



NEVADA NATIVE PLANT SOCIETY

Jan Nachlinger, Botanical Bard

by Lily Rice

For April's member interview, I talked to Jerry Tiehm, who spoke at length about his partner in botanical crime, Jan Nachlinger. After hearing high praise, I was eager to hear from Jan, but alas life tends to laugh at the plans we make. It wasn't until August that I could talk screen to screen with her. She was the image of punctuality, already on the video call by the time I logged on to Zoom. Behind her was an impressive bookshelf well lit from the afternoon sun. Her study gave the clear image of a botanist: on the shelves sat multiple reference materials, live plants, and knick-knacks from her travels. Elsewhere in the study, a cabinet stuffed with her

personal herbarium voucher collections. According to Jan, this room is "...where I spend all my time when I'm not in the field."

For those of you who have not had the genuine pleasure of meeting Jan, her enthusiasm for native plant biology is contagious, and our hour and a half conversation was loaded with stories filled with such substance that I regretfully had to cut so much from this brief article. Officially, Jan is an amateur botanist, has 3 peer-reviewed publications, has an eponymic species (*Silene nachlingerae*), is a board member for the GLORIA project- an international project that aims to track species' range shifts within alpine zones caused by climate change- and has established an endowment for the UNR Herbarium.

Raised in California, Jan has been in the botanical game since she began her undergraduate studies at Santa Barbara College, where she stumbled into floristic love while witnessing a desert superbloom, a foundational event for any botanist. After completing her undergraduate studies, Jan moved to Reno, NV in 1982- a supposed temporary move - where she would go on to work as a plant ecologist with the Nature Conservancy for 18 years. As Jan tells it, the move to Reno was strategic, a way to level-up her botanical knowledge. How? By picking Jerry Tiehm's mind. Jan's friend,



Jan Nachlinger in the Sierras, circa 2003 ©Jan Nachlinger

Susan Cochrane (the former head of the California Natural Diversity Database), and a mutual friend of Jerry, was the person to point Jan towards the plant society.

Jan: "...in Spring of '83, I went to that first spring meeting and tapped on the shoulder of the person in front of me in line, who happened to be Rose Strickland... I asked her if she knew who Jerry Tiehm was, and she said, oh, yes, of course."

This was the beginning of a career-long collaboration. Jan and Jerry have been natural co-conspirators, working on several projects together. Most recently, she and Jerry have published possibly their greatest endeavor, a beautiful 276 page updated annotated checklist to Nevada's vascular flora, which can be purchased [here](#). The last time a flora that covered all of Nevada was published was in 1925, by Ivar Tidestrom, (Tiehm & Nachlinger, 2025). While this centennial publication is impressive, when I asked her about her most cherished memory during her tenure in NNPS, she said the following:

Jan: "...the publication that came out on the Peavine Flora...that's the biggest project that I have ever been involved in with the Plant

Society, and it was really great."

Specifically, she is speaking of the 1992, Number 6 Part 1 & 2 *Mentzelia* publication, back when we were still the "Northern Nevada Native Plant Society." Jan served as an editor for these publications. A copy of the part 2 publication sits on my desk, a gift from Jerry and a testament of their shared work. Next, to wrap up the interpersonal reflections, I asked Jan about her early mentors.

Lily: "Were there any early members who particularly inspired or influenced you? I'm going to guess Jerry Tiehm, anybody else?"

Jan: "Yes, definitely. Margaret Williams. It was all her that brought me into the Plant Society. She had a very strong personality and right away she wanted me to get involved with the committee of the Plant Society, and she mentored me early on. I never really had any experience in a leadership role before, but she just threw me right into it [as] the vice president, and then the president of the Plant Society."

Lily: "How long were you the president for?"

Jan: "I think only a few years."

Since her early days as a botanist, Jan has had a particular affinity towards alpine



Jan's in-field tradition. Each tent set-up gets photographed with surrounding habitat ©Jan Nachlinger

habitats. Her undergraduate classwork at UC Santa Barbara took her to high elevations along the Southern Coast Ranges. During the summers in this period of her life, she worked for Sequoia Kings Canyon National Park, where her appreciation for fragile habitats blossomed. It wasn't until she came to Reno that her alpine speciality matured; much of the rest of our conversation was colored with hues of alpine fervor.

Jan: "Once I moved to Nevada, the fact that it has so many isolated mountain ranges and each one of them has interesting floras and it just all kind of fit together. So, I do consider myself much more of an alpine botanist, which goes... hand in hand with Jerry's emphasis of being a desert botanist."

Given her adoration and attention to detail, I decided to ask her several questions on a changing Nevada.

Lily: "How have you seen the landscape of Nevada change over the past 50 years?"

Jan: "That's a big one. There seems to be a lot more dry, open landscapes that are primarily... annual exotics that have taken over many of the foothills. To me, the development is not so bad. Nevada has so much public land. Nevada has withstood a lot of it because of our public lands, which I think is an absolute treasure."

Lily: "Which native plant species or habitats were most at risk when NNPS was founded?"

Jan: "It was... low elevations that really did make me think about those impacts. Now, I do believe it is the higher elevations as people go up into the montane environments and into the alpine, and whether they're putting another antenna on top of a mountain or another road to get to some facility, or they're just putting in roads for mining, and then they extend them up to peaks. I would also add that riparian systems... have always been impacted, whether it's from cattle grazing or if it's from vehicles... but riparian areas, I think, are heavily disturbed in Nevada."

Across my own travels for the USFS I noticed these themes as well, as I'm sure most of you reading have. I recall a particular stream in Sunflower Mountain in the Carson Range where the right side of the stream was completely barren and dry due to cattle grazing/trampling and the left side was verdant and untouched.

Next, I asked Jan about her specific predictions for the future of alpine habitats.

Lily: "With global warming projected to keep increasing into the two to potentially three degree range [post pre-industrial averages], If we [continue to] do what we're doing now, what do you expect the future of alpine habitats to look like?"

Jan: "I'm saddened. There will be plants that will no longer have the niches that they have now, and they will probably decline and maybe even wink out. I've been working with GLORIA for almost 20 years now. I think it's going to be another decade for sure before we really can say that these changes that we're seeing are because of climate change, but I'm seeing changes now... but, I think that plants on the tops of mountains that don't have anywhere else to go we will see them decline, If not disappear."



Jan before a hike in the Ruby Mountains ©Jerry Tiehm

It is inevitable that some species are going to dwindle into the pages of history, thus is the nature of evolution and our state's natural history; post ice-age aridification led to the isolation of the iconic Mojave Pupfish. With enough collective effort, the number of species doomed to extinction can be lessened. In these uncertain times it is important to maintain a beacon of hope to strive towards, to carry us out of the darkness. In this final section of the interview, we look towards a better future.

Lily: "What legacy do you hope NNPS leaves for future generations of plant enthusiasts and conservationists?"

Jan: "Well, it would be to continue to instill a love for the natural environment and the natural places where plants grow and the contribution that they provide to society, to the environment, and to the landscape... It might seem like there's a lot of extra space out here in Nevada, but it's all connected." After a few intervening stories we continued discussing NNPS' future.

Lily: "Next question for you, what advice would you give to today's NNPS members about carrying the mission forward?"

Jan: "I would say to get out as much as possible and learn about the plants and the landscape and their environments in order to be able to be an advocate for them."

Lily: "I often find it's hard to source dichotomous keys. Is there an easier resource for people who are just getting into botany to help them identify plants that you'd like to recommend?"

Jan: "I don't believe so. The Intermountain Flora is older. Its value is so incredible, [but] it is out of print. We have to use as many references as possible and whether that's written volumes or online resources or experts that you can communicate with... it's what we have to do now."

If you are reading this article and are starting your journey into plant identification or are a seasoned expert, this is a good reminder that the best resource we have is each other. Like Jan, my introduction to NNPS came from a recommendation by Suzy Miladin while performing field work in the Sweetwater Range of California. Together, our collective efforts can build a movement that will outlive us all and give voices the voiceless.

Citation:

- Tiehm, A. & J. Nachlinger. 2025. Nevada Plants: An Annotated Checklist of the State's Botanical Diversity. Sida, Bot. Misc. 67. BRIT Press, Fort Worth Botanic Garden | Botanical Research Institute of Texas. U.S.A.

Kyhosia bolanderi in Nevada

by Arnold Tiehm

1130 feet. That distance is not all that long, only 0.214 miles, 0.344 kilometers, or 377 yards. It is a good distance for a high powered rifle, a very long drive in golf, 81 yards more than the NFL record for one game rushing yards by an individual, and would tie for 8th on the College Football list of one game rushing yards by an individual, 30 yards short of the record. It is a little too long of a distance to find an analogy in

baseball and is totally meaningless in basketball. As usual I digress.

I did not have 1130 feet in mind when I received an email from Tessa Bartz on the 30th of October, 2024. She was having problems identifying a member of the Sunflower Family (Asteraceae) from the Incline Village area. Without much thought, I downloaded the images and opened the first one. The image left me absolutely

flabbergasted. It was the long sought-after *Kyhosia bolanderi* (Bolanders madia).

In Nevada, *Kyhosia* was only known from a collection made in 1938 by Herbert Mason and the location on the label was “three and a half miles above Incline [Village]”. I have known of this collection for nearly 50 years having read about it in Gladys Smith’s *A flora of the Tahoe Basin and neighboring areas* (Smith, 1973). Over the decades I have made numerous collecting trips to the Nevada portion of the Sierra Nevada and have had *Kyhosia bolanderi* in the back of my mind. Jan Nachlinger and I have long talked about writing a flora of the Nevada portion of the Sierra Nevada and to this end in the past decade, we have made many collecting trips to remote parts of the area. Still no *Kyhosia* had been found. We also took a couple of field trips specifically designed to find *Kyhosia*. For one, we parked a car in the upper reaches of Incline Village then drove in another vehicle back up the Mount Rose Highway to Incline Lake (or what is left of Incline Lake). From there, we botanized down Third Creek, looked in the surrounding moist areas, and eventually arrived at our parked vehicle. Still no *Kyhosia*. Turns out we were searching a little too high in elevation.

In 2024 I went about a half mile below the

Vista Point on Mount Rose Highway and parked near the gate on a piece of the old Mount Rose Highway. From there I botanized uphill. The habitat was mostly conifer forests with a small seepage area and one large moist drainage. However, no *Kyhosia*. I did find *Rosa bridgesii* which is the only record for Nevada (Tiehm, 2024). My parking place was 1130 feet from where Tessa found *Kyhosia*. If I had driven a short distance downhill on the Mount Rose highway from



Kyhosia bolanderi in bloom. ©Jan Nachlinger

where I parked and turned left on Fairview Boulevard I would have seen the willow patches in the wet areas, some of which house *Kyhosia*. Mystery solved! *Kyhosia* is common enough on the west side of Lake Tahoe so why is it not in more places on the Nevada side? Time will tell if it is more widespread or relegated to one small wet meadow.

Citations:

- Smith, G.L. 1973. A flora of the Tahoe basin and neighboring areas. Wasmann J. Biol. 31(1): 1-231.
- Tiehm, A. 2024. *Rosa bridgesii* found in the Carson Range. Nevada Native Plant Society Newsletter 50(4): 4-6



Kyhosia bolanderi inflorescence close-up with pollinator.
©Jan Nachlinger

Featured plant: *Nicotiana obtusifolia*, desert tobacco

by Lily Rice

Back in March I putzed around the Amargosa Valley searching for early blooming species. This was my first voyage to this hotbed of endemism and despite the earliness, I saw several species I was seeking. One of the most exciting finds was a member of the enigmatic and addictive tobaccos, *Nicotiana obtusifolia*. While not as flashy as my previous featured plant, nor as rare as the famous *Astragalus phoenix*, *Nicotiana* holds a special place in my heart due to the wealth of glandular trichomes they sport.

Despite being famous for their hairy stature, the common name refers to this plant's habitat of preference, the "Desert Tobacco." *N. obtusifolia* is found in hot deserts from Death Valley, CA in its northwestern boundary, and Oaxaca, Mexico in its southeastern boundary. Across this range it is commonly found in well-drained, gravelly soils on mountain slopes and washes. This

plant is smaller than its sympatric cousins, growing roughly 3 feet tall at its maximum height and is either perennial or annual in its habit. Compared to *N. attenuata*, the flowers of *N. obtusifolia* are broader and more showy, with a creamy-green color. Finally, the soft, pliable leaves are covered in the aforementioned glandular trichomes, which are utilized to deter insect herbivory. I encountered an individual growing in the relative shade of an overhang. Upon touching the vivid leaves I was delighted to find an intense wet feeling, as if they were covered in a thick layer of dew. The scent was strongly reminiscent of fresh-cut-grass unlike the musky, earthy odor of *N. attenuata*.

Nicotiana is the fifth largest genus in Solanaceae with approximately seventy species. Of course, the namesake of the genus is tobacco (*N. tabacum*), which has been cultivated for its large concentration

of nicotine and other aromatic compounds for use in smoking products. Much of the other members of the genus, dubbed wild tobaccos, have been used throughout (pre)history. Their nicotine compounds have been closely studied to document their inhibitory effects on predators such as the tobacco hornworm. Recent analysis between the phytochemistry of *N. obtusifolia* and *N. attenuata* found a more recently studied group of compounds-known as 17-hydroxygeranyllinalool diterpene glycosides (HGL-DTGs), a mouthful to be sure - have a stronger anti-herbivory effect on insects than nicotine. *N. obtusifolia* contained a five-fold higher concentration of HGL-DTGs with half the mass of the hornworms fed on them than the latter (Jassbi et al. 2010).

Citation:

- Jassbi, A. R., Zamanizadehnajari, S., & Baldwin, I. T. (2010). 17-Hydroxygeranyllinalool glycosides are major resistance traits of *Nicotiana obtusifolia* against attack from tobacco hornworm larvae. *Phytochemistry*.
doi.org/10.1016/j.phytochem.2010.04.014



Nicotiana obtusifolia ©Lily Rice





2026 Calendars Available

- Can be purchased through the website or in-person at the Reno meeting. The calendar will cost \$15, S&H for 1 cal is \$7:00, for 2 or 3 calendars it is \$10.



OCTOBER Aphyllon cooperi
Lincoln County
Lois Port

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Canadian Thanksgiving
Indigenous Peoples' Day

First Quarter Moon

Full Hunters Moon

Harvest Moon

Aphyllon cooperi, formerly known as Orobanche cooperi (desert broomrape), is a parasitic plant emerging from desert soils as purplish-yellow stalks studded with tubular flowers. It steals all its nutrients from the roots of other plants and never produces any chlorophyll of its own.

New release! Nevada Plants: An Annotated Checklist of the State's Botanical Diversity by Arnold Tiehm & Jan Nachlinger

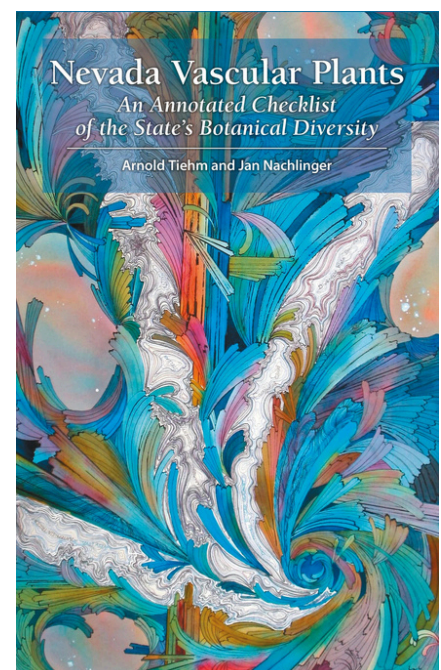
From Brit Press: "[This book] is the first comprehensive accounting of all plant species and varieties native and naturalized in the seventh largest of the United States...

Each checklist entry for 3,647 plant taxa has cited voucher specimens to support their inclusion along with their distributions by county and physiographic region. An additional 195 taxa previously attributed to the state are excluded for lack of an herbarium specimen or for other reasons.

From the first documented plant collections made by John Charles Frémont in 1844, to ongoing collecting efforts initiated in 1973 by first author Arnold Tiehm, and more recent contributions by numerous botanists and graduate students, the diversity of the state's flora continues to be studied with surprising new findings including range extensions and new species.

This Checklist is a valuable resource for botanists, ecologists, land managers, researchers, teachers, consultants, and plant enthusiasts."

[Buy here](#)



Book review: Iwigara, The Kinship of Plants and People: American Indian Ethnobotanical Traditions and Science. By Enrique Salmon

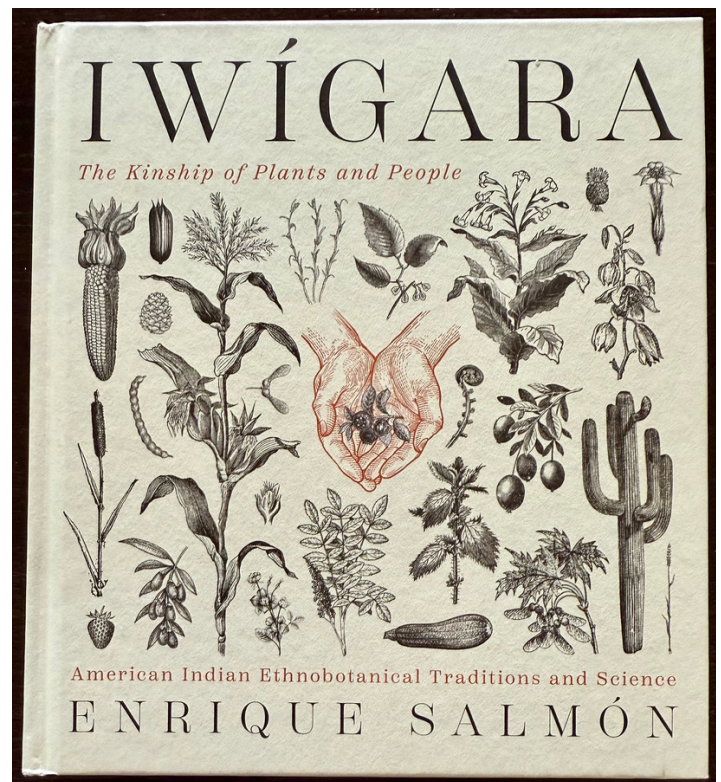
By: Emma Wynn

This book caught my eye as I was browsing the bookstore at the Nevada Museum of Art in Reno. I briefly toyed with the idea of becoming an ethnobotanist in my youth and have become increasingly interested in the relationships between people and plants as I have grown older.

Author, Enrique Salmon, PhD, grew up in a Raramuri family who grew, gathered and used plants for food, medical and cultural purposes. The title of this book reflects his tribal worldview; “Iwigara channels the idea that all life, spiritual and physical, is interconnected in a continual cycle [and] expresses the belief that all life shares the same breath. We are all related to, and play a role in, the complexity of life.”

Enrique Salmon presents information about 80 plants, detailing their uses in medicine, food, and spices across various American Indian tribes and regions. Each entry in this attractive book includes tribal names, photographs, plant descriptions, usage details, identification advice, and ethical harvesting tips, enriched by traditional stories and Native American art. It is not a book I will sit and read from cover to cover, rather one that I will dip into to enjoy the stories, pictures and other information.

Although the book isn't about our region, it offers valuable insights into the cultural plant use of Indigenous peoples across North America. The stories, photos, and practical identification and harvesting tips make it useful and may change how I view certain plants.



Conservation news:

Court victory for protection of biodiversity on Western public rangelands

by Rose Strickland

Our Western public rangelands provide critical habitat for bees, butterflies, grasshoppers, crickets and other insects which support a wide diversity of birds, wildlife and plants. Due to many causes, from droughts to climate change, habitat loss, wildfires, invasive species and increasingly hot temperatures, the populations of greater sage grouse, monarch butterflies and many other species are already in steep decline and vulnerable to harm from widespread pesticide spaying.

APHIS, the Animal and Plant Inspection Service in the U.S. Department of Agriculture, is responsible for the application of pesticides on millions of acres of public lands to prevent grasshoppers and crickets from competing with livestock for forage in 17 Western States - Arizona, California, Colorado, Kansas, Idaho, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

The Xerces Society for Invertebrates, Center for Biological Diversity, and Advocates for the West brought a lawsuit in 2022 against APHIS for violating the National Environmental Policy Act (NEPA) for not considering the impacts of pesticide spraying on other animal and plant species and not considering

preventative options with less harmful environmental impacts, both required by NEPA for proposed federal actions.

Last year, U.S. District Judge Marco Hernandez ruled in favor of the environmental organizations [here](#). Last month, the judge made a final ruling on remedies requiring APHIS to be more open to the public about where, when, and why it proposes pesticide spraying on public rangelands.

In addition, APHIS must consider preventative measures, including Integrated Pest Management (IPM) rather than simply spraying alternatives. The IPM approach to managing pests combines multiple strategies to minimize economic, health, and environmental risks in controlling grasshopper and cricket populations.

And, APHIS is also required to complete a new Environmental Impact Statement covering its pesticide spraying programs in all 17 Western states within 2 years.

The Nevada Native Plant Society and its members are hoping that implementation of the Judge's ruling by APHIS will substantially lower the threats facing pollinators today and reverse the population declines caused by aerial pesticide spraying on public rangelands.

Can Nevada's plants survive mega-droughts until 2100?

by Rose Strickland

Mega-drought is a term describing periods of persistent multi-decadal drought. Nevadans became familiar with the word in the early 2020's when the American Southwest drought which started in 2000 met these conditions. Many research papers

were published then, some describing four mega-droughts which have occurred in the last 1200 years. The most familiar one was in the 13th century (1276-1297 CE) which displaced American Indian tribes from their settlements in Mesa

Verde, Chaco Canyon and other areas in the Colorado Plateau. These studies were largely based on tree-ring records, which accurately record the region's wet and dry periods.

Wet years can occur within decadal droughts, but are not enough to end them. Both the lack of precipitation and the increasingly warm temperatures due to climate change drive these severe droughts. Snowmelt is captured by the dry soils before it can run off into creeks and rivers. And the hotter air can pull the water out of the soil and vegetation. Droughts negatively impact agriculture, increase wildfire frequency, and decrease water availability for humans, wildlife and plants.

A zoologist has recently published a paper on mega-drought impacts on our modern society of over 330 million people that would test our infrastructure, economy, and social fabric in unprecedented ways [here](#). Many of her predictions are alarmingly accurate such as increasingly catastrophic wildfires and the loss of insurance in wildfire-prone areas, in erupting water wars over increasingly diminishing water flows in the Colorado River and Rio Grande, in increasing stresses on our aging water infrastructure, and evenly, locally, in the transferral of Reno/Sparks treated effluent for industrial uses along the USA Parkway. Xeriscaping and increasingly efficient appliances are becoming more common. The author questions whether the scale of disruption from an arid future will be a manageable challenge or a catastrophic disruption to American civilization. Others are questioning the preservation of Nevada's native flora in such an arid future.

More recent research has been conducted on severe droughts in four continental mega-drying regions, including the American Southwest - AZ, NM, UT, CA, and NV. Two decades of satellite observations are showing rapid decreases in freshwater as declining surface waters are forcing agriculture and communities to use more groundwater [here](#).

Most alarming is research just published this July in Nature Geoscience [here](#). It is showing the West's mega-drought might last for decades because global warming is disrupting the natural wet and dry weather patterns in the Pacific Ocean, called the Pacific decadal oscillation (related to the El Nino-La Nina cycle). The positive phase brings warm water to the US West Coast leading to more storms and rainfall. We are apparently stuck in the negative phase in which cooler water and air temperatures are resulting in declining precipitation in the Western states. The author states "that means the drought could continue through 2050, perhaps even 2100 and beyond effectively...as long as humans keep heating up the planet."

If the mega-drought does continue for many



2010 healthy forest (top) on Mt. Rose and the same forest dying and dead in 2024 (bottom) ©Dennis Ghiglieri

more decades, what will be its impacts on Nevada's native plants? In the country's driest state, native plants are able to survive and thrive in dry regions and droughts because of adaptations including deep tap roots, water storage capacities, and the ability to close stomata during drier periods. Other plants have small thick leaves that minimize water loss through evaporation or as succulents which store water.

There is research on short-term drought impacts on plants in Nevada. One study shows a reduction in seed banks and seed sizes [here](#). Another study assessed plants' responses in a wet year and a dry year in a creosote-blackbrush ecotone, finding significant reductions in density, frequency, and above ground biomass in local annual plants. Perennial herbaceous plants did exhibit a significant difference in above-ground biomass. However, all local woody, sub-woody and succulent plants remained

nearly the same in species density, frequency and percent vegetation cover [here](#).

Native plants already face serious threats which may get much worse in a severely arid future. Will native plants be able to evolve or change survival strategies in enough time to survive increasing aridity? Will occasional wet years assist in the survival of water-stressed native plants? Will entire plant communities change such as trees, already dying due to insects and diseases, being replaced by shrubs and grasses? Will invasive plant species out-compete water-stressed native plants? Will barren desert replace many or most of Nevada's native plants? How can NNPS help avoid ecosystem collapse from future aridity-caused stresses?

(Author's note: if you know of research that addresses these questions or if you have more questions, please let me know and I'll publish replies in a followup article in a future newsletter).

Field trip report: Churchill Narrows

by Jackee Picciani

A rather chilly and windy day saw an intrepid group of ten led by our esteemed NNPS member, John Weiser. In general, the salt desert shrub community appeared somewhat compromised by drought with even shadscale (*Atriplex confertifolia*) looking somewhat shrunken and missing leaves. Annual buckwheats were represented by mostly last year's specimens, and a few current stems of bird's nest buckwheat (*Eriogonum nidularium*), skeleton weed (*E. deflexum*) and naked buckwheat (*E. nudum*) present. Herbaceous species were not common although globe mallow (*Sphaeralcea ambigua*) showed up in bloom here and there.

Our first stop was in the immediate vicinity of the old selenite mine characterized by golden, north to northwest facing gentle slopes exhibiting sparse cover of gravel with

occasional, patchy whitish diatomaceous earth showing. Typical salt desert shrub was dominated by shadscale with Nevada ephedra (*Ephedra nevadensis*), winterfat (*Eurotia lanata*) and rabbitbrush (*Chrysothamnus puberulus*) also present.



The first stop ©Emma Wynn

The mostly bare interspaces supported some native bunchgrass cover that included Indian ricegrass (*Achnatherum hymenoides*), squirreltail (*Elymus elymoides*) and desert needlegrass (*Achnatherum speciosa*), while vigorous fourwing saltbush (*Atriplex canescens*) populated roadside lows.

The second stop was just west of the railroad crossing adjacent to the Adrian Valley Road. A large clump of tall whitetop (*Lepidium latifolium*) was hard to miss, but to counteract the presence of this noxious weed we were treated to several impressively blooming salt heliotrope (*Heliotropium curassivicum*) plants on the side of the road that were at least 8 inches tall! I've seen these before in abundance in Lahontan Valley in ephemeral and seasonal wetland habitats, but those were ground hugging. A low-lying wash adjacent to the road also supported herbaceous cover provided by povertyweed (*Iva axillaris*), Douglas' sagewort (*Artemisia douglasiana*), small patches of creeping wildrye (*Elymus triticoides*), and alas, another noxious weed, hoarycress (*Cardaria pubescens*). Adjacent to the wash at bottom of bank some very vigorous desert peach (*Prunus andersonii*) approaching 6 feet in height, fourwing saltbush and big sagebrush (*Artemisia tridentata* ssp. *tridentata*) representing the native shrub layer. Amazing what water can

do! The adjacent uplands were dominated by a dense stand of Wyoming sagebrush (*A. tridentata* ssp. *wyomingensis*).

The third stop was the targeted Churchill Narrows Buckwheat (*E. diatomaceum*) location adjacent to and just west of Adrian Valley Road. This location is Occurrence 1 of only 15 total known occurrences of this previously unidentified buckwheat species in this area. A bit of background as follows: I was fortunate to be working on a TES (Threatened Endangered Sensitive) survey for American Colloid Company under contract to JBR Environmental in June of 1997. This plant kept keying out to windloving buckwheat (*E. anemophilum*) which it clearly wasn't. We took it to Jerry Thiem and he concurred. Next step was attending the July 1997 Jepson Herbarium workshop "A Weekend of Woolly Knees" where the North American buckwheat expert James Reveal also agreed this had not been previously identified. Through quite a process, by 2002 (Novon Vol 12 No 1) this species was officially named. In the interim, both American Colloid Company, BLM and Nevada Natural Heritage Program funded further explorations nearby, to the Virginia Range, the Pine Grove Range, and central Nevada to determine the extent of this plant's distribution on diatomaceous soils to no avail.

Habitat for this species occurs within the



Our destination, the white diatomaceous soils are visible in the hills ©Emma Wynn



Jackee talking about the unusual *Eriogonum* she found when surveying the area in 1997 ©Emma Wynn

Bailey's greasewood (*Sarcobatus baileyi*) community type. Common shrub associates included shadscale, Nevada ephedra, and smooth horsebrush (*Tetradymia glabrata*), with herbaceous cover provided by Prince's plume (*Stanleya pinnata*) and annual buckwheats as well as invasive weeds cheatgrass (*Bromus tectorum*) and halogeton (*Halogeton glomeratus*). This field trip we encountered some Churchill Narrows buckwheat plants in flower, with the more vigorous, well leafed specimens growing within the narrow, erosive hillside gullies, the volcanic cobble/rock cover apparently providing some additional soil moisture enhancement. Several older plants exhibited a lot of dead stems, drought apparently taking its toll.

Adjacent to the slopes with the exposed diatomaceous soils, a narrow valley in between the low hills supported a low gradient, ill-defined wash with cheesebush (*Hymenoclea salsola*) providing the bulk of shrub cover along with several happy and fruiting desert peach groupings. Surprisingly, we found one sand cholla (*Grusonia pulchella*) nestled in the bottom of this wash environment. Go figure... life finds a way. Slightly elevated soils within the wash supported additional shrubs including spiny hopsage (*Grayia spinosa*), Heermann's buckwheat (*E. heermannii*), desert dalea (*Psoralea polyadenius*), budsage (*Artemisia spinescens*) and smooth horsebrush. Herbaceous cover occurred in the shrub interspaces evidenced by Russian thistle (*Salsola paulsenii*), fluffgrass (*Dasyochloa pulchella*) and Indian ricegrass.

The day wrapped up with a convivial late lunch on the patio of our home in Silver Springs, it being somewhat sheltered from the rather cool breezes of the day. All in all, an interesting field trip finding hidden wonders and marveling at the capacity of high desert plant life able to survive this rugged environment.



Eriogonum diatomaceum flower ©Emma Wynn



E. diatomaceum plant ©Emma Wynn

Society updates

Monthly meetings back in full swing

On September 4th, our monthly meetings resumed with Marc Baker presenting a talk “Chollas, with emphasis on those of Nevada.” On October 2nd, Matt Lavin is presenting a talk “Assessing plant functional and species diversity to identify high-value sagebrush steppe.” In November, Tiffany Pereira will be presenting “The Art of Science.” We are working on posting our past meetings on our YouTube channel: www.youtube.com/channel/UC1meY4vzlqXH3_waeDsD6Dg

50th anniversary merchandise still available

The temporary online store to sell limited edition NNPS merch can still be available here: [NNPS Bonfire Store](http://NNPSBonfireStore.com).

We Want to Hear From YOU!

As we plan ahead, we want to ensure NNPS continues to offer what you value most. Take our short (3–5 min) survey to share your thoughts – what’s working, what could be

better, and what you’d love to see next. Your voice helps shape our priorities and direction!

docs.google.com/forms/d/e/1FAIpQLSdW6x5lOJR8vR7Ey_P9Uh3flim-HB9dg2l6ryPcKz56kSpqyQ/viewform?usp=dialog

Welcome new members!

A special thank you to our new members who joined in August and September:

- Lynn Heislein, Reno
- Lois Ports, Elko
- Heidi Nicol, Reno
- Haley Malone, Reno
- Timothy Ganey, Las Vegas
- Nik Marquez, Gilroy, CA
- Sarah Calvo, Las Vegas
- David Worley, Reno
- Joseph Dertien, Las Vegas
- Chad Sckorich, Las Vegas
- John Hackland
- Kathy Hamilton, Vallecito, CA
- Tina Nappe, Reno member since 1975 has upgraded to a lifetime membership!



Erigeron pygmaeus, Pygmy fleabane on Slide Mountain ©Rose Strickland and Dennis Ghiglieri

Board of Directors

Officers

- President: Emma Wynn, emhwynn@gmail.com or president@nvnp.org
- 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

- Cory King
- Sarah Harrelson
- Hermi Hiatt
- Cody Ernst-Brock
- Janette Perry
- Laurel Tashjian

Committee Chairpersons

- Archivist: Connie Douglas
- Conservation: Rose Strickland, rosenreno@sbcglobal.net
- Events: Vacant, events@nvnp.org
- 50th Anniversary: Sarah Kulpa
- Field Trips, N. Nevada: Christopher Mackessy
- Grants: Jim Morefield, grants@nvnp.org
- Horticulture: John Weiser
- Membership Coordinator: Vacant
- Newsletter Editor: Alison Agneray, aagneray@gmail.com
- Photography: Larry Lodwick
- Programs: Sarah Kulpa (North) & Marcus Hooker (South) Marcus.Hooker@csn.edu
- 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

