

**ARLINGTON
CONSERVATION
COUNCIL**

POST OAK

VOLUME 25, NUMBER 3

APRIL 2024

RANDOL MILL PARK • CAROL MARCOTTE PHOTO

April Zoom Meeting



Read more about this program on page 5

Join by Zoom <https://us06web.zoom.us/j/81454647993>

**For assistance accessing the meeting, contact Frank Keeney,
webmaster@acctexas.org**

6:30 pm social time and equipment check, 7 pm presentation

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From the President **Dick Schoech**



Should Arlington have wildlife and plant corridors?

Urban wildlife and plant corridors are habitat areas that connect ecosystems between parks separated by distance and roads, and they were a brilliant idea. Without parks, cities would have lost communal and recreational spaces along with many, many plant and animal species. However, even large parks can be islands of habitat extinction that need improving.

COVID sent record numbers of people into urban parks for safe recreation. The popularity of books like *Wild DFW* by Amy Martin (2024) help us hike beyond neighborhood parks into large tracts of land to discover Mother Earth and all her wonders. Even so, we now drive miles to the Fort Worth Nature Center to see a few live bison on a small patch of native prairie that lacks prairie dogs, wallows, and other elements of a well-rounded prairie ecosystem.

Did you ever put a plant in the perfect location only to find that it spread to find better sun, water, or soil? Environmentalists know that plants and animals move to help the species survive. February 2024 was the hottest month on record, and 2024 has a 99% chance of being in the top five warmest years. Plants, insects, and other animals are on the move to find better living conditions, as evidenced by the shifting northward by half a zone of most USDA Plant Hardiness Zones. ACC's October 2023 guest speaker, meteorologist Jeff Ray, told us how the Texas Tree Foundation has reduced the number of DFW recommended tree species from 40 to five.

Strategies like rewilding can help natural areas adjust to climate change. One city has documented the way by rewilding with green corridors.

Over the past several years, Medellín, Colombia, along with help from an army of citizen-gardeners, has planted and maintained hundreds of thousands of trees and native plants to create a network of green corridors across the city. And the work is paying off big! So far, urban temperatures have dropped by 2 degrees Celsius and are

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ACC POST OAK

Our mission: ACC works to protect Arlington's natural environment through education, community service, and advocacy for a sustainable future

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From the President continued from page 3

expected to drop another 4-5 degrees in the coming decades. Inhalable particulate matter has decreased, death from acute respiratory infections has decreased, and one study showed that just one of the green corridors can absorb up to 160,787 kg of CO₂ per year. (See global warming link below or better yet, [read this](#).)

Are Arlington's 99+ parks islands of extinction? Before available land is gone, our focus should shift from developing more parks to connecting existing parks with corridors. Arlington now has several linear parks that follow our numerous floodplains, creeks, and rivers. With proper infrastructure like trails for hiking and biking, these linear parks can improve Arlington's quality of life and enable plants and wildlife to adjust to our changing climate.

For more information

- ACC's YouTube channel containing guest speaker's audio is at <https://www.youtube.com/@ArlingtonConservationCouncil>
- <https://www.globalwarmingproblemsolvers.com/>
- <https://www.noaa.gov/news/earth-just-had-its-warmest-february-on-record>
- A Yellowstone to Yukon initiative hopes to give wildlife room to roam. <https://rb.gy/mzp2as>



Giant spiderworts in President Schoech's yard.

Our April Zoom Program

Wednesday, April 3, 7 pm

Environmental Perspectives on the Last and Next Legislative Sessions

Rita Beving of Public Citizen will recap some of the major environmental legislation enacted — and not — during the 88th Texas Legislature with an eye toward what may be trending in the next session in 2025. She has a 25-year history of advocating on environmental issues both professionally and as a volunteer with the Sierra Club and Clean Water Fund. Since 2013 she has worked with the national nonprofit Public Citizen as a registered lobbyist on a variety of issues.

For several years Rita served alongside local officials on the North Central Texas Council of Governments' Clean Air Steering Committee to help reduce ozone as part of the State Implementation Plan. Statewide she has battled the Keystone XL and TransPecos pipelines, land farms, landfills, cement kilns, and concrete batch plants.

She worked with former Dallas Mayor Laura Miller and other nonprofits to defeat the permitting of more than a dozen coal plants. She was vice chair of the task force that helped develop Dallas' Comprehensive Environmental and Climate Action Plan, and she currently serves as a technical air advisor for the city's environmental commission.

She is a graduate of Iowa State University and lives in the Dallas area with her husband, attorney David Griggs.



The Watchdog Needs You
watchdog@acctexas.org

**We try hard, but we can't keep up with every environmental thing.
So if you see something we should know about,
email a message to the watchdog.**

Bits & Pieces

The Terse Treehugger



All that rain on the roof.
Piped off, rushes through
a planting bed. Hits the
street and heads for the
Trinity.

We ever gonna get
serious about [gray to
green](#)?

**Visit ACC's
Facebook page
and
Arlington
Conservation
Council
Discussion Group**

Yard Art



Do you ever stand in the
yard thinking this dump is a
real mess? I really have to
clean it up. But then you're
picking up dove feathers
when you hear a Cooper's
hawk and notice a cottontail
frozen in place. Maybe then
you think it could be worse;
might be just a sterile lawn.



Golden groundsel

We Still Don't Get It, Part 4,973



Maybe cedar elms don't
care, but the other day a
landscape crew was testing
this by carefully heaping
mulch up against the trunks
of half a dozen of them by
some apartments on Abram
Street. Haven't found
anybody who likes it, and
it's easy to find [a source](#)
that says don't do it.

**Join us and act locally.
Use the application form
on the back page.**



Question Corner **John Darling**

Q: I bought a plug-in electric car, but I know when I charge it at home the electricity comes from a natural gas power plant. So why can't we just have solar-powered cars and be really clean?

A: You don't have a car; you have a can of worms, and maybe the wrong question. Why not keep your plug-in and switch your provider to one that sells renewable energy? Or build a **solar carport** with 8-12 solar panels on it? Or **look stuff up** and have smart people tell you why you can't have a solar car unless you can manage with that thing in the photo. Basically, solar panels **aren't efficient enough** to stick some on the available space and power a car. But maybe the best thing on the horizon is having solar panels incorporated into **your next EV** that top it up enough to drastically reduce charging. But remember, anything you consume, build, or buy will pollute. Now where did I park my Rambler? Next!



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Wild Birds Unlimited
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(817) 275-1000
www.wbu.com/arlingtontx
Hours 10 - 6 Mon - Sat,
Closed Sun



Green Arlington Foundation
Supporting local sustainability

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Cross vine, UTA parking garage

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Working Toward a Healthy Community
On a
Liveable Planet



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Yes, We're Talking to YOU

Join ACC any time. Now would be good.

IVAN QUERIDO'S REAL HERITAGE TREE

Special field correspondent Ivan Querido seems to have hit rock bottom this month. We can only hope. So your hoity-toity crowd loves to hate hackberries and that's kinda wrong. Look, this one's going strong except for being mostly dead. Two, count 'em, two trunks! With even a crow's nest right on top. What more do you want from a tree?



Our real poet is off today

Maybe you thought all along that
Our little nature newsletter
Has no business with poetry.

But have you been listening to the birds
Making wonderful noise in the early morning?
The poetry of Bewick's wrens!
Bubbling, almost warbling,
Hopping everywhere, poking into tiny spaces
As if volume and verve
Would overcome their poor drab look.

So many years ago, decades really,
A Bewick's wren started me on my first steps
To a chaotic (but native) landscape
When it nested in my lawnmower's grass bag.
No choice there: First no catching of cut grass,
Then, finally, no grass at all.
Only an unruly mess of little trees, big shrubs,
Gangly flowers, and illegally tall sea oats.

All starting, I tell myself, with the tiniest eggs
Laid in an awkward spot
Long before I learned how smart people
Say Bewick.
Who knew then it was just like the car
that introduced me to Cruiser-Line Ventiports?
Priceless information. And those birds, too.

G. Alphonse Random

ACC Heritage Trees

ACC Heritage Trees

From Dick Schoech: Here's a great tree (probably a Post oak) for the Heritage Tree page. It was taken on March 5 at the trailhead of the 1.2 mile Martin Luther King nature trail at the MLK sports complex. In the picture is Donna Piercy. It is a decomposed granite trail through tall old trees providing shade and plenty of birds. It's worth a visit for a meditative walk. You will rarely find any others on the trail.

<https://www.alltrails.com/trail/us/texas/mlk-sports-complex-nature-trail>



We're **Still** Doing Something Big

The ACC-UTA Endowment — established to support future environmentalists, promote environmental integrity and strengthen climate resilience — is a success!

Thanks to you, it has awarded a scholarship each of the last two years. Watch one awardee's presentation of his research [here](#).

And it is getting bigger.

This year it will award a \$1,000 scholarship and a \$3,000 research grant.

Please help the endowment make an even greater impact benefitting even more students. Keep it growing.

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ACC-UTA Endowment
For good.
Forever.
[Donate here.](#)



We're **Still** Doing Something Big continued from page 10

Here's the latest on our educational effort:

The Spring 2024 ACC Undergraduate Scholarship has been awarded to Mohammad Rahman, a sophomore computer science major who is continuing work on a project that will allow him to fully commit to his goal of preserving natural resources and making more significant strides toward sustainable management and conservation efforts.

Mohammad is currently working on development of an Object Detection Model aimed at monitoring and improving water quality by identifying and qualifying pollutants (such as harmful substances and plastic waste) in water bodies to proactively safeguard aquatic ecosystems.

He is the the founder of the Students in Computing and Artificial Intelligence (SCAI) Club at UTA. One of SCAI's key initiatives is hosting workshops that give students the opportunity to collect and analyze environmental data on pressing issues such as water pollution, air quality, deforestation rates, and the impact of industrial emissions on climate change.

ACC-UTA Endowment
For good.
Forever.
[Donate here.](#)



My Nature Notebook

Skeeter hawks

Last night my little brother Stupid was crying because he said a giant mosquito was trying to bite him. But Mom said no, no, that's just a skeeter hawk and it only eats real mosquitos. Now go outside but STAY IN THE



YARD! So we did and there was the creepy old guy next door doing something by a sheet on the side of his house with a purple light shining on it. And there were zillions of skeeter hawks on the sheet but the C.O.G. wasn't afraid and he said they can't hurt you because this kind doesn't have real mouths and they don't eat at all. So I said Huh? So why are they here? What good are they? And what are those two doing? And he said What good are you? And they're here to make babies that look like fat worms and live underground. And those two stuck together? Ask your mother. Definitely.

O.S. Gray Natural Area Amy Martin text and photos

From a story you can find at the [O.S. Gray Friends](#) site below. Go there for many more photos. O.S. Gray surprised me. On the Arlington city map, it looks like there are two short paved trails. But guided by the fine folks from [The Friends of O.S. Gray Natural Area](#), the place kept unfolding. We visited a very old post oak, thriving in spite of being wedged between a thoroughfare and a concrete channel.

We then ambled the other direction, through areas struggling deeply with privet infestation and the most robust poison ivy I've seen in a long while, but safely off trail. Cool stencils in the paved path paid tribute to several pecan varieties developed by O.S. Gray when the place was a pecan nursery.

The other half comes via the Rosser family and contains a fine open Rosser's Woods of large post oaks that the volunteers are valiantly restraining privet growth in, even releasing a little prairie remnant, Rosser's Meadow, now being established with native wildflowers and grasses.

The playground at O.S. Gray is very popular. In a brilliant move, the Friends created a Little Free Library and stocked it with nature books for kids, also very popular.

Worth a visit, y'all. I'll be back! Even the grizzled worker taking a break in the parking lot said of the Friends, "Yeah, I like what they're doing here."



Star Gazing at O.S. Gray Natural Area Carrie Donovan

On February 24, 2024, nature enthusiasts and stargazers alike gathered at the OS Gray Natural Area for a mesmerizing night under the full moon. Approximately 200 attendees marveled at the celestial wonders during the 7th annual Star Party, an event celebrated for its blend of astronomy, education, and outdoor camaraderie.

The evening unfolded with a festive atmosphere, as guests enjoyed the quintessential delights of a campfire gathering. Hotdogs sizzled on grills, marshmallows burst into flames over fire pits, and laughter filled the air as families and friends gathered on the front lawn, surrounded by the tranquil beauty of oak and pecan trees.

Adding to the charm of the evening were the ten dedicated students from Seguin High School, led by their teacher, Ms. W.H. With enthusiasm and warmth, they assisted in distributing wooden skewers for hotdogs and marshmallows, ensuring everyone could indulge in the fireside treats.

In a secluded corner of the natural area, a curious crowd gathered around a softly lit Campfire Light stand, drawn by the presence of a remarkable guest - a Prairie king snake named "Callie" and her handler, Michael Smith. Amidst whispered conversations and gasps of awe, Michael shared captivating insights into the role of snakes like Callie in the Texas grasslands ecosystem, while Callie herself gracefully captivated the audience with her gentle movements.

However, the highlight of the evening was undoubtedly the presence of the Fort Worth Astronomical Sidewalk Astronomers. Setting up their telescopes in the parking lot well before dusk, these dedicated astronomers guided attendees on an enchanting journey through the night sky. As the park lights dimmed, Jupiter and its moons, the ethereal Orion Nebula, and clusters of stars came into view,

sparking wonder and excitement among children and adults alike.

The success of the Star Party was made possible through the collaborative efforts of numerous individuals and organizations, including the Friends of OS Gray Natural Area (FOOGNA), the Seguin High School students and Ms. W.H., Hester Schwarzer, Michael Smith, the Fort Worth Astronomical Sidewalk Astronomers, Arlington Parks & Recreation Dept., and generous donations.

For those who missed the celestial spectacle, the FOOSGNA Facebook and Instagram pages offer glimpses into the night's festivities. Additionally, all are welcome to join the community work days held on the second Saturday of each month. And for a cozy retreat into nature, the newly established Little OS Gray Natural Area Library awaits visitors next to the playground and wildflower beds, inviting all to explore and connect with the wonders of the great outdoors.



Editor's note: The sky didn't look like this, but we we can always hope.

Randol Mill Park Carol Marcotte text and photos

The Texas Parks and Wildlife Department released approximately 1000 Rainbow trout into the pond again this year.

Fisherpersons were ready to throw in a line as soon as the truck left the park

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Randol Mill Park continued from page 15

Another bluebird nest box

Randol Mill Park now has 14 bluebird nesting boxes! Dick Schoech and Carol Marcotte installed the latest one. Look for it in the pollinator garden Josephine Keeney manages.

Volunteer work day

On Thursday Feb 22 we worked at the front entrance garden cleaning, trimming and weeding. Volunteers included Debbie Stilson, Patsy Miller, Dick Schoech and Carol Marcotte.

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Right, Dick Schoech with the latest bluebird nest box.

Below from left, Debbie Stilson, Patsy Miller, Dick Schoech



Randol Mill Park continued from page 16

Trail Signs

Jamie and Mark Brunner have produced and installed trail marker signs in the park. APRD has approved them. The RMP trails are Creek Trail, Redbud Trail and Wildflower Trail. No getting lost now in the natural areas. Thank you, Jamie and Mark.

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EARTH DAY

RANDOL MILL PARK
SATURDAY, APRIL 20, 2024
9am ~ 12 noon



Please come to celebrate **Earth Day** at Randol Mill Park

Trail Building with Arlington experts
Bluebird Box demonstration
Park, Creek & Pond litter clean up
Native Plant Gardening
Invasive Plant Removal
Making & Distribution of Seed Balls

Sign in at the park Pavilion. 1901 W. Randol Mill Road, Arlington.
Tools, snacks, water, giveaways, grabbers & trash bags are provided at RMP pavilion. Advise to bring sunscreen, water, hat and gloves.

Randol Mill Park continued from page 17

NORMP Annual Spring Clean Up

On March 2, **Neighbors of Randol Mill Park** came and went through the morning. Thank you, APRD, for trash bags and the loan of grabbers!

Below from left, Beverly Windsor, Bob Marcotte, Jon Stewart, and Tammie Zaleski.



Spring is a wonderful time to enjoy the pond triangle garden.



Social Media

Be sure to visit
ACC's Facebook page
and
Arlington Conservation Council
Discussion Group



**Our ACC board members love to
talk whenever they're not busy**

ACC on YouTube

Arlington Conservation Council recently set up its own [YouTube](#) channel to upload presentations given at its monthly meetings. Speakers address a range of environmental topics including local issues, wildlife, native plants, and natural areas. Be sure to check the channel soon after each monthly meeting for the latest program upload. From time to time, videos of related interest will be uploaded as well.

Molly Hollar Wildscape Update Marian Hiler

All photos taken by Ann Knudsen except where noted.

Though the lovely and fragrant blossoms of the Mexican plum have now faded there is still plenty of spring color to appreciate in the wildscape. Some buds were just opening while others were in full bloom during March. Always a welcome sight as the days warm and lengthen is the new bright green growth across the wildscape. Flowering trees and shrubs in colors from white and yellows to pinks, purples and reds have been showing off all month. However, not all blooms are conspicuous to us. The coralberry's tiny-greenish-white flowers may be unassuming but are highly attractive to pollinators.

The pollinators are also enjoying the spring flowers. Ann Knudsen observed dozens of Hummingbird clearwing moths hovering over the purple flowers of salvia and Mexican buckeye to sip their nectar. Although not a true buckeye, Mexican buckeye is so called because of the similar large capsules and seeds.

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Right, One of the season's first Texas bluebonnets ([Lupinus texensis](#)). Below, Golden Groundsel ([Packera obovata](#)). Marian Hiler photo.



Wildscape Update continued from page 20, continued on page 22



Above and above right, Crossvine (*Bignonia capreolata*)

Below right, Agarita (*Mahonia trifoliolata*)

Wildscape Update continued from page 21, continued on page 23

Right and below, Red buckeye ([*Aesculus pavia*](#))
Dana Austin and Ann Knudsen photos.



Wildscape Update continued from page 22, continued on page 24



Above, Hummingbird clearwing moth ([*Hemaris thysbe*](#)) feeding on Autumn sage ([*Salvia greggii*](#)).



Above right, Another moth on Mexican buckeye ([*Ungnadia speciosa*](#)).

Below right, Mexican buckeye ([*Ungnadia speciosa*](#)) visited by a honey bee.



Wildscape Update continued from page 23



Left and below left, Rusty blackhaw viburnum (*Viburnum rufidulum*),

Below, Giant spiderwort (*Tradescantia gigantea*)



Wildscape Update continued from page 24, continued on page 26

Right, Mountain laurel (*Sophora secundiflora*)

Below right, Goldenball leadtree (*Leucaena retusa*) leaves budding out. Expect to see its showy balls of golden-yellow flowers in the next few weeks. Dana Austin photo.

Below, White honeysuckle (*Lonicera albiflora*) on the verge of blooming. Dana Austin photo.



Wildscape Update continued from page 25, continued on page 27



Coralberry (*[Symphoricarpos orbiculatus](#)*)



The Butterfly Garden on the verge of exploding with Pink evening primrose (*[Oenothera speciosa](#)*) and Mealy blue sage (*[Salvia farinacea](#)*) blooms.



The woodland area in its vibrant green cover.
Dana Austin photo.

Wildscape Update continued from page 26

First Saturday mini-classes

At the March 2 mini-class, Master Naturalist and wildscape volunteer Josephine Keeney presented “From Grass to Texas Native Plants.” She talked about the Keeney’s two-year conversion process. How they first planned the layout with traffic pathways and bed placement in mind. Then they laid down newspapers and paper bags in preparation for topping off with three free truckloads of tree mulch.

The Apr 6 mini-class will be “*Toxicodendron radicans*.” Joe Martinez, Master Naturalist and wildscape volunteer, will cover how to stay on the prowl for poison ivy and avoid irritating contact. Come join us, if only for the class, in the compost area. The class begins about 11:30 as the workday volunteers put away the day’s tools.

Volunteer Opportunities 9:00 – noon Wednesdays and first Saturdays

All are welcome, no experience necessary. Members of ecology and garden groups can receive credit hours. For more information contact info@thewildscape.org



Josephine Keeney showing pictures of some of the major steps they took to convert their front yard to native plants. Marian Hiler photo.

In Case You Missed It Grace Darling

This spring and summer, across the Midwest and Southeast United States, cicadas will crawl out of their underground burrows by the trillions to mate — due to two different broods emerging at about the same time, one on a 13-year cycle and one on a 17-year cycle. In their brief several weeks aboveground, their mission will be to reproduce. Each male will attempt to attract females by producing a buzzing noise as loud as a lawnmower. But beyond their prodigious numbers and raucous noise, new research published in *PNAS* reveals that cicadas are special in yet another way — their urination. Based on their size and diet, scientists suspected they'd urinate in droplets, but it turns out that these insects produce jets of pee.

According to the Law of Urination, most animals rely on the forces of inertia and gravity to pull down the fluids from their bladder, but when an organism is small (like the size of an insect), then fluids care less about gravity. Instead, surface tension and friction dominate. The result is that most insects and most small mammals like mice and bats urinate in droplets through smaller orifices because droplet urination uses way less energy. So that seemed to be the general rule: If you're big, you pee in a jet; if you're small, you pee in droplets. But recent research shows cicadas defy that expectation.

Here's what scientists think is going on: Cicadas are big insects with a wider gut, plus they have to

process a huge quantity of sap to extract enough energy to power their bodies. "Peeing one droplet at a time takes too long and it's not very efficient, so they have to get rid of that fluid in jets," says principal investigator Elio Challita. It's the latest leap in the development of what Challita hopes could become a kind of Grand Urinating Theory.

<https://www.scientificamerican.com/article/why-cicadas-power-spray-their-pee/> and [npr.org, 3/20/24](https://www.npr.org/2024/03/20/cicadas-urinate)



Local authorities in Seville had been looking for solutions to counter the consequences of a further increase in temperatures due to global warming. The technology they opted for is based on qanats, or special wells that were developed in ancient Persia over 1,000 years ago. The qanats were a series of vertical shafts connected by an underground canal characterized by a slight slope; the canals started from an aquifer and enabled the water to reach great distances taking advantage of gravity without losing some of it due to evaporation.

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In Case continued from page 28

The same principle was used and modernized by the engineers who developed the "CartujaQanat" project for the city of Seville. In this case, the purpose is to transport water to cool a large part of the city center through a system of vertical openings that enable the cool air to reach the surface.

The project of the Seville municipality uses entirely renewable sources. The part of Seville subject to this new technological experiment will enjoy a reduction in temperatures of approximately 10°C and it is estimated that the process will work up to 41°C (105.8 °F). [<https://lightbox.terna.it/en/frontline-24-7/past-technologies-counter-climate-change>]

The CartujaQanat was designed by researchers at Universidad de Sevilla, who added some modern twists to the Persian engineering marvel that served as its inspiration. At night, water runs through an aqueduct outside, which takes it over solar panels on the roof and into giant tanks underground. Contact with the lower temperatures cools the water, while the closed circuit minimizes waste. When the day starts to get hot, solar-powered pumps push the same water through small pipes that run in front of fans to generate cold air. Small openings in the floor and steps allow the refreshing current to seep into the square.

The square itself has features that make sure temperatures inside are lower even when the qanat system isn't operating. It sits 6.5 feet underground, is covered by a white heat-reflecting roof and surrounded by columns and vegetation that help cool it down.

Political Update: Most of the work on the 5-million-euro (\$5.6 million) project, 80% funded by the European Union, was completed last October —

significantly later than its original 2021 deadline. But its opening has been delayed since the progressive Socialist Party, which launched the project, lost local elections in May to the conservative People's Party.

The project has been in limbo since. Over the past few months, CartujaQanat has been used a handful of times for demonstrations to European and local authorities, but remains shut to Sevillanos. The finished structure — walls freshly painted and ponds filled with water — was fenced up and covered in overgrown vegetation and piles of dried leaves when *Bloomberg Green* visited in July. [<https://www.bloomberg.com/features/2023-seville-spain-extreme-heat/?embedded-checkout=true>]



Only a year ago, President Biden signed a proclamation establishing the Castner Range National Monument. The monument consists of 6,672 acres of high-desert mountains, making up the southern component of the Franklin Mountain range, just outside of El Paso, Texas. Located on Fort Bliss Military Base, Castner Range served as the training and testing site for the U.S. Army from 1926-1966. The Army ceased training at the site and closed Castner Range in 1966.

Before the U.S. Army used the lands, Castner Range was home to the Apache and Pueblo peoples and the Comanche Nation, the Hopi Tribe, and Kiowa Indian Tribe of Oklahoma. The Castner Range area

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In Case continued from page 29

contains more than 40 known archeological sites including living structures, hearths, remnants of pottery and other tools, as well as myriad petroglyphs and images on the rock faces that make up the canyons and mountains of Castner Range.

The local El Paso community cherishes the Franklin Mountains for their natural and ecological features. Castner Range remains an area of high biodiversity for desert species in America, including spring blooms of the Mexican poppy. In addition to the poppies, this section of the Franklin Mountains also contains a high concentration of natural springs. Along with creosote brush vegetation, it provides important habitat to wildlife that call Castner Range home, including the American peregrine falcon, Golden eagle, Mountain plover, Texas horned lizard, Black-tailed prairie dog, Baird's sparrow, and the Western burrowing owl. The endangered Sneed pincushion cactus and a host of other rare or endemic plants also inhabit the area. Protecting Castner Range ensures connectivity with other protected areas and migratory corridors for species to travel without the threat of human impacts.

[<https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/21/fact-sheet-president-biden-designates-castner-range-national-monument/#:~:text=Castner%20Range%20National%20Monument%20consists,U.S.%20Army%20from%201926%2D1966.>]

As Russian forces bombard communities across Ukraine, the nation's once-vibrant ecosystems are becoming scorched and scarred, rewinding decades of conservation work. Of particular concern is the eastern part of Ukraine, which is home to industrial infrastructure, including oil depots, coal mines, and nuclear power plants. Without human regulation, each site could potentially spill fuel and leak toxic, planet-warming pollutants into villages, the water



supply, and the atmosphere. Advocates on the ground say that eliminating fossil fuel use could reduce devastating climate outcomes while also disrupting Russia's oil-dominant economy. Without its fossil fuel industry, Russia wouldn't be able to fund the war in Ukraine, since much of Russia's wealth and power comes from its oil and gas exports. Meanwhile, the list of "environmental war crimes" committed by Russia during the invasion continues to grow. [The Washington Post, reprinted in DMN 4/20/22]

From *The Last Climate 202* edition, The Washington Post: 2023 was a critical year for climate policy in the United States. In Washington, the Biden administration doled out billions of dollars from the **Inflation Reduction Act**, Biden's signature climate law, while in state capitols across the country (but not in Texas) lawmakers pushed to accelerate the adoption of clean energy, electric vehicles and other green technologies. This year, Democratic lawmakers in both **Michigan and Minnesota** passed landmark legislation requiring their states to reach 100% clean energy by 2040. Next year, environmentalists are closely watching at least three other states that could forge ahead on climate action, regardless of the balance of power in Washington: Massachusetts, New Jersey, and Pennsylvania.

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The U.S. Forest Service has announced its [strategy](#) to protect America's oldest trees in national forests, including a ban on most logging in groves that play a vital role in fighting climate change. The strategy would prohibit cutting down old-growth trees for economic reasons, preventing carbon-rich forests from being cleared at a time when scientists say they are most needed. These trees, most of which are well over 100 years old, store vast amounts of carbon, provide essential habitat for hundreds of species, and are more likely to survive wildfires. Some forest thinning techniques would still be allowed in old-growth stands to protect them from out-of-control fires.



Lithium is vital for almost all rechargeable batteries and critical to the roll-out of emissions-free cars and clean energy. Australia is the largest lithium producer in the world, accounting for 47% of all supplies, followed by Chile (30%) and China (14.6%). Lithium-ion batteries are the single-largest end use of lithium, amounting to an 80% share of global lithium consumption in 2022. These batteries are highly flammable but are also low-maintenance. Some drawbacks include the fact that they are expensive to manufacture, and that they require protection circuits to maintain the voltage safely. In

2022 the electric vehicle market was trying to halt a breakneck run-up in lithium prices, which had surged almost 490% in a single year; demand for lithium was expected to jump fivefold by the end of the decade, analysts predicted. Instead, lithium prices have dropped more than 80% from their 2022 peak, driven mostly by slowing growth of electric vehicle sales in China, coupled with the broader slowdown in the Chinese economy.

As demand remains sluggish at previous pricing levels and supply surpasses demand, prices have inevitably fallen. In response to the oversupply, producers have cut head count and scaled back on projects, leading to production curtailments and project delays by the EV manufacturers. Long term, analysts and industry participants expect EV demand to pick up, and EVs are expected to make up about half of new car sales worldwide by 2035, according to Goldman Sachs research. That means continued demand for lithium. [<https://www.bloomberg.com/news/articles/2024-02-15/low-lithium-prices-are-unsustainable-says-top-miner-albemarle?embedded-checkout=true>]

Technology involving heated sand becomes part of the answer to energy storage needs. Thermal energy storage, which uses molten salt or even superheated rocks, shows promise as a low-cost alternative to existing storage technologies, and storing energy in solid particles such as sand comes with fewer restrictions. After all, sand is everywhere. Patented technology developed at NREL reveals how heaters powered by renewable energy sources can raise the temperature of sand particles to the desired temperature. The sand is then deposited into a silo for storage and use later. A laboratory-scale prototype and computer modeling allowed researchers to show that a commercial-scale device would retain more than 95% of its heat for at least five days. [[NREL News, 3/28/24](#)]

Sheri Capehart Nature Preserve Annabelle Corboy

Coming Up Mindfulness and Nature Journaling

Saturday, April 6, 2 pm

Led by Michael Smith, M.A.

We will meet at the preserve at 2:00 p.m., at the north end of the parking lot (closest to the hill). After introducing mindfulness, we will climb up to the bluff and walk in several parts of the preserve. Adults and older children (aged 10 and over) welcome. Please register at <https://www.facebook.com/FriendsofSCNP> for this free event.



Let's take a walk and let go of distractions and stresses. Time spent in nature benefits our mood, thinking, and health, according to many research studies. We can spend some time among the trees and grasses, breathing easily and noticing what it is like to live in the present moment.

Mindfulness involves very intentionally paying attention to our present experience, accepting it just as it is. Mindfulness also has a good track record of benefits to such things as mood and attention, and it can promote kindness and empathy. When we practice it in nature, we are likely to appreciate our surroundings as if seeing and hearing them for the first time.

We can then take a little time to reflect on what is around us and within us, writing or drawing in a nature journal. Doing this helps us organize our thoughts, adds to our self-understanding, and may benefit our mental wellness in other ways. Bring a notebook and pen and/or pencil!

Your walk leader: Michael Smith has been licensed as a Psychological Associate for over 38 years. He is author of the forthcoming book, *Mindfulness in Texas Nature*, from Texas A&M University Press. You can find him at <https://livesinnature.com>.

Sheri Capehart Nature Preserve continued from page 32

An Early March Morning Filled with Biodiversity Michael Smith

The 59 acres of Sheri Capehart Nature Preserve (SCNP) are home to a huge community of plants, animals, fungi and lichens. So far, the SCNP project at the citizen science app iNaturalist contains 1,684 species. All those species and that 59 acres of land and water are a small remnant of the Eastern Cross Timbers. That makes SCNP a sort of living natural history museum where we can learn about the oak woodlands and prairies that used to run in a north-south band through north Texas.

The Friends of SCNP offers opportunities to walk through woodlands, patches of prairie, and sit at the edge of the ponds to not only learn about the life of the place but also add to our understanding of what lives here. We offer walks that we call “Know Your Nature Neighbors,” in which we look for and document various plants and animals using iNaturalist. Knowledgeable Friends of SCNP members and Master Naturalists are available to help people find and observe the birds, lizards, dragonflies, flowers, trees, and all the other living things. We call this search, observation, and documenting a “mini bioblitz.”

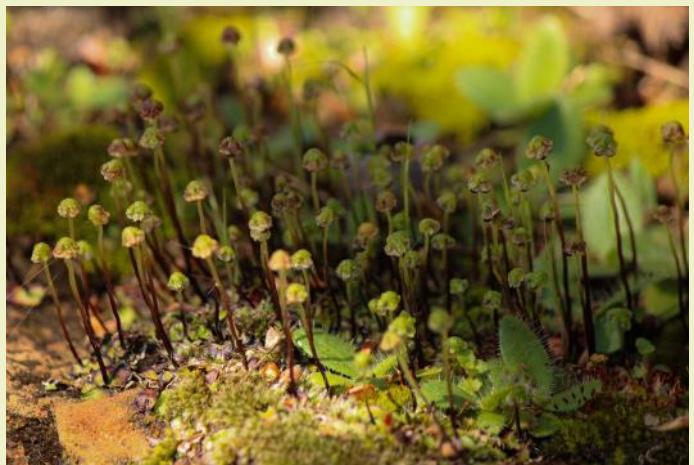
March 9 was the first of these events, starting out cold and windy. At 10:00 a.m. it was about 45 degrees and partly cloudy, and so we had a small group. But as the morning progressed, there was more sun and enough warmth to be a delightful day. The turtles thought so; we saw red-eared sliders as well as river cooters at the south pond. They were joined by a magnificent great blue heron that flew around us and landed on the opposite shore to search for frogs and fish.



Red-eared slider. Kat Oliver photo.



Great blue heron. Kat Oliver photo.



A liverwort identified as the Delicate starwort

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Sheri Capehart Nature Preserve continued from page 33

Our hardy group included Jan and Michael from Friends of SCNP, as well as Alaina, Kat, and Ellie from the Cross Timbers Master Naturalists chapter. We found living things from down in the soil to up in the sky and everywhere in between. There was a South American toothed hacklemesh weaver (a little spider native to South America that has been found in the U.S. for over 70 years), and several other species of spiders, millipedes, and the common pill woodlouse (a roly-poly or “pillbug” that isn’t a bug; it’s an isopod that is distantly related to crustaceans like crayfish).

There were spiderworts, and some have started to bloom, along with narrowleaf puccoon, toadflax and scrambled eggs (a beautiful plant with yellow flowers). The plants here have such oddly beautiful names! The oaks are putting out whorls of pale red leaves that will soon be deep green.

In some places, butterflies seemed to be all around us. There were sulphurs, a goatweed leafwing or two, red admirals, and big yellow and black swallowtails. And there was the smaller and more subtly beautiful duskywings.

Altogether, we contributed 150 new observations to iNaturalist, including 104 species.

We’re looking forward to the next “mini bioblitz,” which will happen on April 27. Keep an eye on the Friends of SCNP. We hope to see you next month!

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South American toothed hacklemesh weaver. Kat Oliver photo, M. Cassidy ID



Blackjack oak with new leaves and catkins. Michael Smith photo.



Red admiral butterfly. Kat Oliver photo.

Sheri Capehart Nature Preserve continued from page 34

Third Saturday Volunteers Jim Frisinger text and photos

Sheri Capehart volunteers focused on ending a longtime “social trail” between the parking lot and the amphitheater during their Third Saturday outing. The erosion was a legacy of access for the original preserve construction project a decade ago. Placement of Woodbine sandstone boulders did not fully restore this degraded hill, and it became a regular shortcut over the years. It was blocked six months ago with honey locust timbers and signage so vegetation has already begun to return. Volunteers placed anti-erosion diversions and barriers and prepared the soil in the old path soil for planting buffalograss and wildflowers.

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Left, Annabelle Corboy and Denise Pederson sow the seeds. Right, Glenn Aanstoos lays an anti-erosion barrier in the social trail to slow natural water flow.



Jim Domke, Denise Pederson, and Samus Quayle prepare the soil for planting.



Sheri Capehart Nature Preserve continued from page 35

Volunteer Opportunity Jan Miller text and photos

There's a prime spot at Sheri Capehart Nature Preserve just waiting for someone's inspiration and some native plants. Could it be you? This high-visibility spot is a raised planter overlooking SCNP's feature pond near the amphitheater. It currently has one cedar elm, handsome sandstone boulders, some blanket flowers, etc. As you can see, it also has tie vine and other less-desirables that need to be managed. But it could be a great opportunity for a demonstration pollinator garden with native plants. Can you see it buzzing with native bees, wasps and butterflies? There's plenty of sun until early afternoon, with shade from late afternoon heat. Access is easy using the concrete sidewalk from the parking lot. All it needs is a native gardener's knowledge of plants, an inspired design and planting. Friends of SCNP can even assist with funding for seed and plants.



Mid-late winter is a prime time for planning, and early spring is great for planting. Would you think about it? If you'd like more information or to sign on, please contact us at info@scnpfriends.org and thanks for considering!

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Sheri Capehart Nature Preserve continued from page 36

SCNP iNaturalist Observations and Species – February 2024

Annabelle Corboy

February totals: 47 Observations, 32 Species, and 12 Observers.



Above, American bird grasshopper (Schistocerca americana) - drawntoscales, American kestrel (Falco sparverius) – joshmols, Mexican plum (Prunus mexicana) - brandonmeadows

Below, Square-headed wasp (Liris sp.) - drawntoscales, Northern shovelers (Spatula clypeata) – joshmols, Standing cypress (Ipomopsis rubra) - lynnjhealy



Blackland Prairie Preserve Guy Random



Spring on our prairie. We know because we saw three flowers, and two of them are yellow. Gilgai are jammed with Cricket frogs making a wonderful racket. And there's green everywhere. Yes, at last!



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Arlington Conservation Council
P.O. Box 216 Arlington, TX 76004-0216

April Zoom Meeting

**Environmental Perspectives
 on the Last and Next Texas
 Legislative Sessions**

Rita Beving
 Public Citizen

7 pm Wed, Apr 3, 2024

Zoom meeting hosted by
 Arlington Conservation Council



See pages 2 and 5 for more on this presentation.