



SOUTHWEST REGION DIVISION OF FISHERIES

Connecting Children with Nature

Recreational Fishing and Outdoor Education Program Highlights
(October 2009– September 2010)

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Juliana Halvorson

SOUTHWEST REGION

Recreational Fishing and Outdoor Education Program Highlights

With all the serious issues facing America today, why is the U.S. Fish and Wildlife Service (FWS) fretting about kids playing inside? Less than 50 years ago, about a third of the U.S. population lived in rural areas. Now over 80 percent of our citizens live in cities, and that number is growing every year. As a result of this change, urban kids are less connected to nature and wildlife. Through 51 listening sessions, tens of thousands of Americans spoke loudly and clearly. They want the Federal Government to support and encourage youth involvement in our natural world. Recreational fishing is just one area in which the FWS supports the American public in the enjoyment of the great outdoors.

That's why you have my personal commitment that all of us in the Southwest Region will continue fretting — and working to overcome — the very real challenge of reconnecting kids with nature.

-Dr. Benjamin Tuggle, Southwest Regional Director, U.S. Fish and Wildlife Service



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Dr. Tuggle at an Archery in the Schools event at Deep Fork National Wildlife Refuge.

SOUTHWEST REGION DIVISION OF FISHERIES

Recreational Fishing and Outdoor Education Program Highlights

For more than a century, the Fisheries Program of the U.S. Fish and Wildlife Service created and supported opportunities to catch fish and to spend time outdoors. Over time, our program evolved from a single focus on recreational fishing to a larger effort to reconnect Americans with their natural world. We engage local communities to help us provide hands-on learning experiences for youth. We work side by side with States, Native American tribes, conservation organizations, and the recreational fishing industry in pursuit of our shared goals.

There is growing evidence that today's children are being pulled away from outdoor experiences to a virtual indoor reality. This disconnect from nature has serious long-term implications for the health and well being of our nation's children and for the future stewardship of our natural resources. In 2007, the FWS declared that "Connecting People with Nature" is among our highest priorities; none of the FWS' other commitments for resource conservation will achieve long term success if we do not accomplish this priority. The Fisheries Program of the Southwest Region has developed a strategy for Connecting Young People with Nature. This document highlights the actions we took to implement the Strategy in Fiscal Year (FY) 2010.

Our primary objectives were to:

- Foster a healthy interaction between people and the outdoors, especially young people;
- Enhance people's understanding and appreciation of the natural world;
- Demonstrate how FWS and conservation play important roles in their communities;
- Introduce a range of natural resource career opportunities to young adults; and
- Develop a strong recruitment mechanism for future employees.

If getting youth active in the outdoors is important to you, please consider joining us in our efforts. Visit our webpage at www.fws.gov or www.volunteer.gov.



Mike Oetker and his daughters fishing in the Atlantic Ocean.

Sincerely,

Mike Oetker

Assistant Regional Director - Fisheries

Summary of FY2010 Activities

The Region 2 Fisheries Program has long been engaged in community level, recreationally-oriented activities that provide hands-on learning experiences for youth that foster an early appreciation for nature, and in many cases, change lives in the process. Our RFOEP implemented new, creative ways to energize youth and instilled life-long commitments to protect, preserve and enjoy our natural environment and cultural treasures. We were able to support educational programs at four stations in FY10. The funding helped to increase the number of fishing events, school tours and curriculum activities as well as visitation to our Fisheries facilities (Table 1). We were able to also increase the quality of activities provided by purchasing necessary equipment and supplies. Now that the ground work has been laid and programs have been developed we anticipate even greater increases in the future and our goal is to support programs at all of our field stations.

With our funding we were able to improve our youth hiring program. Stations received additional funding which more adequately covered the cost of employing the participants. The funding allowed some stations to hire Youth Conservation Corps (YCC) leaders and others to hire more participants compared to FY09. For example, the Alchesay – Williams Creek National Fish Hatchery (NFH) was able to hire five students compared to one in FY09. The Dexter National Fish Hatchery and Technology Center (NFH&TC) was able to hire four students and a leader in FY10 with the funding. Tishomingo NFH was able to increase the number of weeks the students worked.

Table 1. Percent increase in performance measures between FY09 and FY10 for stations receiving funds from the RFOEP.

Performance measure	Funded Stations (n=4)
Number of Fishing activities/events	100%
Number of National Fishing Week activities/events	25%
Number of School Curriculum activities/events	18%
Number of School Tour activities/events	21%
Number of Aquatic outreach/education activities/events	14%
Number of Children visitors	21%
Number of Adult visitors	19%

In FY 2010, we committed staff resources to ensure RFOEP activities were effectively delivered to young people in Region 2. Jennifer Johnson, Arizona Fish and Wildlife Conservation Office (FWCO) and Rebecca Fillmore, Tishomingo National Fish Hatchery (NFH) served as Coordinators for the RFOEP. The Coordinators dedicated their time to:

- Provide expertise and support to the Southwest Region Fisheries staff so they can provide outdoor activities and experiences to connect youth with nature
- Coordinate events with other FWS programs and with State and Tribal efforts
- Expand aquatic education and outreach efforts across the region
- Develop and maintain a library of educational books and materials that can be checked out by field stations
- Develop interactive displays, outreach, and activities to be shared among the stations
- Development of statewide fisheries brochures



With our funding in FY 2010 we were able to purchase the following for our field stations:

- "Freshwater Manual of North America: A How-To Fishing & Boating Manual"
 - Statewide brochures that highlight each of our field stations
 - Fishing poles and equipment for fishing derbies and clinics
 - Brochures, coloring books, stickers and posters, Project WET kids activity booklets and general supplies
- We were also able to support the following programs and events:
- Biologist-in-Training and Native Fish Identification courses – Tishomingo NFH
 - Outdoor Skills Program that provides hands-on wildlife learning experiences for local fifth grade students – Inks Dam NFH
 - Restoration and opening of two interpretive trails– Inks Dam NFH
 - Participation in several summer camps and youth practicum's that targeted Native American youth – New Mexico FWCO
 - Biologist-in-Training courses across northeast Arizona – Arizona FWCO
 - Youth fishing derbies at Kaibab Paiute Indian Reservation and Fort Apache Indian Reservation – Arizona FWCO
 - "Loan-A-Rod" Program for youth at the Show Low Library – Arizona FWCO
 - Participation in the National Fisheries Friends Partnership – Tishomingo NFH, Inks Dam NFH
 - YCC Programs at five FWS stations and the Mescalero Tribal Fish Hatchery



Youth in Conservation Careers

The Southwest Region has been proactive in its efforts to ensure that talented and capable young people are interested in entering public service as natural resource professionals. The Fisheries Program will continue to encourage youth from Tribal communities and underserved areas to explore careers in the fisheries conservation field through the Youth Conservation Corps and the Student Temporary Employment Program (STEP).



Dexter NFH&TC Youth Hiring

Five local high school students were selected to participate in the Dexter National Fish Hatchery and Technology Center (NFH&TC) YCC Program. Environmental education focused on imperiled fishes of the Colorado, San Juan, Rio Grande, Pecos and other western rivers. Field trips were taken to Bitter Lake National Wildlife Refuge, Carson National Forest, and Mora NFH&TC.

Ben Morbitzer, an aquaculture student started his internship for Dexter NFH&TC. He assisted fish culture staff with daily activities and cross trained in the fish health and molecular ecology programs. Ben's experience helped complete the requirements for a course at Hocking College, OH.



Dexter YCC crew fin clipping channel catfish prior to stocking for a youth fishing derby.

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Youth Conservation Corps – Inks Dam NFH



Volunteer George Brugnoli, and student Cramer Eaves help YCC enrollee Aimee Clendennen install posts for the Ashe Juniper Trail signs.

The objective of the YCC program in 2010 at Inks Dam NFH was to construct facilities that will be used by the public for many years. The crew installed sign markers, cleared walking paths, designed and published a self-guided tour of Ashe Juniper Trail, conducted hatchery tours, built a bird viewing site, created wildlife habitat, and provided educational activities on and off station. The YCC program has become an integral part of the outreach and education efforts at Inks Dam NFH. Students also worked alongside hatchery staff to learn about hatchery production, fish biology, and aquatic habitats.

Cindy Fronk, USFWS

STEP and YCC Programs at Uvalde NFH

Katrina Huerta says it best in her own words, "As the first ever STEP student at Uvalde NFH, one of my responsibilities is to ensure I do all that I can to assist in any activities the station takes on and to make sure they are done in a timely, yet safe manner for us and our fish. Another is to make sure that I do my very best so I leave a good lasting impression so future students may have an opportunity to be a part of an elite group who can learn and enjoy such a great program. But by far the most important responsibility as a STEP student is to reach out to as many people as possible, the young and the young at heart, to educate them on our efforts to conserve and recover not only the five endangered species we currently keep on station, but all of our imperiled aquatic species. I very much enjoy and value all that I do and what I've learned during my time at Uvalde NFH and hope to eventually start a career with the FWS."



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Katrina Huerta, student, assists with hatchery operations.

Uvalde NFH also hired three YCC students. Students learned about fish biology and behavior, conservation, the importance of protecting threatened and endangered species, and different careers involving natural resources over their time at Uvalde NFH.

Youth Conservation Corps – Mescalero Tribal Fish Hatchery

Twelve Native American students from the Mescalero Apache Tribe were selected to participate in the YCC program at the Tribal fish hatchery. The program allowed these young Native American students opportunities and experiences to partake in activities to care for Mother-Earth and her surroundings. The students were able to engage in numerous projects ranging from hatchery operations, angler access, riparian and stream restoration, springs renovation, river surveys, and pond development. On multiple occasions, several participants expressed a great interest in considering different occupations in the natural resources field.



Mike Montoya, Mescalero Tribal Fish Hatchery

Stuart Leon FWS Washington Office – Fisheries visiting the YCC staff and New Mexico FWCO staff at Mescalero Tribal Fish Hatchery.

Summer Youth Hiring at Tishomingo NFH



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YCC student maintaining channel catfish egg jars after spawning.

The Tishomingo NFH was fortunate to serve as a host site for four youth workers this summer. Two of the young men worked with the hatchery through the YCC program. The other two young men were both college students and participated in the Workforce Oklahoma Youth Employment Program. Their primary focus this summer was to aid staff in the rearing of juvenile paddlefish. The participants fed, cleaned tanks, and tagged and stocked paddlefish into their native habitat in Oklahoma. The youth workers also helped NFH staff during channel catfish spawning season, and assisted with the rearing of alligator gar, alligator snapping turtle nesting, and completed maintenance tasks on the facility.

Alchesay – Williams Creek NFH YCC Program

Six local youth were employed at the Alchesay – Williams Creek NFH this summer through the YCC program. Five of the students were White Mountain Apache Tribal members. The youth helped with feeding fish, cleaning tanks, loading stocking trucks, and recording water quality data. The students also helped hatchery staff with sample counts, selection of broodstock, fin clipping and fish inventories. The YCC program gave the students an opportunity to serve their community while learning new skills and provided insight into possible career opportunities.



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YCC participants helping load a stocking truck with Apache trout to be stocked on the Fort Apache Indian Reservation.

Youth Hiring at the Arizona FWCO

The Arizona FWCO was able to hire 13 STEP and seasonal positions this summer. The “Apache Trout Crew” consisted of six college students, three high school students and four seasonal employees. Seven of our crew members were Tribal members and several had worked for us in previous years. The crews worked mostly on Apache trout recovery, but also found time to assist with fishery surveys on the San Carlos Indian Reservation and Navajo Nation. The crew also participated in a two-day career workshop that featured many speakers from diverse backgrounds.

Staff created a video highlighting our 2009 youth hiring and Apache trout recovery efforts. It can be found on our facebook fan page under the video tab at www.facebook.com/AZFWCO.



Patti Ferlisi, USFWS

AZFWCO's 2010 summer crew consisting of seven tribal members, six college students, and three high school students.

New Mexico FWCO Reaches Out to Native American Youth



Joe Early, USFWS

Angela James, Fish Biologist, shows college students some native fishes of the Rio Grande while discussing job opportunities.

Staff from the New Mexico FWCO participated in an outreach workshop at the Southwestern Indian Polytechnic Institute to provide an opportunity for Native American college students to learn about job and internship opportunities available within the Department of the Interior. Approximately 500 college students participated in the workshop. New Mexico FWCO staff described their job duties, including monitoring and management efforts for endangered and threatened fish species, recreation and native species restoration on Tribal lands, and salvage efforts for the Rio Grande silvery minnow. Staff also presented a live fish display which included the native fishes of the Rio Grande River basin.

FWS Stations Feature Jobs at School Career Days

Many of our stations reach out to local schools to educate students on possible careers with the FWS. The following are just a few examples.

- Dexter NFH&TC participated in the Dexter High School's "POS-i-Tive Change" Fair. They, along with other community members from a variety of professions, met with students (grades 8 – 12) in round table discussion of career opportunities and answered questions concerning training required for the different professions represented. Dexter NFH&TC staff also attended the Roswell High School Career Day. Staff spoke to approximately 200 high school juniors and seniors about their careers, educational backgrounds and work conducted by the FWS.
- Dexter NFH&TC staff presented a talk at the Eubank Elementary School in Albuquerque, NM to approximately 200 students. Wade Wilson, Fish and Wildlife Biologist, presented information on basic lab procedures including DNA collection/extraction, and analysis of sequence and microsatellite data with case studies on how the data is used upon collection.
- Stewart Jacks, Project Leader, from the Arizona FWCO participated in the Blue Ridge Junior High School Career Day. Eighty-five students heard about careers in biology and natural resources.



Dexter NFH&TC, USFWS

*Sherri Baker, Molecular Ecology
Laboratory Manager, discussing work
conducted at Dexter NFH&TC.*



*Wade Wilson, Fish and Wildlife Biologist,
discussing careers in genetics at Eubank
Elementary School in Albuquerque, NM.*

Oklahoma FWCO Provides Field Experience for Students



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Oklahoma FWCO staff show college students a large paddlefish captured during a survey and discuss paddlefish biology and management.

In 2010, students from Northeastern Oklahoma State University and Rogers State University geared up to help the Oklahoma FWCO conduct paddlefish surveys. Staff from the Oklahoma FWCO developed workshops that gave an overview of fisheries management to the students while providing hands-on experience on how to conduct a stock assessment survey.

Natural Resource Summer Camp Visits Mora NFH&TC

The Oklahoma State University, Natural Resource Ecology and Management Summer Forestry Camp visited Mora NFH&TC in May. This program gives upperclassmen an opportunity to visit and perform hands-on activities at potential sites of employment. Students assisted the station biologist with sample counting, raceway inventories, and length and weight measurements. Most remarked that this was the most “fun” that they had during the program and a welcome change from lecture style visits. The summer camp program intends to visit in the future, and hopefully will bring more fisheries students with them.



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Students from Oklahoma State University assist with hatchery activities at Mora NFH&TC during a Forestry Summer Camp.

Environmental Education Programs

Our Fisheries stations are integral parts of the communities in which they are located and personnel help instill the nation's conservation ethic in our children. Stations are education centers that provide hands-on experiences and opportunities for discovery.



Biologist-in-Training Program Implemented at AZFWCO

Biologist-in-Training (BiT) is an exciting program designed to guide students through a fun, hands-on exploration of aquatic habitats. The activities are adaptable to fit a variety of needs. Several stations in the region have used portions of the program in their educational programs.

Arizona FWCO staff presented a BiT course to 30 students (grades K-3) at the Successful Beginnings Charter School and to 15 youth at the Sequoia Village School "Panther Pals" After-School Program. The students learned about fish anatomy, assembled a fish out of people, and created their own fish to take home. Staff also presented a BiT course to 120 summer campers (ages 5-12) at the Flagstaff Athletic Club. Students learned about native fish conservation and fish anatomy and morphology. Students went home with many prizes ranging from new fishing poles to native fish bookmarks and stickers.



Students learn about fish anatomy by making a fish out of people during a BiT course.

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Tishomingo NFH Conducts Educational Clinics



Kids learning about the fins, colors, and body shapes of fish during a BiT course.

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Tishomingo NFH staff developed and conducted two new clinics for youth. The first class, "Native Fish ID", focused on proper identification and collection of common native fishes. Children learned to net and seine fish from a display pool then participated in hands-on activities related to proper fish identification. Hatchery biologists guided kids and participating parents on a tour of the hatchery, followed by activities and games that focused on conservation of aquatic resources. At the end of the course children received BiT completion certificates and stickers.

Women in Science Day

Every September, staff from the San Marcos NFH&TC participate in the Ladybird Johnson's Wildflower Center Women in Science Day. The event involves participation of women scientists from diverse specialties and is targeted towards children and teenage girls. Staff focus on introducing the young women to water conservation, threatened and endangered species in the area, and aquatic ecology. Children love the hands-on portion of our exhibit which involves an aquatic petting zoo consisting of touch trays containing small crayfish, amphipods, mayfly larvae, dragonfly nymphs, aquatic worms, and several species of native snails. Participants have the opportunity to observe the many careers available to women in the science field, and can interact with scientists and ask questions about each field and the schooling required for a similar career.



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Young women checking out the aquatic petting zoo at the Women in Science Day.

“Kids in the Woods” Program



Jennifer Johnson, USFWS

Nathan Chase, FWS employee, helping a boy learn to cast a fly fishing rod.

Arizona FWCO staff partnered with the U.S. Forest Service on the “Kids in the Woods” Program for a fourth summer. “Kids in the Woods” is a series of free summer programs designed to give kids the opportunity to learn and have fun in the outdoors. Arizona FWCO programs included “Fashion-A-Fish” which focused on fish anatomy and morphology, “Native Fish Bingo” which focused on native fish conservation, and “Biologist in Training” which focused on healthy aquatic habitats, and an “Introduction to Fly Fishing” course. This is a great program and supports several FWS programs and initiatives

Gifted Students Visit Willow Beach NFH



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Gifted students learn about fish anatomy and the importance of fish health at the Willow Beach NFH.

Willow Beach NFH hosted a group of gifted children from Clark County, NV. The kids accompanied by the Clark County Highly Gifted Coordinator and a few parents participated in a tour of the hatchery and a fish biology lesson with a dissection. The participants all got involved and each dissected their own fish. Diagrams of external and internal anatomy helped guide everyone through the process. This was a small group so they experienced one-on-one instruction. Five children and four adults participated in the event.

Future Generations Service Learning Camp

Arizona FWCO staff participated in the Future Generations Service Learning Camp near the Williams Creek NFH. Staff led approximately 40 Native American teenagers from around the state in doing hands-on projects of measuring fish, electrofishing a stream, and learning about Apache trout recovery work. Staff from Williams Creek NFH gave the students a tour of the hatchery and demonstrated daily activities. Students also learned about water quality, forestry practices, violence prevention, search and rescue operations and higher education opportunities over the three-day camp.



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Marina Dazen, FWS employee, leads a group of students on a stream electrofishing exercise as part of the Future Generations Service Learning Camp.

New Mexico FWCO Participates in Summer Camps

The New Mexico FWCO participated in the 15th Annual Southwest Region-Native American Fish & Wildlife Society Youth Practicum at Hermosa Ranch, NM. Fifteen Native American high school students from the Southwest Region participated in the week-long practicum. Staff from the New Mexico FWCO also participated in the the 3rd Annual Tribal Youth Environmental Summer Camp (TYESC) at Nambe Falls, Nambe Pueblo, NM. The TYESC was hosted by Eight Northern Indian Pueblos Council, Inc. Twenty-five Native American high school and middle school students from various NM Tribes/Pueblos participated in the week-long practicum. New Mexico FWCO biologists also participated in the NM Forestry Camp at Seven Springs State Fish Hatchery. The field camp was four full days of hands-on sessions on various environmental topics and techniques. The youth camp included 20 students with an age range of 13 to 17 years of age.

During the camps students learned about the safe usage of backpack electrofishing to survey streams, data collection (e.g., fish identification, fish lengths & weights, stream habitat), the value of gathering accurate data, and how data is used in resource management. Students rotated through each task of electrofishing, netting, weighing, measuring, and data recording.

Steve Dobrott, Manager, Ladder Ranch



Chris Kitcheyan, USFWS



Angela, James, USFWS

Science, Technology, Engineering, and Math Camp

The Arizona FWCO participated in Sequoia Village School's Summer Science, Technology Engineering, and Math (STEM) program. Students were presented information on freshwater ecosystems, water quality, habitat degradation, endangered species, and invasive species. The last week of the camp the students toured Williams Creek NFH. Students learned to measure and identify fish and invertebrates and identified key components of a healthy stream. Students learned about the different types of gears biologists use in the field. After completing the four-week camp the students were presented with their Biologist in Training certificates.



Left: Students measure Apache trout.
Below: A student tries on a backpack electroshocker.



Woodland Wildlife Festival and Youth Fishing Derby



Jennifer Johnson, USFWS

A derby participant with her prize,
a new fishing pole!

The Arizona FWCO and Alchey-Williams Creek NFH, participated in the 4th Annual Woodland Wildlife Festival in Pinetop, AZ. Numerous other natural resource agencies and non-governmental groups were also part of the festival. In addition to the booth and Apache trout display tank at the festival, Arizona FWCO staff co-sponsored a youth fishing derby with the Pinetop-Lakeside Chamber of Commerce to kick-off the festival. Approximately 20 children participated and all of them seemed to have a great time.

Local Youth Groups Visit Alchesay – Williams Creek NFH

Staff from the Arizona FWCO assisted Williams Creek NFH staff with a hatchery tour for pre-kindergarteners from the White Mountain Montessori School. There were 10 children who participated along with their parents. The students learned about Apache trout and hatchery operations. Students went home with coloring books and Apache trout stickers.

The Big Brothers Big Sisters of Whiteriver, AZ visited the Alchesay NFH. Fourteen youth spent an afternoon learning about how the hatchery operated, the importance of sport fish on the Fort Apache Indian Reservation, and about native fish conservation.



Jennifer Johnson, USFWS

Jimmy Smith, Fish Biologist, points out recently hatched Apache trout to a group of pre-kindergarteners.

Willow Beach NFH Partners with Arizona Game and Fish Department



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Young anglers baiting their hooks in hopes of catching a rainbow trout.

Tours were conducted at the Willow Beach NFH in conjunction with the Arizona Game and Fish Department Bighorn Sheep workshop tour. The groups were preparing to take a raft trip on the Colorado River to identify and count the Bighorn Sheep. The groups learned about the history of the hatchery, the goals of the FWS, and about culture methods employed at the hatchery while on a walking tour of the facility.

Willow Beach NFH also partnered with Arizona Game and Fish Department to provide a youth fishing clinic on the Colorado River below Davis Dam. The kids were offered instruction on tying knots, choosing the right tackle and casting techniques. Twenty-five kids enjoyed the event.

Uvalde NFH Community Outreach and Education



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*Students touring the Uvalde NFH. (top)
Dalton Elementary School Career Day. (bottom)*

Uvalde NFH staff gave facility tours to the St. Phillips Elementary School kindergarten class, a group of adults from the Triple R-RV Resort and a home-schooled high school biology class. All groups were very interested in the hatchery and expressed interest in returning for additional tours in the future.

Uvalde NFH was also represented at the Dalton Elementary School Career Day. Staff took several species of fish and different pieces of gear to present to the students. Approximately 700 students and 25 adults attended this event.

Staff also gave tours to the First Baptist Church-Mother's Day Out Program, the Travel and Tourism Office for the City of Uvalde, the St. Phillips Episcopal School-First Grade Class, Country Klub Daycare, Old Town Head Start, and the Alphabet Club.

Tourism Increases at Willow Beach NFH

Despite construction surrounding the hatchery, Willow Beach NFH staff gave tours to visitors from four different organizations including elementary and 4-H students, Boy Scouts, and local anglers. Visitors learned the history, function and mission of our hatchery and its role in providing rainbow trout for anglers and recovering razorback sucker and bonytail chub fish populations specific to Lake Mohave and the Colorado River system. Visitors had the opportunity to view the various phases of rainbow trout and razorback sucker production, focusing on serial re-use for rainbow trout culture and solar heated recirculation systems for razorback sucker culture. Several students asked very specific questions, leading us to believe that they may be interested in a future career as fish biologists.



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Willow Beach Staff giving a facility tour to a group of Boy Scouts.

Dragonfly Festival Roswell, New Mexico



Juliana Halvorson

Kids trying to catch a dragonfly with a little help from a FWS employee.

Dexter NFH&TC staff participated in the annual Dragonfly Festival at the Bitter Lakes National Wildlife Refuge. A living stream display was set up with razorback sucker, bonytail, and Colorado pikeminnow for the public to see. Staff described Dexter's program to the visitors and answered questions concerning the Centers activities and mission. An estimated 2,000 to 2,500 people attended despite the rain.



Tishomingo Summer Environmental Education Programs

Tishomingo NFH staff setup educational booths at Murray State Park and the Greater Southwest Historical Museum in Ardmore, OK. The event at Murray State Park reached 150 children from four area schools in OK. Each class of fourth graders spent approximately 25 minutes at the booth while biologists described and answered questions on why and how each species is reared at the hatchery.



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4th Grade Class at Murray State Park after completing a course on aquatic ecology.

Mora NFH&TC Attends Earth Day Celebration

From the beginning, the living stream has been a hit with the kids, teachers, and other presenters. The display allows people to see and observe a rare native trout species, the Gila trout. Staff provided information about the hatchery, including species raised, water use efficiency, information about endangered species and the endangered species act, habitat, reasons for listing the Gila trout, and our success at down-listing them. Overall attendance was 950 kids plus instructors and parents. Several of the schools that participated in this event included Las Vegas, Mora, Pecos, and Wagon Mound elementary schools. Other presenters included The U.S. Forest Service, NM State Forest Service, Sugarite Canyon State Park, NM State Parks, National Park Service, New Mexico Environmental Department, Las Vegas Fire Department, and the Army National Guard.



Living stream with Gila trout at an Earth Day Celebration.

Arizona FWCO Attends Outdoor Expo



Jennifer Johnson, USFWS

An Outdoor Expo participant getting his picture taken as a "Future Biologist".

The Arizona FWCO, with assistance from Alchesay-Williams Creek NFH, set up a booth at the annual Arizona Game and Fish Department Outdoor Expo in Phoenix, AZ. The booth included live Apache trout, native fish quizzes and puzzles, and lots of brochures and handouts. More than 32,000 people participated in the event. On the day dedicated for youth, more than 1,400 young people attended. Of all the kids and adults who tried our "Native or Non-Native" matching game, only one youth correctly matched all the fish to the correct heading. Over the course of the weekend we hopefully inspired many youth (and a couple adults) to become future FWS biologists.

Tishomingo NFH Attends Wildlife Expo and County Fair

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Tishomingo NFH staff provided visitors with educational materials and information on the role of federal hatcheries.

Tishomingo NFH staff participated in the annual Oklahoma Wildlife Expo, 1st Annual Wildlife and Outdoor Education Expo, and the Johnston County Fair. Hatchery staff set up an educational booth and provided information to visitors about the hatchery and the role federal fish hatcheries play in conservation. Adults and children alike enjoyed the live turtles on display and were excited to see alligator snapping turtle eggs for the first time and an alligator gar. Approximately 42,000 people attended the Oklahoma Wildlife Expo; with more than 16,000 of those visitors attending on the first day set aside just for school aged children.

Native Fish on Display at the Hunters' RoundUp

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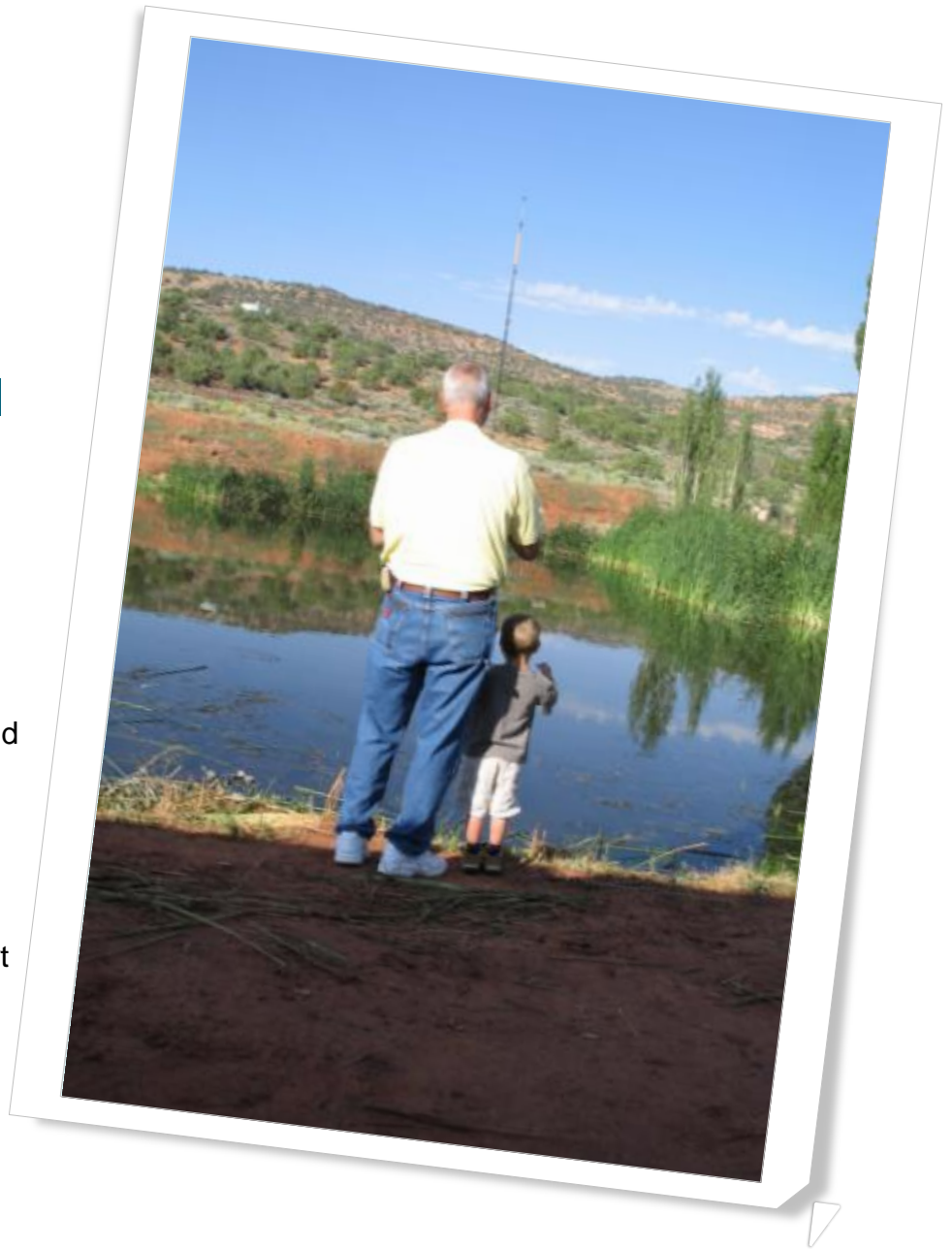


Uvalde NFH booth at the Hunters' Roundup highlighting native fish conservation.

Uvalde NFH participated in the Uvalde Area Chamber of Commerce 28th Annual Hunters' Roundup. The event was a great success with more than 1,300 people attending. Literature was provided to the public and a powerpoint presentation was shown. Bonytail and razorback suckers were displayed in an aquarium, and hatchery insignia items were given away. A small collection of other creatures were also displayed including a snake, turtle, freshwater sponge, and several invertebrates. It was a great hit with the children and adults.

Recreational Fishing

Fishing is more than just catching fish. Fishing can provide an important connection to the outdoors and help build a lasting appreciation for natural resources. Several stations hosted youth fishing derbies and clinics with the support of RFOEP funding.



Uvalde Youth Fishing Derby



USFWS

Derby participant and her catch of the day.

Let's go fishing! This is a statement most children love to hear. The thought of going out to a body of water, throwing a line with a hook and something squishy at the end, added with the expectation of catching something big, is very intriguing to them. At the Uvalde NFH the focus is to stir the interest of the young and the young at heart with the Annual Fishing Derby. It is held during the National Fishing and Boating Week in June. Much preparation goes into this and as the years pass, the organizing, setting up, and gathering donations gets easier as the word is spread as to how much fun it is. The rewards from the effort put into it are multiplied many times over. To hear a simple "thank you" or "we had so much fun" makes this event all worth it. In 2010 we had 180 anglers taking home some 1+ pound catfish and smiles as big as Texas. The event is always free and open to children ages 4-13 and this year included senior citizens. The hatchery plans to continue this event as the young ones look forward to a day of catching a big fish.

AZFWCO Participates in Youth Fishing Derbies

The Arizona FWCO set up an educational booth at the annual White Mountain Apache Tribe Youth Fishing Derby. Youth decorated fish that were made out of recycled soda cans. The derby was attended by more than 1,000 youth. Alchesay –Williams Creek NFH provided fish for the derby and for a special tank for the youngest anglers.

Arizona FWCO staff delivered rainbow trout to the Kaibab Paiute Indian Tribe for their annual Youth Fishing Derby. The trout were provided by the Alchesay –Williams Creek NFH. Several fishing poles were given away as prizes to the participants.



Danny Buleis, Kaibab Paiute Tribe

Participants at the Kaibab Paiute annual youth fishing derby with some prizes.

Tishomingo NFH Kids Fishing Derby

Tishomingo NFH hosted its 16th Annual Fishing Derby in June. Three hundred and thirty-one kids from seven states and more than 20 local communities fished for channel catfish from hatchery ponds. Registration for the event increased more than 21% from last year. The fishing derby provides a free fishing experience that teaches children about recreational fishing and why healthy aquatic ecosystems are important to people and the environment. Several children described the day as their best or first fishing experience ever. The event would not have been as successful without the donations of prizes, refreshments and time from several partners that was matched with RFOEP funds.



USFWS

Kids had little difficulty catching their limit of channel catfish at the Tishomingo NFH Kids Fishing Derby.

AZFWCO Starts “Loan-A-Rod” Program with Local Library



USFWS

A “Loan-A-Rod” backpack, available to checkout at the Show Low Public Library.

The Arizona FWCO, in cooperation with the Show Low Public Library, developed a “Loan-A-Rod” program for youth. This program provides fishing poles to youth who are interested in the sport, but do not have the proper equipment. Youth are able to check out a backpack that contains a fishing pole, tackle, Tribal and State fishing regulations, and general information about fishing for two weeks. The backpack also contains a copy of the Freshwater Manual of North America: A How-To Fishing & Boating Manual. The Loan-A-Rod Program kicked-off in June. A similar program is being developed with the Mohave County Library.

Outreach Short Stories

Tishomingo NFH Helps with Easter Egg Hunt - The Tishomingo NFH participated in the Tishomingo Easter Egg Hunt in March. Tishomingo NFH's educational display attracted more than 150 children and 75 adults. The alligator snapping turtle, by far, was the star of the show with one child even naming the turtle "Flapjack"!

Community Parades – Arizona FWCO and Alchesay –Williams Creek NFH staff and volunteers participated in the annual Show Low Shines Electric Lights Parade. The crew decorated our electrofishing boat with colorful lights and ornaments and towed it in the parade. The hatchery decorated their large fish hauling tank. Arizona FWCO staff also decorated and towed the electrofishing boat in the annual Fall Festival Parade in Lakeside, AZ.

New Interpretive Signs and Kiosks at Willow Beach NFH - Willow Beach NFH constructed a kiosk and designed an informational sign about the fish on station. The full color, aluminum sign is now on display on the fencing surrounding the raceways.

Arizona Center for Afterschool Excellence – The Arizona FWCO participated in the Regional Meeting of the Arizona Center for Afterschool Excellence. The coalition's members work to improve access to high quality out-of-school learning opportunities for all AZ children and youth through community capacity building, advocacy, and professional development.

Summer Reading Program at Local Public Libraries - Dexter NFH&TC staff spoke with approximately 60 Roswell elementary school students at the Roswell public library. Dexter staff also participated in a program presented at the Artesia, NM Library Summer Program. Staff provided an overview of the work conducted at the Dexter NFH&TC and the importance of conservation to 48 parents and children.

Art Projects at Uvalde NFH - In an effort to get the community of Uvalde, TX more interested in the Uvalde NFH, staff went to talk to the local high school hoping to interest them in completing an art project that would involve fish with the results ultimately displayed at the hatchery. As a result the entire Uvalde School District featured fish in their art projects this year. The junior high school's paper-mache art project is now on permanent display at the hatchery.

"Enchanted Evenings" Summer Presentation Series – Dexter NFH&TC staff participated in the Bottomless Lakes State Park "Enchanted Evenings" summer presentation series. A general overview on the FWS role in fisheries management in the southwestern U.S., the history of the Dexter NFH&TC and the various programs currently being conducted at the center was given. The presentation was attended by 30 visitors.

Kids in the Creek at Inks Dam NFH - Five school groups, with hundreds of students in each group, visited the hatchery this summer to participate in the Inks Dam NFH's Outdoor Skills and Education Program. These students, teachers, and parents had the opportunity to experience "Kids in the Creek", Fishing Skills 101, printmaking, wildflower identification, and "What's Under Your Feet?"

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