



NEWSLETTER

of the

NATIVE PLANT SOCIETY
OF NEW MEXICO

APRIL, MAY, JUNE 2015

VOL. XXXX NO. 2

2015 Annual Conference *Flora of the High San Juans*



We hope to see you in this picture for the 2015 Annual Conference in the lush San Juan Mountains.

See full details on pages 9–14. Registration form on page 15.

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From the President

by *Barbara Fix*

Spring is here, at least in most of the region the Native Plant Society of New Mexico covers. Let's hope the snow on the mountains lasts long enough to nurture all of us, native plants especially. With climate "weirding," we'll all have to adapt, or . . .

The NPSNM Board of Directors, composed of the three officers and eight representatives, one from each chapter, all met at Sevilleta Wildlife Refuge this February for our winter board meeting. An innovation that is likely to become a tradition was a potluck party the evening before the Saturday meeting. The fun and camaraderie of that party inspired the careful thought and diligence with which the board treated the many issues to be dealt with.

Grants were awarded. Financial issues considered. The board approved a small increase of dues for 2016. While we have a growing endowment with the Carter fund, and good investments to back up our operations, we need to engage in fundraising to cover the costs of the efficient organization Deb Farson and Lindsey Kirchhevel have provided us with. Deb is to be especially commended for taking on the Quick-Books work and administering the grant program.



Rachel Jankowitz has continued to provide information and analysis of pending conservation issues. She would like to visit the chapters to consult on issues important to them. That is in accord with the need and desire for two-way communication between the chapters and the state organization. The NPSNM website is one means for that. On the home page are the listings for chapter talks and field trips. This is a great opportunity for gaining a deeper understanding of what we are striving to conserve. Conservation actions are also listed. And remember, purchases through Amazon on the NPSNM home page, with your Amazon password, will give us a small part of the price without increasing your costs.

The San Juan chapter will provide us with an extraordinary experience when they host the annual meeting this July. The board meeting will be July 16 and all are welcome to attend. Then, starting the next day, on the extensive field trips and the two lectures by eminent botanists, be prepared to wonder at the beauty and magnificence of the flora and ecosystems that have brought us together. ❖

2015 Donations and Grants Announced

by *Bettie Hines and Pam McBride, Albuquerque Chapter*

The NPSNM Board of Directors met at Sevilleta Wildlife Refuge on February 7, 2015, to consider donations to the herbaria of New Mexico and El Paso and grant proposals that were submitted in December 2014.

Herbaria—Five-hundred-dollar donations will continue to be given to the following herbaria: University of New Mexico, New Mexico State University, University of Texas at El Paso, and Western New Mexico University.

Grants—There were 15 requests for funding, but due to a limited budget, not all requests could be honored. The following is a list of those grants that were awarded:

1. Sandia Mountains Natural History Center, Vince Case: Purchase and Installation of Plants for Two Bird Blinds at the Sandia Mountains Natural History Center.
2. Regents of the University of New Mexico, Matthew Gautreaux: A Floristic Inventory of the Vascular Plants of the Ladder Ranch, New Mexico.
3. Bootheel Biology, John Moeny: Habitat Survey, Seed Collection, and Post-Fire Effects Monitoring of Mogollon Death Camas (*Anticlea mogollonensis*).

4. University of California, Berkeley, David Hembry: Pollination Biology and Systematics of Native *Phyllanthus* (Phyllanthaceae, including *Reverchonia*) in New Mexico.
5. Wetwater Environmental Services, Christian Lejeune: Blue Hole Cienega Nature Preserve Environmental Education Program.
6. UTEP Centennial Museum and Chihuahuan Desert Gardens, John White: Plant Labels for the UTEP Chihuahuan Desert Gardens.
7. William Norris: The Genus *Carex* in New Mexico: Nomenclature, Distribution, and Habitat.

The Santa Fe chapter graciously agreed to fund the following two grants:

1. Pajarito Environmental Education Center, Rebecca Oertel: Demonstration Plant Gardens for New Los Alamos Nature Center.
2. Robert Sivinski: *Thistles of New Mexico* Booklet. ❖

NPSNM DOLLARS AT WORK

2014 NPSNM Grant Report

by Jeff Rose, University of Wisconsin Department of Botany

My PhD dissertation research is on the evolutionary relationships and taxonomy of the genus *Polemonium* (Jacob's ladder, skypilot) in the phlox family (Polemoniaceae). To achieve the goals of my thesis I need DNA material that has been dried quickly to prevent any degradation. This requires freshly collected samples preserved in a desiccant such as silica gel. During 2014 I was lucky enough to be supported through a small NPSNM grant.

I utilized part of my award in August during a four-day collecting trip throughout New Mexico and nearby parts of Arizona and will use the rest during 2015 to process and analyze the material I collected. I had two major goals for my trip. My first goal was to collect from New Mexico populations of wide-ranging Rocky Mountain species. My second and more important goal was to collect representative populations of *Polemonium foliosissimum* (leafy Jacob's ladder), a species that is variable and well represented in New Mexico but has largely been ignored in previous studies.

My trip to New Mexico started from Colorado, where I had just finished up collecting. My first objective was to collect Rocky Mountain species at the southern end of their distribution in the Albuquerque–Santa Fe area, so I headed for Wheeler Peak, which is very accessible via the Taos ski resort. During a lovely early morning hike up the mountain,

with abundant *P. delicatum* in the spruce forest, I finally arrived at the summit to search for *P. viscosum* (skypilot), a species restricted to areas above timberline. Unfortunately all the plants were out of bloom this late in the season. To my surprise, however, the population here had glabrous leaves as opposed to being densely glandular-pubescent, something that (to my knowledge) has not yet been reported. This species is notoriously variable, but this population will definitely be something to keep an eye on as I collect and analyze my genetic data. On the way back down the mountain I encountered a stray dog named Allie, who had apparently hiked over a mile from the ski village. Luckily I was able to return her to her owner since she had a phone number on her collar.

From Taos I traveled southward to Sandia Crest, just outside of Albuquerque, to collect *P. brandegeei* and the first of the three varieties of leafy Jacob's ladder in New Mexico (var. *molle*). On the way I encountered a heavy rainstorm, which turned into hail as I ascended Sandia Crest. At the top I was able to find both *P. brandegeei*, growing on rocks with the narrowly endemic *Heuchera pulchella* (Saxifragaceae), as well as *P. foliosissimum* var. *molle* abundantly represented in the spruce woods at the summit. This population

Continued page 5



Heuchera pulchella, a species endemic to New Mexico



Polemonium foliosissimum var. *foliosissimum*

The Newsletter of the NPSNM

April–June 2015. Vol. 40 No. 2. This newsletter is published quarterly by the Native Plant Society of New Mexico (PO Box 35388, Albuquerque, NM 87176) and is free to members. The NPSNM, a nonprofit organization, is composed of professional and amateur botanists and others with an interest in the flora of New Mexico.

Original articles from the newsletter may be reprinted if attributed to the author and to this newsletter.

Views expressed are the opinions of the individual authors and not necessarily those of NPSNM.

Next deadline is June 1, 2015. Articles and high-resolution artwork supporting the NPSNM's mission are welcomed and can be sent to the editor, Sarah Johnson, at sarita@gilanet.com, or PO Box 53, Gila, NM 88038.

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**If you received this newsletter via email,
and would prefer a hard-copy, please notify
Deb Farson at nativeplantsNM@gmail.com.**

Mission The Native Plant Society of New Mexico (NPSNM) is a non-profit organization that strives to educate the public about native plants by promoting knowledge of plant identification, ecology, and uses; fostering plant conservation and the preservation of natural habitats; supporting botanical research; and encouraging the appropriate use of native plants to conserve water, land, and wildlife.

2014 Grant Report (continued from p. 3)

was important to add because the last person to study this species in detail had noted intergradation between var. *molle* and the more southern var. *foliosissimum* in this area of New Mexico. Interestingly, this population had white anthers. In contrast, the populations I had just seen days before in Utah and Colorado had yellow anthers. Anther color is usually a good character to use to help distinguish species in the phlox family, so this will be something else for me to keep an eye on as I analyze my data.

After traveling south to stay the night in Truth or Consequences, I traveled westward toward Silver City. In the desert along the way I was pleased to see a lot of ocotillo (*Fouquieria splendens*), a member of the Fouquieriaceae, the family most closely related to the phlox family.

On my trip to the Silver City area I collected from a population of *P. foliosissimum* var. *foliosissimum* along a streambed that had managed to escape damage from a recent forest fire. Moving further westward to collect more of this variety as well as var. *flavum*, I ran across localities that either had suitable habitat destroyed by invasive species or were currently closed off due to forest fires on Signal Peak. Given that this was the most accessible site for var. *flavum* in New Mexico, I improvised and decided to seek out this species in eastern Arizona near the New Mexico border. The next day I was able to find a very large population of var. *flavum* on top of Mt. Graham being pollinated by a very large number of honeybees. The day after that I drove the winding Coronado Trail to collect from yet another population of var. *foliosissimum* that looked quite different from the one I had encountered a few days before in New Mexico. This population appears assignable to what has been called *P. filicinum*.

After a busy semester of teaching I will finally be able to get around to processing my samples in the next few months. Earlier in December I was able to process some and it looks like my trip was a great success. I am looking forward to seeing how the anomalous populations I found in New Mexico are related to everything else I collected last summer and



Polemonium foliosissimum var. *flavum*

determine whether New Mexico has any endemic or near-endemic species of *Polemonium*. Thanks again to the Native Plant Society of New Mexico for expressing an interest in my research. ❖



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CONSERVATION CORNER

Issues Worth Watching

by Rachel Jankowitz, NPSNM Conservation Committee Chair

Santa Fe Cholla/ Volunteer Opportunity

In this issue we feature a rare plant called the Santa Fe cholla, *Cylindropuntia* (or *Opuntia*) *viridiflora*. This cactus is closely related to the common cane cholla (*C. imbricata*). Some botanists consider it a hybrid between cane cholla and Whipple's cholla (*C. whipplei*). Santa Fe cholla has a different size and shape from cane cholla (it is smaller and bushier). Contrary to its name, which implies green flowers, its blooms are a lovely orangeish shade, not bright pink like cane cholla's or yellow like Whipple's.



Santa Fe Cholla.

Photo: Bob Sivinski

Santa Fe cholla occurs only in the city of Santa Fe and scattered locations of Santa Fe County in the area of Pojoaque-Española-Chimayo. Its habitat is in the piñon-juniper vegetation type from 5,800–7,200 feet elevation. Residents and visitors to Santa Fe can see this plant in the Dry Garden at the Botanical Garden on Museum Hill. The Santa Fe cholla is a New Mexico State Endangered species because of its limited distribution in an area of human activity and urban development. In 2002 this lovely plant caught the attention of two area residents, John (Obie) Oberhausen and Joe Newman. Obie and Joe founded the Cactus Rescue Project, whose mission is to conduct outreach and education and to develop rooted cuttings and distribute them for people to plant.

In partnership with the NPSNM, the Cactus Rescue Project, and the Santa Fe Botanical Garden, the New Mexico Forestry Division will help plant this rare cactus and establish a permanent conservation site; **they are seeking volunteers for April 25, 2015**. The Forestry Division is providing a site within the city limits of Santa Fe. The Cactus Rescue Project is providing cuttings and small rooted plants. Prior to planting, Daniela Roth, Endangered Plant Program Coordinator for the NM Forestry Division, will give a short presentation on the status of this endangered plant and the status of endangered plants in New Mexico. To sign up for this fun and worthwhile project, and for directions and more details, please contact Daniela Roth (daniela.roth@state.nm.us, 505/476-3347).

Saddleback Piñon Pipeline

NPSNM recently submitted National Environmental Policy Act scoping comments to the BLM Farmington Field Office about the proposed Piñon Pipeline project near Lybrook. The Piñon pipeline would construct approximately 130 miles of pipelines to gather produced crude oil from the Lybrook area and transport it to a point along the Burlington Northern Santa Fe rail line in McKinley County, near the city of Milan, where the product can ultimately be transported to market. The pipeline route would cross portions of San Juan, Rio Arriba, Sandoval, and McKinley Counties. It is intended to accommodate an increase of oil production in the Lybrook area, replacing the current system of transporting the produced crude oil by tanker truck. One problem with the project is that the BLM Farmington Field Office may be putting the cart before the horse, as they have not yet completed the Resource Management Plan Amendment, which will incorporate planning for the increased drilling and production.

NPSNM submitted a letter during the public comment period. Here is an excerpt that includes the main points.

The Piñon Pipeline has potential to adversely affect two special-status species of native plants. The Brack hardwall cactus (*Sclerocactus cloverae* ssp. *brackii*) flowers in May. Its habitat is sandy clay strata of the Nacimiento Formation in sparse shadscale scrub, at 1,500–1,950 m (5,000–6,400 ft) elevation. The status of Brack hardwall cactus is NM State Endangered, BLM Sensitive, and Navajo Gp4 (insufficient information but may warrant listing). The proposed pipeline route appears to run directly through the very limited range of this species. The other special-status species with potential to occur on the project site is Aztec gilia (*Aliciella formosa*), which flowers in April and May. Its habitat is salt desert scrub communities in soils of the Nacimiento Formation, at 1,500–1,950 m (5,000–6,400 ft). The status of Aztec gilia is also NM State Endangered, BLM Sensitive, and Navajo Gp4. These two species often co-occur.

The precise distribution of rare plants in NM is poorly understood. Prior to deciding on a pipeline alignment, please conduct thorough surveys for both special-status species during the appropriate time of year. Surveys should cover the 75' right-of-way, any staging areas, and a sufficient surrounding affected buffer area. A buffer

around the directly affected footprint is necessary because native plants (and other ecological resources) can be affected by related factors such as dust, dust-control practices, compaction, competition from weeds, altered drainage, and habitat fragmentation. *Based on field survey results, it may be appropriate to consider an additional Alternative route which better avoids disturbance of these plants.* Please do not allow transplantation as a mitigating practice. Monitoring results from experimental transplants of Bracks hardwall cactus are not yet conclusive in demonstrating transplantation success. Unless and until success is conclusively demonstrated, the procedure should be considered an experiment-in-progress and not accepted as impact mitigation. The Aztec gilia transplants poorly and is difficult to grow from seed. The Environmental Assessment should also include an analysis of the potential effects of fragmentation on these restricted populations.

Linear corridors of disturbance provide the opportunity for the spread of noxious weeds. In northwest NM, field observations have confirmed the spread of weeds, especially halogeton, along pipeline rights-of-way. Im-

compact minimization includes conducting pre-construction weed surveys, control of existing weed infestations that might be spread by the project (pre-emergence 2,4-D, along with physical control, can work for halogeton), a post-construction monitoring program, and post-construction establishment of a healthy native plant cover.

Pipeline rights-of-way should stipulate strong revegetation standards, using native seed at a rate of approximately 40 PLS/sf. Blue grama, galleta, Indian ricegrass, Western wheatgrass, and a dropseed are examples of species that may be appropriate for the project area, but the mix should be based on the surrounding native plant community. Reclamation should include a requirement to use mulch and/or a soil-moisture amendment such as Biosol, decompaction as needed prior to seeding, and timing of seeding to maximize potential for precipitation. Most important, continue revegetation efforts until predetermined quantitative success criteria are achieved.

In addition to native plant resources, the Lybrook area is distinguished for outstanding cultural and scenic values. Potentially impacted cultural resources include Chaco Culture National Historical Park and a whole network of significant sites in the Greater Chaco landscape. Chaco CNHP, a United Nations World Heritage Site, is also internationally recognized as a Dark Sky Park, which status could be threatened by nighttime drilling, gas flaring, and increased air pollution associated with energy development.

Valles Caldera National Preserve

In December, President Obama signed into law a bill transferring management of the VCNP to the National Park Service as of the end of federal fiscal year 2015, next October. The bill was sponsored by NM senators Tom Udall and Martin Heinrich and supported by northern NM congressional representative Ben Ray Lujan and opposed by southern NM congressman Steve Pearce. The Valles Caldera Trust, the current manager of the property, has said they are committed to a smooth transition period. It remains to be seen how the NPS will conduct planning for the VCNP and what bearing this might have on the existing transportation planning effort we reported in a recent newsletter. ❖

The unique rock formations of the Lybrook area present fantastic, colorful badlands scenery for those willing to venture off the beaten path. Photo: Rachel Jankowitz



Meet NPSNM's Board of Directors



On the left side of the banner, left to right: Keller Suberkropp, Bob Powell, Jan Martenson, Linda Barker. On the right of the banner, left to right: Barbara Fix, Joan Woodward, Carol Johnson, John White. Seated, left to right: Pam McBride, Bettie Hines, Kathy Barton.

The Madrones of New Mexico

by Craig Campbell, Santa Fe Chapter

Madrones! Why do I think they are the most beautiful trees in North America? Very simple—what other trees are broadleaf evergreens that feature exfoliating bark in several colors, white spring flowers, and spectacular red berries in fall? In addition to all those features, the trees often take sculptural forms and are sometimes called “Lady’s Leg.” They go through an annual cycle of creating a layer of reddish bark that peels off in layers, exposing a cream color below the red, a spectacular two-tone that lasts until the entire trunk reveals a smooth light color that lasts through the winter. The clusters of white lantern-shaped flowers in spring are followed in fall by spectacular clusters of red berries.

There are about 14 species of *Arbutus*, which are primarily found in the Mediterranean, in southwestern Asia, and in Mexico. There are three species native to the U.S., of which two are indigenous to New Mexico. Madrones are notoriously difficult to propagate and grow; they are very slow growers and do not like to be disturbed



Arbutus xalapensis, Texas madrone.

Photo: Craig Campbell

even when very young. For that reason, New Mexico’s natives are virtually impossible to find in the nursery trade.

Arizona madrone (*A. arizonica*) occurs only in the far southwest corner of New Mexico in the Animas and Pelon-

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Native Plant Society of New Mexico
2015 Annual Conference
Flora of the High San Juans

JULY 16–19, DURANGO

Whether you are old, wise, and leaning on a cane or young, learning, and in new hiking boots; whether you are an avid botanist or budding wildflower lover; whether you like minute details or the broad sweep of things, we have field trips for you in the lush San Juan Mountains surrounding Durango.

Some trips have little or no walking and some have miles of walking; some trips are all day and some are half day. Some trips are about botanical education; some are about tasting wild plants; some are about keying out plants; all are about bringing you to the beauty of San Juan flora.

Examine the overview to the right, read the brief trip descriptions in the pages that follow, and find trips that suit your physical ability and flora interests. Be sure to take at least one alpine trip. **For detailed trip descriptions and detailed Conference information, see the NPSNM website or [click here](#).** Registration fee is \$50.

After your Friday and Saturday field trips, come to Fort Lewis College to marvel at the beauty of botanical illustrations and then be energized by our speakers: John Kartesz, with his unmatched enthusiasm and excitement for his 40-year project cataloging all U.S. and Canada plants; and David Inouye, with his review of 40 years of innovative and revealing research at Rocky Mountain Biological Lab, the world's premiere high-altitude research station.

The semi-annual board meeting, open to all members, will begin at 1 p.m., Thursday, July 16, [Ft. Lewis College, Noble Hall, Room 110](#).

If you have questions about the Annual Conference, call Al Schneider at 970/882-4647.

See you in Durango.

OVERVIEW NOTES

*If you sign up for one of these trips and you own an SUV or truck, please drive it to Durango. Ride sharing will be arranged for those not having an SUV or truck. Regular cars are fine on trips without an asterisk.

Trips with the same number are identical and are offered on several days.

	Duration of Trip	Meeting time a.m.	Miles of walking
FRIDAY TRIPS			
1 *Alpine Placer Gulch	All day	6:30	1
2 *Alpine Sharkstooth	All day	7:00	4
3 *Alpine Colorado Trail	All day	7:30	0+
4 *Alpine U.S. Basin	All day	7:30	1
5 Alpine Pass Creek	All day	7:30	4
6 Lizard Head Meadow	All day	7:00	1+
7 La Plata Ethnobotany	All day	8:00	0+
8 Southwest Seeds	All day	8:00	0
9 Chattanooga Iron Fen	All day	8:00	½–2
10 Old Growth Forests	All day	8:30	2½
11 Edible Plants	Morning	8:00	½–1
12 Mesa Verde	Morn/All	8:00	0
13 Durango Gardens	Morning	8:30	0
SATURDAY TRIPS			
1 *Alpine Placer Gulch	All day	6:30	1
2 *Alpine Sharkstooth	All day	7:00	4
3 *Alpine Colorado Trail	All day	7:30	0+
4 *Alpine U.S. Basin	All day	7:30	1
5 Alpine Pass Creek	All day	7:30	4
7 La Plata Ethnobotany	All day	8:00	0+
14 Alpine Ice Lakes	All day	6:30	5
15 San Juan Skyway	All day	7:00	0
16 Life Zones	All day	7:30	1
17 Colorado Trail Flora	All day	7:30	2
18 Wildflower Photography	Morning	8:00	0
19 Lime Creek Wildflowers	Morning	8:00	1+
20 Edible Plants	Afternoon	Noon	½–1
SUNDAY TRIPS			
1 *Alpine Placer Gulch	All day	6:30	1
2 *Alpine Sharkstooth	All day	7:00	4
3 *Alpine Colorado Trail	All day	7:30	0+
5 Alpine Pass Creek	All day	7:30	4
7 La Plata Ethnobotany	All day	8:00	0+
21 Andrews Wetlands/Fens	Morn/All	7:30	1
22 Native Plants Bears Eat	Morning	8:00	1
23 Plant Illustration	Morning	8:00	0
24 Lichens and Mosses	Morning	8:00	1
25 Nature Education	Morning	8:00	0
26 How to Make a Park	Morning	8:00	1
27 Anasazi Ethnobotany	Morning	8:00	1+
28 Trees of Durango	Morning	8:30	1

Durango 2015

If thirty-nine field trips aren't enough to get you to the 2015 Conference, how about if we throw in a great town? Come to Durango to enjoy dozens of excellent restaurants, stunning mountain views at every glance, friendly folks, a walking/biking path from one end of town to the other along the Animas River, great night life, a gaggle of shops, lovely weather, and an 1800s steam engine railroad running right through downtown to 14,000-foot mountains. Plan to stay a few extra days. Durango Tourism: www.durango.org or call 800/463-8725. **Best lodging deal:** \$58 campus apartment for two. Call Gregg: 970/247-7372.

Guest Speakers Friday and Saturday Evenings, 7:30 p.m. in [Noble Hall, Room 130, Fort Lewis College](#)

FRIDAY **John Kartesz** began cataloging and describing North American vascular flora early in his career. In 1980 he completed the *Synonymized Checklist of the U. S., Canada, and Greenland*, followed in 1991 by a widely used update. In 1999, he published the *Synthesis of the North American Flora*, the first attempt to provide a state-level atlas and accompanying morphological database for all North American vascular plants. In 2010, John published *North American Plant Atlas*, showing county-level distributions for vascular flora. See www.bonap.org. John has authored numerous books, scores of scientific articles, and has earned awards for his scientific contributions.

SATURDAY Professor **David Inouye** has been at the Rocky Mountain Biological Laboratory since 1971. His work there has included studies of hummingbirds, bumble bees, pollinating flies, ant-plant interactions, plant demography, and flowering phenology. His 1973-initiated study of the phenology and abundance of flowering by 120 species of wildflowers provides one of the longest records of how flowering is responding to climate change and how those changes are affecting interacting species such as pollinators. David is on the advisory board for the USA National Phenology Network and is president of the Ecological Society of America. See www.rmbi.org.

Friday 6:00 p.m.–7:30 p.m. View a display of rare-plant [botanical illustrations](#) at Ft. Lewis College, Center of Southwest Studies. Fabulous free exhibit open just for our conference. Discuss illustrations with the artists.

Saturday 6:30–7:30 p.m. Botanical illustrations exhibited in Noble Hall Room 130 before David Inouye speaks.

BRIEF FIELD TRIP DESCRIPTIONS

In the descriptions below, an *asterisk indicates that the trip has several miles of rough road right before the trailheads, so if you plan to go on that trip and you have an SUV or truck, please drive it to Durango. Ride sharing will be arranged for those not having an SUV/truck. Regular cars are fine for all trips not marked with an asterisk.

"Meet at" gives the time for you to meet in Durango for carpooling to your field trip. "Miles to trailhead" refers to the one-way distance from the Durango meeting area to the trailhead.

Friday Field Trips

*1 [Placer Gulch Alpine Flora](#), led by John Bregar. Miles walked during trip: 1. Trip starts at 12,750'. Elevation gain: ~200'. Meet at 6:30 a.m. Miles to trailhead: 65. All-day trip.

This trip is for folks of all physical abilities and all levels of botanical interests. We will drive right to a number of alpine habitats, so we will minimize walking and maximize our time with the plants. Our pace will be leisurely, and we are not likely to wander much more than a couple hundred yards from the vehicles at each stop. Expect to encounter over 125 species of alpine plants. Amazing!

John is a retired geologist who has been leading wildflower, birding, and mountain-climbing trips for many years. He is the treasurer of the San Juan Chapter.

- *2 **Sharkstooth Trail**, led by Betty Schneider. Miles walked roundtrip: 4. Trip starts at 11,000'. Elevation gain: 1,000'. Meet at 7:00 a.m. Miles to trailhead: 44. All-day trip.
If you can hike at higher elevations, you will enjoy this trip on a lovely trail. Our pace will be moderate on the way up the switch-back trail where we'll see a large variety of subalpine flora in the Engelmann Spruce forest and along the many rivulets that we cross. At our highest elevations, we'll find numerous alpine species and have great views of the San Juans. We'll return at a very leisurely pace so we can examine wildflowers in detail.
Betty loves to meander through the wildflowers and find unusual plants. She is a former special ed teacher and paramedic fire fighter. Beading is her passion.
- *3 **Alpine Flowers of the Colorado Trail**, led by Al Schneider. Miles walked: 0+. Trip starts at 11,650'. Elevation gain: 0'. Meet at 7:30 a.m. Miles to trailhead: 26. All-day trip.
No matter what your physical condition is, you will be fit for this trip. We'll drive right to alpine wildflower meadows that have a number of different habitats which we will leisurely explore with time for photographing, keying plants, asking questions, and sitting still in the silence.
Al is the author of swcoloradowildflowers.com and the app "Colorado Rocky Mountain Wildflowers." He is San Juan Chapter president and leads many wildflower trips each summer.
- *4 **U.S. Basin Wildflowers**, led by Bob Powell. Miles walked roundtrip: 1. Trip starts at 12,150'. Elevation gain: 60'. Meet at 7:30 a.m. Miles to trailhead: 60. All-day trip.
U.S. Basin has some of the most colorful flower fields in the San Juans. We'll explore these in both alpine and subalpine habitats with a few short walks, an easy off-trail, half-mile walk downhill through spectacular flower fields, and a visit to a mossy seep with Bog Orchids. There will always be time for flower and scenery photography.
Bob, DPhil, University of Cambridge, worked on thermometry standards and cryogenics at the National Bureau of Standards. Bob is on the Board of Directors of NPSNM and CoNPS. At 87, Bob is our senior trip leader.
- 5 **Pass Creek Wildflowers**, led by Travis Ward. Miles walked roundtrip: 4. Trip starts at 10,700'. Elevation gain: 1,000'. Meet at 7:30 a.m. Miles to trailhead: 34. All-day trip.
Pass Creek Trail is the best wildflower trail in the area. Without dawdling, but with a number of short wildflower and breath breaks, we'll walk 2 miles to alpine meadows where we'll explore a bit. We'll return on the same trail we came up on but now our pace will drop off to a snail's crawl as we examine numerous wildflowers. Botanical terminology will be non-technical and common plant names will be used.
Travis is a former Durango High School science teacher and is an outdoor enthusiast.
- 6 **Lizard Head Meadows**, led by Connie Colter. Miles walked roundtrip: 1+. Trip starts at 10,300'. Elevation gain 100'. Meet at 7:00 a.m. Miles to trailhead: 96. All-day trip.
A beautiful drive in the Dolores River Canyon will take you to Lizard Head subalpine meadows which offer stunning views and numerous wildflower and grass species. We will study many plants as we meander along a gentle trail crossing small rivulets to a cool spruce/fir forest and new streamside and shade habitats. We'll identify scores of species during the day, but we'll also take time to rest and enjoy the special beauty of this area.
Connie owns Canyon Flower Farm, leads wildflower walks in the Telluride region, is a certified Native Plant Master trainer, and volunteers to teach native plant education courses.
- 7 **La Plata Canyon Montane Ethnobotany**, led by Arnold Clifford, Ken Heil, and Don Hyder. Miles walked: 0+. Trip starts at 8,725'. Elevation gain 100'. Meet at 8:00 a.m. Miles to trailhead: 15. All-day trip.
We will drive up the very scenic La Plata Canyon, making a number of stops to explore a variety of roadside montane communities: Ponderosa, Douglas-fir, talus-cliff-side, riparian, open meadows, etc., with informative ethnobotany and geology talks by Arnold.
Arnold is a Navajo Nation botanist and contributing author to [Flora of the Four Corners Region](#) (of which Ken is the lead author). Ken is curator of the San Juan College Herbarium. Don is San Juan College professor of biology.
- 8 **The World of Native Seeds**, led by Walter and Robby Henes. Miles walked: 0. Trip starts at 6,200'. Elevation gain: 0'. Meet at 8:00 a.m. Miles to Southwest Seed Company in Cortez: 45. All-day trip.
Where do native seeds for gardens and reclamation come from? See the seed-cleaning process, check out how custom mixes are made, and visit production fields. We will discuss the native seed industry, you will learn how seed is evaluated for quality, and you will find out how to get native grasses and wildflowers established.
Walt Henes started [SWS](#) in 1978 at the beginning of the Conservation Reserve Program. Today his children, Walter and Robby, continue the business.

- 9 Ecology and Restoration of Iron Fens**, led by Mountain Studies Institute (MSI). Miles walked: ½-2. Trip starts at 10,200'. Elevation gain: 100'. Meet at 8:00 a.m. Miles to trailhead: 60. All-day trip.
Join MSI for a botanical tour of the Chattanooga high-elevation rare iron fen that MSI is restoring. We will discuss and observe flora, hydrology, ecology, and restoration challenges. Come prepared to get dirty transplanting sedges.
MSI was established in 2002 with the mission of enhancing understanding and promoting sustainable use of the San Juan Mountains through science and education.
- 10 Old Growth Forests**, led by Laurie Swisher. Miles walked roundtrip: 2½. Trip starts at 7,800'. Elevation gain: 200'. Meet at 8:30. Miles to trailhead: 16. All-day trip.
The "[Hermosa Roadless Area](#)" contains magnificent Ponderosa and mixed-conifer old-growth stands. On this easy walk we will explore some of these stands and learn about general forest and fire ecology, the meaning and importance of old growth, and, of course, we will see spectacular trees including the national champion Colorado Blue Spruce.
Laurie has a BS in forest management from the University of California, Berkeley, has been with the Forest Service for 30 years, and is San Juan Forest's old-growth specialist.
- 11 Wild Edibles**, led by Katrina Blair. Miles walked roundtrip: ½-1. Trip starts at 7,000'. Elevation gain: 100'. Meet at 8:00 a.m. Miles to trailhead: 5. Half-day trip.
Along the Colorado Trail we will encounter a bounty of wild edible and medicinal plants and we will learn a host of benefits and uses from these plants. Following our walk, participants will have the option of eating wild foods at [Turtle Lake Refuge Café](#).
Katrina has a BA in biology from Colorado College and a M.A. in Holistic Health Education from JFK University. She founded the non-profit Turtle Lake Refuge and is the author of several books on wild edibles.
- 12 Mesa Verde Research Center**, led by Tara Travis, Lauren Hauptman, and Marybeth Garmoe. Miles walked: 0. Trip starts at 7,000'. Elevation gain: 0'. Meet at 8:00 a.m. Miles to Park: 38. Half-day trip with option for all day.
Tour the new [Visitor Center](#) learning about the green technology that merited LEED Platinum certification, discuss native plantings, see the herbarium and special Mesa Verde collections, and view Ancestral Puebloan artifacts. Participants may then elect to drive as regular Park visitors to see the ancient dwellings.
Tara is the Mesa Verde Museum curator, Lauren is museum technician, and Marybeth oversees various plant projects.
- 13 Durango Gardens**, led by Marsha Schuetz and Linda Robinson. Miles walked: 0+. Trip starts at 6,200'. Elevation gain: 0'. Meet at 8:30 a.m. Trip is in Durango. Half-day trip.
Start the day at a perennial garden planted and maintained by the Garden Club of Durango (GCD), look at the new Animas River Smelter Rapids development, and finish the morning with a look at native plant gardens at several Durango homes. The focus will be on how to start such gardens, problems faced and surmounted, choosing the right kinds of plants, maintenance, funding, volunteer efforts, etc.
Marsha has been involved with the GCD for many years. Linda has her own landscaping business.

Saturday Field Trips

Trips 1, 2, 3, 4, 5, & 7 on Saturday are the same as trips 1, 2, 3, 4, 5, & 7 on Friday. See Friday for descriptions.

- 14 Alpine Ice Lakes**, led by Julia Hanson. Miles walked roundtrip: 5. Trip starts at 9,840'. Elevation gain: 1,670'. Meet at 6:30 a.m. Miles to trailhead: 54. All-day trip.
This most strenuous 2015 Conference trip offers plant lovers the greatest diversity of plants, those found in mixed conifer forests, alpine meadows, and riparian habitats. The trail climbs rapidly, the views are spectacular, and the flowers are magnificent. At Lower Ice Lake we'll take in the sights, study plants, enjoy lunch, and wander. The descent will be at a very slow pace so we can identify even more plants.
Julia has lived in and explored the San Juans for over 20 years. She works as a botanist for a Durango consulting company.
- 15 San Juan Skyway**, led by Mike Price. 240-mile loop by mini-van. Meet at 7 a.m. Miles walked: 0. All-day trip. 5 participants. \$35 fee.
[The San Juan Skyway](#) is one of the most spectacular mountain car tours in the world. Spanning elevations from 6,200' to 11,008', it traverses many vegetative and climate zones. We'll stop often for flowers, brief discussions of two billion years of geologic history, leg stretching, and amazing scenery. From Victorian mining towns to 14,000' mountains, this is a wow trip.
Mike worked as an exploration geologist with Mobil Oil in Denver, Egypt, and the Netherlands. Mike and his wife, Mona, retired to southwest Colorado.

- 16 Life Zones**, led by Will Rietveld. Miles walked during day: 1. Trip starts at 6,000'. Elevation gain: 200'. Meet at 7:30 a.m. Miles of driving round trip: 75. All-day trip.
We will car caravan and make a series of stops to visit a succession of vegetation types. We will identify the influencing factors, the species that characterize the vegetation type, and the associated species with an emphasis on woody plants and wildflowers. The pace will be relaxed, with time to ask questions and roam around.
Will is a retired USFS ecological plant physiologist. He has been an avid backpacker for 56 years, is an outdoor writer, and with his wife, Janet, is the author of the website Southwest Ultralight Backpacking.
- 17 Colorado Trail Flora**, led by Amanda Kuenzi. Miles walked round trip: 2. Trip starts at 10,900'. Elevation gain: 600'. Meet at 7:30 a.m. Miles to trailhead: 45. All-day trip.
At the Molas Pass overlook we'll have sweeping vistas of the Weminuche Wilderness and the 1879 Lime Creek Burn. We'll also search here for rare Moonworts. At a comfortable pace we'll then ascend gentle switchbacks through subalpine conifers to scenic, open meadows with numerous wildflower species. If time permits we'll visit a wetlands.
Since 2000, Amanda has been learning about Southwest botany from her work at Bandelier National Monument, Grand Canyon National Park, and her job as a Durango environmental consultant.
- 18 Wildflower Photography**, led by Priscilla Sherman. Miles walked: 0. Trip starts at 8,140'. Elevation gain: 0'. Meet at 8:00 a.m. Miles to trailhead: 17. Half-day trip.
We'll explore principles and techniques of flower photography for complex and simple cameras. Visual literacy will be our focus, as we learn best flower selection and the importance of composition and habitat. The effects of light, depth of field, wind, and flower color will be discussed, demonstrated, and practiced.
Priscilla is developing an online [photographic environmental education gallery](#). Her images have appeared in various Colorado publications.
- 19 Lime Creek Wildflowers**, led by Julie Korb. Miles walked roundtrip: 1+. Trip starts at 9,900'. Elevation gain: 200'. Meet at 8:00 a.m. Miles to trailhead: 40. Half-day trip.
West Lime Creek Trail is a beautiful, easy trail to hike and see wildflowers that are common to the subalpine zone. We'll walk to a small waterfall through old-growth Engelmann Spruce and Subalpine Fir plant communities, we'll talk about fire ecology, and we'll use tree corers on a few trees.
Julie is a professor of biology at Fort Lewis College. Her research interests include plant community dynamics, forest restoration, fire ecology, and plant-pollinator interactions.
- 20 Wild Edibles**, led by Katrina Blair. Miles walked roundtrip: ½–1. Trip starts at 8,800'. Elevation gain 200'. Meet at Farmers Market (8th & Camino del Rio), Turtle Lake booth by noon. Miles to trailhead: 15. Half-day trip.
We'll start by tasting wild goodies at the Farmers Market, and then we'll drive to La Plata Canyon where we'll meet a variety of edible and medicinal plants along the La Plata River. Sauntering up the Madden Creek Trail at a plant-identification pace, we'll discover and taste a variety of new plants. See trip #11 for Katrina's biography.

Sunday Field Trips

Trips 1, 2, 3, 5 & 7 on Sunday are the same as trips 1, 2, 3, 5 & 7 on Friday. See Friday for the descriptions.

- 21 Andrews Wetlands and Fens**, led by Jim Wakeley & Bob Powell. Miles walked roundtrip: 1. Trip starts at 10,744'. Elevation gain: 60'. Meet at 7:30 a.m. Miles to trailhead: 39. Half-day or all-day trip.
We will examine soil characteristics and plant communities in a ponded fen, fen with subsurface water, dry former fen, rivulet, and meadow. Flora will change from sedges and grasses to wildflowers and shrubs. Cotton-grass, orchids, and pond Tiger Salamanders are especially interesting.
Jim is a retired research wildlife biologist and wetland specialist for the U.S. Army Corps of Engineers. He earned a PhD in wildlife ecology from Utah State University. See trip #4 for Bob's biography.
- 22 Native Plants That Bears Eat**, led by Bryan Peterson. Miles walked: 1. Trip starts at 6,850'. Elevation gain: 200'. Meet at 8:00 a.m. Miles to trailhead: 7. Half-day trip.
Attendees of this easy walk in bear country will get to see bear tracks and scat and some of the plants (Meadow Rue, Sweet Cicely, Waterleaf) that make up 90% of a Black Bear's diet. You will leave the morning walk with a better understanding of Black Bears' food needs, their life in the wild, and the dynamics of their interactions with people.
Bryan is the executive director of [Bear Smart Durango](#), a local non-profit working to reduce human/bear conflict.

- 23 Plant Illustration**, led by April Baisan. Miles walked: 0. Trip starts at: 6,500'. Elevation gain: 0'. Meet at: 8:00 a.m. Miles to trailhead: 0. Half-day trip.
In an indoor setting, we will note plant shapes, sizes, colors, and textures. Working with basic drawing techniques, such as gesture drawing, we will produce sketches in pencil or other media of personal choice. Bring sketchpad and HB2 pencils, pencil sharpener, eraser, and other media as desired.
April has taught science and art to all ages, manages her Four Corners Wildflower Notecards business, and also works as a field botanist.
- 24 Lichens & Mosses**, led by Michael Remke. Miles walked roundtrip: 1. Trip starts at 10,640'. Elevation gain: 80'. Meet at 8:00 am. Miles to trailhead: 35. Half-day trip.
This trip will cover a very short distance and a wealth of biological diversity. Take a slow look at subalpine lichens and mosses. Learn to recognize major vegetative and reproductive structures in both of these microflora. Take an ecosystem perspective and discuss the role of microflora in nutrient cycling and plant growth. Look at vascular plants too.
Michael is a Fort Lewis College graduate studying plant-soil organism interactions for his PhD at Northern Arizona University. Michael has a background in plant ecology and has a strong passion for the mountains.
- 25 Creating a Community Non-Profit Nature Center**, led by Sally Shuffield. Miles walked: 0. Trip starts at 6,040'. Elevation gain: 0'. Meet at 8:00 a.m. Miles to trailhead: 11. Half-day trip.
Come to [Durango Nature Studies](#) (an environmental education non-profit with a 140-acre Nature Center) to learn about what it takes to build, run, and support a successful nature center. Learn how to tie a center to school curriculum. We will focus on building a community non-profit nature center that has a niche and is sustainable and supported by the community.
Sally has 16 years' experience in successful non-profit management. She has been the executive director of Durango Nature Studies for 9 years.
- 26 How to Make a Park**, led by Donna Thatcher. Miles walked: 1. Trip starts at 5,400'. Meet at 8:00 a.m. Miles to trailhead: 51. Half-day trip.
At Farmington River Parks, which extends several miles along the San Juan and Animas Rivers, you will learn how to establish a park in your community. You will get details about acquiring private funding, partnering public and private interests, volunteer work, land acquisition, xeric and deer-tolerant landscaping, signage, and adult and child nature education.
Donna has degrees in biology and anthropology from the University of Arizona. She is the coordinator and education specialist of the [Riverside Nature Center](#) and specializes in ethnobotany. She is a lifelong birder.
- 27 Ethnobotany of Aztec Ruins**, led by Dana Hawkins. Miles walked: 1+. Trip starts at 5,600'. Elevation gain: 75'. Meet at 8:00 a.m. Miles to trailhead: 36. Half-day trip.
We will begin along the Native Plant Trail with plants significant to the Ancestral Puebloans and then walk to the Animas River for riparian species. Then on to native plants ranging from those in a Piñon-Juniper shrub- and grassland to the mesa top with herbaceous vegetation on a river cobble terrace.
Dana is the lead for the Native Plant Trail, Heritage Garden, and Natural Resources at [Aztec Ruins National Monument](#). She gives several programs a year on cultural ecology and ethnobotany.
- 28 Durango's Urban Forest**, led by David Temple. Miles walked: 1. Trip starts at 6,500'. Elevation gain: 50'. Meet at 8:30 a.m. Half-day trip.
Come take short strolls through sections of two Durango city parks, a city boulevard, and the college. We'll enjoy tree identification and discussions about urban forestry, tree management practices, and the history of Durango tree plantings. Along our walks we will see most tree species currently growing in Southwest Colorado.
David has 46 years in the tree care industry with 36 of them in southwest Colorado. A Board Certified Master Arborist, he is the owner of [Trees of Trail Canyon](#), a specialty nursery focusing on unique and large-caliper trees.

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NPSNM encourages members to consider including NPSNM in their wills.

For further information, call Barbara Fix at 505/989-8654.

July 16–19, 2015 Durango NPSNM Annual Conference Registration Form

Members of the San Juan Chapter look forward to sharing San Juan Mountain flora with you.

Please use a new registration form for each person. Include full payment and the signed liability release below.

Fee: \$50 April 1–June 15. \$60 June 15–July 1. Registration must be received by July 1.

There is no registration in Durango. Trips are limited to 11 participants. Register now.

Make checks payable to: Native Plant Society of New Mexico

Mail this form and check to: Janet Reichl, 33 Todilto Lane, Durango, CO 81301

Indicate your field trip choices below.

Before registering, you can check at www.sjma.org/CB/trips.htm to see if trips are filled.

Trips 1, 2, 3, 4, 5, & 7 are offered on several days. If you want to go on one of these trips, place the trip number next to each day that is acceptable to you. For instance, if you want to go on the Placer Gulch Alpine Trip any day there is an opening for you, put #1 on Friday, #1 on Saturday, & #1 on Sunday.

Friday Choices: First: # _____ Second: # _____ Third: # _____ Fourth: # _____

Saturday Choices: First: # _____ Second: # _____ Third: # _____ Fourth: # _____

Sunday Choices: First: # _____ Second: # _____ Third: # _____ Fourth: # _____

Comments, questions: _____

Do you have any physical problems your trip leaders should know about? _____ List on back of this form.

Emergency contact phone #: _____

Please feel free to call Al Schneider (970/882-4647) with any 2015 Annual Conference questions.

Complete your registration by reading and signing below.

Assumption of Risk and Release from Liability

On behalf of myself, children, and others I am responsible for, I release the Native Plant Society of New Mexico, its chapters, officers, directors, volunteers, and agents (collectively "NPSNM") from all liability for anything that happens to us while we participate in, travel to, or return from any activity of NPSNM. I realize that we may be injured in many ways, for example, by falls, barbed wire cuts, rattlesnake bites, plant contact, or automobile accidents. I assume the risk of all damages, injuries, broken bones, or death arising out of our participation in NPSNM activities. I agree to hold NPSNM harmless for any injuries even in the event of NPSNM negligence. I further agree that this assumption of risk and release from liability is binding on anyone acting in my interest, including my heirs and estate.

If I volunteer to drive in a carpool on NPSNM activities, I assert that I will abide by all driving laws and that I and my vehicle are in full compliance with all state vehicle laws. Whether I am a carpool driver or passenger, I agree not to sue NPSNM and release NPSNM from all liability incident to carpooling.

On all NPSNM activities, I and those I am responsible for will conduct ourselves in a friendly and civil manner and will adhere to NPSNM Rules for Field Trip Conduct in "Policies Governing Field Experiences and Outings" and to the guidelines and directions of field trip leaders and NPSNM agents. I understand that on NPSNM activities there may not be rescue or medical facilities or expertise necessary to deal with injuries I incur.

Signature _____ Print Name _____

Print E-mail Address _____ Phone Number _____

Print Address _____ Zip _____ Date _____ / _____ / 2015

Chapter Activities & Events

For further information on the following events, notify the contact person listed, or visit the chapter's web page: First go to www.npsnm.org; click on Local Chapters; then

Albuquerque

All scheduled monthly meetings are normally the first Wednesday of the month at 7 p.m. in the NM Museum of Natural History, 1801 Mountain Rd. NW. For more info on programs contact Jim McGrath at 505/286-8745 or sedges@swcp.com. For field trips contact Carol Conoboy, carolconoboy@gmail.com, 505/897-3530. For meeting places indicated [A] through [H] see website.

Apr 1 Meeting. The Disappearing Trees of Albuquerque: A Gruesome Tale of Woe Told in Words and Pictures. Joran Viers, Albuquerque city forester.

Apr 11 Field Trip. Tree Care in Tiguex Park. Joran Viers, leader. Details TBA.

Apr 18-19 Weekend Field Trip. Jarilla Mountains. Lisa Mandelkern, leader. Contact Jim McGrath to sign up.

Apr 25 Field Trip. Pine Flats, to see Pasque flowers. Gary Runyan, leader. Meet 9 a.m. at [A].

Apr/May Field Trip. Early West Manzano Bahada. Don Heinze, leader. Meet 9 a.m. at [G] or 9:30 a.m. at [H].

May 6 Meeting. Our Favorite Alpine Wildflowers. Al Schneider, San Juan chapter president, and John Bregar.

May 23 Field Trip. Habitat Landscaping Tour. Tour begins 9 a.m.; see website for details.

May 30 Field Trip. White Sands Missile Range. David Anderson, leader. Meet 7 a.m. at [G]. *Sign up by April 12* with Carol Conoboy.

Jun 3 Meeting. Wildflowers of the Northern and Central Mountains of New Mexico: Sangre de Cristo, Jemez, Sandia and Manzano. Larry Littlefield, wildflower book author.

Jun 20 Field Trip. Sandia or Manzano Mountains. Larry Littlefield, leader. Details TBA.

Jun 27 Field Trip. Pecos Canyon. Don Heinze, leader. Meet 8 a.m. at [D] or 11 a.m. at Terrero Store in Pecos Canyon, N of Pecos on Hwy 63.

El Paso

All programs are second Thursdays at 7 p.m. (coffee social at 6:30) at El Paso Garden Center, 3105 Grant Ave. unless otherwise noted. All events free unless a fee is specified. Non-members always welcome. Info: Jim Hastings, 915/240-7414.

Apr 9 Meeting. Preview of plants that will be featured at the annual Chihuahuan Desert Gardens FloraFest and plant sale. John White, curator, Chihuahuan Desert Gardens.

select the chapter. **Hikers** should always bring plenty of water, hat, sun protection, lunch and/or snacks, field guides, and wear sturdy shoes, suitable for rough, uneven ground.

May 7 Meeting. Bees of the Northern Chihuahuan Desert Region. Cynthia McAlister, Sul Ross State University.

Jun 11 Meeting. Plants of Hueco Tanks. Wanda Olszewski, superintendent, Hueco Tanks State Park and Historic Site.

Gila (Silver City)

All programs are free and open to the public. Meetings are third Fridays at 7 p.m. at WNMU's Harlan Hall, with refreshments following the program. Updates posted on www.gilanps.org. Hikers meet at 8 a.m. in south parking lot of WNMU Fine Arts Theatre the morning of the hike to arrange carpooling. Participants must sign a release-of-liability form at that time, and will receive a list of native plants in the hiking area. For more info, call Kevin Keith, 575/535-4064. Destinations may be changed due to weather.

Apr 17 Meeting. Vascular Plant Inventory of City of Rocks State Park. Bill Norris and Tim Geddes.

Apr 19 Field Trip. Big Juniper Tree, north of Fort Bayard.

May 17 Field Trip. Sapiello Creek.

Jun 21 Field Trip. McMillan Canyon.

Las Cruces

Meetings and workshops are second Wednesdays (unless otherwise noted) at 7 p.m. in the conference room of the Social Center at the University Terrace Good Samaritan Village, 3011 Buena Vida Circle, Las Cruces. Field trips are Saturdays; most last into the afternoon. Participants must sign a release-of-liability form. Children must be accompanied by their parents. Programs and field trips are free; nonmembers always welcome. Contacts: Carolyn Gressitt, 575/523-8413; Tom Packard, 575/202-3708.



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- Apr 8** Meeting. Lizards! Patrick Alexander.
- Apr 11** Field Trip. Florida Mountains. Meet 8 a.m. at the Post Office in Fairacres.
- Apr 25** Garden Tour. Walking tour of native plant gardens in Alameda Depot district. Meet 9 a.m. at Pioneer Park.
- May 13** Meeting. Organ Mountains Flowers. Lisa Mandelkern.
- May 16** Field Trip. Westside Road, along the western edge of the Sacramentos. Lisa Mandelkern, leader. Meet 8 a.m. at east end of K-Mart parking lot. All-day trip.
- June** No activities scheduled.

Otero (Alamogordo)

For field trip information, contact William Herndon, laluzlobo@gmail.com, 575/437-2555; or Elva Osterreich, echoofthedesert@yahoo.com, 575/443-4408; or Helgi Osterreich, hkasak@netmdc.com, 575/585-3315 or 443-3928. More info should be available by the beginning of each month.

- Apr 18** Plant Sale at Rose Garden (10th St. and Oregon in Alamogordo), 8 a.m.–1 p.m. To volunteer, contact Jennifer Gruger: jengruger@gmail.com, 505/710-2924.
- Apr 25** Earth Day at the Alamogordo Zoo. Help needed 9:00–noon, noon–2:00, and 2:00–4:00. To volunteer, contact Jennifer Gruger: jengruger@gmail.com, 505/710-2924.
- May 16** Field Trip. White Sands Missile Range. *Sign up by April 12 with Helgi. Space limited; first come, first served.*
- Jun 13** Field Trip. Dripping Springs. For more information, contact William, Elva, or Helgi.

San Juan (Northwest NM & Southwest CO)

For more information, see the chapter's web page on the Four Corners Flora website, swcoloradowildflowers.com.

- May 2** Field Trip. Red Rock State Park, Gallup. Ray Gosden, local field guide author, leader.
- May 20** Field Trip. Sand Canyon, Canyons of the Ancients National Monument.
- Jun 6** Field Trip. Utah high desert near Bridges National Monument and the Bear's Ears. Kay Shumway, leader.
- Jun 21** Field Trip. Mesa Verde National Park.

Santa Fe

Meetings are third Wednesdays at 6:30 p.m. at Christ Lutheran Church, 1701 Arroyo Chamiso (in the triangle of Old Pecos Trail, St Michael's Dr., and Arroyo Chamiso; across street from fire station). For more information, contact Tom Antonio, tom@thomasantonio.org, 505/690-5105. Meetings and talks are free and open to all.

- Apr 15** Meeting. Native Bees in New Mexico. Karen Wright, PhD candidate, University of New Mexico.

- May 2** 11th Annual Spring Garden Fair. County Fairgrounds, 3229 Rodeo Rd. 9 a.m.–3 p.m.
- May 27** Meeting (*note date*). The Tree Whisperer Is IN! Joran Viers, Albuquerque city forester.
- June** Native Plant Garden Tour. Date TBA.

Taos

Meetings are third Wednesdays at 7 p.m. in conference room, Kit Carson Electric Cooperative, 118 Cruz Alta Rd. Check NPSNM website for updates and additional information on activities, or contact Jan at TaosNPS@gmail.com or 575/751-0511.

- Apr 15** Talk. Volunteering with Invasives at Rio Mora National Wildlife Refuge. Joe Zebrowski, Las Vegas NWR.
- Apr 25** Native plant buying trip at Santa Fe nurseries. All-day trip; members only, depart 8:30 a.m. from Ranchos.
- May 15** Field Trip. Ft. Burgwin-SMU campus. John Uebelaker, leader. Meet 8:30 a.m. for easy hike along a stream.
- May 19** Talk (*note date*). Wild Medicinal Plants of Northern NM. Rob Hawley, medical herbalist, owner, Taos Herb.
- Jun 20** Field Trip. Pederal and Ghost Ranch. All-day trip, with lunch at Ghost Ranch; depart 8:00 a.m. from Ranchos.

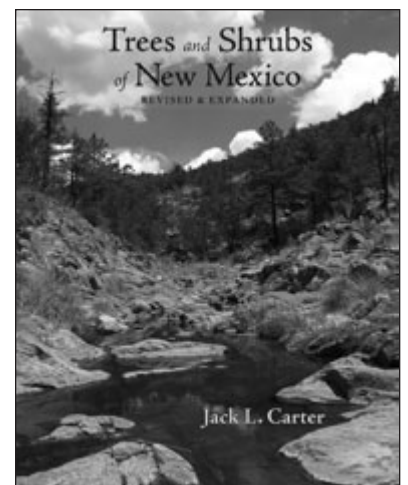
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- Updated nomenclature and taxonomic information
- Biographical sketches of noted botanists
- Landscaping tips for native plants



Madrones of New Mexico (continued from p. 8)

cillo Mountains, as well as in the Chiricahuas in Arizona. The Texas madrone (*A. xalapensis*) is only to be found in the far southeast part of New Mexico in the Guadalupe northwest of Carlsbad, with a greater concentration in Guadalupe National Park in Texas. The name "Texas" madrone is a bit misleading, given that the overwhelming majority of the tree's native habitat is in Mexico. The largest Texas madrone in the country is located in the Lincoln National Forest northwest of Carlsbad. It reportedly had a 14-foot trunk circumference, but, according to a district ranger, a recent forest fire appears to have killed the tree.

The most convenient way to see a great number of Texas madrones is by hiking McKittrick Canyon in Guadalupe National Park, where the size, variety of forms, and colors are amazing. There are huge single-trunk specimens along with dozens of multi-trunk trees. In fall, at just the right time,

madrones are resplendent with clusters of bright orange-red berries, and the canyon maples (*Acer grandidentatum*) are also at their peak of red. The Arizona madrone is a bit more difficult to find, but a trip across the bootheel border into the Chiricahuas will take you to habitat along Cave Creek that's full of Arizona sycamores, Arizona madrones, several evergreen oaks, huge manzanitas, and a host of other interesting natives.

Unfortunately, both the Texas madrones in the hill country of Texas and the Pacific madrones in parts of the Pacific Northwest are suffering to varying degrees from a fungus and canker problem that has killed some trees, so one would hope that these incredible trees survive overall and proliferate in their native habitats. It is unfortunate that our native madrones are not available from nurseries to at least allow patient growers to enjoy these beautiful trees as they slowly develop in their landscapes. ❖

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The generous financial support from so many NPSNM members and friends of the flora of New Mexico will make it possible for the Board to approve more funding for workshops throughout the state, additional basic research on a variety of critical plant taxa, continued support for the state's major herbaria, and hopefully for the development and sup-

port of more early education programs from K-12 in New Mexico schools.

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Left: *Arbutus arizonica*, Arizona madrone. Above: *Arbutus xalapensis*, Texas madrone. Cherished for their beautiful bark, foliage, flowers, berries, and growth habit, madrones are extremely difficult to propagate, but hardy: the author's Texas madrone survived a freeze of -14 degrees. Madrone wood is very dense and was formerly used for tools, stirrups, handles, and the like; today it is used to carve beautiful trays, bowls, and spoons by Mexican tribes living within the tree's range. See "The Madrones of New Mexico," page 8. Photos: Craig Campbell