

# WELLSPRING NEWS

Winter 2021

Published by the Friends of Agua Caliente, Inc. (FOAC)

Tucson, Arizona

**Annual Meeting January 25, 2021**

7 p.m.—Virtual (Online)

## From the President

Dear Friends of Agua Caliente Park,

As we turn the page on a pretty strange year, I'm hoping that the new year brings us some much-needed rain. We are grateful that the re-contouring and sealing of Pond 1 occurred before the drought of 2020 deepened. The pond now uses a fraction of the water that it did before. The natural spring flow has been barely a trickle lately. Water is now pumped from a well drilled in the early 2000s to deliver water to Ponds 1 and 2. You may remember that money for the Pond renovation project was a part of a failed bond package in 2015. Because of the County's determination to control the water loss from the bottom and find the funds to do so, we get to enjoy our oasis.

We appreciate your support, donations and trust in the board. In the last 5 years FOAC has donated nearly \$31,000 to the county for equipment such as the new bridge, park benches, and picnic tables. We have also donated over \$13,000 to education programs at the park. Some of the free online education programs delivered by the County are supported by us. I'm very impressed and proud that your generosity allows us to contribute in such a way that everyone's experience at the park is enhanced.

FOAC has recently partnered with the Sky Island Alliance and the County for a citizen science FotoFauna Project (<https://skyislandalliance.org/our-work/wildlife-program/sky-island-fotofauna/>). We have placed some wildlife cameras along animal trails and have already begun to get some fun photos. In the first week, we've seen a Western Screech Owl taking off after pouncing on something, coyotes, javelina, and a lot of moving grass. We'll be posting pictures on our website and on FaceBook in the upcoming months so be sure to check them out!

Our annual meeting will be held on January 25 at 7PM, we hope you can join us. Of course, the meeting will be on Zoom and we ask that you email [info@friendsofaguacaliente.org](mailto:info@friendsofaguacaliente.org) to receive the link. We are always looking for ideas about how we can help support the park.

Sometime in the fall of 2021 we look forward to finally having a ceremony and party to celebrate the pond renovations and bridge installation and sure hope you all can join us!

**Pam Rossetter,  
FOAC President**

## Nature Corner: Don't Be Afraid of Bats!

Did you know, bats are the only mammal able to truly fly? Like other mammals bats have fur, give live birth, and nurse their pups (typically only one pup per year), have belly buttons and need heat to survive. They are more closely related to primates than they are to rodents.

Bats can be found on nearly every part of the planet. According to Bat Conservation International, there are over 1,400 species of bats in the world. In fact, one fifth of all mammals are bats. Arizona has 28 species of bats and 48 can be found in the Sonoran Desert, which extends into Mexico. Bats can live a very long time, usually 20-30 years and up to 41.

The smallest species, Bumblebee Bat, weighs about 2 grams and measures from 1-3 inches. The largest species, Flying Foxes, are fruit eaters, weigh about 2 pounds and have a wingspan of about 6 feet!

All species of bats belong to the order Chiroptera from the Greek Cheir meaning 'hand' and ptero, meaning wing. So bats are in the order Hand Wing.

About 70% of bats eat insects and bugs such as moths, beetles, gnats, and crickets, while the other 30% consumes various types of fruit. Only a very few species, known as the Vampire Bats, actually consume blood.

The phrase "blind as a bat" is based on the common misconception that bats cannot see. Although vision may be less important than other senses, all bats can see.

Bats make important contributions to our environment including pollination, pest control, seed dispersion and not to be "poo-



Lesser Long-nosed Bat at Feeder

Photo by Doris Evans

pooed", their guano is rich in nitrogen and has been sold as fertilizer. Scientists estimate that insect eating bats save farmers roughly \$23 billion per year in pest control.

At least thirteen species of bats have been identified at Agua Caliente Park at various times throughout the year. The first bat we tend to see at night in the Tanque Verde Valley is the Canyon Bat, the smallest bat in the US. They tend to hunt insects at dawn and dusk.

If you like tequila, you can thank the Mexican Long-tongued and Lesser Long-nosed bats, two nectar feeding bats that visit from Mexico and pollinate saguaros and agave. These are the bats that like our hummingbird feeders, especially in the fall before they migrate back to Mexico. The Mexican Free Tailed bats are the fastest bats in the world. They are migratory and can fly up to 100 mph in a dive. When they are here in the

summer, they are among the bats that roost under bridges. Pallid bats graze scorpions and centipedes off of the desert floor. Yellow bats roost in the palm fronds at the Park.

Like any mammal, bats can carry rabies but it is very rare and unusual for a bat to bite a human. As with all wildlife, don't pick up, pet or touch bats. Do help protect our amazing bats.

**Judy Gray**  
Naturalist

## Electronic Newsletter

Sending the newsletter electronically saves FOAC postage and you receive it in color. If you did not receive an electronic version and would like to be placed on the electronic distribution, please send an email to: [info@friendsofaguacaliente.org](mailto:info@friendsofaguacaliente.org).

We do not release our database to anyone.

## Fish in the Desert?

Being a fish in the desert means being tough and adaptable. For thousands of years, Arizona's native fish have thrived in habitats ranging from rushing rivers to quiet springs hidden away in the valleys and mountains. But, over the past 100 years or so, human activities have resulted in habitat destruction and denigration from agricultural runoff, extensive pumping of groundwater, and the introduction of non-native species into our local waterways. These activities have hit many native fish populations hard. In fact, 20 of Arizona's 36 native fish species are now listed as threatened or endangered under the Endangered Species Act.

To slow the decline and ensure that this irreplaceable natural heritage is around for generations to come, Pima County has been working with the Arizona Game and Fish Department (AZGFD) to cultivate small populations of native fish throughout the county in ponds and waterways where they can thrive and reproduce. Now, the ponds at Agua Caliente Park are among these refuges.

2020 has been one filled with many challenges, but for native fish at Agua Caliente Park, 2020 has been a constructive year. In May 2020, after restoring two of the Park's ponds, Pima County introduced two native fish, Gila topminnow and longfin dace, to the main pond. Gila topminnow were later added to pond two. Newly added topminnow immediately got to work wooing mates; it wasn't long before tiny fry could be seen cavorting in shallows. In June, with the Bighorn Fire threatening to contaminate the waters of Sabino Canyon, endangered Gila chub were evacuated from Sabino Canyon and relocated to several habitats in Tucson, including the main pond at Agua Caliente Park. Then, in October 2020, AZGFD released just over 150 desert pupfish into pond two and hope to augment the population in the spring of 2021.

These fish are not freeloaders. Each of these native species is omnivorous, with their diet including mosquito larvae, as well as plant and animal detritus that might otherwise degrade pond water quality.

Park visitors can help keep these new residents safe and healthy by never adding anything to the pond – this means any kind of plant or animal and this means food – or removing anything from it.

- Added plants and animals can bring disease, compete for resources, and in many cases, prey upon the pond natives.
- Feeding wildlife is not good for the wildlife and not good for the ponds. Animals lose their fear of people and eat the less nutritious, but easy to obtain, food rather than forage naturally.
- Leftover food decays, contributing to algal blooms, making water toxic, and creating foul odors.

Capturing native fish and removing them from the ponds is illegal as these species are protected by federal and state law. Instead spend some time enjoying and watching the fish in their new habitats.



Photo: Paul V. Loisel; License CC BY-SA 3.0

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**Meet the Locals:** These fish may be small in size, adults ranging in length from one to eight inches, but they are by no means small in personality. They can be a lot of fun to observe! So why not spend some time fish watching next time you're at the Park.



Photo: Bruce Taubert,  
Arizona Game and Fish Department

### **Gila topminnow (*Poeciliopsis occidentalis*)**

Endangered

Gila topminnow, in the same family as guppies, bear live young. Adult female are almost twice the size of their male counterparts. Breeding males turn jet black with bright yellow fins and can be seen in groups frenetically pursuing a single female.



Photo: George Andrejko,  
Arizona Game and Fish Department

### **Longfin dace (*Agosia chrysogaster*)**

Longfin dace are one of the few native Arizona fish species not listed under the Endangered Species Act. These small silvery minnows sport a dark stripe along the side. They are among the hardiest of our native fish, able to survive drought tucked within a moist algal mat. During breeding season, males develop cone-shaped nuptial tubercles (bumps) on their head and fins. Males create depressions in the sand into which the female lays her eggs for protection.



Photo: Brian Gratwicke; License: CC BY 2.0

### **Gila chub (*Gila intermedia*)**

Endangered

Breeding males and, to a lesser extent, females become orange-red on the underside with yellow cheeks and lips. Adult females are significantly larger than males. These secretive fish spend much of their time hiding in deep water or areas with cover; adults only come out to feed during the early morning and late night.



Photo: Paul V. Loiselle; License CC BY-SA 3.0

### **Desert pupfish (*Cyprinodon macularis*)**

Endangered

Breeding males become a lovely iridescent blue punctuated by yellow or orange tail fins. Females, young, and non-breeding males are tan with dark vertical bars. Males are larger than females. Breeding males will fiercely defend territory and, following breeding, will guard the nest to protect fertilized eggs.

**Julie Strom**  
**Pima County NRPR**

## Friends of Agua Caliente, Inc. Board of Directors

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Mike Sprung

Joanne Triplett

**Board email addresses are:**

FirstLast@FriendsOfAguaCaliente.Org

## History Online Lecture Series

Beginning January 2021, the history lecture series, which is made possible by your contributions to FAOC, will be presented online. The events are free but registration is required and participation is limited. To check event times and register, go to <https://www.eventbrite.com/> and use the search function to find the lecture you would like to attend.

- ◆ *Two Villages of Tumamoc Hill*
- ◆ *O'Odham Resource Use in the Colonial Pimería Alta*
- ◆ *The History of Agua Caliente Park Spring*
- ◆ *Arizona: a History of Snake Oil Salesmen, Scams, & Hoaxes*
- ◆ *Barbed Wire, Windmills, and Railroads*
- ◆ *John Dillinger Captured in Tucson!*
- ◆ *Geology of the Tucson Mountains*

A complete list of online events offered by Pima County NRPR can be found at <https://www.eventbrite.com/o/pima-county-natural-resources-parks-amp-recreation-30607074198>

FOAC Website: <https://friendsofaguacaliente.org>

## Annual Meeting

The Annual Meeting of the Friends of Agua Caliente will be held Monday, January 25, 2021 at 7 p.m. The meeting will be held online. The meeting URL, login and/or call in information will be sent in advance to anyone requesting to attend. Please RSVP at: [info@friendsofaguacaliente.org](mailto:info@friendsofaguacaliente.org).

We will review funding, other business and vote on the current Nominations Slate. To review the current Slate, paste the following link into your online browser:

<https://friendsofaguacaliente.org/wp-content/uploads/2020/12/FOAC-Nominations-Slate-2021.pdf>

## Membership

Join Friends of Agua Caliente! Thank you to all of our loyal supporters. If you have not yet renewed, please consider supporting FOAC. Our ability to support the Park with funding and items they cannot normally purchase is tremendous and we owe it all to you.

As of January 1, 2021, we have 232 supporters for the 2020-21 year and through your generosity, we have raised \$23,493 so far this fiscal year. We were able to fund 8 new picnic tables for the Park through 7 donors plus some partial funding (8th table) from several FOAC donors. These will be a nice addition to amenities at the Park.

FOAC is a 501 (c) (3) Non-Profit and donations are tax deductible.

Membership is based on:

Individual \$15

Family \$25

Organization \$50

Donation (any amount appreciated)

Please send name, address, and email along with a check to Friends of Agua Caliente, Inc., PO Box 32005, Tucson, AZ 85751-2005. You can also securely support FOAC with PayPal or Credit Card from our website.

Your dedication to the Park and FOAC is greatly appreciated. We cannot do what we do without you!

**Jim Knoll**  
**Membership**

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## Friends of Agua Caliente, Inc.

P.O. Box 32005

Tucson, AZ 85751-2005

### Social Media

If you want to get a glimpse of some amazing wildlife that call the Southwest home, Agua Caliente Park is a great place to visit. Recent wildlife visitors include a juvenile great blue heron, deer, javelina, verdin, gila topminnow (resident) and an osprey to name a few. Visit our Facebook page and website to see photos of some of these animals. Visitors are encouraged to share photos of Agua Caliente Park with us via Facebook Messenger or send an e-mail to tinabaker@FriendsOfAguaCaliente.org. We will share your photos to our Facebook page or website.

Stories about your fun experiences are welcome too. One recent visitor shared her memories of the historic island years ago

"my husband and I were married on the island 22 years ago. It will be wonderful to be able to go back to that magical spot." (-Victoria Stefani)

To find us on Facebook, search "Friends of Agua Caliente Tucson" within Facebook or access us from our website. We also have videos of the Park and events on YouTube. Subscribe for updates on new videos and events. Our YouTube Channel can be accessed from our website or search "Friends of Agua Caliente" from within YouTube. The website can be accessed at <https://friendsofaguacaliente.org/>

Along with the key history of FOAC & Agua Caliente Park, the website includes information regarding significant issues affecting the Park, and links to other websites.

**Tina Baker**  
**Social Media**