



NORTHERN NEVADA

See NVNPS.org for updated meeting details.

May 30 – May Arboretum Plant Sale: 8AM-noon. Additional sale days will be June 1-5, 9AM-2:30PM or until sold out. If you would like to help at the NNPS membership table on Saturday, please email Janel at president@nvnps.org.

May 30 – Bristlecone Chapter CNPS Field Trip to Bodie Hills, led by Julie Anne Hopkins and Jeff Hunter.

Did you know that some 450 different plants species in 73 families are known to occur in the Bodie Hills? Join Jeff and Julie Anne on this outing to explore some of the National Forest lands, as the BLM lands in the Bodie Hills are closed to outings until July because of the Sage Grouse breeding window. The trip will start at Masonic Road and drive on rough gravel roads, stopping at various points to look at the flora and see what is out this year.

Meet at 9AM at the Bridgeport Ranger District office (Humboldt-Toiyabe National Forest) on 395 - just south of Bridgeport. Participants should bring layers, sunscreen, a hat, water and a sack lunch (a chair or something to sit on while eating lunch might be nice).

Binoculars would be good as well as we might see raptors, pronghorn antelope, and more. 4WD vehicles or vehicles with high clearance are required to drive these roads. Carpooling is encouraged and we can organize it at the ranger office. We should return by 3PM.

June 6 – Slaughter House Canyon Trail to Prey Meadows

We will look for various species of *Penstemon*, *Diplacus (Mimulus)*, *Ceanothus*, *Sidalcea oregana*. There may be snow plant still in bloom and other saprophytes. The trip is easy. Parking is very limited at the trailhead. It is therefore suggested that you carpool as much as possible.

From Reno, meet at the Southwest Pavilion Shopping Center near the Pink



Cirsium andersonii - you might see this on the Slaughter House trail.



Chinquapin - another inhabitant of Prey Meadows

Scolari's located at 8165 South Virginia at 8:45AM.

In Carson City meet at the Forest Service Office on south Carson City Street at 9:30AM.

Make sure you bring lunch, water, and insect repellent.

Information:

Charlene Duncan
cirsium.down@gmail.com
(775) 849-1572 - home
(775) 530-7458 - cell

Gary Monroe
g.monroe@att.net
(775) 359-4863 - home
(775) 276-3441 - cell

June 13 – Lemmon Canyon Ranch, Sierra Valley led by Nancy and Bill Harnach.
Meet at the intersection of Hwy 49 and Lemon Canyon Road on the east edge of Sierraville (Sierra Hot Springs turnoff).
Carpooling: same as May 25th. From Reno take Hwy 395 to Hwy 70 (Quincy

turnoff). Turn right on to Hwy 49 and drive south 23 miles toward Sierraville.

Information:
Bill Harnach
(530) 944-3464

John Weiser
johnpweiser@yahoo.com
(775) 331-4485

June 21 – Madora Lake led by Gary Monroe. Bring cash for post trek ice cream parlor visit.

June 27 – Carson Pass Trail led by John Weiser, Ray Fletcher, and Gary Monroe.

July 10-13 – Penstemon Society Annual Meeting in Chico, CA.

ERIOGONUM SOCIETY

July 24-27: NNPS is co-sponsoring the annual meeting of the Eriogonum Society in July. It is open to NNPS and Eriogonum Society members only.

Details are on the Eriogonum Society website, eriogonum.org

SOUTHERN NEVADA

Southern Nevada Meetings are suspended while we search for a new program coordinator. Please contact Cayenne Engel at cpepper3@gmail.com to help organize meetings and get our group out in the field again.

ASTRAGALUS BOLANDERI IN NEVADA, FACT OR FICTION

Here's a bit of a detective drama: the search for a plant. Has it been missing for 140 years or is it just a phantom caused by haphazard documentation? I came across this case while working on a checklist for the Flora of Nevada. My task is to research references made to Nevada plants and verify that the references are based on specimens and not just stories. In this instance, the plant was *Astragalus bolanderi*, a.k.a Bolander's milkvetch.

A. bolanderi is a conspicuous plant. It is multi-stemmed from a buried caudex. The stems can grow to almost a foot and a half in length. The petals are whitish suffused with lavender and are up to $\frac{3}{4}$ inch long, while the pods are stipitate and inflated. This is hardly a plant that would go unnoticed. It is common in the Sierras in California – in fact, Smith (1973) lists specimens from Fallen Leaf area, which is

just across Lake Tahoe. But does it really occur in Nevada?

It does according to Munz and Keck's *A California Flora* (Munz & Keck, 1959). This was the first reference book I used for learning the plants of Nevada. In that work, the treatment of *Astragalus* was done by Rupert Barneby and his distribution for *Astragalus bolanderi* was "Sierra Nevada from Kern-Kaweah Divide in cent. Tulare Co. n. to s. Plumas Co., and extending e. of the crest around Lake Tahoe to Mt. Rose, Nev."

I remember J.T. Howell, the *Eriogonum* expert, talking about *Astragalus bolanderi* and informing Margaret Williams (founder of the Plant Society) and me that it was known from Mt. Rose and that we should look for it. In the nearly forty years since then, I have looked for it and have yet to see it with its feet in the ground. My *Flora of Nevada* background check into *A. bolanderi* has taken me to the California Academy of Sciences, the University of California, Berkeley, and the New York Botanical Garden in search of specimens from Nevada. Additionally, I've



A. bolanderi by Br. Alfred Brousseau, Saint Mary's College

had other people search at the Rancho Santa Ana Botanical Garden and the Gray Herbarium at Harvard University. The only result of these searches is a specimen at New York collected by J.G. Lemmon in 1875. It has a printed Flora of California label, is numbered 1090, and Mt. Rose is hand-written on the label. There is no mention of Nevada.

J.G. Lemmon lived in nearby Sierra Valley and collected in western Nevada on several occasions. In 1875, he and E.L. Case were around Pyramid Lake where they collected the type of *Astragalus casei* which was labeled as occurring in the "Great Desert N of Pyramid Lake." Also in 1875, Lemmon collected the type of *Eriogonum lemmonii* from "Sand hills near Reno" and from the "W shore of Pyramid Lake" he gathered the type of *Glossopetalon nevadense*." In the same year we have *Sphaerostigma lemmonii* (now a synonym of *Camissonia boothii* var. *boothii*) from the "E. flanks of the Sierra Nevada." I would bet that the collections of *A. casei*, *Glossopetalon nevadense*, and *Sphaerostigma lemmonii* were all made on the same trip. Only one of the collections has Case on the label, but he was probably accompanying Lemmon for all three collections. In 1874, Lemmon collected in "Winnemucca Valley near Pyramid Lake" and found the type of *Scutellaria nana*. In 1879, Lemmon returned with his wife, Sara Plummer, to collect the type of *Trifolium plummerae* from "peaks above Pyramid Lake."

What these collection descriptions tell us is that Lemmon was not a careful or detailed record keeper. For example, the only place that *C. boothii* var. *boothii* occurs in the Reno area is around Pyramid Lake and the old shorelines of Winnemucca Lake – not the eastern flanks of the Sierras. The Nevada

endemic *Eriogonum lemmonii* occurs on clay hills, not "sand hills," and the closest it has been found to Reno is about 25 miles east of town. There are many literature citations where Lemmon's label data has been called into question. For instance, Howell (1945) wrote:

A collection of Phacelia bicolor Torr. reputedly made by J.G. Lemmon and wife in 1884 at Fort Mohave, Arizona has been the basis for tentatively including the species in the flora of that state . . . An extraneous leaf which adheres to the base of the right hand plant of the specimen in the United States National Herbarium, and which was obviously pressed when the Phacelia was pressed, is the leaf of Purshia tridentata (Pursh) DC. If the inference is correct that this leaf and the phacelia came from the same place, then the phacelia did not come from Fort Mohave. Although Purshia is known in the Arizona mountains farther east, it is as certain that the phacelia did not come from the mountains of Arizona as it is certain that the purshia did not grow in the Sonoran desert along the lower Colorado River. Also it is quite unlikely that the collection was made in the Mohave Desert as has been suggested by Kearney and Peebles [1942] because in this Lemmon collection the filaments are puberulent while in all collections that I have examined from the Mohave Desert the filaments are glabrous. Moreover the purshia in the Mohave region is Purshia glandulosa Curran, a species with glandular-pitted leaves that are quite different from the leaf adhering to the plant of Phacelia bicolor. Rather, there is every reason to believe that this collection of Phacelia bicolor including the purshia leaf was made in northeastern California or northwestern Nevada where both it and the Purshia are known to grow and where Lemmon collected abundantly.

It seems likely that the only Nevada record for *Astragalus bolanderi* is the above mentioned Lemmon collection. *Astragalus bolanderi* is not listed for Nevada in Tidestrom (1925) nor Jepson (1925). In a study of the Tahoe Basin, Smith (1973) does not list specimens from Nevada and merely cites the Nevada reference in Munz & Keck (1959). An online search for California specimens in the Consortium of California Herbaria yielded one specimen collected by Lemmon on Mt. Lola in 1877. The Consortium lists 295 specimens from California. Although some of these are likely duplicates of the same collection in different herbaria, this is an impressive number of collections.

I did find another reference for *A. bolanderi* being in Nevada in the Bodie Hills of Mineral County (Messick, 1982). Here he says: "*A. bolanderi* Gray. Not among my collections, but to be expected here and reported from the west slope of Mt. Hicks, ca. 9100 ft., by D.W. Taylor (pers. comm.)." After reading this, Matt Lavin and I visited the area and did not find *A. bolanderi*. I contacted Dean Taylor and he did not recall making the report for Mt. Hicks. He also checked his field notebook and he did not collect *A. bolanderi* in the Bodie Hills. The Bodie Hills are two ranges removed from the Sierra Nevada and I believe this report can be discounted.

So, back to the original question: does Bolander's milkvetch occur in Nevada? I cannot rule out its existence in Nevada but I am also leery to include it on the basis of a single specimen collected 140 ago by a botanist whose label data is suspect. I cannot disprove its occurrence

in Nevada so we will just have to get out there and continue looking for it.

LITERATURE CITED

- Howell, J.T. 1945. Studies in Phacelia –IV. Leaflet. W. Bot. 5: 150-152.
- Jepson, W.L. 1925. Manual of the flowering plants of California. University of California Press, Berkeley, CA. 1238 pp.
- Kearney, T.H. & R.H. Peebles. 1942. Flowering plants and ferns of Arizona. U.S. Dept. Agric. Misc. Publ. 423. Government Printing Office. Washington, D.C.
- Messick, T. 1982. The flora and phytogeography of the Bodie Hills of Mono County, California and Mineral County, Nevada. Published by the author. 167 pp.
- Munz, P.A. & D.D. Keck. 1959. A California Flora. University of California Press, Berkeley, CA.
- Smith, G.L. 1973. A flora of the Tahoe Basin and neighboring areas. Wasmann J. Biol. 31: 1-231.
- Tidestrom, I.F. 1925. Flora of Utah and Nevada. Contr. U.S. Natl. Herb. 25: 1-665

by Arnold Tiehm

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