

CURRENTS & FLOWS

From the Sky to the Stream: A Renewed Commitment to the Verde

IN THIS EDITION

Eco Flights

Fireflies in AZ!

***Upcoming Grants
for River Friendly
Living***

***Effective Water
Quality Tips for
your home***

Spring/Summer 2025



Who are **Friends** *of the* **VERDE RIVER**

This magazine is lovingly created by Friends of the Verde River, a purpose-driven community benefit organization and 501(c)(3) nonprofit. Friends envisions a healthy, flowing Verde River and tributaries that support our natural environment, vibrant communities, and quality of life for future generations.

Learn more at
verderiver.org



Dear Friends,

Sometimes the most powerful way to understand a place better is to see it from a new perspective.

This May, Friends of the Verde River partnered with EcoFlight to offer a rare opportunity: an aerial view of Fossil Creek and the Upper Verde River areas of the watershed. As our supporters and partners soared above the river in small aircraft, the landscape told a story that's hard to grasp from the ground—one of resilience, restoration, and the incredible impact of collective action.

From the sky, you can truly see the transformation: the winding path of a healthy river system, the vibrant stretches where invasive species have been removed, and the contrast with areas still in need of care. This perspective shifts not just what we see, but how we feel about the urgency and promise of our work. Eco Flights, hosted by Friends of the Verde River in collaboration with EcoFlight, offer more than just a stunning view—they offer perspective. For many passengers, it was their first time truly seeing the scale and success of the restoration work they've supported. As one board member said, "None of this would be possible without people working together—tribes, legislators, nonprofits—all coming together to protect such a beautiful and important part of Arizona's heritage."

But "new perspectives" aren't only found in flight. At Friends, we're helping people of all ages—from students in classrooms to residents embracing River Friendly Living—see the Verde River with fresh eyes. Through stewardship, water quality monitoring, restoration, and education, we're inviting more people to connect with the river in meaningful, lasting ways.

On land, Friends is laying the groundwork for Project WILD, an educational program that brings new perspectives into classrooms and community events. Currently in early planning stages, Project WILD will provide hands-on materials and training for instructors to help young learners—and their parents—connect with nature in meaningful ways, so that the Verde River has a future with strong stewardship practices in place.

From preschool through grade school, Project WILD opens the door to nature-based learning, environmental stewardship, and curiosity about the living world. By reaching kids and families early, we're nurturing the next generation of river champions.

Whether from the sky or in a classroom, a shift in perspective can spark lifelong care for the river.

Your continued support helps make all of this possible—from large-scale watershed restoration and River Friendly Living outreach, to the launch of transformative programs like Project WILD. Together, we're building a community that protects and cherishes the Verde—from above, along its banks, and into the future.

Thank you for seeing the Verde River with us—through fresh eyes and bold vision. Join us in support of our precious local resource.

With gratitude,

W. David Gressly
Executive Director



Donate Today!
verderiver.org/donate

Restoration Updates

A reflection from our seasonal vegetation monitoring technician - Malina Higgins

As the 2025 monitoring season wraps up along the Verde River, I've been reflecting on both the work we've done and the deeper meaning of this place. The Verde is more than a river, it's a lifeline in the Arizona desert, one of the last free-flowing rivers in our state, supporting rich diversity of life.

Fossil Creek stood out as a personal highlight this season. I've been visiting it for years, drawn back time and again by its striking clear blue waters and the sense of peace it offers. But this year was different. Coming back as part of a crew helping to protect this fragile ecosystem gave the experience a whole new meaning. We spent our time monitoring invasive plants, specifically focusing on Himalayan blackberry—a fast-spreading species that threatens to outcompete native vegetation. The days were hot, the work was tough, and yes, we got way too familiar with thorns, but knowing we were helping native plants make a comeback made it all totally worth it!

The Verde connects landscapes, wildlife, and communities. It quietly sustains us, often without recognition. My time here has reminded me how important it is to not take that for granted and to continue caring for this vital resource.



Water Quality

In FY 25, Friends of the Verde River (FVR) implemented a series of water quality monitoring sites throughout the Verde Watershed. The dedicated volunteers of FVR successfully sampled at over twenty locations, each serving various assessment objectives all informed by our Verde Watershed Restoration Coalition (VWRC) partners and our watershed wide water quality monitoring plan.

Monitoring in the Oak Creek/Spring Creek region focuses on evaluating the success of recent restoration initiatives made by ADEQ and partners. Additionally, multiple sites along the Verde River, extending from Tapco to the Oak Creek Confluence, are being observed under ADEQ's *E. coli* assessment to pinpoint possible origins of recent *E. coli* exceedances. Additional monitoring locations were established to gather baseline data to better understand current stream and river conditions, especially where data may be scarce.

Efforts were also made to enlist new volunteers for water quality monitoring and to build a coalition of water watchers in the Camp Verde area. Collaborators in the Verde Watershed Restoration Coalition like The Yavapai Flood Control District, AZ State Parks, and Sierra Club contributed by adding more sites that align with both the watershed-wide plan and ADEQ guidelines. The Yavapai Flood Control District sampled thirteen sites in the Granite Creek area, many of which previously lacked any assessment or flow data. Future sampling plans include site expansions along Beaver Creek, with VWRC partner Friends of the Forest and the National Park Service.



Here are some effective water quality tips you can implement at home

- **Reduce Water Use:** Practice mindful water consumption. Fix leaks, take less frequent or shorter showers, turn off the tap while brushing your teeth or washing dishes.
- **Plant Native Plants:** Choose native plants for your garden as they are adapted to our local area. This not only conserves water but also supports local ecosystems and wildlife.
- **Use a Rain Barrel:** Collect rainwater to use for watering plants and gardens. This reduces reliance on groundwater pumping and municipal water resources.
- **Avoid Chemical Fertilizers and Pesticides:** Opt for organic gardening methods to prevent harmful chemicals from running off your property and into the surrounding waterways.
- **Install Low-Flow Fixtures:** Use low-flow showerheads, faucets, and toilets to decrease overall water consumption.
- **Rain Gardens:** Direct and capture rainwater for seasonal gardens, watering trees, and creating pollinator habitat.
- **Limit Soil Erosion:** Use mulch in your gardens to help retain moisture in the soil and reduce erosion and prevent run-off.



Volunteer Voices

My work with Friends of the Verde River has been a journey of discovery and gratitude. My adventure began as an AmeriCorps member, and when that funding was cut, Northern Arizona University generously supported continued engagement. Since then, I've tackled a variety of watershed tasks: unching data for the Watershed Report Card to uncover hidden trends in Watershed health. On BioBlitz trips, I've guided budding naturalists to observe everyday river wildlife, illustrating how native species sustain our watershed and how invasives can threaten its balance. I've ventured along the riverbanks at night to survey for elusive fireflies, appreciating the river's nocturnal rhythms. During watershed restoration days, I've joined volunteers to clear debris and practice stabilization techniques, gaining insight into habitat recovery. The Verde River nourishes one of the Southwest's few intact cottonwood-willow corridors—covering less than 0.001 % of Arizona's land area and one of fewer than 20 occurrences remaining in the state—a hidden ribbon of green teeming with life. If you're curious to explore this living classroom and help keep it intact for future generations, we'd be delighted to have you at our next volunteer event—no experience required, just your curiosity.

- Jelana Ortiz



Youth Engagement

Collaborative efforts were made with school teachers through a new Fellows program which aimed to create a science-focused curriculum that encompasses topics such as water quality monitoring, trash data collection, and other healthy stream and riparian ecosystem observations. The goal of this project is to assist teachers with place-based resources and hands-on experience to conduct real research projects with students.

River Champions

In late May, Friends of the Verde River hosted an intimate gathering of dedicated River Champions at the stunning Tres Brisas Ranch in Camp Verde. Surrounded by natural beauty, guests enjoyed an afternoon of meaningful conversation, networking, and connection, just a short 10-minute walk from the flowing Verde River. The setting was alive with local bird activity, adding to the serene and inspiring atmosphere. A delicious catered meal, enjoyed outdoors under the trees, made the experience even more memorable. Attendees included river enthusiasts, birders, and members of Friends' board and staff—all united by their shared commitment to protecting and celebrating the Verde River.

Stewardship

Growing Stewardship Across the Verde Valley

At Friends of the Verde River, we're very proud to see stewardship growing throughout the region. From volunteers monitoring water quality to AmeriCorps members supporting outreach and sustainability education, our communities continue to step up for the river. New partnerships with schools, land and business owners, and local leaders are helping expand efforts in habitat restoration, invasive species removal, and conservation awareness – and stewardship! Every action, big or small, contributes to a healthier, flowing Verde River.

ECO Flights

In May, Friends of the Verde River hosted a highly successful ECO Flights event at the Cottonwood Airport, giving community members a unique aerial perspective of the Upper Verde River and Fossil Creek. The event featured three fully booked flights, with a waiting list already forming for future opportunities. Each flight was guided by local experts, including Kelly Burke of Arizona Wild; David Gressly, Executive Director of Friends; Rachel Laura, Deputy Executive Director; and Tony Gioia, Emeritus Board Member of Friends. The day began with a delightful breakfast launch and included pre- and post-flight interviews with enthusiastic attendees eager to share their experiences. The narrated flights offered powerful insight into the beauty and vulnerability of the watershed, helping to connect people more deeply with conservation efforts. Board Director Dana Walsh reflected on the experience, saying:

"It was such a great opportunity to take a flight with Eco Flights over Fossil Creek. It was so amazing to see the work of partnerships. The whole restoration would not have been possible without people working together—with tribes, the legislature, Friends of the Verde River, Wild Arizona—all working together to restore and conserve such a gorgeous, gorgeous area that's really such an important part of Central Arizona's heritage."



With strong turnout, high engagement, and growing interest, the event was a resounding success and a meaningful way to elevate awareness and appreciation for the Verde River.



Otter Spotting at the Birding and Nature Festival

Dr. Megan Isadore, director of the River Otter Ecology Project and a leading expert on river otters and community science, recently joined Friends of the Verde River for a special event during the annual Verde Valley Birding and Nature Festival. As part of our ongoing partnership through the citizen science initiative Otter Spotter, Megan led a leisurely and informative walk around the lagoons at Dead Horse Ranch State Park, sharing her passion for otters and their ecology.

During the walk, Megan explored a wide range of otter-related topics, including physical characteristics, social behaviors, tracks, scat, diet, reproduction, and more. She was especially excited to visit the Verde River, where she encountered an ecosystem very different from the environment she typically works in back in California.

Cynthia Butler, Friends of the Verde River's Restoration Ecologist and Water Quality Monitoring Coordinator, joined the tour to offer additional insights on riparian ecology, plant identification, and local wildlife. Participants eagerly contributed by spotting birds and asking thoughtful questions, which led to deeper conversations and fascinating stories from Megan's research experience.

Megan's love for river otters was evident throughout the walk. As the group explored the lagoons, they looked for subtle signs of otter presences, some of which suggested active use of the area by these elusive creatures.

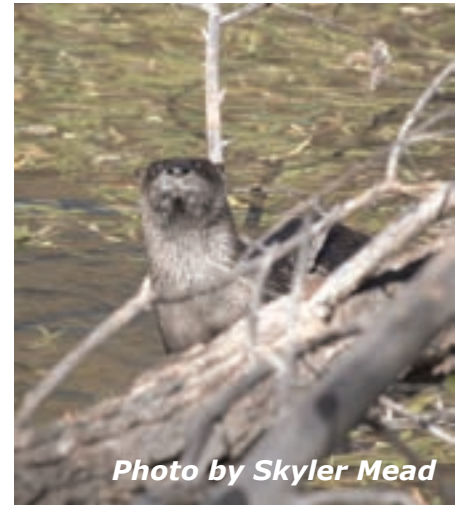


Photo by Skyler Mead



To learn more and participate, visit: riverottterecology.org/

Verde Valley Birding & Nature Festival

The 25th annual Verde Valley Birding & Nature Festival, held April 24–27, 2025, at Dead Horse Ranch State Park and throughout the Verde watershed, was a tremendous success and a meaningful milestone year. With the theme "Birds in Art," the festival featured vibrant artwork of an Anna's hummingbird by conservation artist Walt Anderson and welcomed beloved author and artist Julie Zickefoose as keynote speaker. More than 80 expert-led field trips, workshops, and nature walks guided participants through the Verde Valley's rich habitats, with a record 180 bird species documented. Attendees explored a range of topics, from raptor migration and songbird ID to nature photography and native plant gardening. Family Nature Day on April 26 featured free activities such as pond-side exploration, live bird and reptile exhibits, and hands-on science for all ages. This year also saw a dramatically expanded vendor area—doubling in size—to include a paleontology scientist, local crafters, and artists offering nature-inspired goods. The festival's visibility reached new heights with support from Yavapai Broadcasting and coverage from Channel 12 News, which highlighted The Lookout and shared interviews with organizers. Unique nature outings like the Otter Spotter trip led by expert Megan Isadore, night photography under the stars, and a pronghorn conservation film screening added to the excitement. Celebrating its 25th year, the festival continues to grow as a dynamic tribute to birds, wildlife, art, and community in the heart of the Verde Valley.

VVBNF Stats

356 Registered

Over 600 people
attended Family
Nature Day

54 Field Trips

21 Presentations

Verde Watershed BioBlitz | April 16 – May 3, 2025

Connecting People, Place, and Biodiversity through Community Science

Friends of the Verde River proudly hosted the annual Verde Watershed BioBlitz, a free, community-wide event held from April 16 to May 3, 2025. Open to all ages and experience levels, the BioBlitz engaged participants across the entire Verde River watershed.

This event invited residents and visitors to slow down, explore, and observe the environment around them. By using the iNaturalist app to document plants, animals, insects, fungi, and more, participants helped build a living record of both native and invasive species. These observations contribute critical data that help track ecosystem changes over time, informing future conservation and restoration efforts.



In addition to public participation, this year's BioBlitz emphasized youth involvement, paying special attention to macroinvertebrate sampling during local school field trips. It was inspiring to see the excitement and curiosity of 5th-grade students as they learned about their watershed and the small but mighty organisms that inhabit it.

The BioBlitz was organized by Friends of the Verde River, in collaboration with the City of Cottonwood and Science Vortex. Together, we share the goal of making a positive impact on our community and environment by fostering deeper connections between people and nature. We're grateful to all who participated this year and helped foster a stronger sense of stewardship for our shared watershed. We hope this experience sparked lasting curiosity and care for the natural world—specially in the next generation of river protectors.

For more information and resources, visit: verderiver.org

AZ Gives Day

Friends of the Verde River had a successful AZ Gives Day, raising **\$12,282 from 114 generous donors**—a true testament to the community's dedication to protecting the Verde River. While we're grateful for this strong show of support, there are still several impactful programs open for continued donations. These include publishing our second children's book, *Otter Spotter*, to inspire young stewards; removing invasive species through our veteran-led Verde Earth Technologies team; and engaging 5th-grade students in the Verde BioBlitz, where they learn to become citizen scientists. Additional giving opportunities include supporting water quality monitoring, preserving over 1,000 historical river photographs, improving trail signage, producing Listening to the Verde podcast episodes, and advancing our River Friendly Living Program. Every donation helps us educate, engage, and conserve—ensuring a healthy, flowing Verde River for all of the watershed communities.



Fundraising Updates

Thanks to your generosity, we're closing in on our fiscal year-end goal! These funds support areas such as water quality monitoring, the production of the Verde Watershed Report Card, and quality community programs that build long-term river stewardship. If you haven't yet made your pledge or fiscal year-end gift, there's still time—very dollar makes a lasting impact.

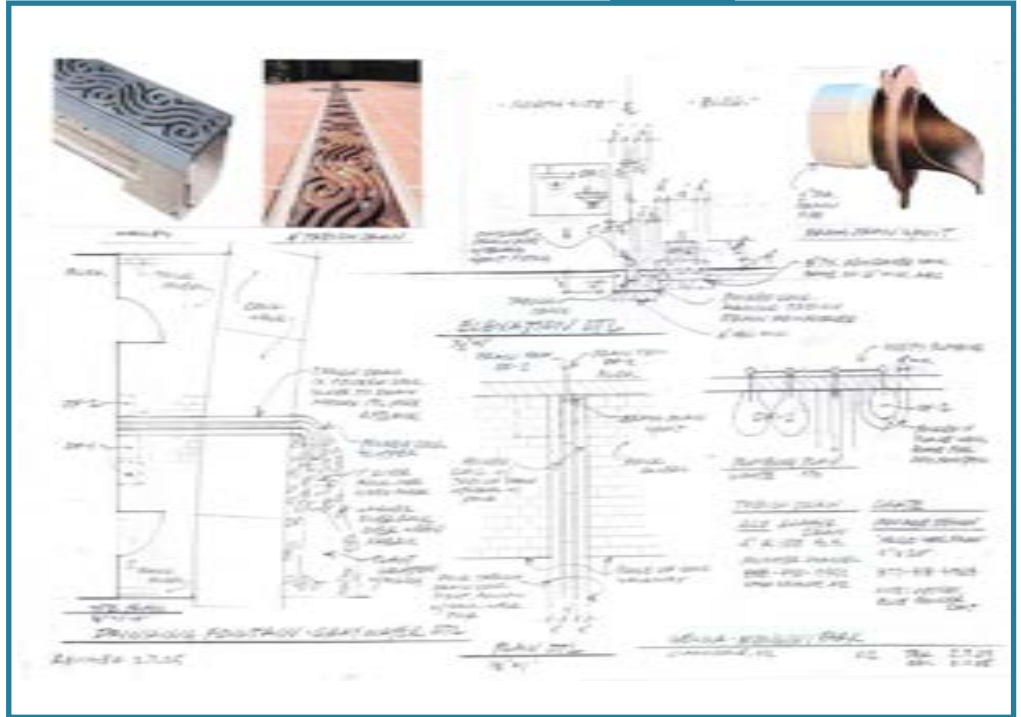
Together, we are ensuring a vibrant future for the Verde River and the people and wildlife who depend on it. Thank you for your continued support!

River Friendly Living

New on the Horizon

The Director of the Parks and Recreation Services, Joni Wescott and the Town of Clarkdale have participated for several years now in the River Friendly Living Program. So when the town began its work on its new Selna-Mongini S.T.E.A.M. (Science, Technology, Engineering, Arts, and Math) Park, partnering with Friends was a natural choice.

Through a collaborative process with Friends and the town, a grant project was created: an innovative greywater reuse and educational zone. The system captures lightly used water from the drinking fountains to use again in the nearby pollinator garden. While providing water is one of its components, the greywater use zone also serves as an educational opportunity to encourage families to create greywater areas of their own. Through using this recycled water, the park aims to save 2,190 gallons of water a year. This multi year project will come to a close in mid August and will soon be officially open to the public.



S Science

1. Wildflower hill
2. Pollinator gardens
3. Rock zone

T Technology

4. Solar table
5. Bird ID zone
6. LED lighting
7. Landing library

E Engineering

8. Rain capture system
9. Permeable pavers
10. Bike repair station

A Art

11. Local art wall
12. Sculpture
13. Homophone plaque

M Math

14. Gray water zone
15. Chess table
16. Low water landscape

Welcome to Selna-Mongini S.T.E.A.M. Park! S.T.E.A.M. stands for Science, Technology, Engineering, Art, and Math. As you explore, look for the S.T.E.A.M. learning zones marked on the map above; each one offers an opportunity to discover something new. This park is a hub of activity- a place to move, explore, and grow together. From the big kid and toddler playgrounds to the basketball court, chess tables, and track ride, there's something here for everyone.

Community Water Champions

Owner and operator of Diamond L Ranch, Chelise's story with Friends of the Verde River began last summer at Green Business Bootcamp with Local First. Wanting to reduce her ranch's water use, she was introduced to the River Friendly Living grants. With the guidance of Local First and Isaac Dudley, Flows Program Manager, Chelise confidently redesigned her 25 acre irrigation system and submitted a grant application.

Diamond L Ranch was awarded double the funding for their project due to its large water savings. Estimated to save roughly 3 million gallons of water per year, Chelise's project focuses on converting alfalfa crops to cattle pasture and leak repair of their irrigation system. Additionally, this change will also stop soil erosion and efficiently improve their cows' feeding. With such a positive grant experience under their belts, Chelise plans to apply for a grant for every pasture at the ranch, totaling 4 grant cycles in total.



We are always happy to work with Friends; appreciate the mission and vision of water conservation"

- Joni, Town of Clarkdale, Parks and Rec

"It's really great that they're being proactive about issues like irrigation instead of waiting to take care of the problem in retrospect"

-Lisa Hutchinson

"It was like a match made in heaven with discovering Friends"

-Chelise, Diamond L Ranch

"The input of Friends and Isaac was integral to getting where we are now"

- Joni, Town of Clarkdale, Parks and Rec

UPCOMING GRANTS!

Up to \$230,000 in grants available!

River Friendly Living grants for water conservation

Funding for homeowners, businesses, and organizations

Upcoming deadlines are

8/31/25,

10/31/25,

and 3/31/26

Full application information at VerdeRiver.org/Grants

Surprise! We do have Fireflies in Arizona!

As I have mentioned in earlier articles, I grew up on a Midwestern farm. As a child, one of the most magical times was in June just after twilight when the lawn and surrounding fields were filled with fireflies. My sisters, brother and I spent many evenings chasing them around our home in soft last light of the evening. While I enjoy the fact that in Arizona, unlike the Midwest, there are few mosquitos and no ticks or chiggers, but I did miss seeing fireflies. Fortunately, our new Deputy Executive Director, Rachel Laura, is a specialist in fireflies in Arizona and is current pursuing her Ph.D. on the subject. She has shared with me the amazing world of fireflies in Arizona. It seems I just wasn't looking in the right places.

Rachel told me that I was not alone and that most people in Arizona don't realize there are fireflies right in their backyard. The Verde Watershed is home to a species of firefly known almost entirely from Arizona. This species, the southwest spring firefly, lives along streams and wetlands in southern, eastern, and central Arizona, including right here in the Verde Valley.



Firefly life history

Fireflies are actually beetles and they are found in every state in the U.S. except Hawaii and every continent except Antarctica. These beetles live most of their lives as larvae on and in the soil, hunting snails, earthworms, and other invertebrates. Firefly larvae typically live one to two years, pupating into adults in order to breed. Adult fireflies typically live less than a month.

Surprisingly, not all fireflies flash the way we expect. There are actually three main life history strategies for fireflies. The flashing fireflies are the most well known. For these fireflies, both adult males and females look like beetles and use their light organs, or lanterns as they are called, to communicate with each other. The second strategy is that of the day-active or dark fireflies. They look much like their glowing brethren, but as adults they do not have lanterns. The last, and perhaps the strangest, is the glowworm firefly. The adult female glowworms look like a larva, with no wings. These females hold on a steady glow from the ground, rocks, or vegetation and await males to find them. The males look like a typical beetle and scan the ground looking for females.



Fireflies in Arizona

Arizona has around two dozen species of fireflies, including species that employ all three of these life history strategies. They can be found throughout the state, perhaps even right in your backyard. Some species, such as the Southwest spring firefly, are strongly tied to wetlands and streams. Others, such as many of our glowworm species, can be found in more arid areas, such as in forests, deserts, and grasslands.

What we know

Although there are many anecdotal reports of fireflies in and around the Verde Valley, only a handful of observations have ever been recorded and shared with scientists. The Coconino and Prescott National Forests, along with their dedicated volunteers, have been surveying for the past several years to try to learn more about these elusive creatures. They have been able to find and document several previously unknown populations of the Southwest spring firefly.

What's happening this summer

This summer, researchers, including Friends of the Verde River Deputy Executive Director Rachel Laura and Candace Fallon at The Xerces Society, are teaming up with the US Forest Service to provide more intensive training to their volunteers. These volunteers will focus their efforts on sites that have the conditions that Southwest spring fireflies seem to love, moist soils and high humidity. These surveys will help us to learn more about what these fireflies need to persist at a site and will hopefully provide insights into how to ensure these magical insects persist for everyone to enjoy.

Threats to fireflies

Globally, fireflies are at risk from light pollution, pesticide use, and habitat loss and degradation. Since most fireflies communicate using light signals, residential or commercial lights, as well as sky glow from towns and cities, can make life harder for these fireflies. Pesticides, many of which are designed to kill insects, can negatively impact or kill fireflies as well. Pesticides can also kill firefly prey such as snails. Several Arizona fireflies are tied to areas with water, such as creek, rivers, and wetlands. Many areas in Arizona that historically supported these species have begun to dry, with many wetlands and creeks going completely dry. Fireflies need these moist soils to persist, so the loss of these areas likely means the loss of fireflies. In addition to the total loss of firefly habitat, the degradation of habitat is also a threat. The Southwest spring firefly builds a little soil igloo in order to pupate from a larva to an adult. This happens to coincide with one of the hottest months in Arizona. Drawing locals to the water to recreate and potentially resulting in trampling of these fragile life stages.

How you can help

Luckily, there are some easy ways that you can help. Turn off your lights at night, avoid using pesticides whenever possible, especially near sensitive areas, such as those along creeks and rivers, conserve water in and around your property, and when enjoying our beautiful Verde Watershed, practice leave-no-trace ethics by minimizing your impact on fragile soils along stream banks.

If you are interested in learning more about our local fireflies, have firefly sightings you'd like to report, or want to help survey for fireflies, you can check out The Xerces Society's Firefly Atlas program at fireflyatlas.org. There you can find a firefly checklist, learn how to survey, see maps of known records, and submit your own data!





Friends *of the* VERDE RIVER



verderiver.org

(928) 641-6013

115 S. Main Street, Suite B
Cottonwood, AZ 86326