



Shape the Future

Canyon Chatter

Friends of Madera Canyon

February 2026



Most of us have experienced the toxic, irritating oily urushiol, the substance that causes an allergic rash in most (86%) people when they contact poison ivy. Urushiol is present in poison ivy all year. Brushing a few leaves onto your bare skin can cause contact dermatitis, which itches intensely and prompts you to scratch, spreading the oil onto your skin and your fingers. Even if you carefully avoid contact with your skin, it may get on your hiking boots and transfer to your hands, which then spread it to your body wherever your hands come into contact. It is toxic in every season. Burning the dried plant will cause the urushiol to travel with the smoke and may enter a person's eyes or upper respiratory system.

While urushiol is an effective deterrent for humans, there are few reports of native wildlife or domesticated animals exhibiting urushiol-induced/associated allergenic contact dermatitis. By way of example, goats are effective at eating undesired poison ivy but do not show any aversion or adverse effects from consuming it. Dogs and cats can brush against poison ivy, transfer urushiol to their fur without evidence of allergenic contact dermatitis, but they can then transfer it to their human companions, where it results in allergenic dermatitis. How herbivores of poison ivy are somehow able to inactivate the allergen or are otherwise insensitive to its allergenic effects remains very poorly understood. Continued on page 13.

Links to Contents

- [3](#) From the President
- [4](#) Sky Island Field Notes from Your Executive Director
- [5](#) Announcements
- [6](#) The Bird Page
- [10](#) Education Program
- [11](#) Editor's Desk
- [13](#) Volunteer Spotlight

On the cover. The leaves of Poison Ivy turn red in the late fall or winter. Find out why many plants do this and why poison ivy is toxic. Photography by Doug Moore.

How to Join Friends of Madera Canyon Below are links to join as a new member, renew a membership or make a donation. The links will take you to a secure server to use to make an automated payment. Do you have any questions? Let us know. If you prefer to help by writing a check, please make your check payable to Friends of Madera Canyon - mail to:

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From the President

Honor The Past—Use the present wisely—Embrace the Future

Executive Director Kristin Wisneski-Blum has written below about the energy she felt at the 2026 Annual Meeting. She has also summarized the Friends' Day of Service project to celebrate Martin Luther King, Jr. Day. Over 40 young people and their advisors were involved. The Service Day was organized by several younger Friends members who have contacts with local schools and youth groups.

The Friends' membership rolls include several Youth Naturalist Groups. There are young people in their 20s working with the Ashers and Trashers on Mondays, and at least two teenagers who staff the VIS with their moms. Isabel Donnelly, a member of a Youth Naturalist Group, earned the Eagle Scout with a graffiti removal project in the Canyon. Several members of the Friends' Board of Directors still have their teenage children at home.

In short, the many faces of the Friends now frequently include many more than those of us who are retired and have more discretionary time to contribute.

In this way, the Friends are drawing a wider circle, adding folks to our membership and activities from age groups that have not been as active in the past. So, yes, there is a different energy evident. Happily, this only adds to the infectious energy our membership has sustained on behalf of Madera Canyon for many years.

Remembering our organizational ancestors as we welcome our new colleagues is important. Does the name A.L. Spitler ring any bells? Patsy Proctor? Louise Gibbeson?

In the April 2, 1986, edition of the Green Valley News, Sherrie Ann Sutton reported that the Forest Service would close the Madera Picnic Area that year with "permanent fencing," removing the picnic tables to spaces along the road. Their reasoning? They didn't have the staffing to maintain the area and clean regularly.

A.L. Spitler wrote a letter, dated April 20, 1986, to the Forest Service Supervisor in the area asking that the decision be reconsidered. Spitler believed that Green Valley residents could be enlisted to clean and maintain the picnic area and perhaps even help update infrastructure.

Spitler was not alone in his objection to the closing, and he was right about there being people in Green Valley who might volunteer to help. The Forest Service postponed the closure. Forest Service personnel from Tucson and the Nogales District engaged with Green Valley residents. The result was the formation of the Friends of Madera Canyon in March 1987.

The first regular task for the volunteers was cleaning and maintaining the picnic area. Appropriately, that's what the MLK Jr. volunteers did this year

Many of you would have worked with Patsy Proctor or Louise Gibbeson. They came along some time after Mr. Spitler's letter. They, and many, many others, are integral to the history of the Friends. The Friends would not be what it is today without the gifts of time, talent, and treasure that our predecessors in the Friendened provided.

So, off we go into 2026, led by an energetic Executive Director and Board, to pursue our work to pre-serve, conserve, and restore the Canyon. Honor the past—use the present wisely—embrace the future. We are well-positioned to fulfill all of these responsibilities together.

Dan White
February 2026



Sky Island Field Notes from Your Executive Director

It has been an incredible first month serving as your Executive Director. As I settle into my new role, I find myself frequently looking out at the unique beauty of this “Sky Island” we call home. I want to start by offering a heartfelt thank you for the exceptionally warm welcome I have received from this community; it is a privilege to lead an organization where the passion for conservation is matched only by the kindness of its members.

From my new vantage point at the Friends, I was particularly moved by the energy at our Annual Meeting on January 24th. Thank you to everyone who joined us to celebrate our collective accomplishments and look toward the future.

During the meeting, I shared stories of my own “natural playground”—the small groves of trees in Pennsylvania where I spent my childhood. Hearing your stories in return reminded me that while we all come from different backgrounds and careers, we are united by a deep love for the outdoors. It is this diversity of life experience—this rich “biodiversity” of our membership—that makes the Friends of Madera Canyon such a vibrant and effective force.

Our organization is a fully volunteer-powered engine. Just as a Sky Island supports a specialized array of life, our success depends on each of you finding your own unique “niche.”

From the classroom to the trails, and from photography to expanding our social media reach, your unique skills are the engine of our success. We aren’t just checking off items on a strategic plan; we are cultivating a collaborative environment where every volunteer helps execute our vision for the Canyon. We were thrilled to receive 57 Volunteer Interest Forms at the meeting—thank you for that incredible response! We are excited to match your talents with our upcoming initiatives and will be reaching out shortly to those who asked to connect.

I also want to extend a special thank you to every member of the Friends of Madera Canyon. Whether you have been with us for decades or just joined this year, your membership is the vital fuel for our work. Your financial support and dedication to our mission allow us to protect this canyon and provide the programming we all value so highly.

Let’s Connect!

For those who couldn’t attend the meeting or are still seeking their perfect volunteer niche, my door is always open. A key part of my mission is to foster a collaborative environment by strengthening our ties with members, the Forest Service, and our local business community. Let’s connect to discuss how your unique talents can help advance our strategic vision.

Start Small: If you’d like to explore opportunities with no pressure, fill out our Volunteer Interest Form: <https://forms.gle/xmB33VEqhJH1jxB16>

Direct Outreach: You can reach me directly by emailing executivedirector@friendsofmaderacanyon.org.

I am truly looking forward to hearing more of your stories—from your own childhood playgrounds to your favorite moments here in the canyon. Together, we will ensure that the Friends of Madera Canyon continues to flourish.

With gratitude,
Kristin Wisneski-Blum
Executive Director, Friends of Madera Canyon



Announcements

The Tucson Bird Alliance

The Tucson Bird Alliance will be offering talks again in Green Valley on the 2nd Tuesday at 11am for the next 5 months. This year the talks will be held at Canoa Hills Center in the Saguaro Room. Here are the topics:

Tuesday February 10 @11am with Olya Weekley "Reducing Hazards to Birds"

Tuesday March 10 @11am with Stephen Vaughan "Exploring Arizona's Pygmy-Owls"

Save these Dates

Advanced call for Volunteers for March 13, March 14, and March 15.

We will be sending out a call for volunteers for 2 events in March.

Hawk Watch in Tubac on March 13

and the Tucson Festival of Books on March 14 & 15.

Green Valley Gardeners Goings On

FOMC member Debbie Gilliam suggested to Greg Hill of the Green Valley Gardeners that our organizations might consider sharing information bits in our respective newsletter since there is a significant overlap of our membership. We both thought the idea worth trying.

The seminars GVG will host in the next six weeks are listed below:

February 5 Fireflies GVR West

February 12 Growing Citrus in Green Valley GVR East (seating limited)

All seminars are from 9:30 to 10:30 a.m. Doors open at 9:00 am



RARE BIRDS IN THE CANYON – 2025

Bob Pitcher

A year ago, the Chatter carried a compilation of the rare birds reported on ebird.org from Madera Canyon during 2024. Here's a similar compilation for 2025.

Rare birds are to be expected in Madera Canyon – the Canyon is famous among birders nationally and indeed worldwide for that very feature. The many different habitats here, the proximity of the Santa Rita Mountains to Mexico and the tropics, and just the presence of thousands of birdwatchers in Madera every year (I do not exaggerate!) all guarantee unusual sightings. In that respect, 2025 was no different from other years.

Yet last year was really a very unusual year for birdlife in the Canyon. The very sparse rainfall over the winter of 2024-25, followed by an unsatisfactory monsoon last summer, starved the area of water, especially, it seems, the higher reaches of the Canyon, the ridges, hillsides, and mountain tops. Down below, there was no water in Madera Creek – at least none on the surface – at the Proctor Road crossing from mid-2024 until December 2025, the longest dry spell there in recent memory.

The Canyon's food chain appears to have been severely affected. Without adequate water, plants in the Canyon may not flower and bear seeds or fruit, or bear less than usual, and so invertebrates aren't found in the usual numbers. Birds, whether they eat seeds, fruit, or insects, have trouble finding food. Summer is often the season when strays of unusual Mexican species are reported from the Canyon. Not this year -- there seems to have been nothing to attract such birds northward this time. Toward the beginning of fall last year, birders began to see many fewer birds at higher elevations and to report seeing some species at lower elevations than usual. After the middle of October, it appears that many birds simply left the Canyon to try somewhere else. The supply of insects had evidently run out. More recent rains have brightened the Canyon considerably since then, and many of the common northern migrants are currently in Madera. So there's hope for 2026.

Rarest

None of this is to say there weren't quite a few eBird reports of rare birds during last year, just the mix was somewhat different. The rarest of all, probably, was a Brown Thrasher, an eastern stray, not seen here for at least twenty years, seen and photographed on October 14 at the Santa Rita Lodge.

And, seemingly for the first time, a Gray Vireo was reliably reported from the Canyon, also in October, at Proctor Road. These small birds are uncommon anywhere in Arizona, and the Canyon holds little if any of their normal habitat – but on migration, nearly anything can happen.

Returning to the Canyon, at least briefly, after an absence of a decade or so, was a Buff-collared Nightjar, (Figure 1) a Mexican bird, that was heard calling from the Proctor Road area in the middle of June, perhaps on one night only. These birds have



Figure 1. Buff-collared Nightjar (*Antrostomus ridgwayi*), Oaxaca, Mexico By Francesco Veronesi - https://www.flickr.com/photos/francesco_veronesi/16259498246/, CC BY-SA 2.0, <https://commons.wikimedia.org/w/index.php?curid=48444431>





Figure 2. Berylline Hummingbird, *Saucerottia beryllina*, Finca El Pila, Antigua Guatemala. Sharp Photography, Charles J. Sharp.

been found more often in Box Canyon over the last couple of years.

Hummingbirds

There were two rare hummingbirds last year, a now perennial Berylline Hummingbird (Figure 2)-- at the Lodge feeders most regularly, but also at the Madera Kubo and sometimes along the creek -- from early spring into August. Whether there was a pair of Beryllines here this year, and whether, if there was, they may have bred, isn't known. An Allen's Hummingbird was picked out of the crowd at the Lodge feeders one day in August. Allen's is a California bird, closely related to the much more common Rufous Hummingbird. And two more hummingbirds, scarce in the Canyon, were seen at feeders, the big Blue-throated Mountain Gem in August at the Lodge and Kubo, and a Violet-crowned Hummingbird at the Lodge in June.

Hawks

Four kinds of hawks rarely seen at Madera were reported during the year soaring above the Canyon. First, a migrating Osprey during September. Ospreys trickle through Arizona in spring and fall on their way to and from northern lakes and

rivers, but they're rarely seen in mountainous habitats. One or perhaps two Common Black Hawks were seen here in April. Black Hawks generally follow the Santa Cruz Valley up to their nesting areas in the north and east of Phoenix, but over the last few years, a few have been checking out the Santa Ritas as a possibility. Similarly, even rarer Short-tailed Hawks (Figure 3) were reported soaring over the Lodge in April and above the Whitehouse Picnic Area in June. Each year, there are only a few pairs of these tropical birds in Arizona, generally on Mt Lemmon and in the Chiricahuas. Might Santa Ritas be a good nesting area for them, at least in a wetter year? And a couple of eastern Broad-winged Hawks were seen this spring in migration, in April over the Madera Picnic Area and in May from Proctor Road.

Woodpeckers/Flycatchers

Yellow-bellied Sapsuckers are becoming a rarity to be counted on in the Canyon in fall and winter, but none were reported this last year. Instead, there was a Lewis's Woodpecker at Proctor Road late in October. These generally more northern birds can stick around in a locality for weeks, but this one didn't.

Two flycatcher species that are rare anywhere in Arizona – and not found elsewhere in the United States at all – were seen briefly in Madera this spring for at least the second year in





Figure 3. Short-tailed Hawk, *Buteo brachyurus*, by Dario Sanches from São Paulo, Brazil - GAVIAO-CAUDA-CURTA
 Uploaded by snowmanradio, CC BY-SA 2.0, <https://commons.wikimedia.org/w/index.php?curid=29745919>

a row: a Thick-billed Kingbird at Proctor Road in April and again in June, and a Buff-bellied Flycatcher up the Carrie Nation Trail late in March. Buff-bellied nest high in the mountains and have

nested in the Santa Ritas on rare occasions, I believe. They're more reliably found in the Huachucas. The Kingbirds generally nest in Arizona along streams at lower elevations – Sonoita Creek and more recently the Santa Cruz River. A pair might do well along Madera Creek in a good wet year.

Other Passerines

When the Friends of Madera Canyon bird list was revised a couple of years ago we moved the Eastern Bluebird to the accidental category, since none at all had been seen here for a long time. But several were reported in 2024, and another, from Bog Springs, this last year, in November. Much rarer, a Wood Thrush was seen and photographed early in October above the Mt. Wrightson Picnic Area.

The latest rarity to be reported last year was a Winter Wren, seen briefly and photographed on December 23 at the brush pile near the feeders at the Santa Rita Lodge. It was still there in mid-January this year.

Three kinds of goldfinch are found in Arizona. The Lesser is common in the Canyon at all seasons, but the other two are accidental at Madera. Yet both the Lawrence's Goldfinch and the American Goldfinch, the former a California specialty and the latter familiar in the East, were seen here in 2025. This is a good winter in Arizona for Lawrence's, but they're not usually seen at these elevations, and the American is rare anywhere in southern Arizona.

Four warbler sightings are worth noting. Throughout the fall of 2024, a Louisiana Water-thrush had drawn attention to Madera Creek, where it could be seen -- sometimes -- from a





The Northern Parula, *Setophaga americana*, National Parks Gallery. N. Lewis.

little above the Lodge down to about Whitehouse Picnic Area. It remained until early April and was even seen once at the Kubo. A Pine Warbler was seen and photographed on Carrie Nation Trail in February. And two somewhat less rare eastern warblers, the Northern Parula and the American Redstart, were reported, the Parula in November from the lower picnic areas and the Redstart in late September and October at middle elevations. There may, in fact, have been more than one Redstart.

Finally, less rare these years, but still notable, were at least two Rose-breasted Grosbeaks, reported from Canyon feeders in both spring and fall, and an Indigo Bunting, to be looked for here at some seasons, but not when this one was seen, January 20 at the Madera Picnic Area!

It might also be noted that the three recognized federally endangered species here, the American Goshawk, Spotted Owl, and Yellow-billed Cuckoo, were all seen here this year. Cuckoos probably didn't breed here, since the creek wasn't running, but young Goshawks were seen, as well as a pair of the Owls.

So, an unusual year in the Canyon, and there were more eastern than Mexican rarities reported in 2025. In 2026, much will depend on the continuation of the winter rain we've had recently. I can say that as of this writing in mid-January, a fine bright male Coppery-tailed Trogon is being seen every day in the lower Canyon along the trail up from Proctor Road.

2026 Spring Activities

Doug Moore, Education Director

Great news- it looks like it is going to be a beautiful spring in Madera Canyon!

Last fall, long-term weather forecasts again predicted below-normal rainfall in SE Arizona for both winter and spring. With a strong La Niña event building in the Pacific Ocean, the initial outlook was for yet another dry winter/spring of failed seasonal precipitation across the Sky Islands... It was a rather gloomy prospect for the plants, animals, and habitat in the Canyon.

There had been an actual 2025 summer monsoon, but it arrived late. Rain fell in the canyon, but not enough to start the long-dry stream flowing; Madera Creek had not run for over a year and a half, since 2024! Nor were local rain totals sufficient to significantly relieve drought conditions. The Santa Ritas were in dire need of some winter moisture and the outlook was simply not looking good!

But forecasts are only best-guess predictions. And, luckily, at least so far, the forecasts have largely been in error. It started with a timely “Chubasco”, a fall Pacific Ocean hurricane churning north up the coast of Mexico, bringing good rain in mid-October. Since then, regular weather fronts have produced desperately needed precipitation to the region in November, December, and TWICE in January! Madera Creek finally began flowing again in December and, at least for now, drought status has been lifted for the canyon and much of SE Arizona.

In addition, warmer-than-normal temperatures, with only a few nights of relatively mild freezing, have combined with timely precipitation to green up foliage and sprout spring annuals. Madera Canyon is definitely “waking up” a little early in the new year and is looking very good! Unless the weather suddenly turns too warm and dry, this could be a fabulous wildflower-filled spring- a great time to plan FoMC activities and field trips.

For the FoMC Ed Program, a “Nature of Madera Canyon” OLLI class is wrapping up with a field trip to Proctor in February. There will be a docent-led trail walkaround and two San Cayetano Elementary nature walks in March. April starts with a nature walk (and younger student activities) for Montessori de Santa Cruz. Then both Sahuarita High School Biotech class and Walden Grove High School Advanced Placement Environmental Science classes have canyon field trips before standardized testing begins across Arizona mid-month. After testing, the Ed Program is trying to schedule Sopori Elementary in Amado for late April to finish the spring schedule, as it gets too warm in May. (There have been staffing issues at Sopori; the 4th-grade class was not able to come up to the canyon for a nature walk last spring.) More members’ activities are being planned and will be announced via FoMC eblasts- stay tuned!

We should definitely not harbor illusions- our climate trend is definitely moving toward hotter and drier. Madera Canyon and the Santa Rita Mountains are in the midst of a 30+ year drought. But we can certainly celebrate the “small wins” when they occur. Productive seasonal storms have been fantastic for life in the canyon! And the opportunities to visit a gorgeous springtime canyon are great for our mental health and well-being, too!

Continued from first page.

So, why did the Poison Ivy liana (*Toxicodendron radicans*) evolve the urushiol molecule in the first place? Lott et al. (2020) investigated this question.

About 50 bird species associated with poison ivy and have been observed interacting with the plant for food or nesting material. Goats, deer, squirrels, insects of various orders, and dogs, among many other animals, show no ill effects from direct exposure to urushiol/poison ivy. The varied and numerous classes of animals observed interacting, whether through herbivory or simply physical contact, suggest that urushiol is neither potent nor broadly effective as a defense against native herbivores.

The drupes of poison ivy may be an important food source for some bird species. Poison ivy drupes are bird-dispersed, and the drupes can survive the digestion by birds. The drupes are composed of three layers: a brittle yellow exocarp, a waxy mesocarp with black striations, and a dense, hard endocarp that protects the embryo within. Due to the mesocarp, the fruits have a high lipid content (47%) and a high caloric yield. This is somewhat offset by their small size, with an average diameter of 0.25-0.7cm and a mean weight of 0.891g. Yellow-rumped warblers and grey catbirds will preferentially feed on poison ivy seeds, especially in the winter months. Squirrels may also disperse drupes, but typically act as seed predators, with some accidental dropping of the fruits.

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The viability of poison ivy drupes following avian digestion remains largely unknown, as does the comparison of that viability to that of drupes that do not pass through a bird. Both are important for the dispersal and establishment of poison ivy.

The most recent inquiry into poison ivy germination found that cold treatment at 4°C was ineffective, despite manifold benefits toward promoting poison ivy seedling germination. However, this hypothesis had not been tested previously. One possible benefit of poison ivy drupes, which may be conferred through avian digestion, is a reduction or alteration in the drupe microbiome, an additional component of the germination protocol. This rather harsh sterilization procedure yielded only

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a 25% drupe sterility rate. The authors postulated that some microbes may be present within drupe tissues as endophytes. The drupes that were not effectively sterilized were contaminated with a common fungal species.

Poison Ivy in Wind Cave National Park, South Dakota. National Parks Gallery. Poison ivy produces small (about 1/4 inch), dull white to grayish-green, waxy, berry-like drupes that grow in clusters on female plants. These drupes appear in late summer/fall, often persisting through winter. Like all parts of the plant, they contain urushiol, causing severe skin rashes. They are an important food source for birds, which disperse the seeds.

This fungal species, *Colletotrichum fiorinae*, was later isolated from the drupes of poison ivy and found to be the source of wilt and blight symptoms in germinating poison ivy seedlings. Therefore, avian digestion may reduce fungal pathogen pressure by removing fungal-infected mesocarp tissue, as in vitro acid scarification stimulates seedling germination.

Reference

Lott AA, Freed CP, Dickinson CC, Whitehead SR, Collakova E, Jelesko JG. Poison ivy hairy root cultures enable a stable transformation system suitable for detailed investigation of urushiol metabolism. *Plant Direct*. 2020 Aug;4(8):e00243.



Volunteer Spotlight

On January 21, the Friends of Madera Canyon Volunteer Tread Team was joined by Eric Ruljancich of Outslope Trail Solutions and Ryan Summers, USFS, Coronado District, to complete the last 30 feet of the Baldy Approach Erosion Mitigation Project. The project started when one of the Tread Team Volunteers requested a training course for the spring of 2025 focused on erosion mitigation on the Old Baldy Approach. The trail was overly wide, braided and rutted, and required frequent--almost continuous-- maintenance to existing drains and culverts. Eric spent that Spring Day with the Tread Team and Zach MacDonald (USFS), focusing on erosion, and specifically the Old Baldy Approach. Eric's idea was to move the trail away from the drainage ditches near the mountain face to the trail's outer edge. In short, create an outslope. Of course, it was a great idea, but we did not think we could execute it. On the other hand, we could not wait to get started. So, we started and worked through the summer-short days, per Pablo Rocha's (USFS) concern for our safety in the extreme heat. We finally got to the last 30 feet and needed some help. Our agreement with Eric to consult on trial issues came in handy! He taught the Tread Team some new rock-work techniques, such as cobblestones, armoring and riprap, and worked alongside us all day to finish the project. Watch this space to see what the Tread Team gets up to next!





The Last Page



The biology of seasonal leaf color change is a controlled survival strategy known as senescence, triggered by environmental signals that prepare deciduous trees for winter. Throughout the spring and summer, leaves function as "food factories," using chlorophyll to absorb sunlight for photosynthesis. This green pigment is so abundant that it masks other colors present in the leaf. As days shorten and temperatures drop, plants stop producing chlorophyll, causing the green to fade and revealing "hidden" pigments. Carotenoids and xanthophylls are hidden pigments that produce yellow and orange. They are present in the leaf year-round but become visible only after chlorophyll degrades. Unlike yellow-orange pigments, red and purple anthocyanins are typically manufactured in the fall. They are produced when sugars get trapped in the leaf as its veins close off. These pigments act as "sunscreen," protecting the leaf from light damage while the tree reabsorbs critical nutrients like nitrogen. When all other pigments have broken down, brown tannins remain, giving some species, like oaks, their final earthy hue.

The display's brilliance depends heavily on the weather. The most vibrant colors occur when a series of warm, sunny days (stimulating sugar production) is followed by cool, but not freezing, nights (which trap those sugars in the leaf). Severe drought can cause leaves to drop prematurely, while early frosts can kill the tissues before the color peak is reached.

Photography by Doug Moore. See any good biology book for a discussion of leaf color change.

Send comments, articles, & announcements to:
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