

Friends of the San Pedro River

River Roundup

Spring-Summer 2023

In this issue: Presidents Report, BLM Hosts Partners Meetings, Hunting Rules, Musings, AZCC, Military Neighbors, Fairbank Reopens, Members, Invasive Species, Mammals, Xeriscape Garden, Photo Contest, and Lewis Springs Hike



This Newsletter is produced by the Board of Directors of the San Pedro Riparian National Conservation Area for its members. All questions should be directed to fspr@sanpedroriver.org. Like to write something for the next newsletter? Let us know.

President's Report

Robert Weissler

President, FSPR

On April 30, 2022, FSPR celebrated the Grand Reopening of San Pedro House with bird walks, river walks, a historic tour and a ribbon cutting ceremony. Visitors received information about the SPRNCA, ongoing activities and interpretive events. With the widespread availability of vaccines for COVID-19, our volunteers had been anxious to resume bookstore operations, interpretive walks, and school field trips for some time. After FSPR submitted operational plans with COVID-19 contingencies to the BLM, they approved those plans early last year. Then last December, visitor contact operations resumed at Fairbank.

Recently, there were two important events with BLM and our partner organizations. On January 30, 2023, BLM hosted a meeting with Friends groups at the state headquarters in downtown Phoenix. Then on February 2, 2023, BLM hosted a visit by the National Director of BLM Tracy Stone-Manning down at San Pedro House. This was a wonderful chance to raise the profile of the SPRNCA, not to mention the Friends of the San Pedro River. The event was attended by prominent community leaders, partner conservation organizations and other local stakeholders. You can read more about these events in the article below.

The BLM convened several working groups for the implementation process associated with the SPRNCA RMP. In May of last year, BLM solicited comments on the preliminary SPRNCA Allotments Lease Renewal Environmental Assessment (EA). Later on July 8, 2022, BLM conducted a SPRNCA Recreation and Cultural Heritage Working Group Meeting attended by several FSPR BOD members. They shared a preliminary draft Deferred Maintenance and Improvement Project plan for the San Pedro House Recreation Management Area trail system and Kingfisher Pond.

In early August last year, the Bureau of Land Management agreed to remove all trespass cattle from the entire San Pedro Riparian National Conservation Area. The BLM has also agreed to inspect, repair, and maintain the conservation area's boundary fencing to keep them out. The legal settlement with environmental groups resolves an October 2021 lawsuit after nearly 50 complaints were filed in the past two years against the BLM's failure to remove the persistent trespass cattle.

In early February last year, FSPR submitted a letter with comments on the U.S. Customs and Border Tucson Remediation Plan for the border wall. The comments cited the severe impediment to wildlife migration across the international border with specific suggestions to improve sites along various sectors of the border.

The Friends Rendezvous and Annual Meeting was held at San Pedro House on Saturday, October 22, 2022. The results of the recent board election were announced in which Bob Luce, Joanne Roberts, and Linda Stitt were reelected to the board. Then volunteers with over 100 hours of service received gift certificates for the San Pedro House bookstore. Volunteer service for the past year of 4,446 hours is starting to return to normal (i.e. before the pandemic). [Subsequently, Steve Ogle resigned from the board. That vacancy was filled by Mary Ann Ambrose. We would like to take this opportunity to thank Steve for his many years of service to the board and welcome Mary Ann to her new role on the board.]

As we ramp up our events and activities for what passes for a normal year, we are grateful to resume our regular interpretive walks, school field trips, and bookstore operations at San Pedro House and visitor contact engagement at Fairbank Schoolhouse. See you soon down at the river!

BLM Hosts Partners Meetings

By Robert Weissler

Recently, there were two important events with our BLM partners. On January 30th, BLM hosted a meeting with Friends groups and other partners in their downtown Phoenix state headquarters. Besides FSPR, the meeting was attended by the Empire Ranch Foundation, the Friends of Ironwood Forest NM, the Friends of Agua Fria NM, the Friends of the AZ Joshua Tree Forest, Keep Sedona Beautiful and Archaeology Southwest. The Conservation Lands Foundation was represented by Danielle Murray and Romir Lahiri from Durango, CO.



Friends groups gathered in Phoenix at the state BLM headquarters.

Arizona State Director Ray Suazo gave opening remarks on the strength of partnerships with Friends groups, their role, and the importance to BLM's mission. Jerry Davis, BLM Deputy State Director, Resources & Planning, gave a presentation describing the role and relationship of Friends groups to BLM, the types of agreements between them, and the ground rules for advocacy and lobbying for Friends groups. The group also heard about the challenges facing BLM with increased visitation, impacts and use of public lands with the pandemic, the chronic understaffing and turnover throughout BLM, and funding opportunities and challenges in addressing the shortfall and increased demand for outdoor recreation on BLM lands. In particular, Arizona now has a Director of Outdoor Recreation and Sustainability at the Arizona Office of Tourism, while BLM is developing a national strategy for outdoor recreation, and a Statewide Comprehensive Outdoor Recreation Plan (SCORP) will be released soon. As for

funding opportunities, there are sources with Arizona State Parks & Trails (ASPT) and Heritage Fund, Arizona Office of Tourism (AOT), not to mention BLM Notice of Funding Opportunities on Grants.gov.

On February 2nd, BLM hosted a visit by the National Director of BLM Tracy Stone-Manning down at San Pedro House. It is noteworthy that this brief trip from DC out west to Phoenix included a visit to the SPRNCA (and later to Las Cienegas on the way back to Phoenix). This was a great opportunity to raise the profile of the Friends of the



BLM Director Tracy Stone-Manning and local officials meet at the San Pedro House.

San Pedro River too. The event was attended by many high-profile partners and other stakeholders including Fort Huachuca Garrison Commander John Ives, Cochise County Supervisor Ann English, recently elected Sierra Vista Mayor Clea McCaa and City Manager Chuck Potucek, not to mention BLM Arizona State Director Ray Suazo, Gila District Manager Scott Feldhausen and TFO Field Manager Colleen Dingman. Ron Stewart and I represented FSPR.

After I provided a welcome to attendees and an overview of the FSPR, the discussion turned to the Sentinel Landscape that protects the mission of Fort Huachuca and the uncluttered electromagnetic spectrum of the upper San Pedro River Valley for the Electronic Proving Ground on post. This collaboration also helps preserve the natural landscape by providing a buffer around the fort and thereby protecting this portion of the watershed from incompatible land uses. Thereafter, the discussion shifted to water resources management and river protection. Holly Richter of the Nature Conservancy shared the accomplishments of the Upper San Pedro Partnership and the Cochise Conservation and Recharge Network to improve understanding of the regional and alluvial aquifers and measures to preserve base flows in the river in the face of the cone of depression in the aquifer under Sierra Vista. The visit concluded with a walk down to the riverside on a beautiful, mild winter day, a fitting conclusion to the event.

Changes to Hunting Rules

Ron Stewart

Vice President, Friends of the San Pedro River

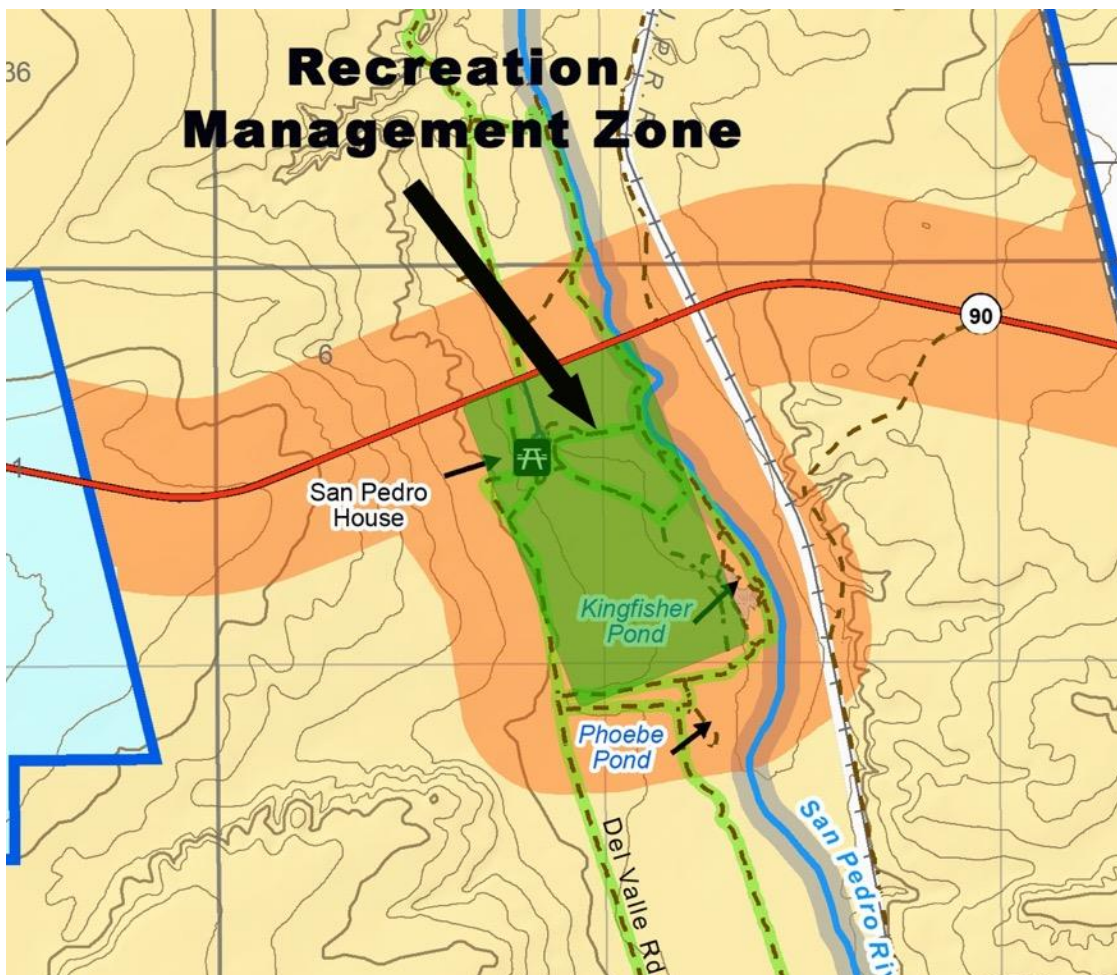
The new Resource Management Plan for the San Pedro Riparian National Conservation Area (SPRNCA) opened the entire preserve to hunting. Previously, it was restricted between Highways 80 and 92.

Now hunting is allowed everywhere except in certain restricted areas that have been designated by the BLM. These restrictions are in accordance with Arizona State Game and Fish regulations: no hunting within ¼ mile of any road, house, or other structure.

In addition, the BLM designated the area around the San Pedro House as a Recreation Management Zone. This area is off-limits, along with the normal ¼ mile buffer. The RMZ runs from Highway 82 south to Garden Wash, and from the river west to the San Pedro Trail. This area is per AZG&F regulations and is referred to in guidance issued to hunters.

If you should see someone hunting within the ¼ mile restricted area at, say, Fairbank, the Charleston Bridge, or the San Pedro House RMZ, you should call 911 immediately. Be prepared to provide what you heard and saw, with a description of the people involved.

Here is a map of the hunting restrictions around the San Pedro House.



Not in any Strategic Plan, But...

Jim Herrewig

Board of Directors FSPR, Site Steward

I was sitting on the bank across from Charleston... listening to the murmur of the river flowing over the rocks... watching a hawk gracefully glide through the sky above... watching some deer water downstream... listening to the birds in the trees... looking at the tree branches beginning to leaf out as the circle of seasons moves on and I thought... this is why we are Friends and Site Stewards. To preserve and protect this tapestry of nature and history that are woven together in the SPRNCA... this treasure in our valley.

For eons of time before us others have sat on these banks and enjoyed moments like this... marveled in the wildlife, the water, the history, the circle of seasons. And our task is simple... although complicated to fulfill... to preserve and protect this treasure so that for eons of time into the future others will be able to sit on these banks and watch a hawk sail through the sky, listen to the murmuring waters and see the trees begin to leaf out as the circle of seasons moves on.



So that moment yesterday doesn't make a strategic plan...but it made clear why we do a plan and why we all do what we do in the SPRNCA. Photo by Jim Herrewig

The AZCC Is in the House!

Carolyn Santucci
Office Manager, FSPR

The Arizona Conservation Corps (AZCC) has had a crew working in the SPRNCA over the last several weeks.

Projects completed were:

- Construction of steps leading up to the Fairbank Schoolhouse open/closed sign as a volunteer safety access point.



What a great crew!



Millville Trail Steps

- Vegetation clearing and trail stabilization at the Fairbank cemetery.
- Installation of two kiosks at the San Pedro House trail system entry points. This provides space for the Bureau of Land Management (BLM) to post critical information to the public such as hunting rules, regulations, and safety zones as well as updated information on any trail hazards. FSPR will also be able to post pertinent information in the kiosks.
- Installation of the new San Pedro House Loop Trail signs.
- Construction of steps leading from the Charleston Bridge parking area down to the river. The original path that was used by the public was extremely treacherous, consisting of a deeply rutted and steep slope. This is a major improvement for visitor safety.
- Construction of steps in the Millville trail wash, improving access to the Millville and Petroglyph Trails. Previously one section of the trail led down a relatively steep slope which was not easy to navigate safely. A

sloped area nearby was left for use by horseback riders.

- Installation of the new Fairbank Schoolhouse Open/Closed sign.
- Painting the Schoolhouse fascia and trim.
- Construction of water gap at Summer Wells/St David area. (That's a lot!)

Like the Civilian Conservation Corps of bygone days, Arizona Conservation Corps (AZCC) operates programs across Arizona engaging individuals and strengthening communities through service and conservation. AZCC is focused on connecting youth, young adults, and recent era military veterans with conservation service work projects on public lands. The crew members usually sleep outside in small tents during their work sessions.

The BLM supplied funding for most of the construction materials, with the Friends pitching in for some last-minute supplies and also providing pizza lunches for these hard-working folks on a couple of occasions!

A huge shout out goes to BLM Park Ranger Jody Barker, AKA Super Ranger, who sourced the supplies for these projects, arranged for the AZCC workforce, and supervised them. We also thank BLM Management for finding and approving funding for these projects in such a timely manner. Another huge shoutout to AZCC crew lead, Alex Gonzalez, who supplied the construction expertise for the successful completion of the steps at Charleston Bridge and Millville, and crew members, Samuel Moon, Gadison Lopez, Cole Parley, Ben Termini, and Dominic Stra. Site Host Pat Jacobsen also helped out with the projects in the San Pedro House area.

As Jody put it, "Working collaboratively in cases such as this just goes to show you what can be achieved when you have passionate individuals working together that have an overwhelmingly amount of respect and care for our precious resources."

Photos by Jody Barker.



San Pedro House Loop Trail Sign

Our Military Neighbors Help Out

Carolyn Santucci
Office Manager, FSPR

Many of the projects we undertake within the SPRNCA require not only willing hands, but strong backs. Our special relationships with various organizations on Fort Huachuca supply both on a regular basis.

On March 18, a group of Fort Huachuca NCO academy students, led by SGT Barnes, did a major cleanup in the Hereford Bridge area. BLM Park Ranger Jody Barker provided heavy-duty trash bags to the group and then returned to haul away a big load of trash retrieved from the area.

A spring cleanup of the grounds around the San Pedro House took place on March 23. The main task centered on cleaning up the area and installing landscaping fabric and gravel as a barrier to growth in the more formal areas. This will circumvent the monsoon splurge of unwanted growth.



Several Friends of the San Pedro River volunteers were also on hand. This group of people keeps the gardens looking good year-round. We were also lucky enough to have members of Havoc Company from the 111th MI Brigade on hand.

These young soldiers are an unbelievable help in getting things done around the SPRNCA and at the San Pedro House in particular. We are so proud of these folks and so very happy to be part of their experience while here in the area.

We want to extend a big, big thank you to everyone who helped with these projects!

Changes at Fairbank

Ron Stewart
Vice President, FSPR
Fairbank Docent

The Fairbank Townsite remained open for recreational use throughout the pandemic, but the BLM directed that the schoolhouse be closed to visitors (the San Pedro House was closed, too).

While it was sitting unused, a whole new set of inhabitants arrived. Spiders, squirrels, mice, bats, and about a million moths made their way into the now empty, quiet, dark building and had a great time. Cleaning up after their party required maximum effort, including a professional janitorial crew. The squirrels chewed their way through the oak flooring into the building. A few rocks blocked that entrance, though the hole in the floor remains.



The Old Doors



This is, from the left, Carol Bierman, Dennis Bierman (site hosts), Clint Dalton (BLM archaeologist), and Jody Barker (our wonderful SPRNCA park ranger).

During the hiatus, the doors of the school continued their ongoing disintegration. Modern construction - wood veneer over a fiberglass core - proved unequal to the Arizona sun and summer rains. Replacing them turned into a major task.

First came getting the approval of the State Historic Preservation Office for any change at all. They ruled out fiberglass replicas, metal replicas...anything but wood replicas, which turned out to be, as you probably guessed, highly expensive wood veneer over a fiberglass core.

We were lucky that a donor stood up to help with the cost. Total costs were around \$15,000 for four doors, plus the cost of finishing, varnishing, and getting them ready, BLM funded the

rest beyond the donation. It took months of wrangling before the doors were designed, approved, ordered, reordered, arrived, cut to fit, sanded, painted, and hung. We are still waiting on door closers to keep them from slamming open into the walls of the school where they will gleefully self-destruct if allowed. The closers arrived last week, but the contractor had ordered the wrong size. So it goes.

We took a hard look at Schoolhouse operations while planning its reopening. One thing stood out - sales at the gift shop/bookstore were not self-sustaining and so, we discontinued the store. The space in the main room that was used as a store is now filled with items for display and there is room for growth. Most of us like the school better without a store and some volunteers are happy not to have to deal with the paperwork the bookstore created for them.



Chris Schrager the preservation archaeologist who took Fairbank under his wing. Sadly, this Forest Service employee is no longer supporting the SPRNCA as part of his duties. Behind him is his wonderful work on the Mercantile.

New items added to the museum include a pair of leggin's (chaps to you non-cowpokes) worn by Ed Levines, a cowboy who worked at the Little Boquillas Ranch in the 40s and 50s. We had these in reserve, but no place to put them. At Laura's suggestion, we created a small Mercantile-type display of some of the staple items they might have sold there. We are still trying to figure out how to display the wagon wheel hub that was found along the river. It is a large thing, probably used on an ore wagon, stagecoach, or

other large, horse-drawn conveyance. We have also put out a sampling of books from our library for the public to look at in the school.

Speaking of books, don't forget the Docent's Library in the school. As members of the FSPR, you can check these books out. We notice some have been checked out for a while. If that is you, don't make us get the library police after you!

Other basic tasks were done around the house - repairing the heating system, repainting the wood trim, spreading gravel. Time to send props to our wonderful site hosts Dennis and Carol Bierman who have the place looking more like a city park than a ghost town. They have had some adventures in their time at Fairbank (a whole other story) and have really had a positive impact. Carol did a lot of work on the school during our reopening.

In the townsite, yet another construction project has been carried out to help stabilize the Mercantile building. This huge adobe structure is always in a state of deterioration. A few years ago, the foundation was stabilized. Last year, a portion of the back had to be rebuilt to prevent its collapse. The white plaster on the front that the Friends funded about 5 years ago is suffering as the building shifts. It is cracked in many places and starting to fall off.



Here, you can see the cracking and crumbling plaster on the front of the Mercantile. Anyone want to donate some money to get it fixed?



The schoolhouse with new doors and a new coat of paint on the wood trim. Pretty as a post card!

Well, there, all you didn't want to know about what is going on at Fairbank. And, wait, one more thing. We are always looking for volunteers to help staff the Schoolhouse. Interested? It is even low-key now that the bookstore is gone, no money, hassling with customers, etc. About the only requirement is a willingness to learn a little about Fairbank and the SPRNCA to answer

questions from the public. You work a 4-hour shift as often, or

seldom, as you wish. Send an email to us at FSPR@sanpedroriver.org. Here are a few pictures. Each of these is worth a thousand words in addition to the 2,000 I have already written.

Member Recognition

New, Renewing, and Lifetime Members

New and Renewing Members

Joe Altimus & Molly Molloy*, Anders Aman, Nicholas Athanas, Mike & Lidya Baker*. Sy Baldwin and Sheila Gershen, Warren Barnes*, Sharon Baron*, Richard Bauer, Virginia Bealer, Mary Belding, Terence Berger, Isabella Burkhart*, June Campbell, Steven Capps, Richard Carlsen, Patricia Carlson*, Margaret Case, Glenn Chambliss & Diane Derouen, Christi & Ken Charters, Clay & Sue Cook, James & Jean Cook, Lee Cook*, Pam & Charlie Corrado, Kevin & Heleen Cox, David Crowley, Janet Dale*, Douglas & Natalie Danforth*, Allen Dart, Lynn Daugherty, Jan & Christy Davids, Barbara Davidson, Philip Davis, Tom Deecken, Kathy & John DeKeizer, James & Lisa Dement*, Dawn Demmon*, Pat & Bruce Dillingham, Cado Daily & Jeri Doud, Diana Doyle, Mary Lou Duffy, Catherine Dunn & Thaddeus Paprocki, Sarah Ager & Gary Eckard*, Tina Eden, Paul Edwardson, James Efaw*, Elaine & Mel Emeigh, David Fales & Sara Hammond, Linda Feltner, Kim Fisk*, George & Sandi Fizell, Elise Foadare, Barb Foley, Sully & Carole Frumentis, Tim Gallagher*, Carol Garnett, Jane & Tim Gormley*, Karen Gravely, Ken Gray, Jim Greene, Pam Griffin & Donald Lukes, Patsy Hansel, Mark Hansen, Jim Havlena & Mary Rogers, Jon Hazen, Diane Hebbert, Robyn Heffelfinger, Lee & Charla Henney, Peter Herstein, Ken & Sandy Heusman, Thomas Hildebrandt*, Francie Hills, Kurt Hilsen, Anna & John Howard, Hank & Peter Huisking, Susan Husband, Thomas & Dale Ireson, Steve Johnson, Helene Jorgensen*, Peter Kadrach, Laurie Kagann, Merle Kilpatrick, Bob King, Dorothy King, Rosemary King, Denny Kitchen, Daniel & Ingrid Koch, Gabrielle LaFargue, Merrienne & Johnny Lange*, Kenneth & Linda Lawson, Theresa & John Lawson, Jonathan Lee-Melk, Tom & Sue Leskiw, Martha Conant & David Levin, DeForest Lewis, Robert Luce, James Godshalk & Marjorie Lundy, John Maier, Rick Marsi, Roger Mary*, Karin Mayes*, Bob Mayor*, Gary & Gretchen Michaels, Alice Moffitt, Conrad & Elaine Moore, Joelle Buffa & Clyde Morris, Ted & Melanie Mouras, Deborah Moyer, Charles Mullany, Pam Negri, Jay Nenninger, Fritz Neuhauser, Stephanie & Kyle Nickell*, Gary Noonan, Angele Brill & Alan Nyiri, Stephen Ogle, Jeroen Oomen, Richard & Cheryl Osburn, George & Jill Paul, Joe Payne, Sharon Peters*, Lori & Bill Peterson, Judy Phillips, Douglas & Sue Polenz, Al & Dee Puff, Rae Nicol & William Walker*, Mary Raje, Karen Ratte, Matt Reed, Judy Reis, Diane Reisinger, Christine Rhodes, Norman Richey, Doug & Elaine Ripley, Joanne Roberts, Scott Robinson, John Rose, Dereka Rushbrook*, Alexander Russell, Carolyn Santucci, Jeffrey Saunders, Reuben Merideth & Deb Scharner, Tom & Judy Shepherd, Daniel Peter Siminski, Carole & Steve Simmons, David Singleton, Molly Smith*, Doug Snow, Anke & Herbert Staffenski, Anne Morris & David Steed, Robin Steinberg, Stephani Stephenson, Scott & Sarah Sticha, David Still, Kirk & Linda Stitt, Barbara Szoke, Rick Tello, Barbara Terkanian, Mary & Scott Tillman, Cindy Tuell*, George & Ruth Van Otten, Judith Visty, Ralph Waldt*, Russell and Julitta Watson, Richard Webster, Robert & Liza Weissler, Robert White, Stephen & Lauvon

White, Gail & Rich Wilder, Louise Wilkinson & Mike Doyen, Erika Wilson, James Wilson, Arthur Wohlers, Connie Wolcott, Brenda Zaun, Virginia Zuelow

*New Members

Lifetime Members

Chris and Gretchen, Bachman, Anne Isbister & Christopher Ballog, Ron Beck, Verna Berry, Dean Bibles, David Carlstrom, Jane Chambers, Debbie Collazo, Stephen Deatruck, Nancy Docherty, David Dross, Bette Ford, Tricia Gerrodette, Ann Hartfiel, Joan Hauflin, C. Vance Haynes, Steve Hazen, Jim Herrewig, Tug Kellough, John Largay, Brandon Lloyd, Chris and Dwight Long, Judah MacCabee, Mary Roger, Ronald Mauk, Arthur Norcross, Mary Olinger, Helen Patterson, Nancy Mocroft & David Paulson, Dot Rhodes, Carol Roche, Sally Rosén, Renell & Ron Stewart, Natalie Sudman, Doris Turner, Susie Walker, John Wallin, Jann Weiss Mike Doyen & Louise Wilkinson

From the FSPR Board to all of you: Thanks!

What's in a Name? Noxious Weed, Weed, Pest, Non-Native Invasive or Native Invasive Species?

Joanne M. Roberts
Board of Directors, FSPR

You often hear people complain about weeds in their gardens and/or properties. Most often they are referring to plants that are growing where they are not wanted. Or you may be frustrated at the explosion of mosquitos during the rainy season and call the insect a pest. Then there are species of animals and plants that just do not belong and become invasive and out-compete our native wildlife and plant species which can lead to a loss of biodiversity and changes in ecosystem functions. These species can be terrestrial and or aquatic. The San Pedro Riparian National Conservation Area (SPRNCA) has a great diversity of native wildlife and plant species stemming from the desert riparian habitats, associated perennial water sources, and sacaton grassland habitats. Unfortunately, it also has its share of unwanted, non-native, invasive species as well.

According to the Arizona Department of Agriculture (ADAg), a pest is a vertebrate or invertebrate insect, bird, mammal, organism, or a weed or plant pathogen that is in an undesirable location. For example, if a squirrel shows up at your birdfeeder and it is unwanted, then it is a pest to you. Whereas, a plant, say a sunflower, can be considered a weed if it grows in an area that you do not want it growing. But it is not considered a noxious weed. The term “noxious weed” is a regulatory term and are plants that are designated by state, county, or

federal government. The government determines if a plant species is injurious to public health, agriculture, recreation, wildlife or property. The ADAg defines noxious weed as, “any species of plant that is, or is liable to be, detrimental or destructive and difficult to control or eradicate.” According to the ADAg website there are fifty-three noxious weed plant species listed under three categories in Arizona. These categories determine how the Department manages and restricts species based on a risk assessment. A description of the categories and a complete list of species can be found at: [Noxious Weeds | Arizona Department of Agriculture \(az.gov\)](https://www.az.gov/Noxious-Weeds).



Onionweed plants in full bloom. This non-native invasive species has expanded throughout Cochise County as seen here on E. Hereford Road. How long before it makes it way to the San Pedro River?

What about invasive species? Are they considered noxious weeds? Yes and no. For example, a commonly known plant that was introduced as an ornamental landscaping plant, the Onionweed (*Asphodelus fistulosus*) is listed as a noxious weed but is also considered an invasive species. Another example, Johnson’s grass (*Sorghum halepense*), is a common but unwanted non-native invasive plant species that was originally introduced to the United States as a forage crop in the 1840’s. It is listed as a “Class C Noxious Weed” as well as an invasive species in Arizona. While it is not on the Federal list of noxious weeds, Johnson’s grass is listed in twenty-four states as a noxious or prohibited weed.

Unlike a noxious weed, an invasive species is not a regulatory term and can be assigned to insects, fish, reptiles, and amphibians as well as plant species. The National Invasive Species Management Plan (NISMP) defines an invasive species as, “a species that is non-native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.” Now that is a mouthful. In the case of the onionweed, it out-competes native species for sunlight, moisture, and nutrients. Additionally, it is not edible for wildlife and livestock. Fortunately, this species has not been documented within the SPRNCA. While the onionweed has not shown up (yet) in the SPRNCA it has increased its range in Cochise County.

Unfortunately, Johnson’s grass is prevalent throughout the SPRNCA. This rapidly growing grass forms dense colonies and produces hundreds of seed that allows it to out-compete more desirable native grass and tree species such as a native perennial bunchgrass, Sacaton (*Sporobolus wrightii*). So how did this grass that was originally welcomed by ranchers as a hay

and forage crop for livestock become an unwanted invasive noxious weed in native plant communities?

Johnson's grass is a perennial species. Which means it lives longer than two years and usually blooms in spring and summer months and dies back during the fall and winter months. It can reach up to 8-feet in height and the leaves range from 6 to 20 inches long and are 1/2 to 1 inch wide. The young plants resemble a young corn seedling a familiar member of the Poaceae (grass) family. It reproduces by seed and rhizomes with seeds remaining viable for up to 10-years. Its robust rhizomatous root system makes it difficult to control. Additionally, it is highly adaptable to survive in various soil types and growing conditions. This adaptability is a competitive advantage over the native perennial bunchgrass, Sacaton. Sacaton reproduces exclusively by seed and requires a specific soil type and soil temperature for the seed to germinate which can take two to three years. It is winter and drought tolerant giving it an advantage for longevity once it is established.

Unlike Sacaton, Johnson's grass produces hydrocyanic acid in the form of cyanide and prussic acid in its leaves which are poisonous to fish, amphibians, reptiles, birds, mammals, and livestock such as horses and cattle. Native federally listed birds, reptiles, and amphibians that are found throughout the SPRNCA are also at risk by the presence of hydrocyanic acid. The hydrocyanic acid is produced when the plant is stressed from freezing and drought conditions. Also, unlike Sacaton, Johnson's grass releases allelopathic compounds through its root system that are toxic to other plants. These compounds inhibit seed germination and root development of other vegetation such as Sacaton.



Native Sacaton grass summer growth found in floodplains in the San Pedro Riparian National Conservation Area.

Sacaton is an incredibly important plant species commonly found in lowland habitats and on floodplains like those found in the SPRNCA. It is an important forage for wildlife with the highest quality of forage in the spring. It is an important cover plant for bird species, including the Botteri's sparrow (*Peucaea botterii*), the collared peccary also known as javelina, and a variety of rodents. Botteri's sparrow is found only in a few areas of southern Arizona and Texas in the United States and are specifically affiliated with the Sacaton

grassland. Changes in this habitat type, by Johnson's grass and other invasive plants, is negatively impacting native vegetation and animal communities by the occurrence of less desirable non-native species.

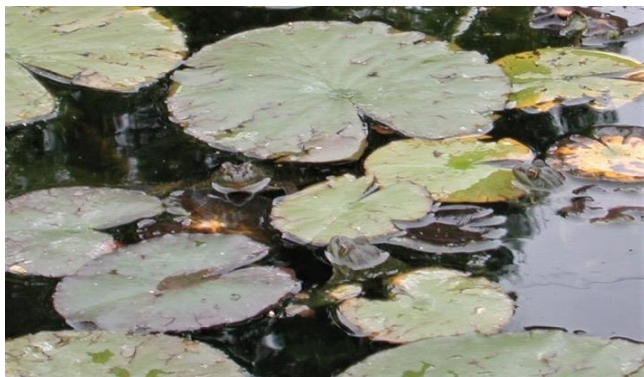
In addition to being an important food source and cover plant, in the summer Sacaton slows runoff, enhances water infiltration, and traps sediments. It is important for slowing down erosion in areas where flash floods occur.



Native Sacaton grass growing in the xeriscape demonstration garden at the San Pedro House.

Besides competing with the non-native invasive Johnson's grass, other issues that have negatively impacted the Sacaton grasslands include, channelization, erosion, and overgrazing.

As stated earlier, the term invasive species is not limited to plants. It also includes animal species. Do you like barbequed frog legs? In the early 1920's through the early 1980's Arizona Game and Fish released the American bullfrog (*Lithobates catesbeianus*) in wetlands throughout the state for that purpose. They are prolific breeders and firmly established themselves while reducing the numbers of not only native leopard frogs, but birds and native fish and reptiles. Not many people are eating bullfrog legs these days and without a natural or few predators, the American bullfrog out-competes and eats about everything in sight. The American bullfrog is not native to Arizona. It is invasive throughout Arizona's wetland systems including the SPRNCA. In the natural world they are predators. The Chiricahua leopard frog (*Lithobates chiricahuensis*) and the Mexican garter snake (*Thamnophis eques megalops*), native species of the SPRNCA, are unquestionably negatively impacted by this species. Both the leopard frog and the garter snake are listed Threatened under the Endangered Species Act (ESA), in 2002 and 2014, respectively. Predation by the bullfrog was a contributing factor for



A native amphibian, adult Chiricahua leopard frog

both species to be listed for protection under the ESA and is a continuing threat to these species.

Some of you may have fond memories of the 1970's Three Dog Night song lyrics, "Jeremiah was a bullfrog and good friend of mine." Unlike Jeremiah, the American bullfrog is no friend of the Chiricahua leopard frog. Bullfrogs have voracious appetites and are prolific breeders laying 20,000 eggs in one egg mass compared to the native leopard frog that lay an egg mass consisting of 300 to 1,485 eggs. The bullfrog predate on pretty much everything and that is no laughing matter when it comes to our aquatic wildlife. It dines on leopard frog eggs, tadpoles, and of course, adult, and juvenile frogs. Unfortunately, there are only a few species that predate on the bullfrog such as raccoons, herons, and human invasive species strike teams!

Originally classified as the Ramsey Canyon leopard frog (*Lithobates [=Rana] subaquavocalis*) and only known from a few locations in the Huachuca Mountains, in 2009 it was recognized as



Native adult Chiricahua leopard frog captured in an artificial cement pond before restoration efforts. Author releasing captive reared Chiricahua leopard frog in an undisclosed location in the Huachuca Mountains.

the same species as the Chiricahua leopard frog. It is found in central and southeastern Arizona, west-central and southwestern New Mexico, and the Sky Islands and Sierra Madre Occidental of northeastern Sonora and western Chihuahua, Mexico. The smaller native frog reaches up to 4.3 inches long compared to the larger bullfrog that reaches up to 6 inches in length. Adult and juvenile leopard frogs avoid predation by leaping to water and can camouflage themselves by darkening their skin under certain light and temperature conditions.

Habitats, sensitive species, and plant and animal community composition and diversity are negatively impacted by the occurrence of less desirable non-native and native invasive plant and animal species. Before the bullfrog became widespread throughout the leopard frogs' habitat, the leopard frog occupied a variety of aquatic habitat types. As the bullfrog and other non-native species expanded their presence, the leopard frogs are increasingly found in more unpredictable and ephemeral habitats where the non-native species have not invaded. While

the bullfrog is a primary predator of Chiricahua leopard frogs through all of its' complex life cycle, other threats include cattle that pollute the water systems, non-native fishes, crayfish, and tiger salamanders, chytridiomycosis a fungus that the bullfrog is less susceptible to while spreading it to native frog species, agriculture, rural development, water diversions, and groundwater pumping.

Some other problem invasive species found within SPRNCA include tamarisk, also called salt cedar, Bermuda grass, Eurasian collared dove, and livestock.

So, what can be done? There is a lot to consider when dealing with unwanted plants and animals and how they are defined have operational and financial consequences for administrators of our public lands such as the SPRNCA. The best way to eradicate, or at least limit the expansion of, invasive species is the early detection-rapid response approach. The cost to eradicate these harmful species is far greater once they are established rather than when they are first identified. However, that is easier said than done.

In 1988, Congress set aside 55,990 surface acres on the SPRNCA including an estimated 47 - miles of the San Pedro River. The purpose of establishing the National Conservation Area is to ensure that management conserves, protects, and enhances the riparian area and the aquatic, wildlife, archaeological, paleontological, scientific, cultural, educational, and recreational resources of the public lands surrounding the San Pedro River. Public lands are managed under many complex resource management plans including integrated pest and invasive species plans. In general, priorities are set in the hope of minimizing the total, long-term workload associated with managing unwanted plant and animal species. As such, preventing new infestations while controlling infestations that are the fastest growing, most disruptive, and which affect significantly valued area(s) of a site are the highest priority.

At home, planting species native to the area in which we live rather than non-native landscaping plants, helps to create a continuous habitat with our natural surroundings. In most cases, plants that are native to the area are more drought tolerant and require less fertilizing and watering than those that are introduced from other countries. In general, landscaping with native plant species saves a very valuable natural resource, water.

To learn more about this spectacular Arizona treasure go to [San Pedro Riparian NCA | Bureau of Land Management \(blm.gov\)](#). To learn more about how you can help to protect the SPRNCA go to the Friends of San Pedro River at <https://www.blm.gov/national-conservation-lands/arizona/san-pedro>.

About the author: Joanne Roberts is a retired Conservation Wildlife Biologist. Joanne worked in invasive species management throughout the State of Arizona. From 2005 to 2009 she served on the Governor's Invasive Species Advisory Council. Joanne worked with the Phoenix Zoo's leopard frog ex-situ "head-start" husbandry program and helped release them into

locations in the Huachuca Mountains. She worked in leopard frog compliance in-situ conservation programs in Arizona. Her work brought her to southeastern Arizona where she has remained part of the local conservation community through her work and volunteer positions. She is a member of the Board of Directors of the Friends of San Pedro River.

All photos by Joanne Roberts.

Mammals of the San Pedro River

Dr. Steve Merkley
Cochise College



Red Fox

A river of green flowing through the San Pedro Valley has provided a much-needed source of water, cover, and shade for humans and a variety of plant and animal life for thousands of years. For more than 2 years, researchers at Cochise College have been exploring the mammal diversity of the San Pedro Valley using remote cameras.

There have been 61 mammal species documented residing around the San Pedro River. Three of these species (house mouse, domesticated dog, and

domesticated cat) have been introduced and feral populations can be found today. Unfortunately, a handful of species have been extirpated from our region, such as the grizzly bear and gray wolf. Almost 70% of the remaining mammal diversity is made up of small rodents and bats, which are usually not detected by our cameras.

Cochise College instructors and students are attempting to measure large mammal diversity and movement near the San Pedro River in Cochise County. We use remote motion sensing cameras, which detect movement and body heat, and take photos and videos of animals that pass by. We mainly “catch” animals of a larger size, including mammals and birds. Since our study began in September 2019, we have documented 21 unique mammal species. The most interesting to me, who grew up outside of Arizona, are mammals that are found only in this region of the country. White-nosed coati (*Nasua narica*), who are in the raccoon family, are often mistaken by tourists and locals alike as monkeys when observed as they walk with their tails up in the air. Coati are widespread throughout Mexico and Central America. However,

their range in the United States is limited in parts of southern Arizona, New Mexico, and Texas, so they are off the radar for many Americans. It is fascinating to review videos of bands of coati with 10 or more adults and juveniles moving through a dry river corridor and rooting around in the soil for food.



Coati Family

Of course, the most charismatic animals to see in photos and videos are the large predators, like mountain lions and black bears. Although black bears are rarely seen on our cameras, we have had a handful of sightings over the past 2 years. We suspect they are using the river as a



Bobcat



Mountain Lion

corridor and possible foraging site while moving between mountain ranges. The mountain lions, however, are a much more permanent resident of the San Pedro River. They can be seen at all times of the year. While most observations are of a solitary individual, we have observed multiple lions travelling together. One of our most exciting discoveries was witnessing three very young mountain lion kittens playing and chasing each other in front of one of our cameras. We also have pictures of them travelling with their mother. I was even “fortunate” enough to see a mountain lion in the wild this past fall, while going to retrieve a memory card from a camera. Lucky for me, it heard me coming and ran in the other direction. In addition, I think it’s important to consider the lesser-known mammals of the San Pedro River. We have 4 species of skunk that inhabit our area. This includes the hooded skunk (*Mephitis macroura*), a species native to Mexico and Central America whose northern range

also extends into the U.S. in parts of Arizona, New Mexico, and Texas. They have a quite impressive bushy tail and seem to be undeterred by humans as I found out on a camping trip in Cave Creek Canyon in the Chiricahua Mountains last spring. Recently, we've seen a lot more activity of our only native marsupial mammal, a Mexican subspecies of the Virginia opossum, often referred to as the Sonoran opossum (*Didelphis virginiana californicus*). We even have a native mustelid, the American badger (*Taxidea taxus*)!

It's quite fascinating to see all this diverse life and have students help in the process of collecting and analyzing scientific data about these creatures of the San Pedro River. I hope that animal and plant life is able to thrive here in Cochise County despite all the environmental changes that are occurring. Fortunately, the more we learn about these animals, the more it instills in us a sense of duty and responsibility to protect them. Next time you see a deer moving quietly through the gallery forest, I encourage you to consider what you can do to ensure they are still here and thriving for many generations in the future.

About the author: Dr. Steve Merkley is a Biology Instructor at Cochise College. He mentors college students in ecological research in the San Pedro National Riparian Conservation Area.

All wildlife cam photos provided by Dr. Steve Merkley.

The San Pedro House Xeriscape Garden

By Ted Mouras



The San Pedro House (SPH) is at the heart of the Friends of the San Pedro River (the Friends) organization. Open every day of the year except Christmas, the SPH welcomes visitors and serves as both a gathering place, information source, and bookstore. Every year, thousands of visitors pass through the gates leading to the SPH on their way to visit the river. In an effort to improve our visitors' experience and as an educational opportunity, the Friends have sought to make the area around the SPH visually attractive to the public and to our local wildlife, particularly to birds.

Over the years, the SPH has been the focus of several efforts to establish a landscape planted with drought-resistant, low-water-use plants. From 2007 - 2009, through the work of Friends volunteers, the Daughters of the American Revolution (DAR), and the Cochise County Master Gardeners (MG), this effort became more organized and resulted in two distinctly different landscaped areas, both of them appropriate to our semi-arid lands. These efforts have continued to this day and have

resulted in a continued expansion to the cultivated area incorporating a variety of different plant communities.

In the past, we had planted a mix of drought-resistant plants, many of them non-native, but efforts over the past 15 years have focused on planting only flowers, shrubs, trees, and succulents native to our local area. We have also placed signs by some of the plants in order to aid visitors in identifying them. The Bureau of Land Management has been helpful via their efforts to establish and maintain a network of trails through the landscape around the SPH in order to make viewing these plants easier.

Located in front and to the west of the SPH is a Wildlife Landscape planted with a variety of primarily native drought-tolerant cactus, succulents, shrubs, and trees. Through the recent efforts of Friends volunteers, this landscape is becoming a showcase of plants native to the San Pedro Riparian National Conservation Area (SPRNCA). Different portions of the Wildlife Landscape are devoted to different themes. One area focuses on shrubs, cactus, and succulents found in the Chihuahuan Desert. A second area is planted primarily in native trees and shrubs found along SPRNCA washes.

Despite the dry conditions at the SPH, once established, the plants in the Wildlife Landscape need little or no supplemental water. An additional feature of the Wildlife Landscape is that it has been established to blend seamlessly with the native landscape on its periphery.



Located to the rear of the SPH, the Community Xeriscape is an effort to demonstrate a low-maintenance, attractive, and affordable xeric landscape suitable for local homeowners. In fact, the main purpose in establishing the Xeriscape was to provide the public with an educational landscape using a minimum amount of our most precious local natural resource, groundwater. Rainwater is collected from the roof of the ramada and SPH and stored in 100-gallon barrels and a 1550-gallon tank. A solar panel on the roof of the ramada powers a 12-Volt Recreational Vehicle water pump that delivers stored rainwater from the tank through a drip irrigation system to the plants in the Xeriscape. We also designed this drip system so that water from the SPH could be pumped back through the lines, if required. We have planted locally native flowers and shrubs found in the foothills of the Huachuca Mountains, in the

grasslands and Chihuahuan desert, and the river. Many of the plants selected are attractive to both hummingbirds and butterflies.

The Community Xeriscape is divided into three sections, each one separated by a walkway. One section uses gravel mulch as its base, another uses bark/wood chip mulch, and the third is a mixture of fine gravel and native grass. Informational signs identify the plants and explain the different elements of the Xeriscape. New features are being added to the Xeriscape, including a passive irrigation feature adjacent to the amphitheater and a large area planted in native plants attractive to a wide variety of native pollinators. The planted and maintained area now covers over an acre.

In 2008 we added a small pond located southwest of the SPH in the mesquite bosque. This pond hosts a variety of attractive water plants, uses a solar-powered aeration system, and provides a supplemental water source for birds, lizards, and mammals. A shady walkway leads from the SPH to the pond, and a bench in the shade of a cottonwood tree makes this a wonderful place to sit and watch birds as they come in for a drink.



None of this could have been possible without the efforts of those who started this project in 2007, who have maintained it all these years, and who continue to maintain and expand it today.

We encourage you to visit the SPH and take a walk around its landscaping. Your next visit may well give you several new ideas for your own yards and landscapes.

Photos by Lori Kovash.

First Annual Friends "A Year on the River" Photo Contest

Ron Stewart, Vice President

We held a contest on Facebook for best pictures of the San Pedro Riparian National Conservation area or the river in general. The categories were scenery and flora and fauna. Four prizes were given for the best and runner-up pictures in each category. First prizes were

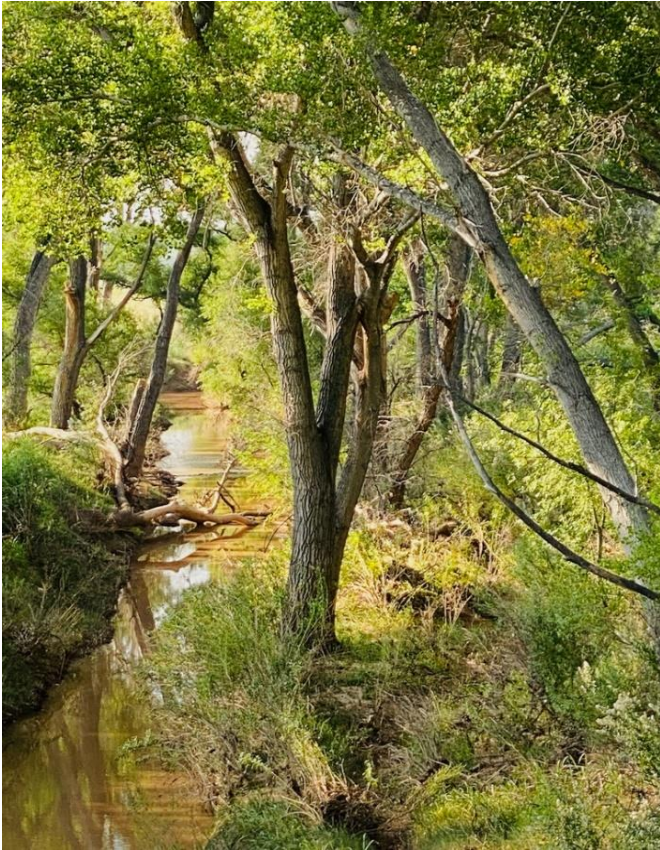
\$100 gift certificates at the San Pedro House, and runners-up received \$50 certificates. The money for the prizes was donated by FSPR Board members Renell and Ron Stewart.

Twenty pictures were entered. Bob Luce and Ron Stewart served as judges, looking at content, quality of picture, and composition to select the winner. Here are the two winners and second place entries.

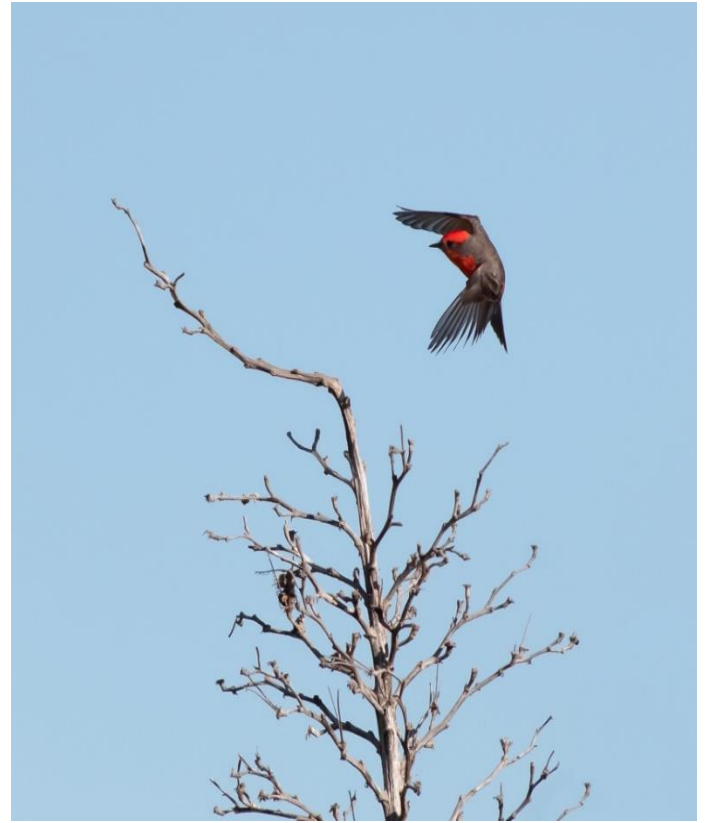
We hope to do this every year to encourage interest in the River and an appreciation, as told in photographs, of its beauty.



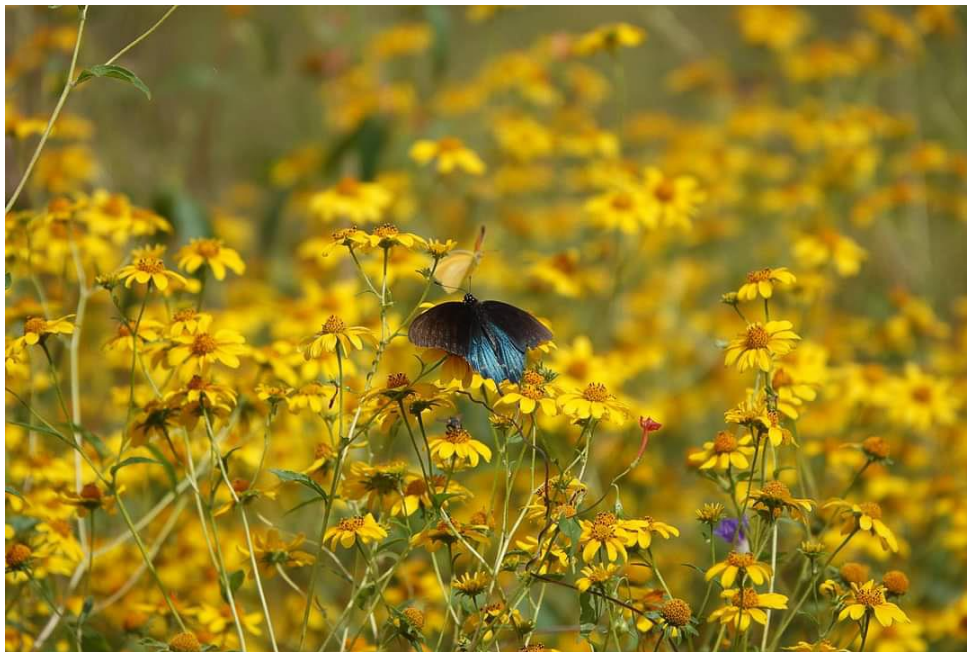
Renee Goodhue's "Great Blue Heron Chicks. Caption: These photos were taken on June 3rd this year. The great blue heron chicks were so excited when one of the adults flew in with breakfast. After parent flew off, they settled down nicely to wait for their dinner.



Kelly Hill entered her picture of a verdant San Pedro River. She titled it "River by Charleston Road."



Sheila Foraker gave this picture its title: Aerial Acrobatics. Captioned: "The vermilion flycatcher put on quite a show..."



Here is one taken by Kim Dodson. The title is Flora on the San Pedro River Trail 1. Her caption: "All photos were taken on the trail from the San Pedro house to the river east. They were all taken in September 2021". It shows a pipevine swallowtail in a cowpen daisies.

Members Only Hike to Lewis Springs

By Renell Stewart, Treasurer FSPR

On March 11 seven FSPR members set off on a hike to Lewis Springs. One of the opportunities you have as a member of the Friends of the San Pedro River is to participate in member-only events. The pandemic halted that, as with so many things, but we are now back on track, starting with this hike.

It was a beautiful Saturday morning. We were led by guide Mike Foster and FSPR Docents



Sandy and Ken Heusman. Most of us had never visited Lewis Springs and were eager for the chance to learn about Lewis Springs along our way. As we walked, we shared our observations. Someone noticed a lot of chewing on the mesquite limbs. It was confirmed with a local authority – via cell phone – that it was the work of pack rats. Another hiker pointed out a red-tailed hawk in a huge nest in a cottonwood near the river. A western diamondback rattler – the first sighting of the year for most of us – was seen sunning beside the trail. A javelina was noticed trotting across a large wash. Several eagle-eyed members were lucky enough to get a fleeting look at a mountain lion.

Then we arrived at Lewis Springs. Back in the 1890s and early 1900s, Lewis Springs was a busy place that attracted large groups of visitors from Bisbee and Douglas. Special

excursion trains carried the folks to enjoy the artesian ponds, the cienega surrounding the rare grove of cottonwoods that grew there, and to fish in the ponds and the river nearby. A natatorium (enclosed swimming pool), racetrack, dance pavilion, and picnic grounds provided further entertainment.

Today, the Lewis Springs area is a quiet, scenic spot. It is located north of the San Pedro House, east of the river about a quarter mile on Government Draw. You can walk around the few ruins of buildings and only imagine what it was like back in the day. It is somewhat difficult to reach and this members-only walk was a great chance to see it.

We all thoroughly enjoyed this hike. A great benefit of being a member of FSPR!

Photos by Renell Stewart.