



Mora  
National  
Fish  
Hatchery  
October 2015

### Gila Trout Distribution

During October, the Mora National Fish Hatchery released 14,368 fish into recovery waters in New Mexico and Arizona. The station also released 1,013 fish for recreation in Arizona. In New Mexico, Willow Creek received 5,120 fish above the temporary barrier and 4,627 below the barrier. Little Creek received 3,002 fish above the barrier. Arizona received 585 fish into Ash Creek, and 1,034 fish into Dude Creek. Both locations are new for 2015. Arizona also received 1,013 fish for West Fork Oak Creek which is a recreational stream with an approved management plan. A breakdown of lineage and size can be found on page 4.





## Whiskey Creek Lineage Clipped

Hatchery staff adipose clipped an additional 1300 Whiskey Creek lineage fish for recovery efforts. Some of these fish were utilized in the Ashe Creek release. Biologists clip the adipose fin, located between the dorsal and caudal fins because it usually does not regenerate, and is a good way to mark hatchery fish.

## Tank Conversion

Staff installed new 4 inch supply lines to the 2500 circular tanks in October. The conversion will supply approximately four times more volume of water than the existing lines. These tanks will be used to overwinter a small population of recovery fish for next year.



## New Sensors Installed

Staff replaced a TGP sensor in the Visitor's Center quarantine system that had failed. Staff also began installing new sensors for the recently constructed second Visitor's Center quarantine system. This network provides advanced notice of potential problems in the rearing systems after business hours.





## Propane Tank Refilled

The hatchery's 12,000 gallon propane tank was refilled during October. Rearing changes that more closely follow a natural temperature profile in the hatchery building have greatly reduced the propane usage. In past years the tank would be refilled yearly, but under the current pattern staff projects a two year refill cycle, saving a considerable amount of money for the station.

## Concrete Pad Poured

A new concrete pad was installed in the lower level of the hatchery building. Once cured, an oxygen generator and air compressor will be installed to provide supplement oxygen to the rearing systems. Producing oxygen onsite will greatly reduce the need for oxygen cylinder and dewar rentals.



## Settling Pond Switched

Hatchery staff cleaned and prepared one of the concrete settling ponds prior to switching the hatchery discharge into it. These ponds catch the solids in the hatchery effluent and prevent them from discharging solids into the environment. The ponds are currently switched approximately every three months.

Fulfilled Stocking	Number	Length	Lineage	Comments
Frye Mesa Reservoir	6,000	3.5	MD/SD	
Black Canyon	3,514	3.5	MD	
Upper White Creek	3,317	4	WC	
Upper Langstroth	4,344	3.8	MD	
Ashe Creek, AZ	585	4.3	WC	Adipose Clipped
Willow Creek	3,520	3.6	SD	
Willow Creek (Below Barrier)	2,811	4.1	SD	Adipose Clipped
Willow Creek	1,600	3.6	SD	
Willow Creek (Below Barrier)	1,816	4.1	SD	Adipose Clipped
Little Creek	3,002	4	MD	
West Oak Creek, AZ	1,013	4.8	MD	Adipose Clipped
Dude Creek, AZ	507	4.4	SD	Adipose Clipped
Dude Creek, AZ	527	4.5	MD	
<b>Totals</b>	<b>32,556</b>			
Cancelled Stockings	Number	Length	Lineage	Comments
Little Creek	2,117		MD	Adipose Clipped
Black Canyon (Above Aspen)	800		MD	
Black Canyon (Below Barrier)	2,000		MD	Adipose Clipped
Mineral	2,500		SD	Adipose Clipped
Sacaton	2,099		WC	Adipose Clipped
Lower West Fork Gila	3,000		MD	
Christopher Creek, AZ	4,000		SD	
South Diamond Creek	1,500		SD	
Sapillo Creek	0		MD	Location Replaced
Raspberry Creek, AZ	0		MD	Location Replaced
Trail Canyon Creek	0		SD	Location Replaced
Lower West Fork Gila	0		SD	Location Replaced
Sapillo Creek	0		SD	Location Replaced
<b>Totals</b>	<b>18,016</b>			
<b>Grand Total</b>	<b>50,572</b>			

## Distribution Totals

The 2015 stocking season was a great success. The Hatchery released 32,556 Gila trout back to the wild! Currently, there are no additional stocking runs planned. The Hatchery still has an additional 18,016 Gila trout in excess of recovery and broodstock development needs.

Staff from the Hatchery, US Fish and Wildlife Conservation Office in Albuquerque, New Mexico Game and Fish, and Arizona Department of Game and Fish are currently working on Recreational Gila Trout Fishery Management Plans to guide stocking of Gila trout in excess of recovery needs. If these plans can be approved, these “excess” fish will provide additional opportunities for anglers in New Mexico and Arizona to fish for one of the rarest trout species in the world.

Gila trout for the Future!

## Building Baffles

Sandy Kalb, Mora’s remaining volunteer, constructed aluminum plate baffles that will be installed into the raceways in Recirculation System #1. Similar units had been installed into system 2 during the winter and had dramatically improved water quality in the raceways. Thanks Sandy!





Production Lineage	Brood Year	Purpose	Location	Number	Mortality	Sample (fpp)	Length (in)	Biomass (lbs)
Main Diamond	2013	Brood	Raceway 5T	464	0	0.6	15.6	773
	2014	Brood	Raceway 6T	1,069	1	1.3	12.1	822
	2014	Wild	VC B	69	0	15	5.5	5
	2015	Brood	96	931	0	20	5.0	47
	2015	Recovery	2500, SR	6,302	3	20	5.0	315
	<b>Total</b>				<b>8,766</b>	<b>4</b>	<b>4.5</b>	<b>8.2</b>

South Diamond	2012	Wild	VC A	74	1	1.0	13.6	74
	2013	Brood	Raceway 5B	368	4	0.6	15.6	613
	2014	Brood	Raceway 7T	737	2	1.4	11.9	526
	2015	Brood	96	1,065	0	20	5.0	53
	2015	Recovery	250	2,459	4	20	5.0	123
	2015	Exper.	380, SR	7,153	0	20	5.0	358
	<b>Total</b>				<b>11,856</b>	<b>11</b>	<b>6.8</b>	<b>7.2</b>

Whiskey Creek	2011	Wild	Whiskey Creek	96	2	0.4	17.5	240
	2014	Brood	Raceway 8T	595	2	2.1	10.3	283
	2015	Brood	96	626	0	20	5.0	31
	2015	Recovery	2500	2,099	0	20	5.0	105
	<b>Total</b>				<b>3,416</b>	<b>4</b>	<b>5.2</b>	<b>7.8</b>

Spruce Creek	2010	Wild	Spruce Creek	25	0	2.0	10.8	13
	2013	Wild	Spruce Creek	17	0	3.0	9.4	6
	2014	Brood	RW Circular	50	0	1.0	13.6	50
	2014	Wild	Spruce Creek	10	0	5	7.9	2
	<b>Total</b>				<b>102</b>	<b>0</b>	<b>1.4</b>	<b>12.1</b>

Iron Creek	2011	Wild	Spruce Creek	32	0	.9	14.1	36
	<b>Total</b>			<b>32</b>	<b>0</b>	<b>.9</b>	<b>14.1</b>	<b>36</b>

<b>Total All Lineages</b>				<b>24,172</b>	<b>19</b>	<b>5.4</b>	<b>7.7</b>	<b>4,475</b>
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## Thank You!

The staff of the Mora National Fish Hatchery would like to say thanks to all the people that made the current distribution season the most successful season to date. In particular, the tireless efforts of personnel from the USFWS's New Mexico Fish and Wildlife Conservation Office, The U.S. Forest Service, New Mexico Department of Game and Fish, and Arizona Game and Fish Department made this possible. In addition, numerous volunteers, students, and retired Service members donated their time and efforts to the recovery of Gila Trout.



## Upcoming Events

- Iron Creek broodstock collection on November 2-4 with NMFWCO and Jim Brooks
- Lori Casados at FAPO Basic Financial Assistance training on November 1-7.
- Final data collection on the DFP project on November 30.

## In Brief

Quarterly DMR's are due on November 27.

Biannual domestic water testing to take place in November.

Richie Garcia on detail at the Las Vegas NWR from October 26 to November 6.

## Hatchery Staff

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Jeff Conway, Fish Biologist  
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Richie Garcia, Maintenance Worker  
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