

BIG MORONGO CANYON PRESERVE

NEWSLETTER

Friends of Big Morongo Canyon Preserve

Fall, 2023

Community Science: Having Fun and Helping Scientists...

Do you love nature and being outdoors? What gets you excited about nature? Perhaps its birds or plants or wildlife, such as mammals, reptiles, butterflies, and more. All that nature you're enjoying and observing is also of interest to scientists. And, regular people- you, me, any-one- can be a community scientist and easily share their observations of the natural world with scientists who will use your information in scientific research. Community science, also called citizen science, can involve volunteering and working directly with a scientist. Dr. Cameron Barrows is one academic scientist who recognizes the value of community scientists. Dr. Barrows does yearly lizard surveys, repeating the same plots or trails each year, and publishes his research in many scientific journals. He describes this experience:

Up in Joshua Tree National Park, we had two park biologists survey a series of plots, counting the lizards that lived there... I took groups of 5-8 community scientists, and we surveyed the same plots, using the same techniques. These were folks who had never surveyed lizards before and didn't know one species from another. My role was mostly limited to running back and forth to identify the lizards

A World Famous Birdwatcher's Paradise...

Growing up in L.A in the 70's, I was active with the Los Angeles Audubon Society at an early age. I rode my bike to local birding areas including the Ballona Wetlands and the Palos Verdes Peninsula. Gulls and shorebirds were my thing back then. Not being old enough to drive, I hitched rides with a few folks to the Antelope Valley, Bolsa Chica and Malibu Canyon for Christmas Bird Counts. On these outings I would often overhear Arnold Small and other birders talking about a place they would visit on weekends called Morongo Valley where vermilion flycatchers, summer tanagers, blue grosbeaks, yellowbreasted chats, and other colorful riparian species were seen. Wow, did I want to

that the community scientists found. The results were astounding. My community scientists saw on the average twice as many species and twice as many individuals than did the collegetrained park biologists.

Community science also happens when an individual like you goes out in nature and then shares their observations through apps that make their information available to scientists. Using simple apps, such as iNaturalist.org and eBird.org, and requiring nothing more than a cell phone or a laptop and camera, anyone can provide scientists with valuable information for their research.



Smoketree sharpshooter at BMCP whose urine falls like rain. photo. by Kaeliegh Watson.

by Donna Thomas

Many of our BMCP volunteers are already community scientists. They use iNaturalist to share observations of BMCP's natural world. Joe Zarki posts his butterfly photos on iNaturalist. Ranger Kaeliegh spotted and posted her photo of a smoketree sharpshooter insect, solving the mystery behind the rain falling on visitors as they walk below willows on sunny days-sharpshooters produce so much urine that they catapult it out of their bodies in energy-efficient, highspeed droplets. Dan Ward shares a variety of BMCP's biota on iNaturalist, like the southwestern speckled rattlesnake he photographed trying to, unsuccessfully, swallow a California thrasher. Then there is Lin Snyder, always busy keeping our preserve weed-free and removing fallen limbs, who has captured photos for iNaturalist of snakes, a juvenile skink, and a legless lizard as she does her work.

Who would have thought that just posting a picture on iNaturalist of our very common side-blotched lizard, Uta stansburiana, would be important to science? Integrative biologist Pete Zani thinks so. This small lizard is his primary study species, and he has amassed 40,000 iNaturalist observations of this species into a data set, which he will be publishing.

(continued on p. 6)

by Kurt Leuschner

go there! But, as luck would have it, I didn't get the chance to go as I couldn't yet drive. It seemed like years went by. No vermilion flycatcher for me. Oh, I would eventually see some in Arizona, but it still bugged me that I never got to know and experience that special birding place called the Big Morongo Canyon Preserve.

Fast forward to 1994– I finished college and was ready to begin a career somewhere. I chose the Coachella Valley, and there were two main reasons for this: close proximity to the Salton Sea and to Big Morongo Canyon Preserve! I finally got to visit the place, and I could go



A glorious male summer tanager.

Friends of Big Morongo Canyon Preserve Offers Adult Education Classes!

Fulfilling BMCP's mission statement to "provide educational programs," we are excited to offer three new classes starting in September through December. These half-day programs will be conducted in the preserve. Class sizes are limited to 8. The exception is the free program, "Viewing the Solar Eclipse," which is a two-hour class, and the registration limit is 12. Young people can enroll with their parent/guardian. See p. 8, "Upcoming Events," for a full list of class titles, instructors, and course fees.

For more information, or to register, go to: <u>www.eventbrite.com/o/</u> <u>friends-of-big-morongo-canyon-</u> <u>preserve-61931405293</u>, or call Kevin Wong at 760-792-1843.

Friends of Big Morongo Canyon Preserve

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Fall, 2023

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Kaeliegh's Korner...

Hey y'all, it's Ranger Kaeliegh here! I've been working at Big Morongo Canyon Preserve for six months now, and every moment has been magical! One of my favorite things about the preserve is how much everyone loves it- from the visitors to BMCP's volunteers and employees. We all share a deep love for BMCP and it shows. Everyone that comes here always seems so happy and friendly. As you hike through the preserve everyone greets one other with a smile on their face. When I ask people how their hike was, I'm often told how magical the preserve is and that every time they come here, they have a great experience. Visitors always express their gratitude for the work we do to preserve this beautiful place.

The preservation of BMCP would be impossible without the many passionate and dedicated volunteers. Many of them have been volunteering for several years and know so much about the flora. fauna, and history of the preserve. It's a pleasure to work with the volunteers, and I'm truly grateful for all the knowledge they've shared with me. I'm always looking forward to working with them!

We all come to nature with different backgrounds and interests, and when we come together for a common goal such as preserving BMCP, that's when the magic happens.

Recently I've been participating in the weekly bird walks and it's certainly been a hoot! Since this is a well-known birding spot, it's important I become well versed in the wonderful world of birds. At first, I was only able to identify a few birds, but



now I'm familiar with multiple species by sight and sound. Thanks to the amazing volunteers and even visitors, my knowledge of birds has greatly grown. It's very exciting to hear when birders get to see a certain bird for the first time. One day I talked with a visitor who saw six lifers in one day! The most exciting birds I've seen this season are the long-eared owls and the indigo/lazuli buntings. I'm looking forward to fall and winter migration and learning all about those birds as well.

As the education ranger, I participate in outdoor and indoor education programs for school-aged kids. In preparation for the new school year, we will be conduct-



ing docent training in September, and we are now recruiting additional volunteer docents. Please let us know if you would like to be considered for training. One of the most important tools in preserving nature is education so it's imperative we provide these education programs to get younger generations involved with nature. You never know what might spark a kid's interest and where it might lead them. Take me for example. My first visit to the preserve was on a school field trip and now I'm the

ranger here! This past school year I led my first school tour, and it was very fulfilling to see the kids' excitement as they learned some of the many wonders of the preserve.

People always say, "if you do what you love, you'll never work a day in your life" and that's how I feel being the ranger at BMCP. I truly love coming to work and getting to share the joys of nature with visitors and volunteers!

BMCP's Butterfly Garden, Six Years Later... by Larry Rosen

Spring has come and gone and we are deep into the summer of 2023. The past six years have seen real changes to the gardens at the preserve. It was in 2016 when Joe Zarki, Bill La Haye, and I began plans to restore the butterfly garden at the Nature Center. After some experimentation planting a few native perrenials in a sunny spot alongside the

bathrooms near the front parking lot, we determined that the original garden needed a new sunny addition and an added extension to the original garden.

The goal was to refresh the garden area for preserve visitors, creating an accessible area for visitors who may have

Memorable Moments...



There are so many things that have happened over the last few months that are memorable. Some of them might seem insignificant such as replacing and updating the portable toilet near the Edu-

cation Center or something as major as finalizing an official understanding with the Regional Parks of the County of San Bernardino. Where do I start?

One "big ticket" item is the signing of a memorandum of understanding (MOU) with one of our key partners, the Regional Parks of the County of San Bernardino. Since many of the acres we steward are on county land, this formal document outlines each of our respective responsibilities as partners. Clearly, they are there for us as much as we are for them.

by Maureen McCarty, President, Friends of BMCP Board of Directors

We also need to understand that much of the land that is in the preserve is also federal property that is managed by the Bureau of Land Management. In many ways we are the nexus to BLM-held land. This relationship continues to grow and prosper. Our volunteer teams maintain the pathways, and BLM helps us to remove the dead wood and invasive species from the preserve. This is another great partnership.

Our volunteer teams have really stepped it up in the last several months. The grounds and the trails of the preserve are in great condition. The Native Plants and Pollinator gardens attract butterflies and birds in great quantities. Our visitors also enjoy stopping there, too.

Another great improvement is the water feature at the Ed Center. In the past, we have done our best to patch the waterfall and pond to make it work, but it was forever failing us. With the help of a donor, we installed a professionally built water feature for the benefit of the birds, insects, and mammals of the preserve. The strong flow and filtration of the new pump keeps the water clean and healthy for its frequent visitors. And as the hot, dry summer days roll in, this newly refurbished water feature is making quite a splash with the local residents. Birds are cavorting and bathing in the flow. Bees are buzzing about, gathering drops to cool their hives. Deer bring their fawns over for a drink under the shady cottonwoods. The varied animal prints around the feature are evidence that many other critters are visiting at night.

As the board president, I am grateful for our board members. This is a "working board". No one is there just to have their name on a board, as they are there to work on behalf of the preserve. There is no area of the preserve that, in one way or another, a board member has not impacted with their time, expertise, and/or financial support.

I know I have left out many significant additional improvements over the last few months. You have seen them and you have voiced your appreciation for all of the physical improvements.

What a magic place is the Big Morongo Canyon Preserve, and how wonderful it is to be part of it.

Executive Director's Report: Moving Forward with Major Changes...

by Kevin Wong

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"Thank you for what you do", were the parting words of a woman and her adult son whom I recently met on the Marsh Trail. The son had just shown me a video that he took of a mother doe and her young fawn bounding through the wooded areas. They were so pleased to have witnessed part of the herd of mule deer

As a public land manager for over 25 years, I have worked with many partner groups and lots of volunteers. Working with the Friends of Big Morongo Canyon Preserve (Friends) has been a wonderful experience since my first day as the Sand to Snow National Monument manager in January 2017. The relationship with the Friends and the Bureau of Land Management has been fruitful beyond measure and has produced many benefits to the Big Morongo Canyon unit. The environmental education and land stewardship, and citizen science work done by the Friends has been very beneficial to local communities and could not be accomplished by the BLM staff alone. Big thanks to the Friends of Big Morongo Canyon Preserve! I am looking forward to what the future holds!

Jihadda Govan, Manager, Sand to Snow National Monument

that populates Big Morongo Canyon Preserve. When she referenced "you" in the above statement, she meant the entire team that works daily to maintain the preserve, which includes the volunteer teams, our board of directors, our preserve host, Ranger Kaeliegh Watson, and me. Meeting our goals is a concerted effort, and the different teams excel at the multitude of rehabilitation projects. These include:

the new water feature and the recently rebuilt bird feeding stations,
 installation of interpretive displays in the Education Center,
 re-opening the retail store with new, branded merchandise,
 working tirelessly to reduce the "fuel load" while observing the Migratory Bird Act,

maintaining the trails to keep them safe by clearing the ever-growing brush, they have a great nature experience, tending to the native plant and pollinator gardens showcasing the many variety of plants, and

increasing the number of school programs to provide outdoor education.

We want our kids to grow up to be adults who will protect nature– our Earth desperately needs this. And it's hard to protect something you don't love or value.

Turkey Vultures at the Forefront of Protecting Wildlife from Lead Exposure...by Dr. Andrea Bonisoli Alquati

In 2019 California became the first legislature in the world to ban lead ammunition for hunting. It's the latest and furthest step in a decades-long series of measures phasing out this toxic metal from industrial and consumer products. We eliminated lead from gasoline, pesticides, paints, and pipes. Bullets, scientists have been arguing, should be next. The reasons for these measures are compelling. Exposure to lead may damage the development of the nervous system, impairing learning and modifying behavior. A 2020 report by UNICEF estimated that one in three children, or 800 million of them, have blood concentrations of lead that exceed 5 micrograms per deciliter, a level that the US Centers for Disease Control and Prevention (CDC) associates with learning difficulties. The long-term effects of exposure to lead on adults are also tragic, with an estimated 1.5 million deaths resulting annually from chronic exposure to lead.

The United States has a history of being a leader in lead regulation. The 1976 Toxic Substances Control Act was among the first laws in the world to regulate leadbased paints. The prohibition of using lead bullets when hunting waterfowl, dating to 1991, achieved protection of wildlife, water quality and public health that other countries took decades more to reach. The European Union banned lead ammunition for hunting in wetlands only last year. California's 2019 ban extended safeguards that had been previously enacted in the range of the California condor (Gymnogyps californianus), to support the massive efforts for its reintroduction. For a successful reintroduction of the condor, lead bullets have to go. This would also benefit many other raptors, both obligate and facultative scavengers, who feed on carcasses and offal piles left behind by hunters, thus being exposed to lead.

For testing the efficacy of the California ban on lead ammunition, I have been trapping turkey vultures (Cathartes aura) since 2019. My collaborators and I reasoned that the ban would result in a rapid decrease in blood lead concentrations, which reflect recent dietary exposure. Over the last four years we trapped dozens of vultures, most of them at sites in Orange County, by setting up a cage baited with fresh carcasses and inhabited by a lure vulture. A funnel entrance to the cage ensures that the captured birds are not able to escape, allowing us to collect a blood sample and standard measures of their age and size. This research has shown that lead concentrations are now generally below clinical effects to the birds. There are, however, some exceptions. In spite of the ban, some older birds showed lead concentrations that, while not lethal, may still impair their cognitive skills and reproduction. We suspect that these birds stored lead in their bones after exposure earlier in their lives. From bone lead can be mobilized, as the skeleton, like all parts of an organism, is continually remodeled. Overall, though, the California ban on lead ammunition seems to be effective in reducing lead exposure to local birds.



A turkey vulture warms itself in the morning sun.

Photo courtesy of California State Polytechnic University, Pomona.



Turkey vulture, Cathartes aura. Photo courtesy of California State Polytechnic University, Pomona.

There is a major caveat. The distribution of turkey vultures extends throughout the Américas. Most turkey vultures travel hundreds or thousands of miles from Mexico and Central and South America to their breeding grounds in the North. Any localized ban is not protecting these birds wherever they need protection. To verify this idea, we started trapping turkey vultures in the Big Morongo Canyon Preserve. The preserve sits on this species' migratory route. In the past three years, we managed to entice about ten turkey vultures to stop over for a meal at the preserve. These birds likely came from Mexico, and had flown hundreds of miles in the preceding days. We found their lead exposure was in some cases many times higher than the California resident birds, and much higher than the concentrations sufficient to cause health effects. A localized ban cannot protect them. This way, the vultures trapped at the preserve remind us that birds know no borders. We also should aim for protection measures that cross borders, and promote the health of ecosystems and people everywhere, whatever the flag.

Andrea Bonisoli Alquati, Ph.D. Associate Professor California State Polytechnic University, Pomona

Photo captions, page 5. Clockwise from upper left: yellowbreasted chat, mating American kestrels, cedar waxwing, gray fox, Reakirt's blue on yerba mansa, harlequin beetles, long-eared owl, western red-tailed skinks, queen larva on rush milkweed, red diamond rattlesnake, desert bighorn ram, dainty sulphur on California buckwheat, osprey. Center: rainbow at Big Morongo Canyon Preserve.

Life Goes On– Big Morongo Canyon Preserve, 2023...



BMCP's Butterfly Garden, Six Years Later...

difficulty exploring for butterflies and plants in the preserve's more rugged trails and terrain. Also, the garden would provide opportunities for closer looks at the life cycle of some of the butterflies and to view other pollinators visiting the gardens.

The winter of 2017 saw the plans for the garden come to life. The land was prepared, seeds were collected from the outer reaches of the preserve, plant propagation was started, and the following May, new planting began. Since then, the Garden Gang increased in size with the addition of volunteers Steve Kerr, Linda Sheehan, Patty Domay, and Kathy Burgis. New irrigation lines were



A gray hairstreak on elongated buckwheat. photo by Joe Zarki.

(cont. from p. 2)

constructed and a new automated water controller was installed. The water feature was rebuilt for the joy of visiting birds, insects, deer, and other wildlife.

In April of this year, we started to collect some of the native seeds we need for the propagation of additional replacement plants in the gardens. Bill, Joe, Patty, Kathy and I began collecting from a few plants that had flowered and had seeds ready. We found grape soda lupine, deerweed, Coulter's lupine,, butterweed, turpentine broom, Acton's brittlebush, sweetbush, and desert globemallow.

We are also looking for: yerba santa, Mojave indigo bush, Mojave aster,, rush milkweed, narrow-leafed milkweed, and mule fat. Bill and I arranged with two outside sources to propagate this year's seed collections.

The Garden Gang of volunteers encourages you to visit the ongoing restorations of the Nature Center's gardens. Watch for butterflies, hummingbirds, and other pollinators in the gardens. While you are there have a seat and watch the comings and goings of the many species of birds feeding at our bird feeders, and don't forget to bring your binoculars and cameras. And for those of you who have a passion as we do for gardening join our Garden Gang volunteer group. We are all looking forward to seeing you there.

Community Science...(cont. from p. 1)



A speckled rattlesnake preys on a California thrasher. photo by Dan Ward.

iNaturalist says it aims to connect people to nature through technology. And the site's species-level identifications have been cited in thousands of scientific publications.

Many of our BMCP bird walk leaders do community science by posting eBird checklists of the birds seen on the walks they lead. This gets data about BMCP birds out to scientists around the globe. Matthew Grube, eBird reviewer for our BMCP region, says of our eBird checklists that they are important in "powering eBird science around the world."

Maybe you will be inspired to be a community scientist in whatever way is easy and fun for you.

(cont. from p. 1)

A Birdwatcher's Paradise...

there as often as I liked because I now lived nearby (and I could drive).

I've felt so lucky ever since. I've hiked all the trails numerous times, participated in hundreds of Wednesday and Saturday birdwalks, Christmas Bird Counts, and bio-blitzes there, brought countless students there from College of the Desert and the Desert Institute to learn about birds, bugs, reptiles or native plants, and would always stop by on my way to other high desert destinations just because I could. Sometimes I would never get out of the parking lot because I was hanging out with Dee and Betty Zeller at the feeders. One time a golden-winged warbler flitted above our heads-just one of many rare or unusual birds I've encountered there over the years. I've even seen bobcat, badger, and black bear



A male hooded oriole.

photo by Dan Ward.

there too- but have yet to see a mountain lion.

Big Morongo Canyon Preserve is a riparian oasis that sits at the confluence of the Colorado Desert and the Mojave Desert. The preserve serves as a crucial wildlife corridor between these desert ecosystems as well as between the San Bernardino Mountains and Joshua Tree

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National Park. The permanent presence of water in the preserve, flowing from the mountains to the Salton Sea, creates the magic that attracts birds and birders from all over the U.S.A. and the world. One can see high and low desert species as well as chaparral and mountain species, and even a few subtropical species which are attracted to the lush habitat. It's an incredibly rich biological crossroad! Visiting the preserve is like taking a trip to southeast Arizona as many of the same species that make SE Arizona famous among birdwatchers also occur at Big Morongo. Dragonfly watchers and wildflower enthusiasts also love Big Morongo Canyon Preserve for the same reasons.

Every Wednesday morning you can join the Big Morongo birders for a free birdwalk in the preserve and adjacent Covington Park. See you there!

Executive Director's Report...

Other members of the BMCP team are our partners, the Regional Parks of San Bernardino County, and Bureau of Land Management. Earlier this spring, the Friends group signed a partnership agreement with the County of San Bernardino (see Maureen McCarty's article). BLM has provided us with many 20yard and 30-yard dumpsters for removal of dead wood and the invasive plants that we continue to pull. A 20-yard dumpster is equal to seven pickup truck loads and a 30-yard one is equal to 10 pickup trucks. The bountiful rain this spring produced wonderful wildflowers, but the many invasive species of plants also thrived and flourished. They continue to be hand-pulled by the volunteers.

Another observation, while on the trails, are the courteous "Hellos" accompanied with a smile. Everyone appears to be happy in the preserve and they are eager to share their happiness. We know that being happy is not about measuring our income, status, passion, possessions, name, fame or health. It is a state of mind. Scientific studies show that:

- Being in nature decreases stress
 Nature makes you happier and less
- brooding
- □ Nature relieves attention fatigue and increases creativity
- Nature may help you to be kind and generous
- Nature makes you "feel more alive."

Being part of a great organization and a wonderful preserve that increases happiness is an exhilarating experience. Seeing the smiles of the visitors, on a daily basis, cannot be replicated by any other experience. Truly, Big Morongo Canyon Preserve is a "magical place".

Recently, we began conducting a survey of our visitors to understand where they reside and what were the most important reasons for visiting the preserve.

"Hiking the trails" and "enjoying nature" were the two most popular responses. I was surprised at how many local residents responded to the survey. Because they identify as locals, they are invested in the preserve and its future. Our regular visitors pitch in when they encounter a volunteer team. They give us observations on anything that may need attention, and they leave donations to fund the work that improves the preserve. I saw a father lift his child up to place a donation in the "iron ranger". They are pay-ing it forward! Friends of Big Morongo Canyon Preserve is a small, non-profit organization that is highly dependent on donations. You can ensure that the preserve continues to thrive and flourish by being generous with quarterly, monthly, or one-time donations on our website, by mail, or in person. And think about making Friends of Big Morongo Canyon Preserve a part of your estate planning.

If you have any questions on how you can help the preserve, please contact me.

Please Retu	urn Your Tax-deductible Donation to:
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SUPORT

FRIENDS OF BIG MORONGO CANYON PRESERVE

Friends of Big Morongo Canyon Preserve is a nonprofit 501(c) (3) association organized for the support of programs at Big Morongo Canyon Preserve. We are dedicated to the exploration, preservation, and stewardship of the preserve by protecting and managing its resources, and by providing educational programs, access for wildlife viewing, and recreational opportunities for the enjoyment of its visitors.

Credit card donations can be made at <u>www.bigmorongo.org</u>. Donations may also be tax deductible.

(cont. from p. 3)

BIG MORONGO CANYON PRESERVE



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GO GREEN...to choose the digital option for receiving your newsletter, email: <u>bmcp@bigmorongo.org.</u>



CALENDAR AT BMCP AUGUST – NOVEMBER Gate open 7:30 a.m. to Sunset 365 days a year

Wednesday Bird Walks

Bird walks are offered each Wednesday morning at 7:00 a.m. to 10:30 a.m. (starting 8:00 a.m. beginning in October). Meet at the main preserve parking area. Recently seen bird lists are updated weekly and may be viewed at: www.bigmorongo.org/birds.

AMBASSADOR KIOSK

Friday, Saturday & Sunday: Ambassadors will be at the kiosk to provide information on the latest BMCP happenings. They are very happy to tell you about recent wildlife sightings, safety precautions, and make recommendations for walks based upon weather, fitness, and time. BMCP branded merchandise is available for sale at the kiosk. The kiosk also has educational displays including the history, geology, flora, fauna, and bird sightings of Big Morongo Canyon Preserve. UPCOMING EVENTS & COURSES (See p. 2 for more details)

September 16, 8 a.m. - Noon. *Reptiles of Big Morongo Canyon Preserve*. Jane 'Spider' Fawke.

October 14, 8:00-10:00 a.m. *View the Solar Eclipse* with Jim LaMotte

October 21, 9 a.m. - Noon - *Geology of Big Morongo Canyon Preserve* with Prof. Bruce Bridenbecker.

October 28, 8 a.m. - Noon. National Public Lands Day.

November 11, 8:30 am -12:30 pm, *Identifying Birds by Sight and Song* with Robin Roberts.

November 18, 7:30 a.m. - 12:30 p.m.. *Photographing Autumn in Big Morongo* with Craig Fucile.

December 2, 8 a.m. - 1:00 p.m. *Photographing Fall Color in Desert Preserves* with Craig Fucile.

Course fees are \$65 per person. Class size limited to 8 participants.