



NEVADA NATIVE PLANT SOCIETY

A chat with Rose Strickland: Newton's third law of conservation

by Lily Rice

In recent months, we've seen coordinated efforts to roll back decades of progress on wildland conservation, air and water quality protections, and the stewardship of public lands. I'm sure many of you, like me, have been writing representatives, submitting public comments, and losing sleep over these developments.

Recently, I had the privilege of speaking with Rose Strickland, the current conservation committee chair of the Nevada Native Plant Society and a member since 1975. She was a fitting founding member to question about both the current challenges and the local history of conservation. Rose reminded me of Newton's third law: for every action, there is an equal and opposite reaction. NNPS and its members continue to be just that, a powerful and persistent response to harmful policies and environmental degradation.

Rose has been a dedicated defender of the defenseless, joining a smattering of conservation groups such as the Sierra Club, the Wildlife Federation, the Audubon Society, and of course NNPS. Her drive for conservation came after a pivotal experience seeing the vast beauty of the western cordillera after leaving her former home in Mississippi. To her, the delicate alpine habitats deserved reverence. In 1975, newly arrived in the Reno area, Rose joined the

native plant society as soon as she heard about it, thrilled to explore a new floristic region.

Rose: "We had a lot of field trips, both day trips and camping trips all over the state, so I really began to learn more about Nevada... My real interest was... to understand why plants would grow here, but not there."

Biogeography - the study of how species are



Rose enjoying wildflowers. ©Dennis Ghiglieri

distributed and how those patterns relate to geography - is a central theme of the Basin & Range province, and one that enticed me to study Nevada's flora as well. The interplay of geology, geography, and hydrology is why Nevada is home to so many unique species and habitats. Looking back at the early days of NNPS, Rose recalled a major conservation crisis facing Nevada at the time: the MX Missile Crisis.

Rose: "It's the first time I'd seen Nevada, totally united; rural, urban, Democrats, farmers, hunters, everybody."

The MX Missile Project was a plan by the US Air Force to protect intercontinental ballistic missiles (ICBMs) by placing both nuclear warheads and decoy missiles on rail tracks and moving them from point A to B across 47 Great Basin valleys in Utah and Nevada (Schweikart, 2023).

Rose: "....this was somehow going to confuse the Russians as to which area to bomb with their nuclear missiles."

In 1980, the Air Force opened a public comment period, and after strong opposition, the project was shuttered by the Reagan administration in 1981 (Schweikart, 2023). The undervaluing of Nevada's ecosystems did not end there. Recently, NV representative Mark Amodei and UT rep. Celeste Maloy tacked a provision onto Trump's "big beautiful bill," to mandatorily sell off public lands. As of May 21, 2025, following backlash from the public and other congresspeople - a kind of Newtownian backlash - the provision was removed (Conservation Lands Foundation, 2025). While this was a win, threats to public lands are ongoing and our vigil continues.

Another concerning development is the EPA's proposed reinterpretation of the Endangered Species Act, in which "harm" would no longer include habitat destruction, a particularly troubling change when it comes to sessile organisms like plants. NNPS responded with a detailed, ten-point public comment opposing this revision.

Rose: "We felt that it was such an egregious misinterpretation or misunderstanding of the

Endangered Species Act."

Lily: "If this decision goes through how will this change the trajectory of endangered species here in Nevada?"

Rose: "I don't think it will be a trajectory of protection and conservation. It will be the opposite."

In addition, Rose added several other sentiments to buoy our worries against the raging storm:

Rose: "Science is not going to go away because it's currently unpopular... We're all responsible for conservation, not just scientists... There's no excuse for giving up in my mind. If it's not one thing it's some other damn thing, you know? So, keep going."

Lastly on conservation, I asked Rose to reflect on how the last 50 years have altered Nevada's landscape.

Rose: "Well, I have seen a heck of a lot of weed covered sagebrush areas. We're seeing wildfires getting bigger... and yet, at the same time, there are places in Nevada that look exactly the same. Maybe even better. Time will hopefully restore, but you just never know, not with the temperatures going up."

In this final section I asked Rose several questions about her history with Nevada and NNPS. First and foremost, I wanted to know out of everything she has been a part of what has been her most cherished memory with NNPS; I think her answer says a lot about her values.

Rose: "For me, it was sharing the love of plants with my husband (Dennis Ghiglieri, a native



Rose and Dennis enjoying a sunset. ©Dennis Ghiglieri

Renoite) and my life partner... So, we learned together, and it's been a fabulous experience. Not just him, but our friends that we would drag along and our mentors. It's really been pretty fabulous."

After her clear sentiment towards community building and involvement it felt essential that I receive her perspective on public opinion.

Lily: "How has public interest in native plants changed since NNPS began?"

Rose: "People are beginning to shift toward more desert landscapes and native plants, but it's very hard for us to find native plants to buy out here. It's a constant question that comes into the native plant society."

Lily: "How do you convince people who distribute plants to change their practices?"

This question tugged on Rose's conservationist heart.

Rose: "It is getting hotter, and we don't have much water. So lawns take a lot of water and our diminishing supply and raising prices is convincing people to hire somebody to get rid of their lawns and put in [xeriscapes]. Water is also one of my conservation issues... The Southern Nevada Water Authority realized that they could increase their water supply by improving their water conservation. They actually got more water from conservation than they would have gotten from the [Las Vegas] pipeline, and now they're the guide post out here in the west [on water conservation]."

There were many more questions that I had for Rose, but the conversation was running long for our three hour time difference and my page restriction, so I shall end on this piece of whimsy.

Lily: "What advice would you give to today's NNPS members about carrying the mission forward?"

Rose: "That's easy. Keep getting outside, keep finding plants, and remember to take joy in what you're seeing. Last week- where I got this terrible sunburn- we found these balls washed up on the shores of these shallow quasi-saline lakes at the Stillwater National Wildlife Refuge. They're Widgeon Grass, *Ruppia maritima*, which is a submergent plant. We've had some



Widgeonball example. ©Dennis Ghiglieri

very windy storms lately [and] when it's pushing the water back and forth the plant constricts into this sort of roundish shape."

While bizarre, these widgeonballs are naturally formed and have been observed before, albeit rarely. According to the Stillwater Refuge manager, the last observation was roughly 20 years ago. A 2005 report from Olson et al hypothesized on the function of ball formation, stating that the weak stems which break under turbulence and rolling wave action from winds shape the stems into round shapes, like lint balls found in washing machines.

In desperate times like now when it feels as though the foundations of what we know is shifting under our feet, it is important to remind ourselves why we care and why we fight. I myself have been struggling with intense feelings of melancholy. The act of communal observation is a radical and educational endeavor in this time of regression. Find your botanical joy, equal and opposite to the opposing force.

Citations:

- Conservation Lands Foundation. (2025) conservationlands.org/republicans-strip-sell-off-provisions-but-public-lands-still-on-the-chopping-block.
- Olson, R.W., Schmutz, J.K., and Hammer, U.T. (2005) Occurrence, composition and formation of *Ruppia*, Widgeon Grass, balls in Saskatchewan Lakes. Canadian Field-Naturalist 119(1): 114-117.
- Schweikart, L. (2023) Activists Oppose Deployment of the MX Missile. EBSCO Research Starters. ebsco.com/research-starters/history/activists-oppose-deployment-mx-missile

Featured Plant: *Eucnide urens*, Desert stingbush

by Lily Rice

I adore plants that could potentially be described as “lovable bastards,” that is, any plant that is both beautiful in its own right and able to stab me if I don’t respect its personal space. This month’s featured plant, *Eucnide urens* (A. Gray) Parry, fits that bill. Otherwise known as the desert stingbush or the velcro plant, this Mojave member of the stickleaf family, Loasaceae, is quite charismatic. Etymologically, the binomial nomenclature is tautological. *Eucnide* is Greek in origin, ‘Eu’ meaning true or good, and ‘knide’ meaning nettle; and ‘urens’ also refers to nettles, specifically *Urtica urens*.

While Loasaceae is fairly diverse within Nevada, *E. urens* is the only member of its genus which inhabits Nevada; most of the diversity within *Eucnide* is found in Mexico & Baja California. *E. urens* can be found primarily in the Mojave desert, from Death Valley east to the Grand Canyon and southwards into the Mojave National Preserve in California. A smaller, disjunct population also can be found in Baja California along the Gulf. To locate the desert stingbush in habitat look for rocky, desert slopes and cliff faces.

In appearance, the desert stingbush is an herb to subshrub up to three feet high. The flowers closely resemble the family, with five creamy-white petals, and copious stamens closely surrounding the style. *E. urens* is incredibly showy, with numerous flowers



Prominent trichomes visible on all parts of *E. urens* ©Lily Rice



Eucnide urens near Death Valley ©Lily Rice

tucked into the hairy foliage which gives the plant a frosted appearance. Beware, though, every surface is covered in stiff trichomes that are incredibly irritating. These hispid hairs are tipped with breakable-bulbs that release irritants into offending herbivores when contacted, similar in both form and function of stinging nettles (Urticaceae). The function of these outward-facing stinging hairs is apparent, but another of the trichome's function is less clear. Scabrid-glochidiate hairs on the stem and abaxial leaf surfaces of many Loasaceae members function in a similar manner to Velcro®, clinging to whatever contacts them, including our clothes and animals.

Several botanists and amateur naturalists have noted dead insects (Eisner et al., 1998;

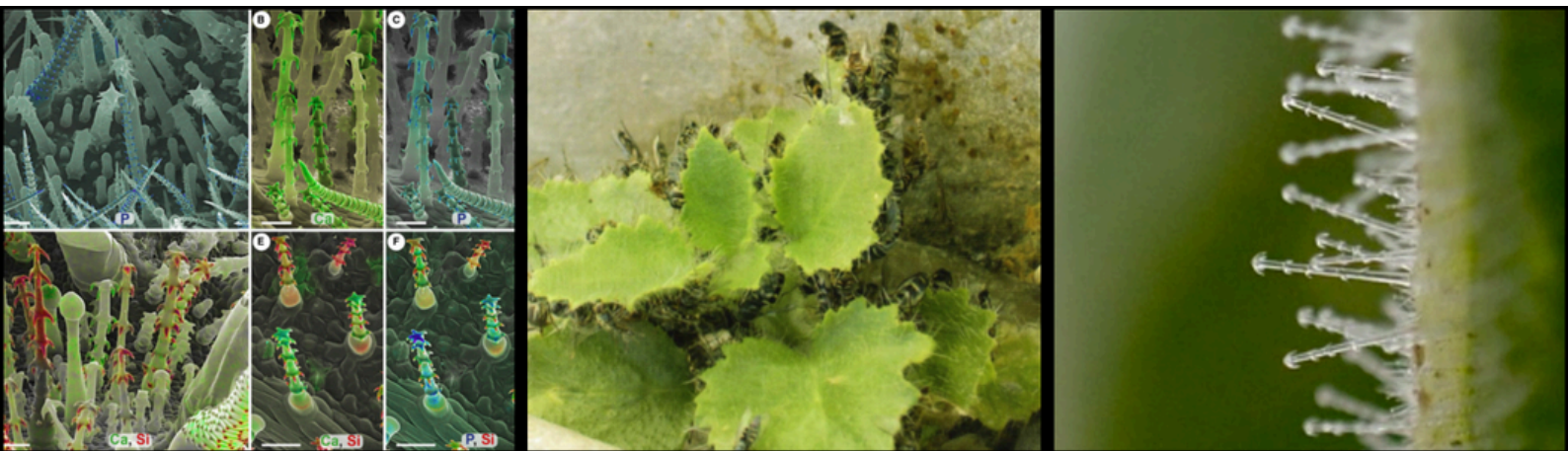
Metzler, 2006) & even dead bats (Cockrum et al., 1949) trapped on the underside of the leaves of both *E. urens* and other Loasaceae members. This is an odd occurrence for a group of plants not known for any carnivorous adaptations. These animal-trapping observations open the door for further inquiry: Is this a trait that has been selected for; are the insects commonly attached being attracted by *E. urens*; or, are these uncommon occurrences coinciding with trichomes meant to deter herbivory? The answer isn't clear.

Adding on to the intrigue of these hairs' function, a [2017 imaging study](#) out of Weigand lab in Bonn, Germany found unique biomineralization patterns within hair types across several Loasaceae species. These biominerals provide rigidity and toughness to

the trichomes that resist unintended breakage and can rupture the chitinous body of insects. In the [1998 paper by Eisner et al.](#), the group noted several dead insects where the insect's hemolymph stained the surrounding trichomes. In the same study, the group noted aphids - a notorious herbivore - were able to freely avoid the hooked glochidiate hairs, whereas coccinellid beetles who prey on aphids were regularly captured. On the surface this may seem like a net-negative for the plant, but once again, Eisner et al. noted that the 'farmer' ant species typically present to protect the aphids was absent, which may allow the coccinellid beetles to hunt more successfully. This tradeoff, along with a potential dead-insect fertilization scheme, may counteract any harm the aphids may propose. If you're reading this, considering a PhD, and don't know what subject to study, this lovable bastard may be for you.

Citations:

- Cockrum, E. L., Currier, W. W., de Vos, A., Allin, A. E., Handley, C. O., Cope, J. B., Packard, F. M., Trapido, H., Hardy, R., Ulmer, F. A., Hayward, C. L., Wetzels, R. M., Gunderson, H. L., and Palmer, R. S. (1949). General Notes. *Journal of Mammalogy*, 30(4), 427–438. doi.org/10.2307/1375222
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From left to right: Imaging showing biomineralization in Loasaceae trichomes (Mustafa et al., 2017). Photo by Michael Metzler showing trapped hoverflies on *E. urens* (Metzler, 2006). Photo by Rosemary Glos showing *E. urens*' glochidiate trichomes

New courses available

Sagehen CalNat Course, June 15-21

- Want to learn more about California Natural History, and spend time in the beautiful Sierra Nevada mountains this summer? Sagehen Field Station is hosting a California Naturalist class (a certification program run by UC Ag and Natural Resources, as is Master Gardeners.) Tahoe Institute for Natural Science is helping volunteer instructors, Claire Elliott and Lynn Hori to administer the course. Sagehen is in a beautiful location. The accommodations and the long driveway are a bit rustic, but the capable caterer provides yummy food and we always have a fun group of participants!
- Here is a [link](#) for more information and to register for the course.

Basic Sunflower Identification, July 8-10

- This three-day short course covers the unique taxonomy associated with the Sunflower Family, Asteraceae. Basic terminology, dissection skills, and use of a key are critical elements of this class. We will cover not only how to identify sunflowers, but how to collect and press them for future reference or for the purpose of mailing to others for identification or verification. You can anticipate seeing about 60 different sunflower genera. This class is for participants with beginner through intermediate skills.
- COST: \$ 240.00 non-student
- Sign up by emailing the instructor, Jerry Tiehm (atiehm@unr.edu)



Crepis acuminata, Ron Wolf



Helianthus spp., Phil Krening



Crepis runcinata, Phil Krening



Agoseris grandiflora, BLM Oregon



Atrichoseris platyphylla,
Ron Wolf



Helianthus annuus, BLM
Colorado



Cotula coronopifolia, Ron Wolf



Echinacea angustifolia, BLM Wyoming



Acrotilon repens, Gerald Carr



Chaenactis cusickii, Gerald Carr



Tragopogon spp., Phil Krening

Special feature with PBS Reno's *Wild Nevada*

We're thrilled to share that our president, Emma Wynn, was recently featured on the Wild Nevada Podcast to celebrate the 50th anniversary of the Nevada Native Plant Society. In the episode, Emma highlights the incredible diversity of Nevada's native plants and offers practical tips for experiencing their beauty firsthand—just in time for spring and summer wildflower season.

As Wild Nevada puts it: "Celebrating its 50th anniversary, the NNPS educates Nevadans about the wide variety of native plants, including the beautiful wildflowers that can be found all over northern Nevada. Emma Wynn gives us some wonderful suggestions to go out and experience a spring and summer full of brilliant color and a greater appreciation for our plant life."

Even more exciting, NNPS will be featured in an upcoming episode of the Wild Nevada television series this season. Stay tuned for details on air dates and viewing

options!

We're so proud to see native plants and the work of our members getting this kind of well-deserved attention. Be sure to give the podcast a listen and share it with friends who might want to learn more about Nevada's wild side.

Links to the interview:

- YouTube: youtu.be/Hpcmz5sdles
- PBS Reno site: pbsreno.org/watch/wildnevadapodcast/
- Apple Podcasts: podcasts.apple.com/us/podcast/wild-nevadacast/id1763344206



Emma Wynn being interviewed by Dave Santina ©PBS Reno

Featured book review: The Light Eaters by Zoë Schlanger

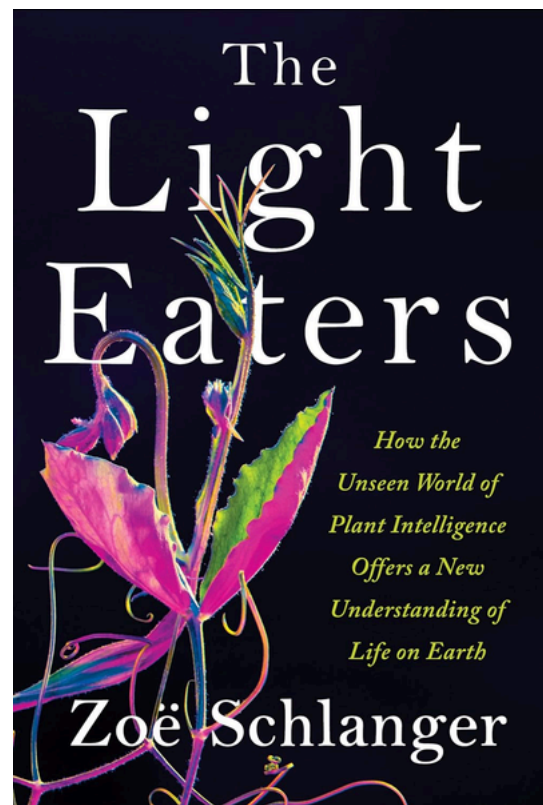
by Alison Agneray

If you've ever wondered whether plants know anything—whether they sense, respond, or even remember—*The Light Eaters* offers a compelling and poetic exploration of those questions. Journalist Zoë Schlanger takes readers on a fun journey through the frontiers of plant science, weaving together interviews with pioneering researchers (including someone working on big sagebrush), compelling stories from the field and laboratory, and philosophical questions that challenge long-held assumptions about what it means to be alive. She does a fabulous job translating complicated research into readily accessible (and often colorful) language.

This book doesn't just present the science of plant behavior, it interrogates the way Western science has historically defined intelligence, memory, and even life itself. Schlanger introduces us to scientists studying root communication, kin recognition, plant learning, and more, all while grounding the narrative in accessible language and moments of awe. There's a deep reverence for plants throughout the book, which will resonate with those of us who already spend our days appreciating native flora.

The Light Eaters offers both inspiration and provocation. While it doesn't focus specifically on native plants or desert ecology, it invites us to reconsider our relationships with plants in general. Whether you're a botanist, a

restoration ecologist, a native plant gardener, or simply someone who feels a deep connection to the green world, *The Light Eaters* is worth the read. It may not change the way you identify species in the field, but it might change the way you look at a seedling pushing up through dry soil. This book makes for easy reading while on a flight to your next adventure or just sitting by a pool this summer.



Society updates

Spring Highlights & Adventures Ahead

April and May were action-packed months for the Society as we celebrated our 50th Anniversary, kicked off the spring field season, and connected with hundreds of people through outreach and events.

We held our 50th anniversary meeting in April, with 24 attendees in Reno and 14 in Southern Nevada, including both longtime members and new faces. The event featured a beautiful slideshow of NNPS members across the decades, a series of interviews with founding members, and two celebratory cakes that were almost too pretty to eat! Thank you to everyone who made the event a success—especially Sarah Kulpa, who led the 50th anniversary committee and created the slideshow showcasing 50 years of NNPS history. Sarah also set up our Bonfire store, where we're selling t-shirts featuring Tiffany Pereira's 50th anniversary artwork. It's a print-on-demand system that runs in 15-day campaigns. Visit the store here to get yours: [NNPS Bonfire Store](#).

Our first Reno-area field trip to Hoge Road on April 13 drew 28 participants. Thank you to Connie for leading a great day in the field. We also hosted successful outreach tables at TMCC's Earth Day and Reno's Earth Day at Idlewild Park. We were glad to share our booth with the Museum of Natural History to cross-promote their work.

April also saw our first-ever NNPS iNaturalist BioBlitz, which wrapped up with 13,521 observations and 1,008 species logged throughout the month! A big thank you to everyone who contributed observations and helped with identifications. We hope some of you also joined the NDNH (Nevada Division of Natural Heritage) project as well.

Thank you to John Weiser for opening his beautiful garden to visitors on May 18—a lovely way to connect with native plants in a more cultivated setting. We also had a wonderful field trip to the Prison Hill – Silver Saddle Area on June 7. Thanks to all who

joined our field trips and helped make it a beautiful day on the trail!

Please note that monthly meetings are now on summer break and will resume in September. We're focusing on field trips and outdoor events over the summer—check the calendar and join us in the field!

Upcoming Field Trips

Churchill Narrows, Saturday, June 21st, 9am
Join John Weiser to see the rare endemic *Eriogonum diatomaceum*, a candidate for ESA listing, along with many other special species found on diatomaceous soils. Meeting points in Reno and Carson City—check our events calendar for full details.

Peavine Mountain Summit, Saturday, June 28th, 10am

Another trip with John, this time to explore the rock garden-like summit of Peavine. Meet in Carson City at 9:00 am or in Reno at 10:00 am before caravanning to the top. Expect bumpy roads and spectacular blooms!

Welcome new members!

A special thank you to our new members who joined in the last two months:

- Lesley DeFalco, Boulder City, NV – New lifetime member!
- Phoebe Smurthwaite, Pasco, WA
- Carmen Britton, Sparks, NV
- Robyn Albaeck, Washoe Valley, NV
- Alexis Prochko, Reno, NV
- Quinten Quiggle, Reno, NV
- Melanie Scott, Reno, NV
- Jake Dick, Gardnerville, NV
- Stevie Steele, Reno, NV
- Jennifer Atherton, Orangevale, CA
- Tripp Floyd, Carson City, NV
- Bruce Hoagland, Carson City, NV
- Carol Thomas, Verdi NV – Past President
- Sam King, Elko, NV
- Tsvetelina Stefanova, Las Vegas, NV
- Lorraine Fitzhugh, Gardnerville, NV
- Deb Snyder, Carson City, NV

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