



Mora
National
Fish
Hatchery
January 2015

New Incubation Head Tank

The hatchery completed a new de-gassing system that will allow the direct use of well-water for the incubation of Gila trout eggs. Previously, re-circulated water was used for incubation, and was identified as a future improvement during the Infrastructure and Operations Audit in 2014. The used incubation water will be re-circulated back to System 3 for possible use on start-up fish. The new system reduces water demand by half by double-stacking the incubation units and utilizing the head-pressure from the reservoir for supply. This change will provide the best quality water to the most critical stages of incubating eggs. The initial test of the vacuum de-gassing system looks promising, reducing gas levels from 114% TGP to 98% TGP. The crew also plans to add an O2 contactor to increase oxygen saturation from 85% to 100%.



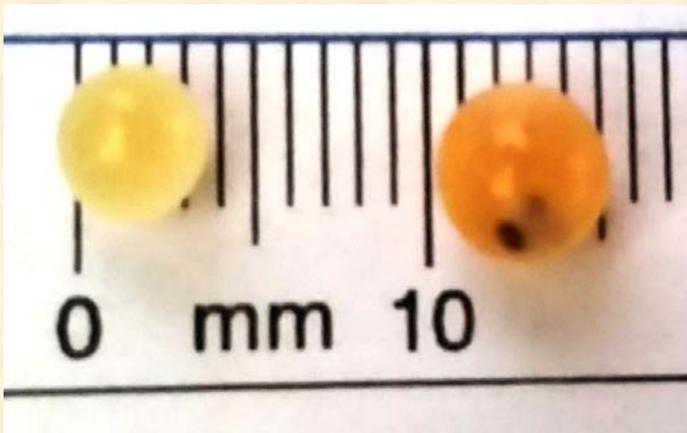
New Upwelling Incubators

The Hatchery received 18 up-welling incubators on excess from Dworshak National Fish Hatchery, a value of \$4,860. The Incubators will be tested in 2015 to examine eye-up rates.

Archery Instruction Certification

Hatchery staff completed Archery Instruction Certification through Debbie Pike from the Las Vegas National Wildlife Refuge. The Hatchery annually hosts several Archery fun shoot events.





Spruce Creek Eggs

The five Spruce Creek females spawned in December did not produce any viable eggs. At expected eye-up, the Spruce creek eggs were still very pale and much smaller than “normal” Gila Trout eggs. The Hatchery suspects the females did not fully develop prior to releasing their eggs early. Fortunately, the remainder of the females are not gravid and may be developing more fully.

YouTube Video!

Jessie Jobs, Website Administrator Southwest FWS Region, put together a video highlighting the work on the Whiskey Creek Gila Trout lineage. The short video features interviews with Jeff Powell, Previous Hatchery Manager, and Jim Brooks, Gila Trout Recovery Team Member.

<https://www.youtube.com/watch?v=5ua6e3LevD4>



Vacuum System Modification

The staff made a plumbing modification of the vacuum system to allow pre-priming with a 3/4 garden hose nozzle. This change, coupled with the raceway baffles will keep the raceways cleaner and reduce the labor spent performing daily cleaning.

Anode Replacement

Richie Garcia, Maintenance Mechanic, replaced the sacrificial anode rods on the System 3 Bio-filters since the System is down for maintenance. These had last been replaced about 5 years ago and were due for a change.





Galvanic Anodes

The photo demonstrates the difference between a new and old anode. These rods help prevent corrosion the inside of the steel Bio-filter tanks and are usually constructed of a metal alloy with a more negative reduction potential, and are commonly called a sacrificial anode.

Brush Chipper Training

Richie Garcia lead a brush chipper safety training for the staff. Richie installed a new carburetor, fuel tanks, and fuel pump to get the brush chipper back up and running. The Hatchery has a lot of limbs to clean-up after the power-line tree clearing.



Rio Mora and Pritzloff Ranches

Nate Wiese visited the Rio Mora National Wildlife Refuge with Refuge Manager, Rob Larranga and Luis Ramirez, Denver Zoo Great Plains Coordinator. The entourage also visited the Pritzloff Ranch site which may be donated as the 561st National Wildlife Refuge.

Fish Dissection Presentation

Stuart Wilkins and Daniel Gallegos gave a fish dissection presentation on January 28, 2015 to the Mora Community Academy of Social Science, Science and Math (CASSM) program at the Mora Schools. Rainbow trout were used in the dissections and were provided by the Lisboa Springs State Fish Hatchery in Pecos, NM.





Production Lineage	Brood Year	Purpose	Location	Number	Mortality	Sample (fpp)	Length (in)	Biomass (lbs)
Main Diamond	2010	Wild	Visitor Center	19	0	0.3	20.0	69
	2011	Brood	Raceway 2B	72	0	0.3	18.6	212
	2012	Brood	Raceway 2T	236	2	0.7	15.3	327
	2013	Brood	Raceway 1T	524	1	0.9	14.0	577
	2013	Recovery	Raceway 1B	196	1	0.9	14.1	216
	2014	Brood	Raceway 5T	1123	1	10.6	6.2	106
	Total				2170	5	1.4	12.1

South Diamond	2011	Brood	Raceway 4B	70	0	0.3	19.2	212
	2012	Wild	Shady Acres	148	0	2.3	10.3	64
	2012	Brood	Raceway 4T	227	1	0.6	15.8	356
	2013	Brood	Raceway 3T	413	1	1.0	13.7	424
	2013	Recovery	Raceway 3B	84	0	1.5	11.4	56
	2014	Brood	Raceway 7T	740	7	14.7	5.5	51
	2014	Recovery	Raceway 7B	1295	2	13.2	5.8	99
Total				2977	11	2.4	10.1	1262

Whiskey Creek	2011	Wild	Whiskey Creek	95	0	0.4	17.0	194
	2011	Wild	Visitor Center	40	0	0.4	17.0	80
	2014	Brood	Raceway 8T	649	0	13.3	5.7	49
	Total			784	0	2.4	10.1	323

Spruce Creek	2010	Wild	Spruce Creek	42	0	4.2	8.4	10
	2013	Wild	Spruce Creek	19	0	12	5.1	2
	2014	Brood	RW Circular	58	4	6.4	6.7	9
	2014	Wild	Spruce Creek	14	0	50	2.9	0
	Total			133	4	6.3	7.4	21

Iron Creek	2011	Wild	Shady Acres	40	0	1.4	12.1	28
	Total			40	0	1.4	12.1	28

Total All Lineages				6104	20	1.9	11.0	3141
---------------------------	--	--	--	-------------	-----------	------------	-------------	-------------

Polar Bear Plunge 2015

On the lighter side, Nate and his wife Amber represented the hatchery at Storrie Lake's Annual Polar Bear Plunge. Crews had to break the ice before the event began and ambient temperatures were in the twenties.



In Brief

- Nate Wiese attended a Coldwater Conference call on January 5th
- Jeff Conway started a 30-day work detail at Uvalde NFH on January 12th
- Dick Lanford from the Bosque del Apache NWR, completed an equipment audit on January 15th
- Nate Wiese and Grant Langmaid attended the Coldwater Fish Culture Course at NCTC from January 26 to February 6, 2015

Upcoming Events

- Administrative Conference February 10-12th
- Fire Coordination meeting at Bosque del Apache NWR on February 18th
- Continue finishing maintenance projects and UV installation on System 3
- Spawning Preparation

Hatchery Staff

Nate Wiese, Project Leader
Lori Casados, Admin. Assistant
Jeff Conway, Fish Biologist
Grant Langmaid, Fish Biologist
Richie Garcia, Maintenance Worker
Stuart Wilkins, Biological Technician
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)