

Carapace

NEWSLETTER FOR THE

Upper Gila Watershed Alliance

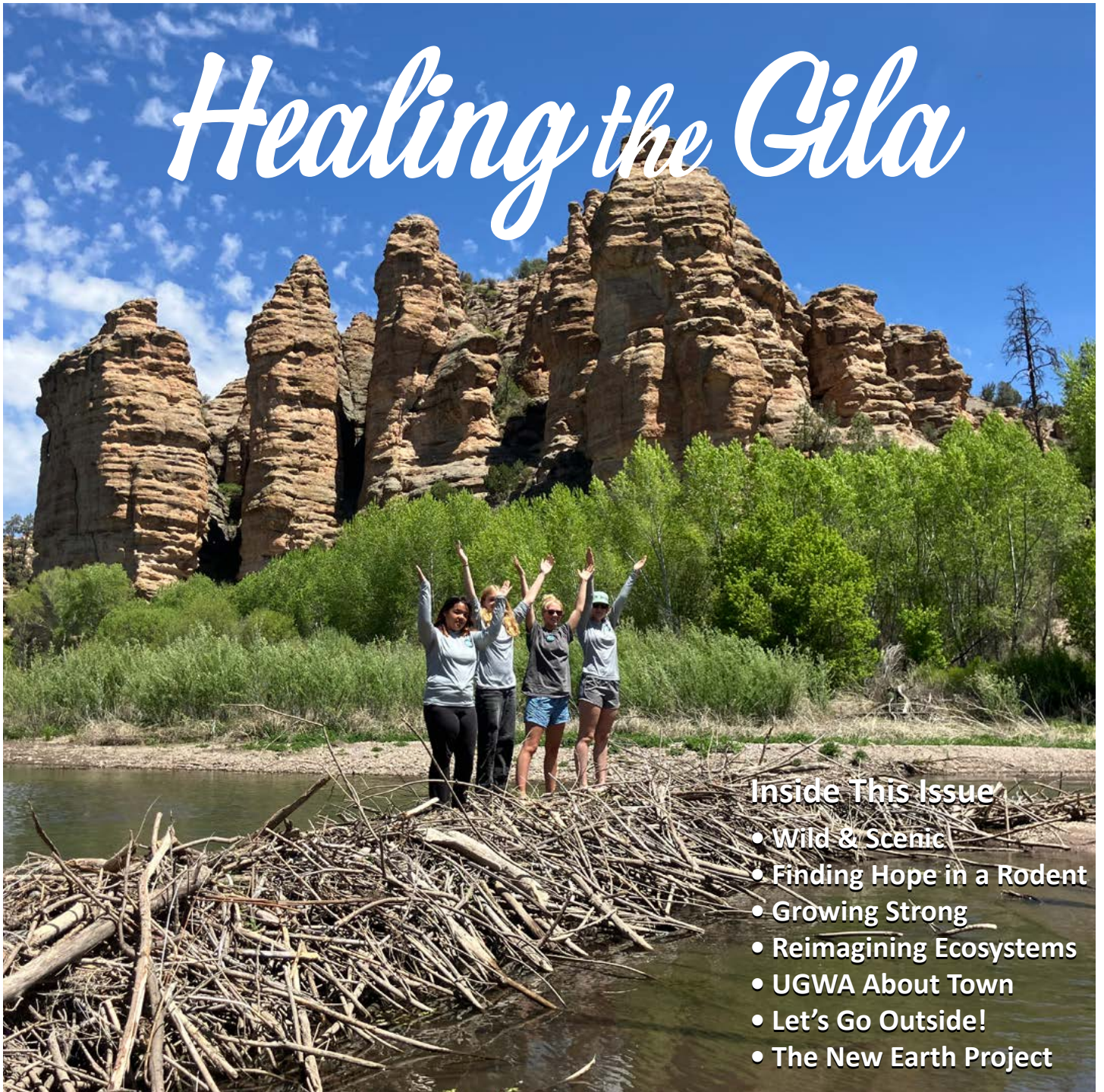
FALL 2024

Upper Gila
Watershed
Alliance



Vol. 27 No. 2

Healing the Gila



Inside This Issue

- Wild & Scenic
- Finding Hope in a Rodent
- Growing Strong
- Reimagining Ecosystems
- UGWA About Town
- Let's Go Outside!
- The New Earth Project

Upper Gila Watershed Alliance

Office

PO Box 1536 • Silver City, NM 88062
575-956-3301 • admin@ugwa.org
www.ugwa.org

Mission Statement

The Upper Gila Watershed Alliance is a non-profit watershed protection and conservation organization working to promote the long-term health of the Upper Gila Watershed and its communities of life. Through advocacy, education, research and restoration projects, we are striving to build communities of stewards in more locally based economies.

UGWA Staff

Carol Ann Fugagli
Executive Director

Rebecca Martin
Administrative Assistant

Board of Directors

Nora Fiedler

Jim Furnish

Sarah Johnson

Ron Parry

Sharman Apt Russell (Chair)

Dennis Weller

Editor

Sharman Apt Russell

Graphic Design

Rebecca Martin

Carapace is published by the Upper Gila Watershed Alliance. It is sent free to all UGWA members.

UGWA is a 501(c)(3) organization incorporated in New Mexico. All contributions are tax-deductible.



Message from the Executive Director



Photo by Mike Fugagli

Not long ago, UGWA's springs protection manager, Dylan Duvergé, and I visited a spring in the Burro Mountains. A fence had been erected a decade before our visit to keep out grazing cattle. Coming up to the spring, we were giddy with excitement, expecting to observe a thriving riparian ecosystem with young cottonwood trees reaching for the sky, tall Goodding's willows bending in the breeze, canyon grape, and wild onion, along with a plethora of other common riparian plants, all flourishing due to their protection from grazing animals.

Sadly, this is not what we saw. Instead, the lack of vegetation and ubiquitous cow patties indicated that undesirable

stressors had occurred for years. The fence, apparently, was ineffective. Feeling doleful, I reflected on *Marshland Elegy*, a mournfully beautiful essay by Aldo Leopold. In this work, he lamented the loss of wetlands and the dwindling population of sandhill cranes due to humans' destructive actions. Dylan and I trudged back to our car, our spirits decidedly low.

But these stories don't have to have an unhappy ending. Humans do have the ability to turn things around.

In this issue, our contributors give shining examples of the power of restoration and how habitats can heal if allowed. In the piece "Hope in a Rodent," Chris Smith demonstrates the

administration.) Our backyard has 3.3 million acres of majestic national forest and wilderness. And the Forest Service is UGWA's largest and most prominent partner. Many of our restoration projects, such as tamarisk removal and vehicle closures, have had profound and satisfying results.

One thing is certain: a new Federal Administration antagonistic to environmental protections will make our work more difficult. Preserving the wild places we cherish will require more persuasion and clever strategies. Stay with us; we can do this.

After all, we are the only species with a choice of what kind of future our planet will become.

"We have become, by the power of a glorious evolutionary accident called intelligence, the stewards of life's continuity on earth. We did not ask for this role, but we cannot abjure it. We may not be suited to it, but here we are."

— Stephen Jay Gould

successful work beavers contribute—which they do for free! In "Reimagining Ecosystems," Mike Fugagli writes about the triumphant feral cattle removal (which most likely would not have been implemented under the incoming

Fight for what you love, one thing at a time.

Onward, in solidarity,

Carol Ann Fugagli

"Here we are, the most clever species ever to have lived. So how is it that we can destroy the only planet we have?"

— Jane Goodall

The Gila River: Wild and Scenic!

By Carol Ann Fugagli

“An unspoiled river is a very rare thing in this Nation today. Their flow and vitality have been harnessed by dams and too often they have been turned into open sewers by communities and by industries. It makes us all very fearful that all rivers will go this way unless somebody acts now to try to balance our river development.”

Those words were written by Lyndon B. Johnson upon signing the Wild and Scenic River Act on October 2, 1968. Before this landmark law, decades of dam construction had seriously degraded the nation's rivers. Rapids were disappearing and fish populations declining. Conservationists, alarmed at the state of the nation's rivers, were determined to save the remaining few. After many years of work by biologists, conservationists, and allies such as Secretary of the Interior Stewart Udall, the Wild and Scenic Rivers Act was born.

The Wild and Scenic Rivers Act of 1968 authorizes Congress to protect rivers with exceptional natural, cultural, and recreational values while still allowing for their appropriate use. Designated rivers are to be kept free-flowing and their water quality protected. Designated rivers also protect biodiversity and increase resilience to climate change. Designation neither prohibits development nor gives the federal government control over private property. Recreation, agricultural practices, residential development, and other uses may continue.

Less than one-half of one percent of our nation's rivers are protected under this law. In New Mexico, portions of the Rio Grande, Rio Chama, Pecos River, and East Fork of the Jemez River are designated as Wild and Scenic. Conspicuously missing from this list is America's first wilderness river, the big-hearted Gila, with its headwaters in the first designated wilderness, the Gila Wilderness. Passage of the M.H. Dutch Salmon Greater Gila Wild and Scenic River Act would designate nearly 450 miles of Gila and San Francisco Rivers as Wild and Scenic. The Gila is home to more than two hundred bird species and seven threatened or endangered animal species. The wilderness and



The glistening waters of the Gila River offer solace to many people. Photo by Carol Ann Fugagli

its river provide a necessary respite from today's hectic pace. It's becoming increasingly clear that humans require solitude and beauty, as much as food and shelter, and the Gila River provides an abundance of both.

The Gila River checks all of the required boxes for Wild and Scenic designation, so one might think that including the Gila on the established list should be easy. Well, not so fast. Wild and Scenic designation is an act of Congress which means the alignment of many minds and strategies needs to be in place. Numerous environmental non-profits in our area have been collaborating for several years for this to come to fruition. We will continue this mission for as long as it takes.

Many thanks to the Conservation Lands Foundation for funding UGWA's work on the Wild and Scenic Rivers campaign.

“The song you heard singing in the leaf when you were a child is singing still.”

— Mary Oliver



Finding Hope in a Rodent

By Chris Smith

In the face of climate change, optimism can be hard to find. Loss is upon us. But I just spent three days with over 500 people who have found a source of answers, solutions, and hope. This group is part of a massive groundswell that is building and gathering momentum. And we have good reason for feeling good. Actually, there are a lot of reasons; and we'll get to them.

First, I want to talk about where we are. New Mexico is on the forefront of the climate crisis in many ways. Our fragile ecosystems and vulnerable communities—human and critter—have experienced catastrophic wildfires, severe droughts, tragic flooding, freak storms, and more. As you know, the Gila watershed is no different. On top of the climate threats, pressure to divert water and mine minerals continue to pop up—exacerbating the situation.

Every corner of our state is feeling these impacts. And there is every reason to suggest that things are going to get more chaotic

before they calm down. This is our reality whether we want to admit it or not, whether we blame humans or not, and whether we like it or not. How we face this new reality is really up to us. We can make things worse, we can mope and do nothing, or we can recognize possibility.

Back to this group of optimists...

Among the people I just spent three days with are teachers, researchers, park rangers, hydrologists, line cooks,

firefighters, ranchers, filmmakers, military veterans, farmers, office assistants, biologists, students, writers, doctors, engineers, hunters, foresters, and something called fluvial geomorphologists. This big crosscut of society, which comes from all over North America, has its collective eyes on one critter that may help us solve the myriad problems we all face. And this isn't a cult or some kind of LinkedIn profit maximization consortium. This is just a group of people who are looking at beavers.

It's a little silly to say that beavers are having a moment. Beavers have been top-of-mind for people trying to heal degraded watersheds for over a decade. Much earlier in American history, posters from as far back as the 1920s herald beavers' ecosystem engineering fêtes. Idaho saw the need for beaver restoration in the 1950s and used planes to relocate them over a wilderness. But the current energy going into beaver science, coexistence, restoration, and mimicry is higher than it has ever been, as evidenced by 500 people



Photo of Baugh Creek, Idaho, illustrates how a string of beaver ponds in a barren, post-wildfire landscape, serves as wildlife refugia and potentially as firebreaks. Photo by Schmiebel, CC BY-SA 4.0

selling out BeaverCON 2024 in Boulder, Colorado.

If you aren't in the loop, here's what all the beaver buzz is about. North America used to be home to around 200 million beavers before Europeans arrived. Then the fur trade commenced, and by 1900, that number had been reduced to about 100,000. I'll give you a moment to re-read that and let it sink in.

There were beavers in practically every waterway across the continent. Every creek, pond, river, lake, wetland, and marsh held (or was held by) beavers and their dams. The loss of these creatures and their infrastructure had a massive impact on North America, especially the arid American West. And we're now learning just how much we miss them.

In short, beavers and their dams slow and spread surface water, mitigate drought, recharge aquifers, make water cooler and cleaner, create wetland habitats, restore floodplains, improve and create aquatic habitats, promote biodiversity, sequester carbon, slow and weaken flooding, and even prevent wildfire and accelerate post-fire recovery. You read all of that right!

That last part is particularly intriguing

continued on page 6



Beaver complex in northern New Mexico. Photo by WildEarth Guardians/ New Mexico Beaver Project

Finding Hope in a Rodent
continued from page 5

and is part of new, emerging science. Researchers are discovering and exploring incredible lush and green patches in horrific burn spurs. These veritable oases don't burn because they are so wet. And they not only allow animals to seek refuge during intensive burns but also provide a platform for the re-establishment of plants and wildlife. Cattle, too, have been found to seek shelter in beaver wetlands during catastrophic fires.

New Mexico does have beavers—it's not like they are totally absent. And the Gila region has a good number of beavers. Forest managers saw the wisdom in banning beaver trapping on the Gila National Forest well before New Mexico implemented its public lands trapping ban. But both the Gila and the state as a whole could use a lot more of these incredible rodents. Unfortunately, right now we don't have any proactive, systemic way to increase beaver presence. We don't have a plan.

[The New Mexico Beaver Project](#)

(nmbeaverproject.org) is a group of organizations and individuals who believe that beavers can help make New Mexico's lands more lush, resilient, hospitable, and productive for people and wildlife. We are working to get the state to write, fund, and implement a plan that would restore beavers where they are absent and help more people coexist with beavers where there is conflict.

We see this work as landscape healing and restoration through wildlife policy. And maybe the best part is that beavers happily work for free. While watershed restoration and forest treatment for wildfire prevention are incredibly expensive and limited in their timeframe, beavers scale up their work and, if left alone, work their magic for years and years.

There are lots of ways to help this healing. First, you can learn about beaver benefits and coexisting with beavers. During the pandemic, we hosted the virtual [New Mexico Beaver Summit](#) (nmbeaversummit.org) where beaver experts and enthusiasts from around

the region shared their insights. You can get involved with our work to restore beavers across the state by going to the New Mexico Beaver Project website and signing up to help. You can talk to your neighbors and friends about beaver benefits and how to share the landscape with these ecosystem engineers. And if you're a landowner with a little bit of water, maybe you can even host a new beaver family and see the benefits yourself.



Chris Smith

Chris Smith is the wildlife program director for [WildEarth Guardians](#) and he recently helped start the [New Mexico Beaver Project](#). He lives in northern New Mexico where he was born and raised to appreciate the incredible natural ecosystems of the high desert.

Growing Strong

by Carol Ann Fugagli

The growth of a tree can be compared to the development of a child: fragile at infancy, gangly and vulnerable when young, strong and sturdy when fully grown. UGWA's Seedlings to Saplings program is a native tree nursery cared for by young adults who develop along with the growing trees. I receive great pleasure watching an adolescent standing among the Velvet Ash, Arizona Sycamore, Ponderosa and Piñon Pine, Netleaf Hackberry, Chokecherry, Arizona Cypress, and numerous other species that thrive first in our nursery and then in our arid landscapes.

continued on page 10



Local youth assist in repotting hundreds of seedlings for our native tree nursery. Photo by Carol Ann Fugagli

Reimagining Ecosystems

By Mike Fugagli



Zack Crockett and Mike Fugagli head up Turkey Creek Road to begin salt cedar treatment on the main stem of the Gila River. Photo by Jamie Crockett

From the native ecosystem point of view, it turns out that wild nature is not so "wild" after all; a fundamental point often misunderstood by opponents of environmental protection who wrongly consider wild places and wilderness areas as societal luxuries instead of basic necessities.

Wildness, it turns out, is essential. Far from the erratic, disjointed, disorganized, and chaotic meaning that the word "wild" is so often saddled with, wildlands are brimming with intelligence. Life, after all, is an historical phenomenon. Life journeys through time. Life begets life, and the stability, resiliency, and individual character of every native ecosystem springs from the long-evolving relationships members of those ecological communities have forged with one another.

Enter, stage left: salt cedar, Siberian elm, tree of heaven, the crayfish, the bullfrog, the cow.

Enter climate change.

By the year 2100—one human lifetime from now—scientists anticipate that up to 90% of the Earth's land-based surface will be covered by "no-analog" ecosystems; brand new ecosystem types of which there are currently no examples on the Earth today; ecosystems that will be governed by novel climates, containing jumbled species' assemblages, mostly generalist species thrust together, each looking to

For decades, conservation biologists have centered their work around the protection of "native" ecosystems, often called natural communities: assemblages of individual species that have evolved together and whose connections with each other are intricately woven and finely tuned over eons into a recognizable and persistent equilibrium.

find a foothold somewhere, anywhere, in a new and rapidly changing world.

Of course, that leaves conservation biology in a bit of a pickle. If "native" and "natural community" are losing their meaning, just what is it we're supposed to be protecting? Does the idea of sustainability have any meaning in a world characterized by rapid and accelerating ecological change? How are we to think about non-native species now? When does a non-native species cross the line into the realm of invasiveness? Is there such a thing as botanical or ornithological racism? Should we open our doors and our hearts to anything that will just say the equivalence of please and thank you—and live and grow? Or should we make a stand - Remember the Holocene! - understanding that with the loss of natural communities, we lose the hard-won intrinsic intelligence, the

ecological wisdom unique to each community that collectively is responsible for the continuity, stability, resilience, and ecological potential of our beautiful but beleaguered world?

In 2017, year two of UGWA's upper Gila River Salt Cedar removal project, I finally had the chance to walk the entire

mainstem wilderness reach of the river for the first time. Not just to walk it but to explore every nook and cranny where a salt cedar might be hidden. Somehow, I guess, I had come to a firm decision: this invasive plant had to go. And that feeling went far beyond science; my heart, too, cheered for the cottonwoods.

Exploring the entirety of the floodplain was a twofer. It also gave us a ring-side seat to the feral cattle show and the impacts they had on the river corridor and floodplain, catalyzing those efforts that led eventually to the species' 2022-2023 controversial removal.

In both cases—salt cedars and cows—the species removed were considered invasive because of their ability to highly disrupt our native riparian

continued on page 10



Grasses thrive along the banks of the Gila River when stressors are removed. Photo by Carol Ann Fugagli

UGWA About Town



Gila River Festival Tour

Conservation biologist Mike Fugagli offered two tours to the New Earth Project site during the Gila River Festival. Over 70 people learned how we fill Johnson-Su bioreactors to create Living Earth—a vital soil compost and inoculant that can help draw down atmospheric carbon and create healthy soil for increased water storage, more pest-resistant plants, and increased food nutrition.

Las Juntas Workshop

We are grateful for our partnership with Seeding Regenerative Agriculture from Las Cruces in co-sponsoring our third workshop at Las Juntas—land owned by The Nature Conservancy near Riverside, NM. We used our Living Earth compost, made from the composting bioreactors at the New Earth Project, to make a microbial slurry. Mixed species cover crop seeds were coated with this microbial slurry and planted in trial plots. We also planted a control plot using seeds without the microbial treatment. Our past trials show that coated seeds produce twice the biomass as the untreated seeds. This data shows what regenerative agriculturalists have been telling us for a long time; humans need to step back, stop putting fertilizers into the soil, stop disturbing the ground, and allow microbes to multiply and grow. These microbes will develop a relationship with



plant roots so that the plants are better equipped to deal with pests, withstand adverse conditions, and produce more nutritious crops. Let's let Mother Nature do what she has evolved to do!



Sharman's Program

Award-winning authors, Sharman Apt Russell (UGWA board chair) and Jason Amaworo Wilson, provided an enchanted evening at Miller Library in August. They connected the audience to the natural world by reading excerpts from their latest books, *What Walks This Way: Discovering the Wildlife Around Us Through Their Tracks and Signs* and *First and Wildest: The Gila Wilderness at 100*. The audience of nearly 100 people braved rain showers to experience nature through their eyes.



Students and Worms

Did you know that redworms have five hearts, breathe through their skin, and recycle food? As part of Journey Through the Food System hosted by the National Center for Frontier Communities, UGWA educator Nan Franzblau helps students from Hurley Elementary School explore the fascinating world of redworms. Representatives from many non-profit organizations participated in teaching these young people where food comes from, beginning with the creation of soil, the sprouting of seeds, and the water cycle that nourishes those seeds. Students were guided on how to make healthy choices regarding sugar intake, homegrown or local vs. factory-farmed produce, and the consumption of fresh fruits and vegetables.



Ron's Moths

Did you know there are approximately 165 butterfly species in Grant County, while the total number of moth species probably exceeds 2,000? Moth expert and long-time UGWA board member Ron Parry shared many beguiling facts with an entranced audience at WNMU. Standing room only! After the program, we observed moths that were attracted to a blacklight after dark.



Salsa Showdown

New Earth Project educator Nan Franzblau informs folks in the Cobre District about backyard composting during the Salsa Showdown, hosted by the Frontier Food Hub.

Reimagining Ecosystems
continued from page 7

ecosystems. This kind of ecological disruption is far too common. Following habitat loss, the impacts associated with invasive species are the second leading cause of species extinction globally.

Still, it can be a tough decision. A weed is better than bare ground. But since that first trip in 2017, UGWA has removed all known salt cedar - hundreds of locations, thousands of stems - from all river reaches, including all three forks of the Gila, from national forest lands.

And the feral cattle are gone.

This summer, UGWA treated the mainstem wilderness reach again for salt cedar. It was a cleanup operation. There were maybe thirty locations total between Mogollon Box and Grapevine, mostly 2-3 year whips growing from the dying roots of what were five plus inch diameter seed trees a decade ago.

Without a maintained trail between Turkey Creek and Sapillo, the going was rough with the horses and mules, but at least those animals had something to eat. On the benches where the feral cattle had been there were actually plants: tall grasses and wildflowers covered with butterflies. On the river corridor, cottonwood, willow, and sycamore seedlings crowded the bars.

I understand that not everyone agrees we should use herbicides in wilderness



Mike Fugagli

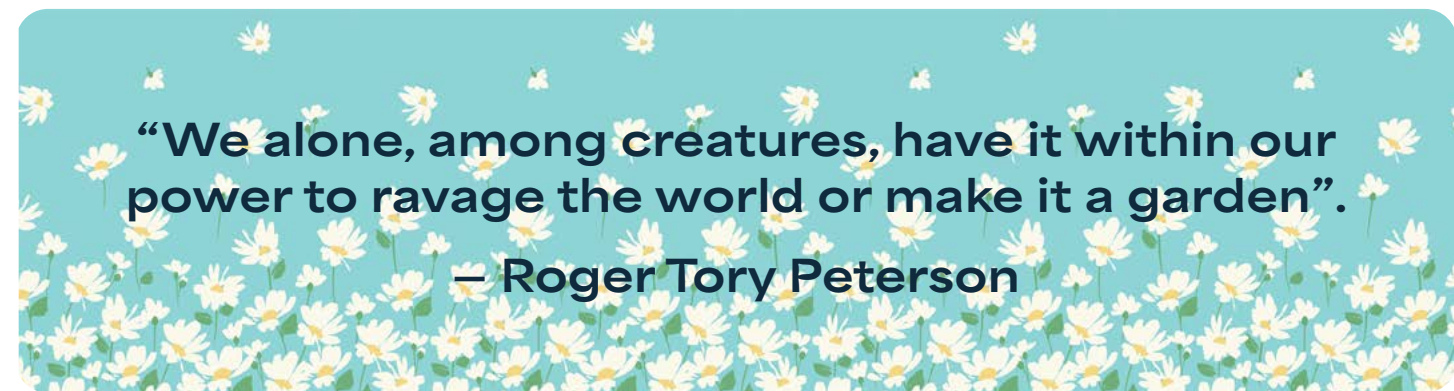
Mike Fugagli is UGWA's conservation biologist and co-director of the New Earth Project. He has been walking the Gila River hunting salt cedar since 2017.

areas to treat invasive salt cedar. I know that, for some, euthanizing feral cattle on our wilderness river is a hard pill to swallow, because it sure ain't the cow's fault. But when I woke up at 3 a.m. this summer in an old-growth floodplain forest, enchantingly close to a dueting pair of western screech owls - a declining species that I hadn't encountered for a decade - I knew that I would have no trouble getting back to sleep that night.



Zack Crockett

Zack Crockett owns Gila Backcountry Services, a wilderness outfitting business. He has been outfitting and working to remove salt cedar with UGWA since 2016.



Growing Strong
continued from page 6

We purchase seedlings from the Forestry Division's Conservation Seedling Program. This program offers low-cost seedlings to plant for reforestation, erosion control, windbreaks, streambank restoration, and wildlife habitat improvement. UGWA's paid interns nurture the plants until they are robust before placing them in the ground for local restoration projects—such as along the banks of the San Vicente Creek in Silver City. The many benefits that trees give our planet are well known and include helping with climate change mitigation, storing carbon, providing cooling shade, and increasing water infiltration.

One necessary component most tree nurseries lack is nourishing soil in which to grow the trees while they mature. Fortunately, we've got that

covered! Our New Earth Project generates a living compost or "microbial inoculant." This growing medium is ideal since it's comprised of trillions of living bacteria, fungi, protozoa, and nematodes which are necessary for healthy plant growth. A key component of this substrate is the presence of mycorrhizal fungi. This type of fungi forms a microscopic network of threads called mycelium that wrap around or bore into tree roots. This network allows trees to communicate with each other and exchange nutrients, water, and carbon. Around 90% of plant species depend on this relationship. This fascinating microscopic world is largely uncharted territory, and

science is just scratching the surface of discovering the mysteries that lie beneath the soil.



Tree seedlings are watered and cared for by young interns. Photo by Carol Ann Fugagli

Clairvoyance and the New Earth Project

by Carol Ann Fugagli

If I had owned a crystal ball when we began the New Earth Project two years ago, my predictions of our accomplishments would have been eerily accurate. This brave endeavor began with the novel idea of using food leftovers as input for the Johnson-Su composting bioreactor. Using such food "waste" had never been tried before. Would it work? We were laying everything on the line since obtaining results, either positive or negative, would require at least 12 months while the material biodegraded. We took the plunge and waited. The results? A resounding success! To confirm our results, we sent several samples of our "Living Soil" compost inoculant to a laboratory in Oregon.



Youth helpers and interns pose with senator Siah Correa Hemphill whose generosity helped fund the New Earth Project. Photo by Carol Ann Fugagli

The owner of the company, Earthfort, said he hadn't seen a compost so dominant with fungus and associated beneficial micro-organisms in a long time.

Job well done! Other organizations and groups are now giving their support both with encouragement and financial assistance. We are grateful to the Grant County Commission and to the 30something group who offered finances to build a structure on our permanent location



Nan Franzblau, Makayla Jaurequi, Lila Knadler, and Ella Jameson enjoy the task of putting cafeteria leftovers through a garbage disposal before placing in a modified Johnson-Su bioreactor. Photo by Carol Ann Fugagli

near San Vicente Creek. This pole barn will provide a community classroom, a laboratory to house our microscope to analyze soil samples, and workspace.

In only two years, we have diverted nearly 60,000 pounds of leftover food and 120,000 pounds of shredded wood from the local land-



The pole barn will offer a community classroom, laboratory & workspace. Photo by Mike Fugagli

fill. We continue to educate 4th graders in the classrooms about the importance of healthy soil, and we are spreading our tendrils to other communities who are interested in replicating our work.

Our results are a microbially rich compost or



Corn, squash, and beans are planted in the bioreactor for collecting super seeds! Photo by Carol Ann Fugagli

inoculant that can increase the water storage capacity of soil, increase plant yield, increase nutrition in crops, and drawdown atmospheric carbon. The next step is getting these microbes into as much soil as possible. We're in conversation with farmers around Silver City and Deming to experiment on their fields. Here's where you come in...buy some and try it on your plants, raised beds, and trees, and give us your feedback! We'd love to hear from you!

To purchase our product, visit our site on Mondays between 9:00am and 1:00pm or contact Carol Ann at director@ugwa.org to schedule a time. Please see the advertisement below for more information.



Bella Torrez helps fifth graders from Harrison Schmitt Elementary identify aquatic macroinvertebrates. Photo by Dara Werber-Raiter



Fifth graders from Harrison Schmitt Elementary gleefully splash in the Gila River during the Children's Water Festival. Photo by Dara Werber-Raiter



Eco Camp participants enjoy an evening soak at Lightfeather Hotsprings. Photo by Carol Ann Fugagli



Master Camp Cook, Diane Barrett, prepared irresistible meals during Eco Camp. Photo by Carol Ann Fugagli

**Ahhh...
this is the life**



Kate Dixon educates students from Guadalupe Montessori School about animal skulls during the Children's Water Festival. Photo by Carol Ann Fugagli



Trip Peterson, Ra Schofield, and Jordan Grinie perfect fire by friction skills during Eco Camp. Photo by Carol Ann Fugagli

Let's Go



Guadalupe Montessori students enjoy the cool waters of the Gila River during the Children's Water Festival. Photo by Carol Ann Fugagli



Group photo of Harrison Schmitt fifth graders during Children's Water Festival. Photo by Carol Ann Fugagli

Outside!



Diane Barrett's camp kitchen during Eco Camp. Photo by Carol Ann Fugagli

It's a Beautiful Day, Let's Go Outside!

by Carol Ann Fugagli

“Ahhh....this is the life!” exclaimed a 5th grader from Bayard Elementary as he ate his lunch sitting next to the Gila River. Yellow Warblers vocalized above in the cottonwood trees, and children gleefully chattered to one another, excited to be outdoors. Last spring, over 300 5th graders from the Silver City and Cobre School Districts had the opportunity to experience the Children's Water Festival, a day of hands-on, outdoor discovery at the Gila and Mimbres Rivers. Whether it's looking for aquatic macroinvertebrates, identifying animal skulls, or learning bird vocalizations, spending time at the Gila River is always memorable. Jocelyn Lyons-Baral, an educator at Guadalupe Montessori School, affirmed: “These experiences in the Gila connect our children to this amazing place we live in, preparing them for stewardship or for educating others, or simply passing on their love for Gila to their own children.”

For young people seeking an immersion experience, UGWA offered a four-day camping excursion to the Grapevine Campground. The teenagers were introduced to the ancient skill of making fire by friction, the art of cordage using local plant material, knife safety, archery, and map-reading. They experienced the beauty of the Gila River, and its importance for wildlife, and came to appreciate how humans depend on a healthy watershed for our existence.

Camp organizer, Carol Ann Fugagli, reflected, “Creating the opportunity for teens to expand their self-confidence and find previously unknown strengths within themselves is incredibly rewarding and makes all the preparation time worth it!”

UGWA would like to thank the Conservation Lands Foundation, Lineberry Foundation, The Nature Conservancy, and the Outdoor Equity Fund for supporting these programs.



Jordan Grinie collects wild sorrel to accompany his breakfast. Photo by Carol Ann Fugagli



Participants in Eco Camp learned about geology and topography map reading skills during an all day hike up the Gila River. Photo by Carol Ann Fugagli



Xuma Sage, Ra Schofield, and Andrew Dahl-Bredine discuss the Mimbreno people during a sunset hike. Photo by Carol Ann Fugagli



A fifth grader from Harrison Schmitt Elementary searches for aquatic macroinvertebrates during the Children's Water Festival. Photo by Carol Ann Fugagli



Students from San Lorenzo Elementary enjoy a photo opportunity during the Children's Water Festival along the Mimbres River. Photo by Carol Ann Fugagli

UGWA Membership Application

Your membership and additional financial support sustain UGWA and are critical to the organization's ongoing health. Share in the protection and conservation of our watershed and become an UGWA member today.

Name(s) _____

Address _____

City _____ State _____ Zip _____

Telephone _____

E-Mail _____

Membership Categories—Annual Dues:

Chiricahua Leopard Frog	\$	20
Gila Trout		30
Mexican Gray Wolf		50
Beaver		100
River Otter		250
Other Amount		_____



Make your check payable to UGWA and send to

PO Box 1536, Silver City NM 88062

I don't wish to join at this time but please notify me of upcoming events.

Name _____

E-Mail _____

UGWA's Statement of Philosophy

The members of the UGWA recognize a vital and necessary connection between our individual and collective rights and responsibilities as landowners and community members and the long-term stewardship of the Upper Gila River Valley and Watershed.

The members of the UGWA share a love and concern for our community which is an integral part of our lives and, therefore, seek to harmonize our presence and activities within the watershed for the health and integrity of the entire "community," which includes the soil, the air, the water, the people, the plants, and animals.

The members of the UGWA share the conviction that men and women work best together in a spirit of cooperation, conflict resolution, and consensual agreement that builds upon a common ground that benefits from the views and concerns of each individual acting as uncoerced free agents.

To realize our vision for the common benefit of the entire community served by the Upper Gila Watershed, and for the sake of future generations, the UGWA seeks ways and means to bring people and organizations together in constructive dialogue and activities aimed at clear communication, education, land restoration, research, and local economic health

So Many Ways to Donate

ONLINE: Do you prefer online payment instead of paper checks? We've got you covered! Simply go to our website at ugwa.org and click the Donate Button.

RECURRING: We'd love to see you again. And again. To become a Recurring Member, go to our website at ugwa.org, click the Donate Button and choose "Make this a monthly donation."

PROGRAM SPECIFIC: Do you have a favorite program you want to support? Include a note with your donation and we'll apply your donation to that program! Donating online? Let us know by an email to admin@ugwa.org.



Thank You!
(March 30, 2024 – November 4, 2024)

New Members

Cindy Gagnon • Gail Langsner • John Lathrop • Meriwether McClorey
Carrie Hinds & Nancy Kendrick • Mariah Walker • Loren Poole • Ted and Deborah Whittemore
Cissy McAndrew • Jeffrey Hager • Cindy Beaver • Dianna Wynn • Shannon Cimarron
Nancy Stephens and Brian Etheridge • Zoe Wolfe & Steven Shelendich
Janice Embree-Bever • Steve Morgan • Nina & Larry Parker
Donna Gianoulis & Brad Van Every • Gillian Sherwood • Howie Richie
David Eicher & Joseph Smith • Cinde Thomas-Jimenez • Kay Fugagli

Recurring Members

Jene Moseley • Marc Nevas

Returning Members

Mary Bechelli • Jim Furnish • Betty Spence & Dennis Switzer • Dennis Weller
Jeff Goin • Fred Fox • Tom Hester • Nora & Andrew Fiedler • Victoria Reece
Hara & Scott Davis • Marilyn & Tris Germain • Bill Stites • Chris Overlock
Sandy Hathaway • Betty Lawson • Joseph & Marilyn Gendron
Ceil Murray & David Rose • Kathleen Wigley & Robert Pittman
Sue Childers & Randy Harkins • Corinne Smith • Diane LaFrance & John Rogers
Jim and Jackie Blurton • Sarah Johnson • Pamela Bryant & Ron Groves
Andy and Gwen Payne • Sandra & Paul Michaud • Karen Nakakihara
Karen & Tom Weller-Watson • Esperanza Quintero • Andrea & Jon Walker • Ron Parry
Don Benage • Sharman & Peter Russell • Debbie Guerra • Allyson Siwik
Carol & Ray Pittman • Lindee Lenox & Shelby Hallmark
Joan & Elroy Limmer • Shelton Holland • Lynda Aiman-Smith
Nancy & Jack Brennan • Mary Hotvedt & Robert Garrett • Jeff & Allison Boyd
Jamie & Marion Newton • Melissa Green • Damie Nelson • Mary Barrett
Carlene Roters & Frank Merritt • David Becker • Deb Preusch & Tom Barry
Marcia Stout & Dale Housley • Deb Cookingham & Hugh Epping
Janet & Paul Riger • Steve McGarity • Meyoni Geouge

Funder Thank You!

Commission for Environmental Cooperation • Conservation Lands Foundation
Lineberry Foundation • National Wilderness Stewardship Alliance
New Mexico Environment Department • River Stewardship Program
New Mexico Outdoor Recreation Division Outdoor Equity Fund
New Mexico GRO Fund • New Mexico Native Plant Society
Tides Foundation • U.S. Department of Agriculture

Special Thanks

To Gary Berg for offering his engineering expertise for the New Earth Project.
To Richard and Carol Martin for the continued use of their truck aka, the 'Desert Rat' for the New Earth Project.



NEW EARTH KIDS RADIO SHOW

As part of the Kindred Continuum series, UGWA hosts a monthly radio show on Gila Mimbres Community Radio KURU 89.1FM called *New Earth Kids*. *New Earth Kids*, features students of all ages who talk about the challenges facing our planet today and how they are creating and implementing solutions.

Listen to archived shows on our website at ugwa.org

Upper Gila Watershed Alliance
PO Box 1536
Silver City NM 88062

FIRST CLASS MAIL