



NEWSLETTER

Vol. 37, No. 3

APRIL 2012

NORTHERN NEVADA HAPPENINGS

MEETINGS

NOTE MEETING ROOM FOR THE APRIL MEETING. We will meet in Room 104 of the Knutsen Resources Center at 1000 Valley Road. This is one building north of where we have been meeting. Enter from the courtyard on the south side of the building. Social time starts at 7:00 pm and the meeting commences at 7:30 pm. From I-80 take the Wells Avenue exit, go south on Wells and immediately turn right on 7th St. At the stop sign turn right on Valley Road. After the overpass over I-80 take the first entrance on the right into the parking lot. Bear left and proceed to the last building on the right. If you would like to join any of the speakers for dinner beforehand, meet at Carrow's Restaurant on the northwest corner of Wells Avenue and 6th St. at 5:30 pm.

APRIL 7th – **Arnold Tiehm and Jan Nachlinger**, GUBs*, will feature a program on interesting plants and habitats in southern Nevada from several trips taken early and late in the 2005 floriferous field season. *grunge unemployed botanists

MAY 3rd - **Carol and Howard Thomas**, past President and past Vice President of NNPS, respectively, will graciously host members at their home and garden in Verdi. They've emphasized native plants including *Penstemon* and *Eriogonum* species, cold hardy cacti, alpine rock garden species, and they also have a vegetable garden. Please email them at plantweaver@sbcglobal.net or call 775-345-0161 for directions. Be there at 6 pm with a potluck dish and beverages to share for a fun evening.

FIELD TRIPS

MAY 12th - Prison Hill on the eastern outskirts of Carson. Leader Janel Johnson.

MAY 19th - Mormon State Park Located in Genoa, NV. This will be a work day to help the staff of two get the grounds spruced up for the summer season. If you have extra plants or seed you wish to trade with other members, by all means bring them and we will conduct a plant swap. Leader Janel Johnson.

MAY 26th - Red Rock area located between Cold Springs and Hallelujah Junction on the Hwy 395 corridor. Leaders Nancy and Bill Harnack.

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JUNE 2nd - no trip planned as this is the date for the plant sale at the Wilbur D. May Arboretum in Reno.

JUNE 9th - Lake Basin area of Sierra County, CA. Leaders Nancy and Bill Harnack.

JUNE 19th - Pine Nut Mountains to help BLM's Carson District Botanist Dean Tonenna with rare plant surveys in the Pine Nut Mountains seeking *Ivesia pityocharis*.

JUNE 23rd - West end of Wilson Canyon at the north end of the Pine Grove Hills located in Lyon County to explore *Eriogonum alexanderae* habitat. Leader John Weiser.

JUNE 30th - Open at this time with a tentative plan to seek out *Leucocrinum montanum* around Washoe Lake, should the runoff recede enough to access their habitat.

JULY 14th - Paige Meadows located in the Tahoe Basin on the western shore. Leader Cheryl Beyer

JULY 28th & 29th open at this time. Several members are researching the possibility of a two day trip to the Sonora Pass.

AUGUST 4th - Osgood Swamp south of Lake Tahoe. Leader Tom Schuster.

AUGUST 11th - Meadows on Mount Rose accessed via the US Forest Service access road to Relay Peak. Leader Elizabeth Bergstrom.

RENO EARTH DAY, APRIL 22nd

We are going to have a booth at the Reno Earth Day this year. The new Wildflowers of Northern Nevada books should be printed by then and we will have the books, posters, and older Mentzelia volumes available for sale as well as some wildflower coloring pages and crafts for the kids. If you would like to volunteer at the booth, please contact Sarah Kulpa at 861-6340 or vicepresident@nvnp.org.

MORMON STATION WORK DAY AND PLANT SWAP, MAY 19th

Mormon Station State Park in Genoa in the site of the oldest permanent settlement in Nevada. While the park doesn't boast many native species it has several small flower gardens, historic structures, and picnic areas. The work day volunteers will be planting flowers, cleaning up beds, trimming plants, and enjoying the nice weather (we hope.) Snacks and beverages will be provided but bring your own lunch, along with closed-toe shoes, gloves, and sunscreen. Meet at Mormon Station at 9am. We will also have a plant swap at mid-day. Native plants are encouraged but all plants and seeds are welcome. Bring extra bags and pots to hold your new specimens. For questions, contact Janel Johnson at 684-2911 or president@nvnp.org.

SOUTHERN NEVADA HAPPENINGS MEETINGS

Meetings are on the first Monday of every month starting at 6:30 pm. They are held at the U.S. Geological Survey office at 160 N. Stephanie Street in Henderson. Contact Matt Hamilton (702) 468-2251 if you have any questions or would like to be added to the notification by email list, mojave0827@aol.com

APRIL 5th - Several of our members will be co-hosting and co-leading an Asteraceae identification workshop. The workshop will be oriented towards beginners and enthusiasts who want to dust off their skills and tools for the upcoming summer season. We will briefly review the important characteristics to observe in identifying Asteraceae and then work together in identifying a few specimens as a group and on our own. We will first work through the Jepson guide to familiarize ourselves with the terminology, but feel free to bring any keys with which you are most comfortable. Please bring any spring specimens that you may like assistance in identifying. Also, bring a loop and any identification books you prefer to use. We will bring several copies of Jepson, Intermountain Flora, and Utah Flora as well as other useful identification aides at our disposal. We will have plenty of plant materials if you come empty-handed.

MAY 7th - Cayenne Engel with the UNLV Applied Ecology Research Group will be presenting recent work her lab has performed. Her lab focuses on Mojave Desert ecology and restoration. Presentation title TBA.

SOUTHERN NEVADA PLANT SALES

The **Springs Preserve Spring Plant Sale** will be at the end of the month, March 31. It is from 8am to 2pm with a "members preview" from 7am to 8am. There will be about 5000 native and desert adapted plant species avail. There will also be herb and vegetable starts available which is new this year.

Exhibitors and local experts will be on hand to answer any questions visitors may have as well as guest lecturers who will present "mini" talks on horticulture related subjects. There will also be some arts and crafts for sale all from local vendors.

All should bring there own carts as there is a limited supply.

The **Nevada Division of Forestry State Tree Nursery** in Las Vegas is having a spring plant sale Saturday, April 7, 2012 from 9 a.m. to 3 p.m. More than 70 species of locally grown native and desert-adapted trees, shrubs and perennials will be on sale. One-gallon plants are \$3, five-gallon plants are \$7 and fifteen gallon plants are \$15. Details are available at:

<http://dcnr.nv.gov/2012/03/state-nursery-holds-spring-plant-sale-saturday-april-7-2012/>

MARCH 2012 RENO MEETING

A survey of BLM conservation projects in western Nevada and eastern California by Jan Nachlinger

Dean Tonenna is the botanist for the Carson City District of BLM and is one of only two botanists for the agency in Nevada. He gave us an update on the district's conservation projects which have been fortified by teams of interns that he has been able to recently recruit through an internship program at the Chicago Botanical Garden. Dean gave an overview of several activities involving many programs to help restore and rehabilitate past disturbances on public lands as well as to add to our knowledge of rare and special status plants.

The Native Plant Materials Development Program at BLM and the interagency Seeds of Success Program has the common goal to develop local native plant materials for restoration and rehabilitation projects. Interns at BLM have been collecting seed locally of geographically and genetically appropriate materials for areas in the western Great Basin and eastern Sierra Nevada. Seeds are processed and stored for future needs. Dean used the example of a collaborative project on the Truckee River spearheaded by The Nature Conservancy to redevelop sinuosity in the river channel. Seed collections and willow wattling were used along the new channel banks to jumpstart riparian vegetation regrowth and to help eliminate cover by noxious weeds—in particular, *Lepidium latifolium*, tall whitetop or perennial peppergrass.

There have been many recent fires in northern Nevada and local seeds were used directly as well as grown for plant material to rehabilitate some of these areas. In the Peterson Mountains north of Reno the BLM interns planted bitterbrush seedlings for fire rehabilitation efforts. Success of the plantings is being monitored over time.

Sand Mountain has been on Dean's radar for a long time because of its habitat importance for the rare and endemic Sand Mountain blue, *Euphilotes pallescens arenamontana*, which is dependent on its host plant *Eriogonum nummulare*, kearney buckwheat. He showed a GIS chronology of roads developed over time and the impact they have had on reducing vegetative cover. This compelling evidence helped close some sensitive areas to vehicles and direct recreation use to other areas. BLM interns planted kearney buckwheat plants in previously occupied areas that had been denuded and the plants are being monitored for survival and long term establishment success.

Rare plant inventories and monitoring are being conducted, for example, in the Pine Nut Mountains for *Ivesia pityocharis*, Pine Nut Mountains ivesia. Recent field innovations like handheld GPS devices allowed interns to document more precise delineations of populations and scattered occurrences of the plant which favors seasonally wet meadow margins.

After the program Dean submitted a list of ideas that he would welcome volunteer assistance with from members of NNPS either individually or as a group:

- Rare plant surveys in the Pine Nut Mountains
- Floristic surveys in Alpine County, CA: Rare plants and common plants for future seed collection
- Native Seed Collecting for rare and common plants (can be anywhere)
- Willow plug planting in burned areas (primarily in Washoe County and Smith Valley area)
- Meadow surveys in Sage Grouse habitat to document vegetation present (Pine Nut Mountains)
- Noxious weed surveys

Feel free to contact Dean Tonenna at BLM at 775-885-6000 or dtonenna@blm.gov if you are interested in helping.*

LARREA TRIDENTATA - CREOSOTE BUSH

by Arnold Tiehm

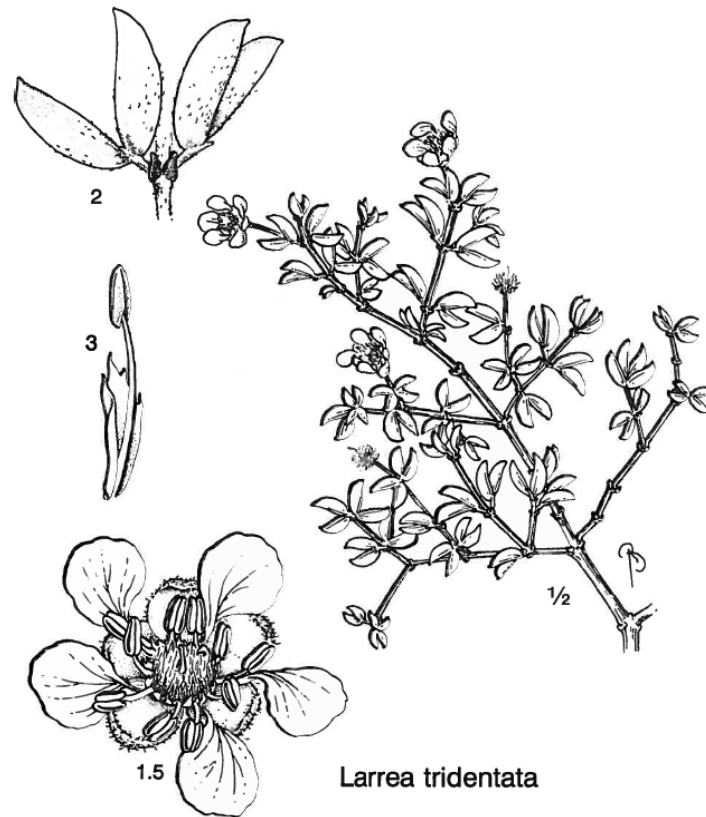
Larrea, or creosote bush, is a dominant shrub of the Mojave, Sonoran, and Chihuahuan Deserts and also occurs in the desert regions of South America. A recent article discussed the results of an investigation of North American creosote bush (Laport et al., 2012). Their conclusion is that *Larrea* is represented in South America by four species and in North America by one species, *L. tridentata* (Laport et al., 2012). Interestingly there is a variety of *L. tridentata*, var. *arenaria*, that is restricted to the Algodones Dunes of southeastern California. So the correct name for creosote bush in Nevada becomes *L. tridentata* var. *tridentata*.

The Mojave, Sonoran, and Chihuahuan Deserts cover parts of southern Nevada, southwestern Utah, southeastern California, western and southern Arizona, southern New Mexico, western Texas, and much of northwestern Mexico. Over its range through these deserts *L. tridentata* varies in chromosome numbers with plants being diploid, $2n = 26$, tetraploid, $2n = 52$, or hexaploid, $2n = 76$ (Laport et al., 2012). These ploidy levels are mostly geographically correlated. Diploids are found throughout the Chihuahuan Desert, hexaploids are found in the Sonoran Desert, and tetraploids are found in the Sonoran and Mojave Deserts. For the most part the boundary between diploids and hexaploids was well defined while hexaploids and tetraploids were broadly mixed. However, there is some overlap where the Chihuahuan and Sonoran Deserts adjoin. In the majority of cases plants in any local population had the same ploidy level (Laport et al., 2012). There is no indication that the authors believed the different ploidy levels should be accorded taxonomic rank.

I cut my botanical teeth using Munz & Keck (1959) and in that work creosote bush was named *L. divaricata*, meaning they believed the North American plant was the same as one of the South American species. Out of curiosity I checked other works and the only other one that used *L. divaricata* for the North American plant was McMinn (1939). Other names applied to the North American plant were *L. glutinosa* (Abrams, 1951); *L. tridentata* var. *glutinosa* (Jepson, 1936); and *Covillea tridentata* (Tidestrom, 1925).

We are perfectly familiar with the new California floras using the name *The Jepson Manual* with the second edition just arriving earlier this year. Jepson was a pioneering California botanist who wrote a number of books and articles on the California Flora (among many others Jepson, 1922, 1925, 1936). His flora was never completed and today seems to collect more dust than readers. I greatly admire Jepson's insights that are eloquently expressed in his flora (Jepson, 1922, 1936 and more). For instance, if you are bewildered by the variable forms of California poppies (*Eschscholzia*) you should read Jepson's account (Jepson, 1922). He also gave us insight into creosote bush, part of which is quoted below (Jepson, 1936): "To the traveler the distinctive odor of the herbage is its most striking character. To some it is aromatic, to others it is foul . . . Teamsters in the desert employ a hot water decoction of the herbage as a liniment for treating collar sores in draft horses. For use as a fuel, desert miners disfavor the entire top of the bush, the whole of which is cut away and the root-crowns then lifted with a crowbar. These compact root masses burn much like bituminous coal or pitchy pine blocks. The stems, on the other hand, which make a quick hot fire, are often the only available resources of the desert traveler, who soon finds that the green ones burn as well as dead ones".

The following illustration is from Intermountain Flora 3A: 325. 1997.



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SHARON SCHAFER AT THE AUDUBON SOCIETY MEETING IN RENO

Sharon Schafer, the artist who illustrated our Eastern Mojave Wildflowers poster, will be speaking at the Lahontan Audubon Society Meeting on May 22, 6:30 pm, at Moana Nursery on Moana Lane. See the Audubon website for more details, www.nevadaaudubon.org. She will be sharing photos of the Mojave Desert. We will have the wildflower posters available for sale and Sharon will be signing posters after her presentation.*

WILDFLOWER REPORTS NOW AVAILABLE ONLINE

The wildflower reports are now available on the NNPS website under the Field Trips tab. After logging in, members may create and edit wildflower reports, including up to four photos. Jim Morefield will be transferring the old wildflower reports from the Nevada Natural Heritage Program website later this year.*

WELCOME NEW MEMBERS

Boudeau, Melanie, Santa Ana, CA.
Kopp, Christopher, La Jolla, CA.
McBride, Ida, Spring Creek, NV.
Ross, Marsha, Sparks, NV.
Scarborough, Sheila, Las Vegas, NV.
Seip, Douglas, Las Vegas, NV.

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PO Box 8965
Reno NV 89507-8965

RETURN SERVICE REQUESTED



MEMBERSHIP APPLICATION

Name _____

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City _____ State _____ Zip _____

Email _____ Renewal

Newsletter preference: Paper Electronic

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 - Individual, family or group for three years ..\$40.00
 - Student or senior citizen, each year\$10.00
 - Life membership\$450.00
- Dues are for the calendar year in which you join.
Membership expiration dates are on the mailing labels.

Gifts, and bequests are tax deductible.

Your donation in any amount is appreciated \$ _____

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