



NEVADA NATIVE PLANT SOCIETY

Supporting Western Monarchs with Waystations

by Julie Koop, Director for Nevada Monarch Society

Western Monarchs in Nevada? Yes—there are many Monarch butterflies in Nevada! Until the turn of the century, most people, including scientists, were unaware of this fact. In addition to migrating monarchs, we also have a few overwintering locations in the southern part of our state.

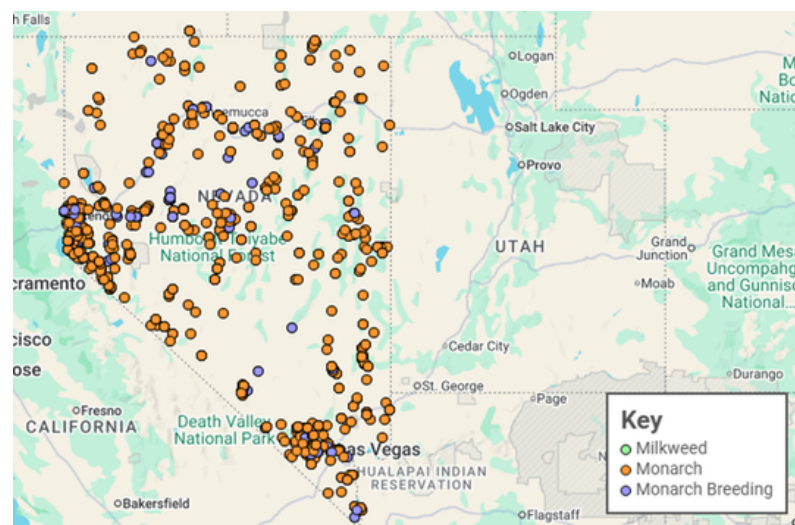
In 2016, I founded the Nevada Monarch Society after participating in a free monarch butterfly workshop at Stillwater National Wildlife Refuge. As a biology teacher at Carson High School, I wanted my students to learn about these butterflies and actively contribute to conservation efforts. It was important for them to understand that Nevada contains a wide range of habitats with high biodiversity.

At the time, I was surprised, and concerned, that there were only seven registered Monarch Waystations in Nevada. However, I soon realized that this was partly due to the state's vast open landscapes and relatively low human population density. Most residents are concentrated in the Las Vegas and Reno areas. Establishing more waystations required engaging these communities, as well as individuals living in Nevada's more remote regions.

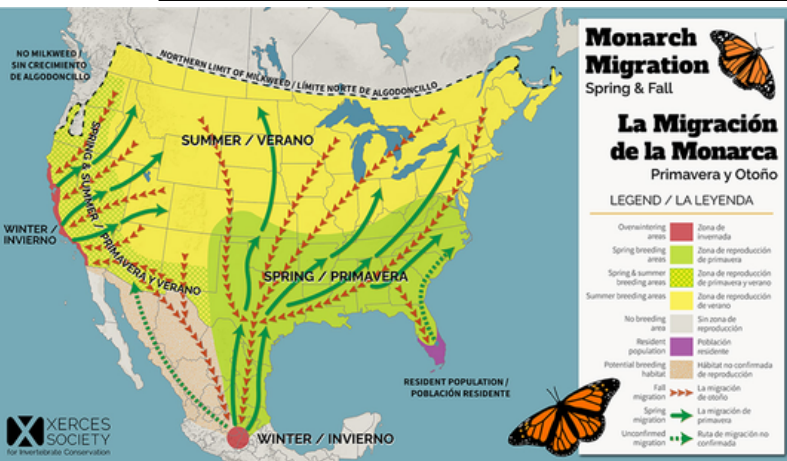
Presently, there are approximately 130 registered waystations across the state. Even so, Nevada has always supported natural waystations thanks to its diverse native milkweed species. These waystations provide essential habitat and resources for migrating monarchs (*Danaus plexippus*).

They include milkweed for larval development and nectar plants for adult feeding (Monarch Watch, 2024).

The following map was generated using the Western Monarch Milkweed Mapper. It shows recorded monarch and milkweed sightings across Nevada. However, many monarchs likely pass through Nevada unnoticed, and countless milkweed plants remain undocumented. Additional figures illustrate migration pathways and recent population trends. The monarch population is suffering significantly due to several factors: "habitat loss, excessive pesticide use, and climate change. Key factors include the destruction of overwintering groves, loss of breeding milkweed, and increased mortality from droughts and wildfires, bringing the population to near-extinction levels" (Xerces Society, 2023).



Recorded Monarch and milkweed sightings across Nevada
(Western Monarch Milkweed Mapper, 2024)



Monarch migration pathways (Xerces Society, 2025)

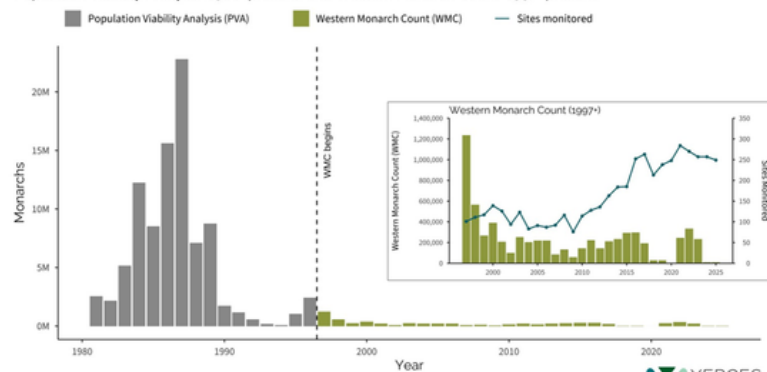
Nevada plays an important role in monarch conservation, and individuals can help. In doing so, you get intrinsic value and joy from seeing them in your yards! So how do we help the surviving populations of *Danaus plexippus*, both this generation and those to come? We plant local, native milkweed. And if you want to make an even greater impact, you can propagate native milkweed species. We need more, especially low-desert species such as Desert milkweed (*Asclepias erosa*) and Rush milkweed (*A. subulata*). If you grow extra plants or collect seeds, please reach out to the Nevada Monarch Society, and we will ensure they find good homes with people creating more waystations at schools, parks, medical campuses, and in their own yards!

Nevada Milkweed Species & Habitats that are easy to grow:

- Desert Milkweed (*A. erosa*): Found in southern Nevada, typically in dry, sandy, or rocky habitats.
- Narrowleaf Milkweed (*A. fascicularis*): Widespread, often found in dry to moist areas and tolerant of various soils.
- Showy Milkweed (*A. speciosa*): Found in northern/western areas, often along roadsides and in disturbed soil.
- Rush Milkweed (*A. subulata*): Southern Nevada, specifically in extremely arid desert habitats.
- Spider Milkweed (*A. asperula*): Present in eastern and southern Nevada.

Western Monarch Overwintering Abundance (1980–2025)

Population Viability Analysis (1980–present) and Western Monarch Count (1997–present)



(Xerces Society, 2026)

The following link is also a great resource! **“A Guide to Common Milkweeds of Nevada”**

[https://xerces.org/sites/default/files/2018-05/12-](https://xerces.org/sites/default/files/2018-05/12-022_04_XercesSoc_NativeMilkweeds_Nevada_web.pdf)

[022_04_XercesSoc_NativeMilkweeds_Nevada_web.pdf](https://xerces.org/sites/default/files/2018-05/12-022_04_XercesSoc_NativeMilkweeds_Nevada_web.pdf)

Once you have propagated or purchased your milkweed plants, you’ll want to begin planning your waystation design and maintenance plan. The best and most successful waystations are at least 100 square feet—you can divide this space into smaller subsections within your yard. Milkweed needs at least six hours of sun each day. You’ll need at least ten individual milkweed plants, and we recommend including at least two different species. Clustering the same species in groups of three or more, spaced about a foot and a half apart, is ideal. Then, plant at least four additional nectar-providing plants. Examples of native nectar plants include globe mallow, various penstemons, bee plants, blue flax, and sulfur buckwheat. These are included in our Pollinator Blend seed packet for only \$3.

Your beautiful pollinator garden will feature flowers that bloom at different times, ensuring a continuous nectar supply whenever butterflies, hummingbirds, and other pollinators visit. Native milkweeds and nectar plants are drought-tolerant and thrive in well-drained soils.



©Jennifer Duvall

Have a plan in place to sustain your Monarch Waystation. Maintenance may include mulching, thinning, watering, eliminating insecticide use, and removing invasive plant species. Most of the native plants recommended here are perennials, returning each year with stronger, healthier growth, while annuals will naturally reseed themselves. Be sure not to let your plants become overcrowded, as this can harm plant health and attract pollinator predators. You'll find that these native gardens require less work, less water, and no fertilizers compared to more traditional landscapes.

After you have created your beautiful pollinator garden, you need to register your waystation through Monarch Watch

(<https://www.monarchwatch.org/waystations/>).

We recommend purchasing the "Monarch Waystation Registration and Sign Bundle." It's only \$36, and you receive an attractive, high-quality sign, that helps others recognize that native milkweed is both beautiful and essential for Monarch butterflies and other pollinators.

Waystations are important because they provide the resources needed for monarchs to produce successful generations and sustain their migration. They need milkweed stems and leaves for their larvae to eat and grow on, and their flowers for nectar. They also will use other flowering nectar providers as their fuel for energy needs.

"By creating and maintaining a Monarch Waystation you are contributing to monarch conservation, an effort that will help assure the preservation of the species and the continuation of the spectacular monarch migration phenomenon." (Monarch Watch, 2024).

It will only take a short time for fun and interesting birds and insects to find your waystation! One of my favorites, after Monarchs, is the milkweed horned beetle with its bright blue belly. I mostly see them on Showy milkweed. Please feel free to reach out to us for questions or help, nvmonarchs@gmail.com and our website is <https://nvmonarchs.org/>

Literature Cited

- Monarch Watch. (2024). Monarch Waystations. Retrieved from <https://www.monarchwatch.org/waystations/>
- Western Monarch Milkweed Mapper. (2024). Combined monarch and milkweed sightings map. Retrieved from <https://www.monarchmilkweedmapper.org/app/#/combined/map>
- Xerces Society. (2025). Monarch migration pathways in North America. Retrieved from <https://xerces.org/blog/5-monarch-migration-facts>
- Xerces Society. (2026). Western monarch population trends from the Western Monarch Count. Retrieved from <https://xerces.org/press/western-monarch-numbers-remain-at-historic-low>
- Xerces Society for Invertebrate Conservation. (2023). Western Monarch Population Status. Retrieved from <https://xerces.org>



Milkweed horned beetle on Showy milkweed ©Julie Koop

Featured plant: *Peraphyllum ramosissimum*, Wild Crab Apple

by Joshua Lovera

Peraphyllum ramosissimum Nutt., is a member of the Rose Family commonly known as wild crab apple, Ute apple, or squaw apple. Despite its name, this stunning shrub is not a close relative to the domesticated crab apple species you may find in your neighborhood such as the European crab apple (*Malus sylvestris*) or the Japanese crab apple (*Malus floribunda*). Instead, *Peraphyllum ramosissimum* is more closely related to our native serviceberries and hawthorns. In fact, *Peraphyllum ramosissimum* belongs to a monotypic genus, meaning that the wild crab apple is the only species found in *Peraphyllum*. (Campbell et al. 2007).

The name *Peraphyllum ramosissimum* translates to “very leafy” and “many branches” a fitting description which highlights its shrubby, dense form and ability to grow up to 10ft in height. *Peraphyllum ramosissimum* is a stunning shrub that produces 5-petaled white or pink flowers in clusters along its branches. The flowers are very reminiscent of the other Rosaceae shrubs in our state such as desert peach (*Prunus andersonii*), Utah serviceberry (*Amelanchier utahensis*), fernbush (*Chamaebatiaria millefolium*), and bitter cherry (*Prunus emarginata*), just to name a few. What sets the wild crab apple apart is the fruit, which looks like a traditional crab apple but has a peach-like coloration that seems to glow before turning a rusty brown color. This fruit, which is called a pome, is eaten by a wide variety of wildlife such as grouse, turkey, rodents, deer, and black bears. The pome is also edible and is said to have a sweet, yet bitter taste. (Turner & Kuhkmann 2014).

If you want to see this unique species in the wild you are in luck! *Peraphyllum ramosissimum* can be found throughout much of Nevada in Clark, Lincoln, Nye, Washoe and White Pine counties,



©Cecelia Alexander

growing in mostly full sun on dry hillsides.

The peak flowering time is April through May, but with such a large range this species may be seen flowering into late spring and early summer. In southern Nevada this species can easily be found along Mt. Potosi Canyon Road. It has also been well documented in Great Basin National Park in eastern Nevada. For those of you in the northwestern part of the state, consider this an excellent excuse to explore the North Buffalo Creek Trail in Washoe County near Gerlach.

If you are like me and think that *Peraphyllum ramosissimum* would be an excellent addition to your native garden, I would recommend you check *The Woody Plant Seed Manual* entry titled “*Peraphyllum ramosissimum* Nutt.” by Janene Auger-- a former doctoral student at UNR who is now the managing/technical editor for the Western North American Naturalist -- and Justin Smith a retired employee of the USDA Forest Service Pacific Northwest Forest and Range Experiment Station.

In short, once the fruit is collected from the shrub the seeds can be removed by mashing in water until the pulp floats off. Once the seed is dry, it can be stored in a cool and dry location for up to 5 years. To germinate the seed, cold stratification is recommended for a minimum of 45 days and up to 120 days. The seeds should be planted at a depth of 5mm and covered with fine sand. Seedlings typically emerge in just 1 to 2 weeks. after which plants should be kept in pots, until they reach a maturity at 1 to 2 years of age before being transplanted into the garden. (Auger & Smith)

Literature Cited:

Auger, J., & Smith, J. (n.d.). *Peraphyllum ramosissimum* Nutt. US. Forest Service. <https://www.fs.usda.gov/nsl/Wpsm/Peraphyllum.pdf> (Accessed March 17, 2026)

Campbell, C.S.; Evans, R.C.; Morgan, D.R.; Dickinson, T.A.; Arsenault, M.P. (2007). Phylogeny of subtribe Pyrinae (formerly the Maloideae, Rosaceae): Limited resolution of a complex evolutionary history. *Plant Systematics and Evolution*. 266(1-2): 119-145.

Turner, M., & Kuhlmann, E. (2014). *Trees & Shrubs of the Pacific Northwest* (1st ed.). Portland, OR: Timber Press. p. 248.



©Kenzie Anderson-Bell



©Robbie Hannawacker

Medicine Garden at Pyramid Lake Museum and Beyond

by Israel Orellana

It's been some time since our last update, and Ripple Project is excited to share with the Nevada Native Plant Society the growth of the Medicine Garden at the Pyramid Lake Paiute Museum. Ripple Project is a multi-disciplinary volunteer collective with a focus on native flora, ecology, and culture of the Great Basin Region. Our collaboration between Pyramid Lake Museum, Bureau of Land Management, Comstock Seed, Native Plant Farm, and The Greenhouse Project has led to the continuing development of the Medicine Garden. The original vision of the collaboration was to create an ethnobotanical garden displaying a sample of the rich flora of the Great Basin region, and how plants were traditionally used by the tribe. Over the past 5 years the Medicine Garden planted over 300 native plants with drip irrigation, 400+ volunteer hours, 20 educational signs, and 2 traditional infrastructure buildings. Plants vary from herbaceous perennials such as arrowleaf balsamroot, sulphur buckwheat, Great Basin wild rye, blue flax, Palmer's penstemon, evening primrose, to woody perennials like Mormon tea, green rabbitbrush, Western serviceberry, and many more.

We are proud to announce the newest installations of traditional Paiute infrastructure on the grounds of the Pyramid Lake Museum, the Haba and the Kanee.



©Israel Orellana

The Haba is a traditional Paiute tribe shade structure with seasonal roofing. Fresh leafed coyote willow branches are used for the roof and Jeffrey pines for the structure. Picnic tables were added for seating. The installation has been well received by visitors and guests.

The Kanee is a temporary housing structure made from grass, tules, cattails, sagebrush, willows, or pine boughs (Survival Arts of The Primitive Paiutes by Margaret M. Wheat). Cattail and tule were used for the walls and coyote willows for the structure. Our exhibit is a miniature size to enable easier maintenance and demonstration.





©Jacob Mast

Our goal this year is to build two more Habas; one for the museum that expands their ability to do outdoor programming and another for our partners at Fly Ranch. Fly Ranch is a regenerative land project by Burning Man and the Haba would be one of its first permitted structures. At the museum, we will also add educational signs about the collaboration and the Kanee. The signs include phases in the Kooyooe Tukadu (Pyramid Lake Paiute) language at the top, followed by historical information, and an explanation of the building process.

We are currently fundraising 10k by June for our newest installation, the Hanging Garden Exhibit at Fly Ranch.

Welcome to the Haba!

A haba is a traditional Paiute shade structure

Kooyooe Tukadu Apegan, the Pyramid Lake Paiute Language
Habadoohayoona tamme tukakwu.
Habadoohayoona tamme tabe tukahoo.

We are going to eat under the willow shade.
 We had lunch under the willow shade.

History
 Numu people have built haba structures across the Great Basin region for thousands of years. A haba is made with **willow branches** that are woven together for protection from the sun.

This Haba
 Built in 2023 through a collaboration between Ripple Project, Pyramid Lake Museum, and Burners without Borders to celebrate Numu ways of life. The **Jeffery Pine** trunks and **Coyote Willow** branches of this haba were sustainably harvested.

* Photos by Margaret Wheat, courtesy of University Nevada Reno.

©Zack Bishop, Billie Jean Guerrero, Bas Kools, Raph Lagomarsino, Will Mast, and Pierre-Yves Bertholet

This shade structure will provide an outdoor lecture and performance space for use during conferences and campouts. Please consider donating for our continual development of free public art spaces.

Link here!

<https://app.thefield.org/home/donation/crowd/preview/571/Hanging-Gardens-x-Ripple-x-Fly-Ranch->
 All our work has been made possible by you.

Thank you to our Guild members and active contributors Bas Kools, Bryant Stephan, Will Mast, Israel Orellana, Mei Visco, Gabriel Donnenberg, Jacob Mast, Patricia Fox, Pierre-Yves Bertholet, Raphael Lagomarsino, Sheridan Renehan, Timothy Barry, Xiaojin Ren, Zack Bishop, and Christin Cohee

Roadside Botanizing and Belly Plants

by Emma Wynn

I took a quick trip to Beatty in mid-March; I was travelling solo and didn't want to drive from Reno on my own, so flew to Las Vegas and rented a car. It was my first time in the Mojave, and I loved it -- such interesting geology, history and wonderful wildflowers.

The unusual heat, a painful foot and being on my own, meant I did not plan to hike or scramble up rocks looking for special plants. Instead, I drove slowly and stopped frequently jumping out of the Jeep to check out the plants I spied along the roadside.



©Emma Wynn

I was not disappointed! I saw many plants that were new to me, species that I had only seen in photos, in presentations, or on iNaturalist. I think the botany gods were watching out for me, I would pull over for a mid-size plant only to find some lovely belly plants as well.

I managed to squeeze a lot into my three-night trip. On the first afternoon I drove from the airport to Beatty, via Furnace Creek, so I could get a first view of Death Valley wildflowers. The journey took me much longer than google maps suggested, as I made several stops before I even got to the park!

I started my full day in the park watching the sunrise at Ubehebe Crater—it was a magical experience and netted me some cute plant sightings, including *Eschscholzia glyptosperma*, *Diplacus bigelovii*, *Mohavea breviflora*, and lots of *Nama demissum*. I drove from the crater to the Furnace Creek Visitor Center, stopping multiple times along the way, including for a fabulous *Eucnide urens* and a hillside covered in *Geraea canescens*. After the Visitor Center, I drove the Artists Palette loop, admiring the rocks and *Phacelia*, and finding three *Gilmania luteola* plants! I decided not to go to Badwater Basin, as so many cars were headed that way and it was getting way too hot, so I went back to Beatty—and of course stopped a few times along the way. I saw blue dicks and *Phacelia fremontii* for the first time.



Eucnide urens ©Emma Wynn



Chylisimia claviformis ©Emma Wynn

My second full day was spent in Nevada. I visited Ash Meadows National Wildlife Refuge and was excited to be able to experience such a special ecosystem. The contrast between the alkali meadows and the glorious crystal-clear pools is quite something! It was too early to see most of the endemic species, though I did see *Enceliopsis nudicaulis* var. *corrugata* in bloom, as well as the pupfish. I got to see one of my target species in bloom on BLM land along Devil's Hole Road: *Langloisia setosissima*! It was belly plant heaven—along with the sunbonnet, I saw *Linanthus demissus*, *Nama pusillum*, *Chorizanthe rigida*, and *Aliciella latifolia*. In the afternoon, I went to the Rhyolite Ghost Town. Since I was in a Jeep, I was able to explore some of the dirt roads winding through the site. The floral highlights for me were *Calochortus flexuosus* and *Euphorbia albomarginata*.

I headed back to the airport and Vegas on my third day, and managed a final bit of roadside botany when I spotted a clump of purple flowers conveniently located near a side road. In addition to seeing *Xylorhiza tortifolia* and a glorious *Sphaeralcea ambigua*, I was treated to an *Opuntia basilaris* in bloom!

I am still processing the trip and all I saw. I admire the plants that make Nevada home and the adaptations they possess to survive their diverse and harsh growing conditions. It was my first trip to the Mojave but hopefully not my last!

“To see a world in a grain of sand
And a heaven in a wild flower,
Hold infinity in the palm of your hand
And eternity in an hour.” William Blake

Conservation News:

Conservation Attitudes of Public Lands in Nevada

by Hannah Bishop-Moser

With more than 80% of Nevada being public land, it is a major part of our flora diversity, abundance, and conservation. Additionally, public land contributes largely to Nevada's economy and identity. One could wonder what Nevadans think of the multitude of threats facing these lands, from mining to housing development. Thankfully, Colorado College State of the Rockies, in partnership with FM3 Research and New Bridge Strategies looked into this. They have polled residents of Western States since 2011 and Nevada residents since 2016. The 2026 poll, titled "Conservation in the West; The 2026 Survey of the Attitudes of Voters in Eight Western States" included Colorado, Wyoming, Idaho, Utah, Arizona, Montana, New Mexico, and Nevada.

2026 poll: The conclusions of the 2026 poll generally show that people approve of protecting our public lands. This trend is true amongst Democrats, Republicans, and Independents alike. However, the data shows that Democrats generally find conservation topics to be more important than Independents or Republicans. Some key takeaways are the following:

- 85% of the Western state residents and 81% of the Nevadans polled say that conservation issues are important in deciding whether to support an elected official.
- 84% of Western state residents say that rollbacks of laws that protect our land, water, and wildlife are a serious problem..
- 76% of Western state residents and 75% of Nevadans think members of congress should place more emphasis on protecting sources of clean water, air quality, and wildlife habitat while providing opportunities to visit and recreate on our national public lands rather than producing more domestic energy. This includes 62% of republicans and 89% of democrats.

- 74% of Western state residents oppose selling some national public lands to private companies for oil, gas, and mining with only 63% of Nevadans opposing. This is the lowest percentage of all the states polled.

- 73% of Western state residents would like to prioritize our needs for more coal, oil, and gas by expanding our use of clean, renewable energy rather than drilling and mining for more coal, oil, and gas. Solar power was the most preferred with 42% of people choosing it as their first choice.

Changes Over a Decade: There has been increased political tension and ideological changes over the past decade. What does that mean for Western voter's opinions on public land conservation? The 2016 poll results titled "Conservation in the West Poll; Key Findings; The 2016 Survey of the Attitudes of Voters in Seven Western States" generally shows that Western state voters support public land conservation more in 2026 than in 2016. These beliefs cross party lines with Democrats, Republicans, and Independents all showing greater interest in public land conservation. Nevadans followed this same trend. Unfortunately, however, while many of the topics were the same between the 2016 and 2026 poll, only one question was identical. Therefore, it is not clear if attitudes changed for specific questions, or the topics as a whole. The key changes for the most comparable questions between the 2016 and 2026 results were the following:

- 75% of Western state residents in 2016 and 85% of Western state residents in 2026 think that issues involving public lands, water, and wildlife are important in whether to support an elected official.



©Melissa Sinka

- 75% of Western state residents in 2016 and 85% of Western state residents in 2026 think that issues involving public lands, water, and wildlife are important in whether to support an elected official.
- In 2016, 52% of Western state voters think we should continue drilling and mining at the current pace, but with increased safeguards for land and water. 10% think we should increase drilling and mining on national public lands. 22% think we should stop all drilling and mining on national public lands. There was no identical question in 2026. However, in 2026, 75% of Nevadans and 76% of Western state voters would prefer if members of congress placed more emphasis on ensuring we protect sources of clean water, our air quality, and wildlife habitat while providing opportunities to visit and recreate on our national public lands over ensuring we produce more domestic energy by maximizing the amount of national public lands available for responsible oil and gas drilling and mining.
- The top choices for energy sources Western state voters want to encourage in 2016 were solar at 48% and wind at 15%. The 2026 question was worded differently where people chose two energy sources rather than one. Regardless, solar and wind energy were showing greater support with 64% of people's combined choice including solar and 40% of people's combined choice including wind.

What This Means for Nevada's Flora: According to the Bureau of Land Management's (BLM's) Nevada Native Plants Program on the [blm.gov](https://www.blm.gov) website, the BLM manages over 1,608,000 acres of Areas of Critical Environment (ACEC's) and over 1,773,000 acres of National Landscape Conservation Areas (NLCA's) across the state.

The article "News Agency Public Lands Rule Addresses Sustainability and Climate" on defenders.org states that there are over 300 threatened and endangered species on BLM land, 85 of which occur mainly on BLM land. BLM land in Nevada contains unique ecosystems which evolved endemic and rare species. According to heritage.nv.gov website's "Botany Program" section, there are 133 plant species endemic to Nevada. If these lands are lost, these species will likely become extinct.

It is important to note that there are multiple factors for habitat loss and degradation. According to the article "News Agency Public Lands Rule Addresses Sustainability and Climate" on defenders.org, greater than 20% of sagebrush habitat in the Rocky Mountain states is affected by oil and gas fields. Moreover, invasive plant species have altered over 31% of BLM land. Livestock have greatly affected BLM land with 35% of BLM livestock allotments in sagebrush ecosystems not meeting public land health standards. Multiple sources note that climate change, habitat fragmentation, and wildland fires have threatened the health of public lands.

Political Action: With so much support for public land conservation, how is this translating into policies? The One Big Beautiful Bill Act was passed into law in 2025, which removes protection from drilling, mining, logging, and more on millions of acres of public land as stated in a press release titled "Interior Advances Energy Dominance Through the One Big Beautiful Bill Act" on the [blm.gov](https://www.blm.gov) website. Much of this land would be in the Western United States, including Nevada. Additionally, the Department of Interior is proposing to rescind the BLM's Conservation and Landscape Health Rule according to a press release on the [doi.gov](https://www.doi.gov) website titled "Interior Proposes to Rescind Public Land Rule, Restoring Balance, Multiple-Use Management". This rule is to protect, restore, and make informed management decisions on BLM land. The changes would be to utilize conserved, or "no use" land for other activities such as mining and grazing.

Closer to home, the BLM has approved the sale of 5,500 acres of land in Lincoln county to facilitate local expansion according to a press release titled “BLM Approves Sale of 5,500 Acres in Lincoln County, Nevada” on the [blm.gov](https://www.blm.gov) website. Additionally, the Southern Nevada Economic Development and Conservation Act proposes selling 25,000 acres for housing and economic development. Congressman Mark Amodei is a proponent of public land sales. Amodei reintroduced the “Northern Nevada Economic Development and Conservation Act”, which proposes federal land sales in Douglas, Pershing, and Elko county as well as Carson City, Fernley, Spark, and Incline Village General Improvement District (IVGID). Additional information can be found on the amodei.house.gov website. With his imminent retirement, it has yet to be seen what the next congressmember will support.

Proponents of public land sales have not always seen partisan divide. There was bipartisan support by the Senate Energy and Natural Resources Committee to pass the Carson City public Land Correction Act.

This act was proposed by Senator Jacky Rosen. This will transfer 1,288 acres of BLM land to Carson city as well as make 360 acres of BLM land available for economic development. Additional information on this bill (S.3493) can be found on the [congress.gov](https://www.congress.gov) website.

Conservation vs. Other Values: It should be noted that bills introduced have often had an element of conservation. Not all public land redistribution is for economic development. Reasons range from flood mitigation to recreation to oil and gas development. While we see public support for conservation, we also see public support for other uses for public and private lands. It is less predictable what people will support when competing beliefs and values come to a head. With the addition of political and media coercion, the true support of public land conservation is even less predictable. The future of Nevada flora depends on these decisions.

As a member of the public, it is up to us to figure out how to best support this beautiful state for ourselves, the future, and the plants and animals that call this place home.

You Can't Fire Me Until I Quit: Nevada Flora Persisting on Their Own Terms

by Blake Ferrell

One may initially think that a fire scar is a bleak landscape. It is! Egged on by cheatgrass and other invasive annuals, fires in this state skitter up and down our landscape, run up slopes, creep down hillsides, and hop back-and-forth depending on the whims of the wind. Besides cliffs and areas of shallow bedrock (in these places, vegetation is often spaced out beyond the grasp of encroaching flames), fires tend to render large acreages more-or-less barren.

One of our newest members-at-large, Lara Derasary, has been involved in the post-fire restoration world for quite awhile now. I'm lucky enough to work with Lara. She helps plan the post-fire restoration recovery, and I walk around and tell her about what's working and what's not.



The 2025 Rosencrans fire in eastern Lincoln County burned through piñon-juniper woodlands, leaving very little behind. ©Blake Ferrell

The fires we're concerned with all burned in either White Pine and Lincoln counties. For those who aren't familiar, these areas encompass everything from transitional Mojave shrublands to intermontane chaparral. All of these areas burn. Despite this, things persist.

Some species, like *Penstemon petiolatus*, are protected from fire by their whole raison d'être. *P. petiolatus* is often chasmophytic, growing in boulders and bedrock nearly untouched by fire. Most of its range is in the southern portions of this state, with a few populations just over the border in SW Utah and NW Arizona. Its glaucous, dentate leaves are unmistakable – even from several meters away, they stand out in stark contrast against the rocks from which they grow. Flora of North America mentions its affinity for limestone, but I've seen it growing just as happily out of welded tuff (one of this state's more common rock types, tuff is volcanic ash turned to stone). Every individual counts for this species; in this state, it's considered vulnerable at best, if not imperiled.

One species that is imperiled in Nevada is *Cymopterus jonesii*. Unlike the penstemon, this carrot seems to grow in spite of fire. Its range is similar to the penstemon, but jogs a bit more north and east into Utah and Arizona. Possessing a stout taproot, this species is suited to dealing with above-ground change. Sporting glaucous leaves ternately pinnate, *C. jonesii* nearly shines through the cheatgrass wasteland that so often replaces native shrub and grasslands. A welcome and surprising sign that these areas aren't totally lost.



Penstemon petiolatus just before flowering. This guy was hanging on in an unburned island in the 2020 Twin Fire, which burned tens of thousands of acres in the South Pahrocs. ©Blake Ferrell

Other instances of a hopeful post-fire future over the years have included carpets of *Scutellaria saphirina*, a wash filled with the odor with *Hulsea heterochroma*, hillsides ablaze with the reds of *Penstemon eatonii*, and isolated stands of *Pinus scopulorum* (formerly included in that ever-reliable pine of the west, *P. ponderosa*).



Pinus scopulorum population ©Blake Ferrell



Cymopterus jonesii ©Blake Ferrell

These individual species, though, still exist in the context of their surroundings. And this is one of the things Lara's good at planning for – the seed mixes she proposes for these charred landscapes are usually heavy on native grasses and forbs in addition to the classic shrubs. It's easy to see when these pay off: pictured below is a robust stand of *Hesperostipa comata* (needle-and-thread grass) and *Eriocoma hymenoides* (ricegrass)

that was seeded in the 2020 Miller fire.

In short, fire scars are bleak, but not always. Several of our natives are exceptionally hardy from years of desert dwelling, and the right recovery planning can make all the difference. Luckily, there are land managers like Lara who care for these wounded landscapes and try to support native plant diversity.



©Blake Ferrell

Book Review:

Every Living Thing by Jason Roberts (2024)

by Dennis Ghiglieri

Author Jason Roberts weaves together the academic and political worlds of the 18th century through the story of two men who both worked their entire lives to identify and describe all life on earth.

Born in Sweden in 1707, Carl Linnaeus is credited with formalizing binomial nomenclature and with being the “father of modern taxonomy.” He also believed in the “fixity” of species – i.e., that plants and animals do not change and set in motion a false notion of humans being separate species based on skin color. He wrote many works mostly in latin with his defining work being *Systema Naturae* (1758) divided into the animal, plant and mineral kingdoms and organized by kingdom, class, order, genus, and species.

Linnaeus continued to revise his major work and eventually named some six thousand animal and more than four thousand plant species. He was a self promoter often writing reviews of his own work anonymously and used his work to support his view that all of nature was part of God's design as described in the bible.

Born in France in the same year as Linnaeus, Georges-Louis de Buffon wrote 28 separate volumes of his life's work, *Histoire Naturelle*, describing animal species in great detail and recognizing that species have changed and continue to do so. He rejected the idea of “fixity” and race-based views of humanity and was an ardent opponent of slavery.

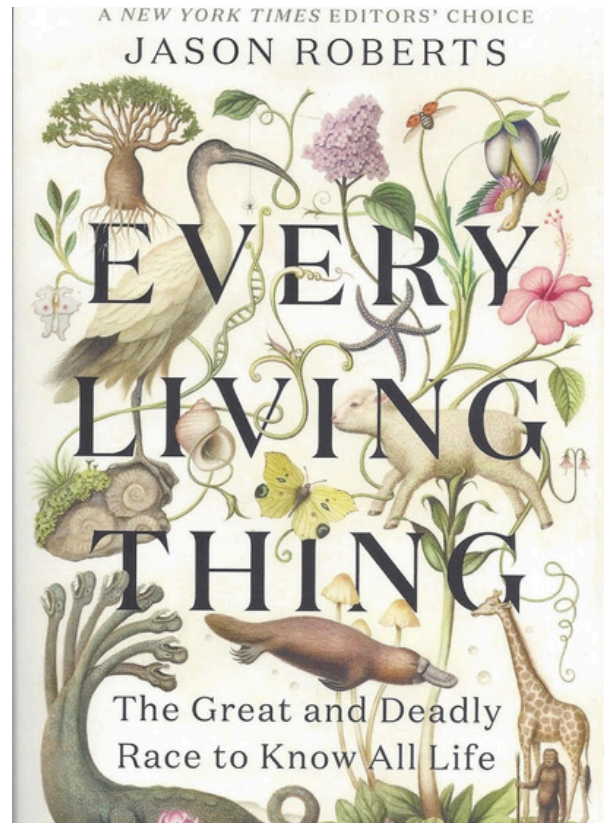
An additional 8 volumes were completed after Buffon's death by his colleagues and friend Bernard Germain de Lacépède. Buffon criticized Linnaeus' taxonomical approach and described earth's history without adherence to the biblical account. He is credited with being one of the earliest thinkers leading others to consider the idea of species evolution.

The author paints for the reader how each one used their “very different worldviews” attempting to “fit ... each piece of life's puzzle into a cohesive whole.”

As a professor of medicine in 1741 at Uppsala University in Sweden, Linnaeus became the head of the botanical garden which he oversaw and expanded throughout his tenure. In 1730 he developed a system to classify plants by the number of flower stamens and pistils in the flower and later published separate books on plants of the Uppsala botanical garden. After Linnaeus' and his son's death, Linnaeus' wife sold all of his collections and writings to a medical student in London named James Edward Smith who later created the Linnean Society of London.

Buffon became the head of the Jardin de Roi (the King's garden) in 1739 through one of his mentors. Like the garden in Sweden, the Jardin held many species important to medicine of the day. Buffon remained in that position until his death creating a botanical and zoological museum which remains today as the Jardin des Plantes de Paris. Linnaeus' garden in Uppsala was lost but a recreated garden exists today in Uppsala. The Linnean Society of London maintains a library and archive of Linnaeus' work in London.

Roberts deftly tells the story of these two very different men of great intellect and energy who devoted their lifetimes to explain life in all its complexity. Through his well researched work that stretches through the 18th and early 19th centuries and to recent times, the reader gains an appreciation for both men and their many contemporaries struggling within systems of kingly patronage and – especially for Linnaeus – poverty and less than stellar academia.



Roberts divides his book into 3 major sections bringing in more modern ideas at the end and concluding with “Notes and Sources” used for each chapter, a detailed bibliography and index. It is a book for botanist and non-botanist alike with a very readable style that sets the beginnings of botany in the context of European history including the French Revolution.

Roberts gives the reader perspective on how Linnaeus' new idea of classification and naming of species evolved into modern taxonomy. Even better, he provides the reader a deeper understanding of the two men's differences and how the ideas they held still are with us today. Roberts' captivating story puts the reader into a not very distant time where science had yet to emerge as a discipline and religion was the powerful force of academia and the monarchy.

Upcoming Events - April & May 2026

NVNPS Programs

In 2026 NVNPS will host seven in-person programs, held at 7:00 PM on February 5, March 5, April 2, May 7, September 3, October 1, and November 5. Programs are open to everyone and available via Zoom, with in-person meetings in Reno and Henderson. Social time begins at 6:30 PM for informal connection and refreshments.

Program details are emailed to members one to two weeks in advance from programs@nvmps.org (please be sure to add this address to your email and check your spam folder) and are also posted to our website calendar and Facebook page at least one week prior.

April Program | Thursday, April 2 | 6:30 PM

Story of Three Salty Bird's Beaks: Genetic and Morphological Research Reveal Two New Chloropyron (Orobanchaceae) Taxa Native to the Great Basin and Mojave Deserts in California and Nevada

Presented by Dr. Naomi Fraga (California Botanic Garden), Director of Conservation Programs. Her research focuses on rare desert plants, including the Tecopa Bird's Beak (*Chloropyron tecopense*).

Attend in person in Reno (FA 300G, Fleischmann Agriculture, UNR) or Henderson (A109, CSN-Henderson). Social time begins at 6:30 PM. Parking is limited in Reno; free and abundant in Henderson.

Virtual option: Zoom opens at 6:45 PM

Register:

<https://us06web.zoom.us/meeting/register/LqDILjovSMmzXmL-UMVMaA>

NVNPS Field Trips and Outreach Events

Find the latest updates on field trips and outreach events here:

<https://www.nvnps.org/events-1>

Field Trip: James Lee Park – Indian Hill

Saturday, April 11, 2026 | 9:00 AM–1:00 PM

Explore the native plants and habitats at James Lee Park.

Location: 3394 James Lee Park Road, Carson City, NV 89705

Field Trip: Peavine Peak

Sunday, April 19, 2026 | 9:00 AM–2:00 PM

Search for *Claytonia umbellata* and other early spring blooms. Additional details will be shared closer to the date.

Reno Earth Day

Saturday, April 18, 2026 | 10:00 AM–5:00 PM

Visit our information table at Reno Earth Day, shared with UNR's Natural History Museum. Learn about bees, bugs, and the native plants that support them.

City Nature Challenge

Saturday, April 25–Sunday, April 26, 2026 | 9:00 AM–2:30 PM

Participate in the City Nature Challenge at Valley Wood Park. Details will be added closer to the date.

Guided Hike: Avi Kwa Ame National Monument

Saturday, April 25, 2026 | 9:30 AM–11:30 AM

Celebrate Avi Kwa Ame National Monument's anniversary with a guided hike through creosote, blackbrush, and Joshua Tree habitats. Discuss native ecology and plant adaptations to the Mojave Desert. Dress for heat and bring water.

Location: Walking Box Ranch, NV

More info & registration: [Time Travel in Avi Kwa Ame](#)

Discovering Flora with the Nevada Native Plant Society

Friday, May 8, 2026 | 12:00 PM–1:00 PM
Emma Wynn, NNPS President, will share the region's diverse flora and ways to engage with Nevada's 3,600+ plant species.
Location: Nevada Museum of Art, Reno, NV
Register: [Nevada Museum of Art Event](#)

Song Dog Nursery Visit

Saturday, May 9, 2026 | 8:00 AM–10:00 AM
Tour Lake Mead NRA's Song Dog Nursery to learn about native plant seed collection, growth, and restoration projects. Includes greenhouses, seed storage, and restored sites. Dress for heat, bring sunscreen, water, and questions. Max 20 participants; carpooling encouraged.
RSVP: Brianna Kramer
bmramer05@gmail.com

Field Trip: Incandescent Hills

Saturday, May 16, 2026 | 9:00 AM–3:00 PM
Explore the unique plant communities of Incandescent Hills and nearby areas. Details will be added closer to the date.

Field Trip: Red Hill Evening Walk

Wednesday, May 20, 2026 | 5:00 PM–7:00 PM
Enjoy an evening walk on Red Hill in Reno, home to seven species of *Eriogonum*, including *E. robustum*. Additional details will be shared closer to the date.
Location: 7005 Dandini Blvd, Reno, NV 89512

Garden Tour

Sunday, May 31, 2026 | 9:30 AM–3:30 PM
Join us for one of the year's highlights: John's open garden! Address and details will be shared closer to the date.

Native Plant Sales**Nevada Monarch Society Southern Milkweed Sale**

Saturday, April 25, 2026 | 9:00 AM–12:00 PM
Native milkweed for Monarch butterflies and other pollinators, including desert, rush, spider, showy, and narrow-leaf varieties. Seeds and plants available, plus Monarch Waystation kits. Learn about creating habitat for pollinators in your yard!
Location: Floyd Lamb Park at Tule Springs, Las Vegas, NV
More info: nvmonarchs.org

NDF Washoe Nursery – Seasonal Opening

Starting Thursday, April 30, 2026 | Thursdays–Saturdays | 9:30 AM–3:00 PM
Browse native plants grown for Nevada's climate. Open full-time in May and June; available by appointment after June until fall.
Location: 885 Eastlake Blvd, New Washoe City, NV 89704

NDF Las Vegas Nursery - Seasonal Opening

Monday–Thursday, 8:00 AM–2:00 PM |
Fridays by appointment
Native plants for sale, locally grown and adapted.
Location: 9600 Tule Springs Rd, Las Vegas, NV 89131

May Arboretum Plant Sale

Saturday, May 9, 2026 | 8:00 AM–2:00 PM
A selection of homegrown native plants for sale at the Wilbur D. May Arboretum.
Location: Burke Garden, 1595 N Sierra St, Reno, NV 89503

Nevada Monarch Society Annual Milkweed Sale – Carson City

Saturday, May 9, 2026 | 9:00 AM–2:00 PM
Local native milkweed for Monarch butterflies and pollinators, plus seeds and Waystation kits. Learn how to create a Monarch Waystation in your yard.
Location: Greenhouse Project, 1111 N Saliman Rd, Carson City, NV 89701
More info: nvmonarchs.org

Walker Basin Conservancy Spring Plant Sale

Saturday & Sunday, May 30–31, 2026 | 9:00 AM–3:00 PM
Shop a wide selection of native wildflowers, shrubs, and grasses grown at WBC's Native Plant Nursery. Locally adapted plants support pollinators and thrive in Nevada's arid climate.
Location: 170 Smith Gage Rd, Smith, NV

Volunteer/ Citizen Science Opportunities

Native Habitat Maintenance and Trail Clean-up – Centennial Hills Park

Friday, April 3, 2026 | 9:00 AM–12:00 PM
Help care for native gardens through a variety of maintenance activities.
Location: Las Vegas, NV 89131 (Exact location provided upon sign-up)
More info:
<https://volunteer.getoutdoorsnevada.org/timeslots/oWdCrMbOr5>

Davis Creek Habitat Restoration – Washoe Valley

Saturday, April 4, 2026 | 11:00 AM–1:00 PM
Assist in rehabilitating wildfire-affected areas.
Location: Davis Creek Regional Park (see map on website)
More info:
<https://www.ktmb.org/events/davis-creek-habitat-restoration>

Pitchfork Ranch Tree Planting & Reseeding

Saturday, April 18, 2026 | Time TBD
Help plant fruit trees, reseed campground areas, assist with trail cleanup, and restore ponds. Registration required.
Location: Walker River State Recreation Area – Pitchfork Ranch
More info:
<https://parks.nv.gov/events/america-250-volunteer-project-pitchfork-ranch-tree-planting-reseeding>

Gold Butte Bioblitz Spring 2026 – Bunkerville

April 25–26, 2026 | 9:00 AM–3:00 PM
Participate in species surveys and record observations using iNaturalist. Training provided on April 11.
Location: Gold Butte National Monument, New Gold Butte Rd, Bunkerville, NV
More info:
<https://www.friendsofgoldbutte.org/events/>

KTMB Great Community Cleanup – Truckee Meadows

Saturday, May 2, 2026 | 9:00 AM–12:00 PM
Support community cleanup efforts including illegal dumping removal, invasive weed management, and native planting.
Location: 25 sites throughout the Truckee Meadows
More info:
<https://www.ktmb.org/events/ktmbs-great-community-cleanup->

Early Registration Required - Intermountain Herbarium Annual Botanical Foray – Ruby Mountains (Elko)

July 24–27, 2026 | Multi-day event
Help document the flora of the Ruby Mountains alongside the regional botanical community. Space at base camp is limited—registration required. Dispersed and paid camping available nearby.
Location: Terrace Campground, Ruby Mountains, Elko, NV
More info:
<https://www.usu.edu/herbarium/foray>
[Register Here](#)

Society updates

Outreach Event Volunteers Needed

We receive numerous invitations to participate in events throughout the year, which may include hosting an information table, volunteering for activities aligned with our mission, or presenting on topics related to native plants. Many individuals first learn about our organization at events such as Reno Earth Day or similar gatherings.

Spring is a particularly busy time for outreach opportunities in the Reno area, and we are always looking for volunteers to help promote awareness of native plants. Expertise is not required; enthusiasm for native plants in the field and in the garden is invaluable in supporting our initiatives.

If you are interested, we would love your help at upcoming events including Reno Earth Day, the May Arboretum Plant Sale, the Walker Basin Plant Sale, and the UNR Pollinator Week event. See calendar on the website for dates. Most shifts are two to three hours, and we always have more than one person per time slot, so you won't be alone!

Sign up for an outreach event using the QR code below or contact info@nvnps.org.



2026 NVNPS Margaret Williams Research Grant Recipients

Congratulations to the 2026 NVNPS Margaret Williams Research Grant recipients! This year, grants of \$2,000 each were awarded to Marife Auccapoma, Ph.D. candidate at Claremont Graduate University and California Botanic Garden,

to support "*Diversification and Endemism in Zeltnera (Gentianaceae): Phylogenomic and Morphological Perspectives on a Cryptic Pan-American Lineage*," as well as to Erica Fontanez, M.S. candidate at Claremont Graduate University and California Botanic Garden, to support "*Phylogenetic and Biogeographic Analysis of Chloropyron (Salty Bird's-Beak, Orobanchaceae), a Genus of Salt Marsh Dependent Species*."

Thank you to all the applicants who submitted proposals this year, and to the reviewers who thoughtfully evaluated them and made the difficult decisions about which to fund. Proposals are due on February 1 for each year's grant cycle, and the Grants Committee looks forward to another strong pool of applicants in 2027. To view a list of past recipients, visit nvnps.org/grants.

Welcome new members!

A special thank you to our new members who joined since February 1st, 2026

- Marianne Denton, Reno
- Ronald Van Heest, Sparks
- KC Wylie, Zepher Cove
- Bruce Nelson, Carson City
- Hannah Bishop-Moser, Reno
- Janice Brown-Silveira, Reno
- Blossom Tichenor, Silver Springs
- Gaylene Kinzy, Benton, CA
- Courtney Henderson, Yerington
- Sadie Dukatz, Reno
- Jarred Dusyk, Las Vegas
- Brisa Arias Leon, Henderson
- George Kish, Henderson
- Kitty Gillette, Reno
- Cary Meister, Yuma, AZ
- Belle Eckert, Washoe Valley
- Andrey Zharkikh, Salt Lake City, UT

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- President Emeritus: Arnold Tiehm
- Vice President: Alison Agneray, aagneray@gmail.com
- Recording Secretary: Esther Hwang, secretary@nvnp.org
- Treasurer: Patrick Cassady, treasurer@nvnp.org

Members-at-Large

- Laurel Tashjian
- Cory King
- Lara Derasary
- Hermi Hyatt
- Cody Ernst-Brock
- Brianna Kramer

Committee Chairpersons

- Archivist: Connie Douglas
- Conservation: Hannah Bishop-Moser
- Outreach:
 - N. Nevada: **Vacant**
 - S. Nevada: Brianna Kramer and Hermi Hyatt
- Field Trips,
 - N. Nevada: Christopher Mackessy,
 - S. Nevada: Brianna Kramer and Hermi Hyatt
- Grants: Jim Morefield, grants@nvnp.org
- Horticulture: John Weiser and Charlie Duncan
- Membership Coordinator: Alison Agneray
- Newsletter Editor: Melissa Sinka, newsletter@nvnp.org
- Photography: Larry Lodwick
- UNR Herbarium Curator: Arnold Tiehm
- UNLV Curator: Marcus Hooker
- Programs: programs@nvnp.org
 - N. Nevada: Sarah Kulpa
 - S. Nevada: Marcus Hooker
- Publications: Arnold Tiehm
- Rare Plants: Joshua Lovera, rareplants@nvnp.org
- Social media: Emma Wynn & Sarah Kulpa, social@nvnp.org
- Webmaster: Patrick Silbey, psilbey@gmail.com

