



Mora National Fish Hatchery

November 2014

Ash Creek Recovery Effort

The Hatchery staff assisted in recovery of Spruce Creek lineage Gila Trout from Ash Creek in the Coronado National Forest. Ash Creek was stocked with Gila trout directly from Spruce Creek in New Mexico as a result of the Whitewater Baldy Fire in 2012. Post-fire flooding was predicted to be severe in Spruce Creek, and the decision was made to translocate them to Ash Creek, which had been treated with rotenone in 2010 and was fishless. In addition to Ash Creek, 100 Gila trout were taken to the Hatchery in attempts to establish a broodstock population. Unfortunately, a power incident at the Hatchery resulted in the mortalities of the translocated fish, and all that remain at the hatchery are 65 fish that are the progeny of those transported directly from the creek.

As predicted, Gila trout were eliminated in Spruce Creek, and Ash Creek stood as the only known wild location where the lineage remained. This Recovery effort captured 82 Gila Trout in attempt to develop a broodstock population at the Hatchery for future translocations.





Cracks



Door Frame Repairs

The Hatchery had a local contractor complete temporary fixes on several of the Hatchery door frames. The door frames were installed incorrectly in 2012 and several have failed. The temporary fix will secure the doors until funding is available to replace the steel studs that were removed to accommodate the wider frames.

Hauling Tank Repairs

The new hauling tank suffered some de-lamination issues at the PVC/Fiberglass junction. Repair material was sent by Reiff manufacturing to fix the problem.



Temporary Aquarium for Spruce Creek

19 of the Spruce Creek fish recovered from Ash Creek were less than 100 fish per pound at capture. Staff set-up a temporary aquarium in the Spruce Creek isolation room to get these fish started on feed.





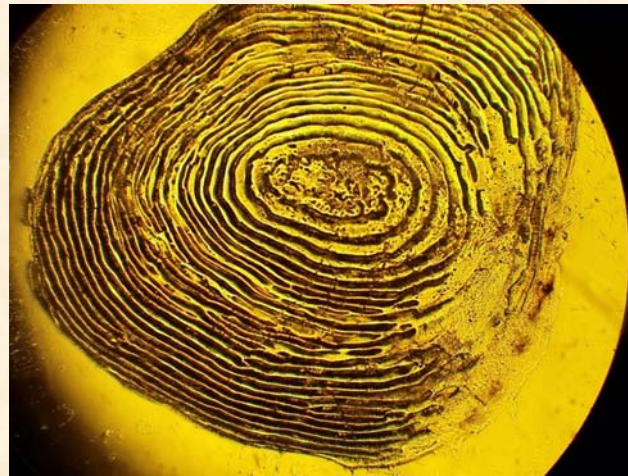
Quarters #1 Skirting

A vendor finished the Quarters #1 skirting project with Pro-panel and 2" foam board. The skirting was finished just in time before the first snow-storm of the year!

Iron Creek fish are Old!

The Hatchery lost a few of the Iron Creek in November. Overall survival is now at 80.4% after 1.5 years of holding. The fish that died appeared in good condition and water quality samples looked very good as well:

Nitrate = 1.6 mg/l (0-3.0 mg/l)
Nitrite = 0.007 mg/l (<0.2 mg/l)
Ammonia = 0.0 mg/l (<0.0125 mg/l)
CO₂ = 8.75 mg/l (0-10 mg/l)
DO = 8.27 mg/l (>5.0 mg/l)
TGP = 98% (<100%)
N = ~97% (<100%)
Temp = 54.3 (<60)
pH = 7.2 (6.5-8.0)



Further analysis by the Hatchery staff and the Dexter Fish Health Center staff revealed that the Iron Creek fish onsite are between 5-8 years old! Based on this analysis, the Hatchery believes that age and pre-spawning stress are likely contributing factors to the mortalities.



PV work Suspended

Sacred Power Company personnel arrived to do PV System maintenance and repairs just after the Hatchery received 9 inches of fresh snow! The contractors got measurements of the system and will return to complete the work when conditions are safer to work on the roof.

PIT Tagging Operations



Hatchery staff started PIT tagging operations at the end of November in the Brood Year 2014 broodstock. So far, Visible Implant Elastomer tags installed in July have held up well and have been used to sort broodstock into families for genetic testing.

Infrastructure and Operations Audit

Jack Christiansen, Snake River Compensation Plan Aquaculture Engineer; Jimmy Salsovich, National Renewable Energy Labs Engineer; Mark Orton, Electrical Engineer; and Jae Ahn, Operations Specialist; completed a infrastructure and operations audit of the Hatchery. The audit team found several opportunities to reduce electrical consumption and align infrastructure with Gila Trout recovery goals. Reports and action plans from the audit will be forthcoming.



Powerline Tree Clearing

Staff from Bosque del Apache National Wildlife Refuge cleared trees from the Hatchery powerlines. Several trees had grown close enough to cause concern for power interruptions during wind events.



Production Lineage	Brood Year	Purpose	Location	Number	Mortality	Sample	Biomass
Main Diamond	2010	Wild	Visitor Center	19	0	0.3	69
	2011	Brood	Raceway 2B	72	0	0.4	200
	2012	Brood	Raceway 2T	243	2	0.8	287
	2013	Brood	Raceway 1T	525	0	1.3	405
	2013	Recovery	Raceway 1B	197	0	1.8	108
	2014	Brood	Circular 250	1140	57	21	54
	Total				2196	59	2.0

South Diamond	2011	Brood	Raceway 4B	70	1	0.4	195
	2012	Wild	Shady Acres	148	0	2.5	60
	2012	Brood	Raceway 4T	258	2	0.8	304
	2013	Brood	Raceway 3T	425	4	1.3	327
	2013	Recovery	Raceway 3B	403	0	1.9	215
	2014	Brood	Circular 250	736	12	22	33
	2014	Recovery	Circular 250	2400	0	25	97
	Total				4440	19	3.6

Whiskey Creek	2011	Wild	Whiskey Creek	97	0	0.5	194
	2011	Wild	Visitor Center	40	0	0.5	80
	2014	Brood	Circular 250	648	3	22	30
	Total			785	3	2.6	304

Spruce Creek	2010	Wild	Spruce Creek	44	0	4.4	10
	2013	Wild	Spruce Creek	19	0	19	1
	2014	Brood	Circular 96	65	4	22	3
	2014	Wild	Spruce Creek	17	2	131	0
	Total			145	6	10.3	14

Iron Creek	2011	Wild	Shady Acres	40	1	1.6	25
	Total			40	1	1.6	25

Total All Lineages				7606	88	2.8	2697
---------------------------	--	--	--	-------------	-----------	------------	-------------

Snow in the Mora Valley

Temperatures dropped below zero and 9 inches of snow accumulated in November.



Upcoming Events

- PIT tagging of Spruce Creek lineage rescued from Ash Creek for Genetic Sampling
- Stuart Wilkins, BioTech, starts December 1st
- Gila Team Recovery Meeting December 18-19th
- System 3 shut-down for biofilter maintenance in December and January
- Fishing in the School and Monarch program briefing by Debbie Pike to Hatchery staff Dec 16

In Brief

- Nate Wiese and Lori Casados visited the Regional Office on November 13 to turn in computer hard drives and discuss excess property paperwork.
- Jeff Conway led a tour for Jill Wick and Kirk Patten from the New Mexico Department of Game and Fish Fisheries Division
- Lori Casados set up new desk tops in several offices.
- Angelica Solano started as a 100 hour intern from Luna Community College. Angelica is a General Science major at Luna.

Hatchery Staff

Nate Wiese, Project Leader
Lori Casados, Admin. Assistant
Jeff Conway, Fish Biologist
Grant Langmaid, Fish Biologist
Richie Garcia, Maintenance Worker
Daniel Gallegos, Intern

Contact Us

Mora NFH
PO Box 689
Highway 434 Mile Marker 2
Mora, NM 87732
575 387 6022
575 387 9030 (fax)