



PFW's Horseshoe Spring Grassland Restoration Project. Before and after photos of invasive juniper removal. *Photos by Dominic Barrett*

AZFWCO Staff

Pinetop

- Vacant, Project Leader
- Vacant, Assistant Project Leader
- Jeremy Voeltz, Project Coordinator
- Dominic Barrett, Partners for Fish & Wildlife Biologist
- Jennifer Johnson, Fish Biologist
- Kayla Barrett, Fish and Wildlife Biologist
- Travis Taylor, Biological Technician
- Karla McGhan, Administrative Officer
- Patti Ferlisi, Office Assistant



Flagstaff

- Kirk Young, Project Coordinator
- Randy Van Haverbeke, Senior Fish Biologist
- Dennis Stone, Fish Biologist
- Mike Pillow, Fish Biologist
- Jim Walters, Biological Technician
- Rick Deshler, Biological Technician

Parker

- Mitch Thorson, Fish Biologist
- Tammy Knecht, Fish Biologist
- Robert Randall, Fish Biologist
- John Naugle, Biological Technician
- Sean O'Kray, Biological Technician

Apache Trout Crew

- Alex Poole, 1040 Seasonal
- Andrew Larson, Pathways Student
- Barney Gregg, Pathways Student
- Brian Hickerson, Pathways Student
- Brianna Thorson, Pathways Student
- Ethan Jacks, Pathways Student
- Justin Covington, Pathways Student

Partnerships and Accountability

Jeremy Voeltz completed the 2013 Fisheries Accomplishments reporting in FIS with assistance from several staff members.

AZFWCO staff submitted requests to attend the annual Desert Fishes Council meeting in November. The DFC meeting will be held in AZFWCO's backyard in Flagstaff, Arizona this year, and presentation abstracts and registration are due October 1.

Dominic Barrett participated in multiple meetings with AGFD (Arizona Game and Fish Department), contractors, and a private landowner to discuss the Turkey Spring Forest Management Project thinning prescription, wetland restoration, future opportunities, and wildlife considerations. Contracted mechanical thinning will begin in September.

Flagstaff field staff met with NPS (National Park Service) and GCMRC (Grand Canyon Monitoring and Research Center) staff members to iron out logistics for translocations of humpback chub this October during regularly scheduled fall monitoring in the LCR (Little Colorado River). A second attempt is necessary due to the loss of translocation fish from flash flooding that occurred during translocation efforts in July. If NPS will provide helicopter support we will again attempt to pull humpback chub from the LCR for grow-out at SNARRC (future use at Havasu and Shinumu creeks) and transfer to Chute Falls.

Dominic met with AGFD to identify potential wetland restoration projects on the Apache-Sitgreaves National Forest. Efforts will reduce erosion, increase water retention, and benefit nesting and migratory waterfowl.

Kayla Barrett participated in the NFHP Communications Committee teleconference.

Dennis Stone met with Jeff Muehlbauer (GCMRC) to discuss macroinvertebrate sampling, fish feeding behavior and distribution, and logistics in the Little Colorado River to assist him with his LCR food base research.

Dominic participated in the Regional Fisheries conference call, and Intermountain West Joint Venture conference call.

Jeremy participated in the most recent Spikedace and Loach Minnow Recovery Team meeting. The team is charged with revision of recovery plans for both species. The loach minnow plan is nearing a solid final draft.

Dominic participated in a meeting with the National Park Service Rivers, Trails, and Conservation Assistance Program, Fred Phillips Consulting, LLC, and the City of Holbrook to discuss restoration priorities and a grant proposal.

Dennis provided GCMRC with a list of 155 humpback chub and 16 flannelmouth suckers that USFWS captured since 2007 that contained only an old 400 KHz PIT tag and we implanted a newer 134.2 KHz PIT tag, so they can make a decision over which type of new PIT tag scanners to buy. PIT tag scanners that can detect both tag frequencies are being discontinued, and this data will enable partners information-based assessment of field equipment needs.

AZFWCO staff participated in the

monthly Fishery Coordination meeting among AZFWCO, A-WC NFH (Alchesay-Williams Creek National Fish Hatchery), & WMAT-WORD (White Mountain Apache Tribe-Wildlife & Outdoor Recreation Division).

Dominic participated in a meeting with the White Mountain Land Trust, AGFD, USFS (U.S. Forest Service), and others to discuss and plan private landowner workshops funded by the Intermountain West Joint Venture's (IWJV) Capacity Grant program. Workshops will provide opportunities for landowners to learn about state and federal financial assistance programs. Dominic used ArcGIS to identify areas containing private land wetlands within IWJV Bird Habitat Conservation Areas in Apache, Greenlee, and Navajo Counties.



Dominic met with AGFD and a private landowner to solicit additional financial support for the PFW (Partners for Fish and Wildlife Program) funded Twin Springs Canyon Grazing Management Project. The project will improve cattle distribution and management and decrease grazing pressure along the Blue River.

Dominic participated in an Apache County NRCD Local Work Group Meeting and tour of conservation projects in Apache County.

Public Use

AZFWCO facebook page currently has 402 “likes” from 20 countries. The page posts information on our staff, upcoming projects, educational events, and volunteer opportunities across the state. Check us out at

www.facebook.com/AZFWCO.



Kayla updated the DFHP Facebook page and reviewed several DFHP proposals for FY14.

Dominic worked with the City of Holbrook, NPS, AGFD, and others to develop a wildlife identification brochure for the Hidden Cove Riparian Restoration Project.

Habitat Conservation and Management

Kayla completed timeline and calendar for FY14 DFHP proposals and distributed to steering committee and spoke with several people with questions regarding DFHP’s funding opportunity for FY14.

Dominic marked alligator junipers “to save” for the Turkey Spring Forest Management Project. Ponderosa pines will be marked in September.



Kayla continued to work on the DFHP project database for internal use and started coordinating the DFHP annual meeting in November.

Dominic met with private landowners to

organize three cultural resource surveys in support of PFW funded Milligan Valley Riparian Restoration Project, Blue River Native Fish Restoration Project, and Twin Springs Canyon Grazing Management Project. All three cultural resource surveys were completed by contractors in August.

Dominic marked project boundaries and archaeological sites while Rich Calamusso, Equipment Operator from Sevilleta NWR, began mechanical mastication within the Clear Creek Canyon Grassland Restoration Project area.



Kayla developed the DFHP newsletter for summer 2013. The final version will be ready for distribution this week.

Tammy Knecht completed monthly water quality monitoring for Alamo Lake.

Kayla coordinated with DFHP project leads from past funded projects to get updates on the projects.

Dominic completed a Section 7 consultation for the PFW funded Clear Creek Canyon Grassland Restoration Project. The project will be completed September 2013.

Kayla reviewed the draft version of the 2014 MSCGP proposal that has been developed to address FHP needs at a regional level.

Cooperation with Native Americans

Jeremy and staff from the A-WC NFH assisted WMAT-WORD with the stocking of 30,000 channel catfish into lakes and tanks on the Fort Apache Indian Reservation. The fish were grown and delivered by staff from the Inks Dam NFH in Texas.

Jeremy assisted the White Mountain Apache Tribe with a Tribal Wildlife Grant (TWG) application entitled Native Fish Monitoring and Management on the Fort Apache Indian Reservation. Jeremy and Chris Kitcheyan (New

Mexico FWCO) reviewed a Navajo Nation TWS application entitled "Implementation of a Native Fish Annual Monitoring Program." If funded, staff from the Arizona FWCO will assist in implementation of both projects.

Jeremy and staff from the San Carlos Recreation and Wildlife Department have set up a meeting in September to discuss fisheries management on the San Carlos Apache Reservation. The 2011 Wallow Fire and the recent drying of San Carlos Lake have

significantly reduced sportfish related revenue on the Reservation. In addition, there are on-going talks about native fish restoration project potential on the Reservation.

Mitch Thorson worked with Carl Harper (Chief Game Warden) to secure permitting for next year's research on Colorado River Indian Tribe (CRIT) lands. Permits are now in place for MSCP funded work on razorback sucker and bonytail movement and survival on CRIT portions of the Lower Colorado River.

Aquatic Species Conservation and Management

Randy Van Haverbeke participated as co-PI with Bill Persons on the mainstem humpback chub aggregation monitoring trip. The trip was successful in that quite a few humpback chub were captured outside of known aggregation sites and chub were analyzed by ultrasound as part of a project to look for the presence of eggs. Several of the chub captured in the mainstem had egg development occurring.

John Naugle and Sean O'Kray focused Salvinia control efforts in Reach 5 of the Lower Colorado River treatment area. Control efforts took place at the big hot spot North of Mitchell's Camp. Due to the site being on Cibola NWR, Palo Verde Irrigation District (PVID) cannot clear the bank to access Salvinia growing there. John and Sean have been manually pulling out dead cattails to get back to Salvinia near the bank. The crew has conducted in-depth surveys of Reach 5 daily in search of Salvinia and has found next to nothing growing except at sites already

documented.



Sean and John conducted water quality monitoring at Three Fingers Lake, High Levee Pond, and the PVID outfall drain. Chemical analysis will occur at EuroFins (Eaton Analytical) Lab in Monrovia California.

The Apache Trout Crew completed mapping habitat and conducting population surveys in two Apache trout streams using the Basinwide

Visual Estimation Technique.



Tammy and Rob retrieved ten Submersible Underwater Receivers (SUR) for the CRIT razorback and bonytail project. After downloading the data from the SURs there appears to be little fish movement taking place. The data will have to be looked at more closely but so far no movement to report. Tammy and Rob also tracked sonic telemetry tags within the CRIT project area of the Colorado River.

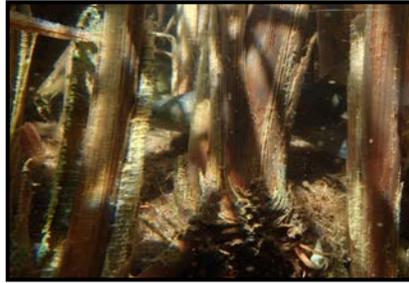
Kirk Young participated in the Long Term Experimental Management Plan (LTEMP) workshop in Flagstaff. An EIS is being prepared for the LTEMP that will guide management

Aquatic Species Conservation and Management *continued...*

in the Grand Canyon for the 15-20 years. The purpose of the workshop was to present initial results of possible EIS alternatives modeled against resource-specific performance metrics, demonstrate the use of multi-criteria decision analysis techniques to compare alternatives, and solicit feedback on this early stage of the analysis.

Randy worked on data analyses and writing for the 2013 annual report for GCMRC. The report will summarize our monitoring activities on humpback chub in the Little Colorado River since fall 2000.

Rob snorkel-surveyed the Parker Dam Pond and observed approximately five different age classes of bonytail within the pond.



Randy spent time working on a draft manuscript on establishing a refuge population of humpback chub at Dexter and translocation methods. Not sure where this will go, but Randy was inspired by the importance of these efforts.

Rob placed remote PIT tag scanners into each backwater in an attempt to collect population estimates from the off-channel big

river fish habitats.

Our Pathways students completed their summer internships with AZFWCO where they primarily worked on Apache trout recovery projects. The group was recognized at a special awards ceremony. Good luck to each of them. Alex Poole was voted employee of the summer by his co-workers. David Kuhn volunteered with AZFWCO for two weeks and won our raffle for a chainsaw carved Apache trout.



Leadership in Science and Technology

Mike Pillow has been analyzing data linking old tags to new tags, to prepare a manuscript on age of humpback chub. Several humpback chub have been linked back to original tagging and data collection over 25 years ago.

Dennis has been working on a Chute Falls humpback chub translocation manuscript. The analysis of a decades worth of data is a significant effort.

Tammy submitted a revised copy of the Lake Havasu Lake report to Mitch for review.

Rob drafted the 2013 Mohave Lake report and submitted for review.

Randy reviewed three manuscripts. 1) Bill Pine's manuscript dealing

with differential length weight relationships of chub through time (Journal of Fish and Wildlife Management) 2) Charles Yakulic's manuscript dealing with differential life history patterns of humpback chub (Journal of Fish Ecology) 3) Paul Marsh's paper dealing with telemetry of razorback suckers in the lower Colorado River (Southwestern Naturalist). Randy will likely be a co-author on the second manuscript.

Mike edited and co-authored, along with LCR volunteer Nicole Bransome (DOI), an article that has been submitted to Newswave, a U.S. Department of Interior newsletter. The article is primarily about the collaborative effort between DOI agencies under the Glen Canyon Dam Adaptive

Management Program (GCDAMP) to inform decisions on dam operations. The article also briefly describes how research and monitoring efforts, such as USFWS operations in the LCR, ties in with the overall goal of the GCDAMP.

Mike has been examining the GCMRC fisheries database and old ASU datasheets from the early to mid-1990's to find records of humpback chub that were given floy tags or Carlin tags in the late 1970s and 1980s and then given PIT tags in the 1990s. The links between old tags and new can add decades of capture data (size, capture location, etc.) to fish that are still being captured in the Little Colorado and Colorado rivers today.

Kirk and Dennis completed the 2nd

Leadership in Science and Technology *continued...*

and final series of Passive Integrated Transponder (PIT) tag experiments at SNARRC. The experiments included evaluation of mortality, tag retention and growth associated with tagging small

humpback chub with currently used PIT tags, newly available small PIT tags, and Visible Implant Elastomer tags. Fish for this series of experiments ranged from 60-80 mm in total length. Post-tagging

evaluation of the two experimental series will take place over 60 days, with final fish workup taking place in September and October. The study is in partnership with USGS.

Workforce Management

Brianna Thorson volunteered for three days with the Mexican Wolf Recovery Program in Alpine, Arizona. Brianna learned about the Mexican Wolf Recovery program and gained experience with trapping and telemetry.

Dennis took a) GSA SmartPay Travel Card Training, b) DOI Charge Card Refresher Course, and then completed my DOI Integrated Charge Card Annual Agreement of Responsibility, c) B3 Combination Helicopter/Airplane Safety Courses A-101 Aviation Safety, A-105 Aviation Life Support Equipment, A-106 Aviation Mishap Reporting, A-108 Preflight Checklist and Briefing/Debriefing, and A-113 Crash Survival.

Jennifer Johnson completed

NCTC's webinar series, Social Media and Digital Content Development.

The Apache trout seasonal crew completed their No FEAR training.

Randy has been coordinating with volunteers for upcoming September aggregation trip, and with Bill Persons to get gear prepared. Randy has continued to ensure that our volunteers are up to date with helicopter training for the upcoming Little Colorado River trips in September and October, as well as other staff members from GCMRC that may be flying. Training records have been updated and coordinated with USGS.

Kayla completed travel arrangements for AFS and worked

with the FIS regional coordinator to get super user status in FIS.

AZFWCO staff participated in the AZFWCO teleconference staff meeting on August 19.

Mike had the necessary maintenance completed for all vehicles, including oil changes, a battery replacement, a tire replacement, and a windshield replacement. He also collected, processed, and mailed all vehicle mileage and credit card receipts along with acquisition requests to Karla McGhan in Pinetop. All vehicle fire extinguishers were inspected by a certified inspector and either recharged or replaced.

Upcoming Activities/Events

September 6-23. Humpback chub Grand Canyon aggregation study survey trip.

September 10-20. Little Colorado River humpback chub fall population monitoring trip – Fall population estimate mark trip.

September 21. Parker staff will be

participating with the Refuge Complex Friends Group in a Adopt a Highway program clean-up. We will be cleaning the roadway in front of the Bill Williams Wildlife Refuge.

September 28. Parker staff will be participating in National Public Lands Day. Parker staff will be participating in a river clean up

event along the Colorado River.

October 8-18. Little Colorado River humpback chub fall population study and makeup translocation trip – Fall population estimate recapture trip, and humpback chub capture and transfer to above Chute Falls and to SNARRC (for future addition to Shinumu and Havasu creeks).

