



Inks Dam National Fish Hatchery



Monthly Accomplishments

May 2016

Fisheries Activities

Water Quality

This month's average dissolved oxygen level, for the incoming water, was 5.00 parts per million (ppm) and a mean temperature of 21.00°C. The Lower Colorado River Authority has decided to release water for downstream agriculture, and now flood protection this year, which is creating much cooler water temperatures and improved dissolved oxygen levels. Monthly pond dissolved oxygen levels averaged slightly lower at 6.68 ppm (79.50% saturation), at an average pond temperature of 23.98° C which is a needed



This is what recent flooding has done in the central Texas area. Water has been going over the entire length of the spillway at Inks Dam now for two and half weeks.

increase from last month. Staff has continued the increased time for manual backwash to once every thirty minutes on the filter because of lake productivity and now flooding.

Channel catfish

All of the FY15 fish are in their larger over-wintering production ponds. To-date, 39,800 are in production ponds for FY16 Tribal requests. These fish currently average 3.89 fish per pound (fpp) and 9.42 inches in total length.

Overall, we're still behind in lengths and weights on these fish because water temperatures are now being influenced by water releases from Lake Buchanan. Fifty-four mortalities were recorded for the month. Since the floodgates have opened staff has seen an increase in ponds with external protozoan problems, such as; *Trichodina* and *Chilodonella*. This has been triggering several more ponds having minor outbreaks of *Flavobacterium columnare*.

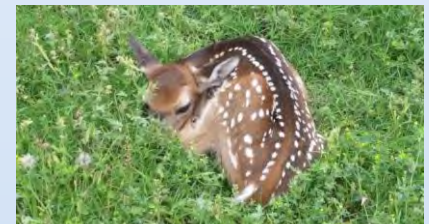
Hatchery staff seined and harvested ponds for the second Tribal Trust stocking this month. Hatchery staff stocked 8,028 into Zuni and Zia tribal waters. These fish averaged 4.58 fish per pound (fpp) and 8.99 inches in total length.

Production numbers for the FY14 Channel catfish are 2,937 averaging 1.64 fish per pound (fpp) and 12.70 inches in total length. No mortalities were recorded for the month. These fish will be used as future brood stock and future reimbursable fish.

Currently there are 2,156 FY13 channel catfish averaging 0.72 fpp and 16.75 inches in total length. These fish are being used as brood stock this year and reimbursable fish.

Hatchery staff transferred 662 fish from this population to the Fort Hood Natural Resources staff for the season's second stocking. These fish weighted a total of 731 pounds and averaged

Spring has sprung at Inks Dam NFH and new things are everywhere! Here are just a couple of things that caught our attention...but you had to look hard because of their size.



Female deer, it seems, were dropping off their young to have us watch over them while they went out and do what they wanted to do! This was one of several that got left around the office this year.



With all the rain, and subsequent flowers this year, staff has noticed a "buzzing" crop of hummingbirds. Here are a couple of them enjoying the easy pickings at the bird blind. Oh, DO NOT get in their way when they are chasing each other without appropriate PPE's for protection.

0.91 fish per pound and total length was 16.50 inches. No mortalities were recorded for this population during the month.

Additional production also includes 477, FY12, catfish averaging 0.14 fpp and 27.38 inches in total length. These fish are being utilized for brood stock this year and Fort Hood Reimbursable contract requests later in the year after spawning. Five mortalities were recorded for the FY12 population of fish this month and due to spawning activities.

Channel catfish spawning has started this month. First spawn takes were at the beginning of the month and by months' end a total of 403,125 eggs had been collected. The decrease in water temperatures, due to flooding and release of water from Lake Buchanan, has subsequently increased the amount of time necessary for hatching. At this time only 178,500 eggs have hatched. Some fungus issues in the spawns have developed because of this increase in hatching time.

Clear Creek gambusia

The FY14 Clear Creek gambusia currently in isolation totals 52 fish. Four mortalities occurred during the month. There are currently 35, FY15, Clear Creek gambusia. Three mortalities occurred during the month in this population. Mortality, so far this year, has been greatly reduced during this spawning season. No external parasites were found.

All FY14, FY15, and F1's adults are now on a 14 hour on and 14 hour off light cycle. Staff has increase time so these fish are now on full light regimes for

spawning. Water temperatures have also been increased gradually to better represent the late winter and spring seasons. Other water quality indices are being monitored to duplicate optimum water conditions for pre-spawning conditions. All of the FY14 and FY15 Clear Creek gambusia adults (100% pure) are doing well and staff has now taken a total twenty-two (22) F1 fry from three spawning females.

The FY15 F1 Clear Creek gambusia total 235, of which; 146 are female and 89 are males. A total of three F1 mortalities occurred during the month. No external parasites were observed on the mortality and probably due to spawning.

Hatchery staff decided to see if we can get these fish to spawn, unaltered, in their first year. By spawning these we should get age 1 fecundity numbers for life history data since most of the fish we get from the wild are of unknown age. They will be genetically tested after spawning in FY16. To date we have produced through our spawning technique a total of 358 F2's. Many more of the F1 females are showing signs of being gravid and have been separated into spawning tanks.

Personnel

Paul Dorman has made a selection for the replacement of Larry Guerro, WG-Motor Vehicle Operator. Jeff Pivonka will be new WG staff member. Jeff is a veteran and originally a Texas native. We look forward to having Jeff on our staff starting in June.

Maintenance

Staff performed routine equipment and facility maintenance during the month. Multiple Deferred Maintenance Projects (DM) projects were completed during the month of May.

Visitors, Education and Outreach

Inks Dam NFH had 284 visitors for the month which does not include the almost 400 kids and people for HOP. The Friends of Inks Dam NFH (FOIDNFH) and other volunteers had a total of 215.0 hours for the month. They performed the usual monthly maintenance and one tour not related to the Hatchery Outdoor Program (HOP).

The first tour was a group called Galaxy from the Houston, Texas area. This is a group of fathers and daughters who explore Texas sights together and have done this activity for more than six years. They got to see some catfish eggs, feed the brood stock catfish, Master Caster Class and a hike up the Overlook Trail.



The Galaxy fathers and daughters didn't know what was in the pond until they put some feed in the pond! They almost didn't want to do anything else except have the Master Caster program in this pond after that!

“HOP is our opportunity to promote Outdoor Education activities and USFWS programs to youth from local Independent School Districts (ISD's). The local ISD's are invited to bring students, typically 4th and 5th

graders, to Inks Dam NFH to participate in numerous Outdoor Educational programs put on by the Friends Group. The primary focus is to provide reinforcement of school curriculum by “hands-on” understanding and develop a true appreciation for nature while having fun!

This year a total of four local ISD's took part in HOP and a total of 311 kids, 18 teachers, 67 parents, numerous Friends Group volunteers and hatchery staff participated. Attendance was down from previous years but that was to be expected since this month was the highest ever recorded rainfall since records were kept in the State of Texas.



One hour into the first HOP program of the year and the weather didn't cooperate. A total of 95 Marble Falls ISD were kids split into two groups and housed in the Holding House and Education Center until the storm had passed and it was only lightly raining.

On the 12th Marble Falls Elementary 2nd grade participated in HOP for about an hour before a super cell descended upon us an hour into the program effectively cancelling the remainder of the day.

On the 17th and 18th, RJ Richey Elementary, Burnet ISD participated with 181, 5th graders, and NO RAIN! They got to enjoy the Master Casting, Fish Production and Morphology, Solar Printing and Ladybugs,

Ecology & Geology on the Overlook Trail and Birding basics at the Bird Blind.

On the 19th of May the entire Llano ISD Elementary HOP program was rained out before they left Llano. The entire 72 5th grade was extremely disappointed as was the Friends Group and Hatchery Staff.

On the 23rd May, newcomer Florence ISD, brought over 35 seventh graders to learn about fish production, infrastructure necessary to accomplish that goal, T&E species work accomplished here and the reason species preservation matters. They then hiked the on to the Overlook Trail for Hill Country ecology and geology.

Please enjoy several other pictures from this year's HOP program. Even though some got rained out there were many wonderful things the kids, parents and volunteers all got to enjoy.



RJ Richey Elementary, Burnet ISD, kids learning about fish morphology and how the fish use their different styles of mouths to obtain food.

Florence ISD kids learning about Hill County geology and the varied ecology on the way up the Overlook Trail.





Some of the Friends Group hanging solar prints that the participants created from the wildflowers and the sun.



HOP participants looking at Ladybugs under magnifying glass which was a new program this year. It was to show not only how “cute” they are but they are beneficial in control other bugs without the use of pesticides, how they defend themselves, and just taking the time to observe something small in nature.



Finally at the top of the Overlook Trail you can see Inks Dam and how it's used to control flooding.



Learning about catfish production, how we get our numbers and generally having fun doing Math!

U.S. Department of the Interior
U.S. Fish & Wildlife Service
Southwest Region
Fisheries and Aquatic Conservation



Inks Dam National Fish Hatchery
345 Clay Young Road
Burnet, TX 78611
Phone 512/793-2474
http://www.fws.gov/southwest/fisheries/inks_dam/index.html

Current staff members

Paul Dorman	Project Leader
Scott Walker	Assistant Project Leader
Vacant	Environmental Education Specialist
Tammy Simmons	Administrative Technician
Gregory Landry	Fisheries Biologist
Matthew Paulson	Fisheries Biologist
Vacant	Animal Caretaker (Term)
Vacant	Maintenance Worker
Jerry Simmons	Maintenance Worker
Jerry Crouch	Maintenance Worker