



A GILA TROUT IS PIT TAGGED

Mora National Fish Hatchery

DECEMBER 2012

2013 Spawning Preparation

As spawning season quickly approaches, hatchery staff began to prepare by initiating the broodstock tank systems in early December. By the third week of the month, the bio-filters had sufficiently cycled to allow the movement of the first round of fish.

Approximately 30 fish from each of the two domestic lineages (Main and South) were randomly selected to form the basis of the 2013 spawning year class.

After randomized selection, the fish were anesthetized by MS222, length and weights were taken, a pit tag was injected under the skin below the dorsal fin, and a fin clip taken. The fin clips will be sent to the Southwestern Native Aquatic Resources and Recovery Center, where Doctor Wade Wilson will analyze the clips for pair-wise relatedness. The samples are analyzed using the Relationship Coefficient (R_{xy}), where; 0-0.1 are unrelated, 0.1-.18 are cousins, 0.19-.38

are half siblings, and 0.39 were full siblings. Viable crosses are 0.18 and below. This will ensure that hatchery staff will be able to make ideal family crosses.

More fish will be moved into these units on a staggered basis until rearing capacity is reached. Fish will also be processed and kept in the raceway units, as part of a total gas study.

Wild Main Diamond Gila trout, housed in the Visitor's Center, will also be processed this year. Wild genetic will be incorporated into the spawning year class per the current Gila Trout Genetic Management Plan. Hatchery staff estimates that there will be 50-60 wild fish spawned this year.



Egg Trays Relocated

The egg trays that are sub-divided and used to ensure familial crosses are in the process of being relocated. Last year, hatchery staff had difficulty in supplying water to all the units due to their height. The trays will sit approximately 4 feet lower.



Whiskey Creek Lineage Moved

Additional Whiskey Creek lineage fish were moved into the new system. This brings the total in the Ozone room system up to 60 fish. Staff will continue to gradually move fish into the system while allowing the bio-filter adequate time to charge.

Aquatic Species Conservation and Management

2011 Broodstock

The 2011 broodstock were moved into the raceways during December. All fish have been pit tagged. The Main Diamond are in raceway 3 and number approximately 320. The South Diamond lineage are in raceway 5 and number approximately 190.

2012 Broodstock

Hatchery staff sampled and inventoried all 2012 year class of fish in December. Fish surplus to the needs of broodstock development were transitioned into the recovery program.

Future Stocking

500 fish of each lineage are being retained until the spring for pit tagging and gentic sampling. The fish will be then released into the West Fork of the Gila River.



Daniel Gallegos Departs

Daniel Gallegos was employed as an emergency hire in November. He previously worked at the facility as a Youth Conservation Corp student during the summer.

Daniel proved to be a valuable asset at Mora. He is extremely interested in fish culture. He was willing to learn all aspects of hatchery operations. He is currently going to college at Luna Community College in Las Vegas.

His last day will be January 3. The hatchery staff hopes we will see him again in the future.



Work begins on Conditioning Tanks

The first step in the construction of the planned conditioning tanks was begun in December. These tanks, once complete, will allow hatchery staff to rear fish into a naturalistic environment prior to release. Tanks will contain substrate and the fish will be fed a combination of pelleted and live food.



Chemical Inventory Completed

An inventory of all chemicals on the facility was completed in December. Deficiencies were identified during an environmental audit. Usable chemicals are being offered to other stations. All unwanted and/or expired chemicals will be disposed of in accordance with their MSDS.

CURRENT STAFF

Jeff Powell, Project Leader
 Teresa Martinez, Administrative Assistant
 Jeff Conway, Fish Biologist
 Grant Langmaid, Fish Biologist
 E. "Richie" Garcia, Maintenance Worker

FOR MORE INFORMATION

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Additional Activities

- Jeff Powell and Jeff Conway attended the annual Gila Trout Recovery Team meeting on December 13 and 14.
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