



PHOENIX MOUNTAIN PRESERVATION COUNCIL LOOKOUT

Spring 2023 Newsletter



Courtesy of Libby Goff

OUR NEW PRESIDENT TICE SUPPLEE

Please welcome Tice as PMPC's newly elected president. A great asset to PMPC for many years, Tice has been an active board member and previously served on the organization's executive committee. Since 2005, Tice has been the Audubon Arizona (now Audubon Southwest) Director of Bird Conservation since 2005, after a career with the Arizona Game and Fish Department that included experiences in research, habitat management, game management, and urban wildlife. She coordinates Audubon Southwest's science related activities with National Audubon Society programs and offices in other states and co-manages the Arizona Important Bird Areas program.

Her National Audubon Society work is focused on birds and their habitats, including administration of the Arizona Important Bird Areas (IBA) program. Sites that are critical to a complete life cycle for resident and migratory birds are given this status.

RENEWED PARTNERSHIPS

Now that COVID-19 restrictions have mostly ended, the PMPC is working to renew partnerships and make new ones with groups that share our values and interests. This will make us more effective in finding out about issues in the preserves and making positive change. Over the past few months, we've been in conversations with:

- **Save Our Mountain Foundation.** Our close ally over the years, we need to work closely with them to meet our shared goals.
- **Central Arizona Conservation Alliance.** Convened by Desert Botanical Garden, CAZCA works to ensure a sustainable regional open space system that supports healthy ecosystems and healthy communities in Central Arizona. They partner with many organizations, making them an important group to network with. Their next all Partners Meeting will be in late spring. See more about their mission at cazca.org.
- **City of Phoenix Parks and Recreation Department.** Close ties with this department have led to more PMPC successes. A big thanks to Claire Miller, Preserve/Park Supervisor, for continually providing great updates about our precious preserves.
- **City of Phoenix Preserve Park Stewards.** This volunteer group acts as volunteer Park Rangers, becoming the eyes and ears of the park as they number in the hundreds. Their participation in the PMPC would bring in many younger people to continue the protection of our preserves.

KNOW OF A GROUP WE SHOULD CONNECT WITH?

LET US KNOW

DREAMY DRAW CLOSURE

While pipeline construction was underway, the city took the opportunity to update the amenities at Dreamy Draw. Historical structures have been kept where possible while adding elements that can be seen in the designs at Pima Canyon, Piestewa Peak, and Cholla trail heads.

Dreamy Draw is expected to reopen to the public in 2023.

Courtesy of Google



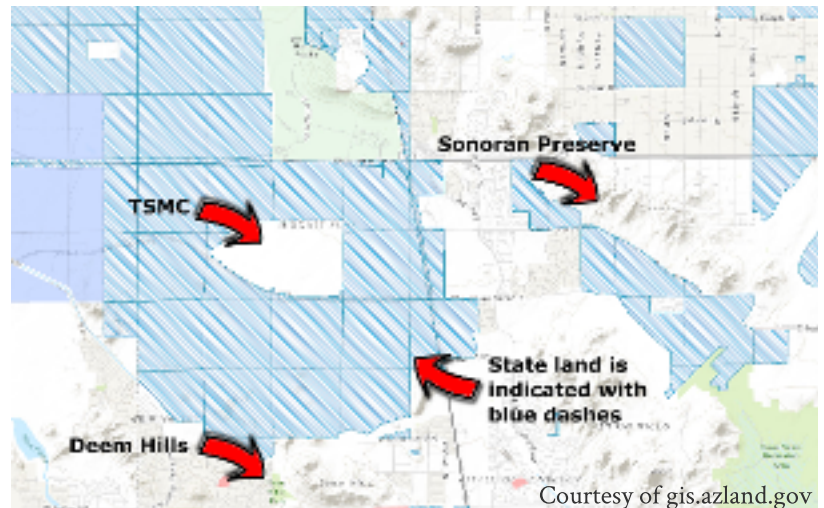
BISCUIT FLAT PRESERVATION

Taiwan Semiconductor Manufacturing Co. (TSMC) is under construction in Phoenix. It was all over the news when President Biden visited back in December. Only one fabrication building is being constructed right now. On the two mile by one mile swath of desert that was purchased, there is enough space for six total fabrication buildings.



To start, the plant will bring 2,000 jobs to Phoenix. Within a few years, this will easily double, if not quadruple. Then there's the suppliers and other businesses that will come to Phoenix for the convenience of being close to the facility. This all means more people will want and need to live in North Phoenix.

The plant is located just west of I-17 between Deem Hills and the Ben Avery Shooting Facility. This was open space, land owned by the Arizona State Land Department. Discussions had been underway for the City of Phoenix to purchase some of this land to create another preserve. Those talks have ended. The land surrounding the plant will likely be sold to developers who will pay well over the minimum bid to transform the desert into more



suburbia. This will further fragment and destroy habitat for our desert creatures, provide less food for migrating birds passing through the area, and less open space for the residents of Phoenix and surrounding areas to enjoy.

It isn't all doom and gloom! One positive is that the auction of state trust land provides funding for schools, military institutes, hospitals, and government buildings throughout the state. The second positive is that Taylor Morrison (the same group of the VERDIN development across from the Apache Wash Trailhead) has shown interest in buying the state trust land. Through close relationships with the City of Phoenix Parks and Recreation Department, they have expressed interest in making land not suitable for development available as preserve land. Drains, washes, and hills could become the next preserve area we are all committed to protecting. We will keep you updated as we learn more about these developments.

References

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CREOSOTE BUSH

The land of the Biscuit Flat area, like most of the Sonoran Desert, is dominated by the creosote bush. *Larrea tridentata* is a shrub occurring in monospecific stands growing at elevations up to 5,000 feet that have been successfully growing in the area for about four million years. Over time, they have developed multiple adaptations to survive in the harsh conditions of the desert.

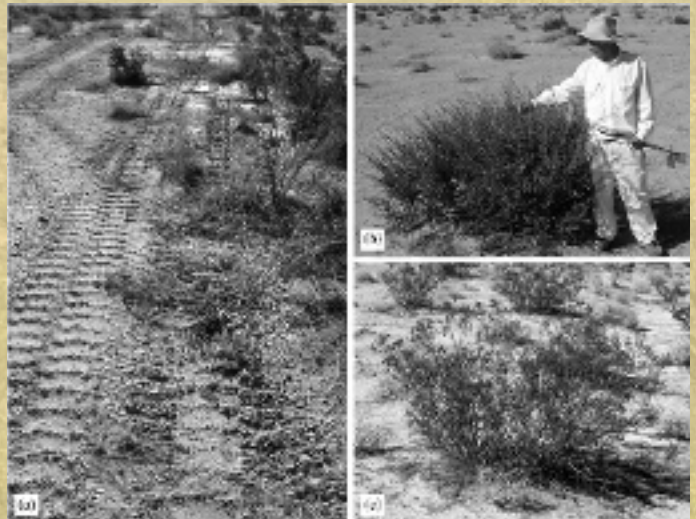
The bush has a taproot and secondary roots that extend about 10 feet from the crown. These roots and the leaves release chemicals into the soil that inhibit the growth of other plants in its area. This allelopathic effect makes the creosote a good option in mitigating the growth of invasive species, such as buffelgrass, but also means it can take over grasslands.

The creosote bush can live to be hundreds of years old. While they do produce seeds, they are more successful in reproduction through cloning. The clones can be thousands of years old and may be the earth's oldest living organisms. As the inner stems die, resprouts (clones) appear on the periphery creating a circular pattern. The rings expand outward about a meter every



500 years. Circular or oval shaped stands of multiple plants could all be the same plant that has been cloning itself for thousands of years.

Studies in desert military training areas show the shrub has a 5-year recovery time when the shrub crown is crushed. After being run over by vehicles, the plant resprouted. To



Larrea tridentata in creosote bush desert scrub, Langford Impact Zone, Fort Irwin NTC, California. Tracks show paths of military vehicles passing through shrubs (a); (b) a robust 3-year resprout following the very wet El Nino year 1998; (c) shrub with a relatively open canopy (0.83 m) showing a 5-year recovery after the shrub crown was totally crushed and broken by a vehicle.

Courtesy of Philip W. Rundel

recover after being crushed, they only need water, not nutrients from the soil. For times of low rainfall, the leaves are covered with a waxy substance that slow evaporation to conserve water. In dry periods, the leaves fold in half to decrease their exposure to the sun. If the drought is bad enough, the bush will drop its leaves. In years of drought, old branches and secondary roots die. Once there is a rain, the plant resprouts and the cycle continues.

Like most of our flora, the creosote bush is poorly adapted to fire. The waxy substance on the leaves is very flammable. The woody remains in the center of the plant that have died take about 60 years to decay, leaving it exposed if there is a fire. Studies after a

low-severity fire near Florence showed 97% of the creosote bushes in the burn area were top-killed. 37% of them resprouted, but the other 60% had their root crown killed by the fire.

Today we enjoy the smell of rain the creosote produces (the waxy substance protecting the leaves). In the past, the bush was important for its medicinal properties. Native Americans used the creosote to treat at least fourteen different illnesses. Other animals continue to depend on the creosote. It is a food source, perch site, shade provider, and hibernation site for reptiles, amphibians, and small mammals. Bees and hummingbirds feed on the nectar in the flowers. The desert tortoise digs shelters under the creosote bush where the roots stabilize the soil. Kangaroo rats make their dens under the bush for the same reason. Some kit foxes also den under the bush. The

bush is host to *Tachardiella larreae*, a lac insect measuring 2.5 – 3.5 mm in length. These tiny insects have no legs and choose to live near their food source, the sap of the creosote bush. They secrete a sticky substance that covers them as protection from predators and the sun. This sticky substance was used by Native Americans as a sealant on food jars and to repair broken pottery.

References

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While enjoying our preserves, we've all seen something that isn't right. But what can we do?

If you see something that doesn't belong in our preserves, such as a homeless encampment, graffiti, or

damage off-trail, you should report it via email. Take some pictures of what you observed. Using an app on your phone, get the GPS coordinates of where you are to help Park Rangers find the area. Email the details to Claire Miller (claire.miller@phoenix.gov). She will make sure the right people get the information. It may take them some time to respond as Park Rangers have a lot of responsibilities, but they will get it taken care of.

If someone is not acting appropriately, call the non-emergency police number at (602) 262-6151. If the person is breaking the law, they may dispatch an officer. If the visitor needs to be educated about the Code of Conduct in our preserves, ask the dispatcher to contact a Park Ranger on the radio to respond.

If you're not already a Park Steward, sign-up! You'll receive training on educating visitors acting inappropriately, how to track and mitigate invasive species growth, and simple ways to maintain the trail tread.

SEE SOMETHING SAY SOMETHING!

PHOENIX MOUNTAINS PRESERVATION COUNCIL

2023 SPRING SOCIAL

Saturday, March 11th 2PM-4PM

North Mountain Brewery

522 East Dunlap Avenue

Phoenix, AZ 85020



Guest Presentation: Jessi Szopinski with Parks & Recreation and the Central Arizona Conservation Alliance Desert Defenders. Learn what PMPC is doing to Protect the Phoenix & Sonoran Mountain Preserves.

Get involved and make a donation.



@phoenixmountains www.phoenixmountains.org

WHAT ARE DESERT DEFENDERS?

City of Phoenix Park Ranger Jessi Szopinski will tell us all about Desert Defenders at our Spring Social, but you may want to get involved now!

There's a Desert Defenders program with CAZCA and another by the same name for the Park Steward Program. CAZCA describes their program as "a collaborative, community science program focused on finding, mapping and removing invasive species at local parks and preserves" (<https://cazca.org/project/desert-defenders>). Park Ranger Szopinski brought the program to the Park Stewards with the same purpose increase the number of concerned citizens engaged in this seemingly never ending battle.

Desert Defenders educate visitors to the preserves and those living in nearby neighborhoods about not using fountain grass as ornamental landscaping. This may be a large, easy to maintain plant but the seeds take flight into our preserves and take over patches of land. This invasive plant does not belong in our preserves.

Focused on invasive species that pose a moderate to severe impact on our ecosystems, buffelgrass gets a lot of attention by the groups. It may not be possible to eradicate buffelgrass from our preserves at this point, but we try to control where it's allowed to spread. Park Ranger Szopinski has been experimenting with thrashing. Ask her about what that is and her findings at the social!

To promote our native species, both groups make seed balls. Combining clay and native seeds, these balls can be launched into areas of the preserves where invasive species have been removed.

The biggest threats to our Sonoran Desert flora is climate change, drought, and invasive species. Join one or both of these groups to get involved with this important work!

PMPC ARCHIVES

The history of the PMPC has been preserved in the Dorothy Gilbert and the Phoenix Mountains Preserve collection at ASU. The collection is from the beginning to 1997, with 60 documents available online [here](#). The other boxes of documents are available, but one has to talk to a librarian and wait for them to be delivered to ASU from an offsite storage facility. This preserves them, but does not make them as accessible to the public as we would like.

Our work to protect the preserves continued, so we now have over 40 years of additional documents. Those have been stored in the library at the North Mountain Visitor Center. Tice Supplee and Stacia Hurst have been going through the bins of documents to organize them. (Thank you!) There are maps that should be digitized to preserve them and many documents to share with the public. If you have ideas on how to best make these documents available online, let us know!



Courtesy of Arizona State University Libraries

OTHER ISSUES WE'RE MONITORING

TAYLOR MORRISON PROJECT

The 480-acre development across from the Sonoran Preserve will be moving forward. The good news is the developer has committed to being responsible stewards of the land. They are actively engaged in discussions with the city and look to be a good partner in the future.

TRAIL #25

There has been no significant progress on this trail from North Mountain to Lookout Mountain.

But the PMPC does not forget! We will continue engaging in conversations on this topic to move it forward when the time is right.

ACRES FROM THE 202

When the 202 expansion cut through South Mountain Park/Preserve, there was an agreement for a 32-acre land exchange. This land has not yet been returned to the preserves. We will not forget this land is owed to the residents of Phoenix.

FOLLOW OUR SOCIAL MEDIA



phoenixmountains.org
pmpcaz@gmail.com





JOIN The Phoenix Mountains Preservation Council

Your membership helps us to protect the Phoenix and Sonoran Preserves

Thank you for your 2023 PMPC Membership

Name: _____
Address: _____
City, State, Zip: _____
E-mail address: _____

MEMBERSHIPS: Family/Individual \$35. Organization \$45.

ADDITIONAL FINANCIAL SUPPORT

Tortoise Protector.	\$25
Slope Protector	\$50-\$100
Cliff Protector	\$100-\$500
Peak Protector	\$500+

MAKE CHECK PAYABLE TO: Phoenix Mountains Preservation Council, Inc. (PMPC, Inc.)

MAIL TO: Phoenix Mountains Preservation Council, Inc.
12950 N. 7th Street,
Phoenix, AZ 85022

You can also join on our website: www.phoenixmountains.org

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