007, approximately 90,000 phase I fish were distributed to the Chattahoochee River. Additional fish are being reared for distribution as phase II fish in FY 2008.



WARM SPRINGS NATIONAL FISH HATCHERY PERSONNEL MAKE 7TH TRIP TO WISCONSIN TO COLLECT LAKE STURGEON EGGS

Staff members Carlos Echevarria, Chad Shirey, Jaci Zelko, and Tom Sinclair from the Regional Office recently traveled to Wisconsin to spawn lake sturgeon in the Wolf River. This is the seventh year that hatchery staff has traveled back and forth to the Wolf River to collect eggs and bring them back to the hatchery. Warm Springs also collected eggs that are incubated at two other hatcheries: Pvt. John Allen in Tupelo, MS and Genoa NFH in Genoa, WI. Even though the 4-day trip is exhausting, the extraordinary effort will produce about 35,000 lake sturgeon fry to be distributed at 4 hatcheries. Fish will be raised for 6 months, then stocked at the Lower French Broad in the Upper Tennessee River; Cumberland River in TN; and Coosa River, GA. These preservation and recovery efforts are part of collaborations with the Wisconsin DNR, Tennessee Wildlife Resource Agency, Tennessee Valley Authority, the Service, and 12 other agencies to begin restoring this species in portions of its historic range in the Southeast.



SPAWNING OF ROBUST REDHORSE, THE MYSTERY FISH, IS ONCE AGAIN UNDERTAKEN ON THE OCONEE RIVER

The Oconee River was sampled for three weeks to produce fingerlings for ongoing stocking programs in the Ogeechee, Ocmulgee, and Oconee rivers in Georgia. Electric grids were used for broodfish collection at a known spawning aggregation located near the Avant Kaolin Mine. A total of 7 specimens were collected (4 males and 3 females). One female was crossed with sperm from three males. 16,803 eggs were divided up between Warm Springs (9,630) and Richmond Hill SFH (7,173) to be incubated. Due to the shortage of eggs, no studies were undertaken that involved the use of eggs. 1000 fry from the 2007 year-class robust redhorse were held back to be intensively reared until the fingerlings reach 3-5" in size. The fingerlings will be coded wire tagged and stocked according to Georgia Department of Natural Resources recommendations. This is the first year that fry will be cultured intensively at the hatchery for an extended period of time. Normally, fry are sent to state hatcheries for pond rearing when they're 25 - 30 days old. Variability with consistent good survival from pond culture in the past few years prompted the hatchery to take the responsibility to rear the fish to a stockable size.



FOR THE FIRST TIME EVER - CAPTIVE ROBUST REDHORSE ARE SPAWNED!!!



The hatchery attempted the spawning of 20 captive robust redhorse, the first known trials for this species. These adults had been held at Warm Springs for several years, and were previously held in captivity. Five captive adult robust redhorse were moved into a conditioning system in early March. The sex of the fish was unknown, but they looked like possible females. Several fish in a separate tank developed tubercles, indicating that they were males. Four fish were injected with the hormone, Ovaprim, which is also used during the spawning efforts of wild robust redhorse in the Oconee River. All four females released eggs, about 28,700 in total. The eggs looked very different from wild eggs, so the viability of the fertilized eggs was unknown. Only about 100 fry hatched out. The fry are currently being reared to determine longtime survival of captive-reared spawned robust redhorse.

ALLIGATOR GAR SPAWNING



Warm Springs NFH is working with Pvt. John Allen NFH in developing strong partnerships with state resource agencies, academic institutions, and other NGO's in the restoration of alligator gar. We have offered our assistance in developing protocols for the collection of eggs and sperm from brooders for the past couple of spawning seasons. Our staff provided support in broodfish collection and spawning at Pvt. John Allen NFH in May. Also, protocols to raise alligator gar intensively in tanks and raceways at WSNFH have been developed.



FRESHWATER MUSSEL CULTURE AT WARM SPRINGS NFH



Several freshwater mussel species currently held at Warm Springs National Fish Hatchery were displaying (gravid) during Mar - May. The hatchery holds 6 mussel species including the Sculptured Pigtoe, Eastern Elliptio, Oval Pigtoe, and Little Spectaclecase. Due to time and personnel constraints, no formal study plan was initiated in 2007. However, we attempted to flush glochidia from several gravid mussels and infect host fish. The knowledge and techniques gained from this work will be used in a future study to determine possible host fish for the Sculptured Pigtoe.



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