



# FISH SOUP

The O 'Fish' al Newsletter of the AZ-NM Chapter of the American Fisheries Society

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Cover: Horton Creek (photo credit: Katie Hansford).

## President's Note

Welcome back to **Fish Soup!** The Arizona-New Mexico Chapter of the American Fisheries Society's (AZ-NM AFS) bi-annual newsletter. After a brief hiatus, we are bringing these newsletters back! So, if you have any announcements, field stories, conservation successes, or anything else you would like to share please reach out to our Newsletter Editor, **Katie Hansford** (Kathryn.Hansford@tonation-nsn.gov).

It is that time of year where the heat has arrived in Phoenix, and every time I walk outside, I wonder to myself if this is what it is like to live on the surface of the sun. As many of you are busy out completing great fisheries work, your Arizona-New Mexico AFS Executive Committee has been busy hosting courses and planning for future meetings.

The Chapter is currently working on is revising the JAM Planning Manual with the Arizona and New Mexico Chapters of The Wildlife Society. This important document provides guidance to chapter leadership on how to plan a successful JAM and much of it has not been updated since 2017. A revised manual should be completed later this summer, which will ensure that meeting organizers continue to have the resources they need to host a successful JAM.

On April 24 – 26 the Chapter sponsored a **Practical Electrofishing Course** that was held at the Arizona Game and Fish Department Regional Office in *Mesa, Arizona*. The course was taught by **Jim Reynolds**, University of Alaska-Fairbanks, *retired*. There was a total of 12 participants in the course, including seven Arizona Game and Fish Department staff and five students. Course participants were taught about electrofishing principles, systems and safety, electroshock effects on fish, and sampling methods. Participants also got hands on experience using oscilloscopes, digital multimeters, and conductivity meters. On the second day of the course, participants got to go over to the Verde River to get hands on experience with Backpack Electrofishing units. Course participants measured the electrical field produced by their backpack electrofishing units using oscilloscopes and then got to sample fish in the Verde River. The final day of the course had participants analyze and discuss the data they collected in the field the prior day. In addition, course participants constructed a standard power table using hypothetical data. Following completion of the course all participants got a letter of certification for formal training in electrofishing. Overall, the course was a great success!

# President's Note, Continued

The Arizona-New Mexico Chapter of AFS currently has four student subunits that are contained within the chapter. Students are an important part of AFS and their involvement in our chapter provides them with opportunities to learn from and network with fisheries professionals. These connections they make as students can be invaluable for them as they embark on their careers. To better support our student chapters and increase their ability to provide these valuable opportunities to their members, the Executive Committee has developed a new **Student Sustainability Fund**. As part of this fund, the chapter will provide each of our student subunits with \$250 annually, but in return the student subunits must send us a brief <u>Annual Report</u> detailing their activities for the year and how their funds were spent. Stay tuned for this update to start appearing in future newsletters!

I hope that everyone has a safe and productive field season! -ZB



## "Tails" From the Field

# Gila Trout Recovery Stockings in Arizona



By Emily Keister

Native Trout and Chub Specialist

Arizona Game and Fish Department

In June, the Arizona Game and Fish Department with the help of many volunteers had the opportunity to stock two Gila Trout recovery populations. On June 7, the AZGFD's Native Trout and Chub program and Region VI Aquatic Wildlife Program lead a large group of volunteers to stock 438 Gila Trout. All Gila Trout had their adipose fin clipped and AZGFD staff plan to use these fish to evaluate whether a large waterfall in Dude Creek previously thought to be a barrier to fish passage, is an effective barrier. Dude Creek is also one of the only two Gila Trout recovery populations in Arizona that is seasonally open to catch-and-release angling.

On June 18, AZGFD's Native Trout and Chub program and Region I Aquatic Wildlife Program lead a group of volunteers to stock 535 Gila Trout into KP Creek. Gila Trout were loaded up into 5-gallon buckets lined with trash bags. The trash bags were filled with oxygen and sealed. Volunteers and Arizona Game and Fish Department staff then hauled the Gila Trout over two-miles on foot to their new home. KP Creek is one of eight occupied Gila Trout recovery streams in Arizona and these efforts contributed greatly to the recovery of the species within the state.

These type of recovery stockings are great opportunity for AZGFD staff to engage and educate the public, as volunteers are heavily relied upon to hike trout into their new forever homes. A big thank you goes to Mora National Fish Hatchery for raising all the Gila Trout; thank you to Trout Unlimited, the Tonto National Forest, the Apache-Sitgreaves National Forest, the US Fish and Wildlife Service, and all our other partners for their help in making this stocking happen. And of course, thank you to all our volunteers who do the heavy lifting and carry heavy buckets of fish and water over rough trails to give Gila Trout a chance at recovery.



 $KP\ Creek\ Stocking\ Crew\ (by\ Sean\ Gates,\ AZGFD)$ 



Gila Trout Stocked into KP Creek (by Sean Gates, AZGFD)



Dude Creek Volunteers Stocking Gila Trout (by Emily Keister, AZGFD)

# Student Spotlight

### Maret Smith-Miller



By Dr. Zach Klein

Assistant Professor

New Mexico State University

After earning her Bachelor of Arts degree from Colorado College, Maret began her career in fisheries. She moved to California and worked for multiple agencies dedicated to the management and recovery of the Central Coast's steelhead populations. During her time as a fisheries technician, Maret learned the value of science-based management and conservation. Her interest in the science underlying fish conservation inspired her to pursue a Master's degree at New Mexico State University under the guidance of Dr. Zach Klein.

Her graduate research focused on understanding the population dynamics, habitat use, and life-history behavior of the Rio Grande Cutthroat Trout in the upper Rio Costilla watershed, New Mexico. Maret used mark-recapture techniques and various modeling methods to identify stocking regimes and habitat improvements that could be used to mitigate the effects of climate change and anthropogenic activities on the species. During her time at New Mexico State University, Maret presented her research at six regional and national meetings. Maret successfully completed her Master's degree in July and recently submitted three publications to peer-review journals. Maret has since relocated to the East Coast, where she is continuing a career focused on conserving fish species in the face of human activities.



# Student Voice

# Pupfish Pond Restoration Project

By Ramine Mohebbi Student
University of Arizona

The University of Arizona's Fish and Wildlife Society (UAFWS) has recently made great strides in restoring a local pond hosting the endangered Desert Pupfish (Cyprinodon macularius). Palo Verde High Magnet School in Tucson, Arizona has been home to such a pond since the late 1990's. Built and managed by the high school's Ecology Club, the pond has provided a safe haven for the Desert Pupfish. Recent events including the global Coronavirus pandemic have decreased active management, allowing for a significant growth of bulrush, cattails, and algae to choke the pond. The UAFWS sought to aid the school's Ecology Club and staff in restoring the pond to optimal conditions while providing an educational experience for the high school students on proper pond management.

UAFWS has been involved in restoration efforts of Palo Verde High Magnet School's pond since the Fall of 2022. The UAFWS has worked with the high school students on plant identification, methods of removal, and water quality assessment. Water quality testing techniques include pH, dissolved oxygen, and checking nitrate/nitrite levels. The UAFWS has also engaged in removal of the algae and vegetation harming the pond via netting, cutting, and uprooting of these species. The UAFWS and Palo Verde staff plan to finish the job this fall by draining the pond, removing the remaining bulrush, and installing a float valve to regulate water levels. These efforts will improve pond maintenance and ensure stability of the Pupfish population so that the high-maintenance plants may be replaced with alternative native species

# Small Grants Request for Proposals

The Arizona-New Mexico Chapter of the American Fisheries Society seeks to support creative work to benefit fish conservation through two or more small grants. Proposed activities can benefit **native** or **sport** fish. The total amount available for these grants is \$2,000.

#### **Terms**

- 1. The project must benefit native or sport fish in the states of Arizona or New Mexico.
- 2. Work resulting from these grants should be completed within two years.
- 3. Grants do not pay Salary.
- 4. Grants do not pay overhead to agencies or universities.
- 5. Grants are awarded to individuals not to a larger entity.
- 6. Projects that require NEPA and ESA approval must have this completed prior to applying.
- 7. A summary report to the sitting AZ/NM AFS President will be required at the end of the project.

#### **Application Instructions**

Applicants should submit their proposals electronically to **Zach Klein**, <u>zklein@nmsu.edu</u>. The deadline for proposals will be **January 10**, **2025**. The proposal should be submitted as a single file (WORD or PDF) and contain the following sections in the order listed below:

- 1. A cover sheet that includes: (a) the title of the proposed project, (b) the investigator name(s) and contact information, and (c) 1-2 sentences that describe the impact of the work.
- 2. A brief narrative describing (a) goal and objective(s) of the proposed work, (b) how the work will be conducted, and (c) how it will benefit native or sport fish in Arizona or New Mexico.
- 3. A project timeline consistent with the conditions outlined in the "Terms" section above.
- 4. An itemized budget and brief budget narrative explaining the line items.

#### Scoring

Proposals will be ranked by a committee with at least one representative from each state (Arizona and New Mexico) on the following categories:

- 1. Application is complete and does not violate Terms described above.
- 2. The goal, objective(s), and methodology are clearly articulated.
- 3. The project represents a meaningful and valuable contribution to the conservation of native or sport fish
- 4. The project has a high probability of success given the budget, other resources at hand, people/person involved and timeframe for project completion.

# **Upcoming Events**



#### AMERICAN FISHERIES SOCIETY

September 15 - 19, 2024 | Honolulu

Conserving Fishes and Fishing Traditions Through Knowledge Co-Production

The American Fisheries Society's (AFS) 154th Annual Meeting is scheduled September 15-19, 2024, in Honolulu, Hawaii. The Western Division of AFS will be meeting in Hawaii. See the meeting's website for more details: <a href="https://afsannualmeeting.fisheries.org/">https://afsannualmeeting.fisheries.org/</a>.

# Desert Fishes Council Consejo de los Peces del Desierto

Dedicated to the Conservation of North America's Arid Land Ecosystems

Desert Fishes Council 2024 Annual Meeting is scheduled November 21-23, 2024, in Grand Junction, Colorado. Abstracts are due September 30, 2024. Early registration ends October 7, 2024. See the meeting's website for more details: <a href="https://www.desertfishes.org/2024/02/05/2024-desert-fishes-council-annual-meeting-is-scheduled-for-grand-junction-colorado-21-23-november-2024/">https://www.desertfishes.org/2024/02/05/2024-desert-fishes-council-annual-meeting-is-scheduled-for-grand-junction-colorado-21-23-november-2024/</a>.

## **Executive Board**

#### President:

Zach Beard Arizona Game & Fish Department zbeard@azgfd.gov

#### **President-Elect:**

Betsy Grube Bureau of Reclamation egrube@usbr.gov

#### Past President:

Jane Trujillo New Mexico Department of Game & Fish Jane.Trujillo@dgf.nm.gov

#### Secretary:

Emily Keister Arizona Game & Fish Department ekeister@azgfd.gov

#### Treasurer:

Zach Klein New Mexico State University zklein@nmsu.edu







## Committee Members

#### **Continuing Education**

Bryan Bakevich NM Department of Game & Fish Bryan.Bakevich@state.nm.us

Curt Gill
AZ Game & Fish Department
cgill@azgfd.gov

#### **Environmental Affairs**

Adam Barkalow NM Department of Game & Fish adam.barkalow@dgf.nm.gov

#### **Membership**

Brian Hickerson AZ Game & Fish Department bhickerson@azgfd.gov

Taylor Saucier University of Arizona tsaucier@arizona.edu

#### Miles McInnis Scholarship

Pilar Rinker US Fish & Wildlife Service pilar\_wolters@fws.gov

#### Newsletter

Katie Hansford Tohono O'odham Nation kathryn.hansford@tonation-nsn.gov

#### Nominations/Awards

Matt Rinker AZ Game & Fish Department mrinker@azgfd.gov

#### **Small Grants**

Zach Klein NM State University zklein@nmsu.edu

#### **Student Affairs**

Pilar Rinker US Fish & Wildlife Service pilar\_wolters@fws.gov

#### Website

Sean Deery Arizona Game & Fish Department sdeery@azgfd.gov

#### Note from the editor...

Hi Everybody!

Thank you to everyone who contributed to this issue of Fish Soup. I want to hear more from you for the next newsletter! Please send in articles, photos, and announcements to Kathryn.Hansford@tonation-nsn.gov. Feel free to contact me with suggestions and comments about the newsletter.

Best,

**Katie Hansford** 





