

NEWSLETTER

of the

NATIVE PLANT SOCIETY OF NEW MEXICO

OCTOBER, NOVEMBER, DECEMBER 2019

VOL. XXXXIV No. 4



Asclepias incarnata, Swamp Milkweed, Robert Sivinski, 2011

Inside This Issue

- 2 Who's Who at NPSNM ❖ 3 From the President ❖ 4 Conservation Corner
- 8 NPSNM 2020 State Conference 9 Photos from the NPSNM 2019 Conference
- 11 NM Closeup: Our Shrinking Heritage 💠 12 A Desertscape at Mariposaville 💠 14 Book Review

The Newsletter of the Native Plant Society of New Mexico

October-December 2019, Vol. 44 No. 4. 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.

The next submission deadline is December 1, 2019. Articles and high-resolution artwork supporting the NPSNM's mission are welcomed and can be sent to the editor, Margaret Ménache, *npsnmnewsletter@gmail.com*.

Native Plant Society of New Mexico

Board of Directors

OFFICERS

President Tom Stewart

nativeplantsnm@gmail.com

Vice-President Sue Small

Recording Secretary Jane Kruse 575/574-8152 **Membership Secretary Barbara Fix** 505/989-8654

Treasurer Anne Curley

CHAPTER REPRESENTATIVES

Albuquerque Judith Phillips

El PasoMarianela Milner915/346-2482GilaKeller Suberkropp575/313-1518Las CrucesJoan Woodward575/527-4640OteroHelgi Osterreich575/443-3928

Santa Fe Maggie Parrish

Taos Jan Martenson 575/751-0511

Chapter Presidents

 Albuquerque
 George Miller
 505/352-9019

 El Paso
 Ellen Saad
 915/584-7946

 Gila
 Don Graves
 218/722-0707

 Las Cruces
 Carolyn Gressitt
 575/523-8413

 Otero
 Jennifer Gruger
 505/710-2924

 Santa Fe
 Tom Antonio
 505/690-5105

 Taos
 Jan Martenson
 575/751-0511

Committee Chairs

Conservation Rachel Jankowitz

NPSNMconservation@gmail.com

Finance & Pam McBride 505/343-9472

Investment

NMDOT Steve Gisler 505/827-5349

Newsletter Margaret Ménache NPSNMnewsletter@gmail.com

Editor

Poster Sales Gary Runyan 505/205-9953

Discussion Group Moderator

Bob Sivinski 505/577-0287

Staff

Membership Lindsey Kirchhevel 505/286-2385 Coordinator npsnmmembership@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.

If you received this newsletter as a hard copy but would prefer it via email only, please notify nativeplantsNM@gmail.com.

Changed Your Email Address?

Please notify
Lindsey Kirchhevel,
NPSNM Membership Coordinator:
npsnmmembership@gmail.com

It Pays to Advertise!

Only \$100/yr for business card ad; \$175 double business card ad; \$225 quarter page.
4 issues plus NPSNM's website.
Contact nativeplantsnm@gmail.com

Legacy: What we leave behind, we give to the future

NPSNM encourages members to consider including NPSNM in their wills.

For further information, contact us at nativeplantsnm@gmail.com

NPSNM is a 501(c3) tax-exeempt organization

From the President

The Best, the Worst, and the Hopeful

by Tom Stewart

Each annual, statewide conference of the Native Plant Society of New Mexico turns out to be "the best ever!" That is, best in its own way as each region of our rambling territory has something great and unexpected to offer. The recent gathering in Santa Fe stands in my memory as a time out of time, where dear friends and wonderful strangers paused business as usual to share learning, amazement, and beauty.

We owe the Santa Fe chapter and its president, Tom Antonio, a big thanks for all the energy, creativity, and dedicated work it took to bring us such an experience. The speakers were exciting and the field trips were energizing.

And now we are grateful to the Otero chapter for grabbing the baton and revealing the dates and title of next year's conference. Save these dates: August 28-30, 2020, for "People and Native Plants, A Journey through Time." It is sure to be our best year ever!

The much less welcome news this last summer was about the large number of fires that were burning in the Amazon rainforest. The world's most rich and diverse community of plant life is still considered by some to be mere green stuff standing in the way of enterprise.

It reminds me why the presence of native plant societies is so important. Happily, they have sprung up in many states. The newest partner in the Native Plant Conservation Campaign is the NPS of Staten Island, a borough of New York City. The im-

We Want to Hear from You!

Do you have an idea for an article for our newsletter?

Do you have information about an event or activity that would be of interest to our membership?

Have you read a compelling book, an educational article?

Have you visited a thought-provoking website? Have you been on an exciting hike?

Do you have photographs, drawings, paintings of favorite or unusual plants?

Share your thoughts, ideas, writings, and illutrations with us.

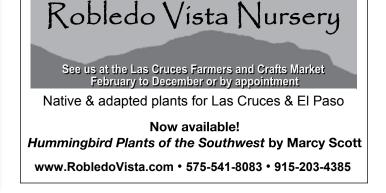
Email us at: npsnmnewsletter@gmail.com

portance of native plants is not an abstraction for New York. That city depends on the protected native forests and meadows in the not-so-distant Catskill Mountains to deliver all 1.2 billion gallons of pure water those 8.4 million people use each day! Are many New Yorkers aware of that?

We have five national forests within New Mexico. I wonder why only one out of our five national forests employ a (repeat: a) botanist? Three revised forest management plans have been released for public comment, and they speak of many projects and the necessity of monitoring results. Why do the drafted plans not mention staffing with a few more botanists, professionals to help conduct and evaluate the monitoring? Our comments will point this out.

We join a native plants organization because of our individual interests, and wind up meeting people with very different interests. We get new information and new perspectives. Over time we learn to value native plants not just because some are pretty or useful, or because it is politically correct or because they purify air and water, build soil, provide medicine, and on and on. We come to conclude that native plants, in their habitats, are the glue that holds nature together. Think about it. The more that people, in and out of government, start to realize this the better off we are all going to be.





Conservation Corner

by Rachel Jankowitz, NPSNM Conservation Committee Chair

Santa Clara Canyon

A handful of NPSNM representatives travelled to Santa Clara Pueblo on July 8, for a tour of watershed restoration activities that the tribal Forestry Department has undertaken following the devastating Las Conchas fire. In fact, Santa Clara

canyon has been impacted by three large wildfires: the Oso fire (1998), Cerro Grande (2000), and Las Conchas (2011).

In June of 2011, 15,500 acres (about half the watershed) of Santa Clara canyon was burned by La Cueva, much of it at high intensity; however, unburned patches remain. During the monsoon storms of that and the following summer, the road along the spring-fed stream in narrow, bedrock-confined Santa Clara canyon was

and subsequent flood waters,

as were the stream channel itself and its four in-channel flood control ponds.

The tribal Forestry Department, along with many partners, has made tremendous progress to rebuild the road and ponds, stabilize the stream channel, remove hazard trees, and conduct salvage logging and contour felling to retain soil on steep slopes. Watershed recovery initially focused on stabilizing tributary side channels (26 out of 28 tributaries have been treated). A wetland is being restored at the former location of Fourth Pond, which has been fenced off to exclude cattle. Eventually the tribe would like to re-introduce beavers, once enough forage for them has regrown. Goals of the restoration effort include future fire resiliency, restoring recreational use, and establishing traditional use plants.

We observed impressive natural revegetation of the upland canyon slopes. While most of the ground cover appears to consist of Kentucky bluegrass, we also saw the native forbs *Perityle*, Monarda, penstemons, yarrow, and Erigeron, as well as woody plants including oak, locust, maple, potentilla, roses and Holodiscus. Revitalized aspen thickets are springing up both in former aspen groves and at new locations which did not previously have aspens. There is a lush copse of alder on the Fourth Pond wetland. Soils in Santa Clara canyon are Andisols derived from the Bandelier tuff (consolidated volcanic ash). Volcanic soils are generally very fertile and retain water well, although they are easily eroded, so soil type is probably contributing to successful regrowth of native plants. The tribal Forestry Department is helping along reforestation of the dominant tree species by collecting cones and growing them out for replant-



completely wiped out by the fire NPSNM contingent at the Santa Clara Forestry Department offices. **Photo: Sue Small**

Recovery challenges include controlling both tribal and trespass cows, and musk thistle and other weeds along the road and stream, not to mention meeting the requirements of several diverse funding sources. An interesting weed problem is buffalo bur (Solanum rostratum), a native but weedy plant which sprouts up and spreads from locations where slash piles have been burned. The common name "buffalo bur" alludes to the plant's tendency to grow abundantly around buffalo wallows, a form of natural soil disturbance. Because it

contains the alkaloid solanine, common in plants of the Solanaceae family (think green potatoes), buffalo bur is toxic to livestock and humans. Although it is native to most of North America, buffalo bur is considered a noxious weed in some states. However, its seeds are important to ground-feeding birds. And, according to the Native American Ethnobotany Database, the Zuni tribe historically used it as a gastrointestinal aid. An infusion of powdered root was taken for 'sick stomach.' Needless to say, don't try this at home!

SFNF Landscape Resiliency

NPSNM recently sent a letter to the Santa Fe National Forest in response to a request for scoping comments on the Santa Continued page 10



DESIGN XX INSTALLATION XX IRRIGATION

MAINTENANCE OF NATIVE, DROUGHT TOLERANT PLANTS

CONTRACTOR'S LIC. #59714

505-344-7508

Hunter Ten Broeck

Jack and Martha Carter Native Plant Conservation Award

On Saturday, August 3, 2019, Melanie Gisler was awarded the Jack and Martha Carter Native Plant Conservation Award following the banquet at the 39th Annual Native Plant Society Conference in Santa Fe, NM.



Sabinoso Canyon Wilderness Area, Sept 2019. Melanie with her husband Steve, son Leo, and dog Pinon.

Photo: Steve Gisler

Melanie Gisler prepared the following comments for the newsletter to express her appreciation for this award to the NPSNM membership.

Receiving the Jack and Martha Carter Conservation Award at the 2019 NPSNM State Conference was such an honor and surprise. Since the day the Institute for Applied Ecology opened our doors in Santa Fe in 2015, the NPSNM has supported our mission and contributed greatly to our successes. The NPSNM has funded the development of a native plant curriculum, sponsored a seed collection crew position for a Tribal youth, supported new producers of native plant materials through capacity building funding—including the NM Nature in Prisons Project, and as a major contributor to our Forest Bound program which offers intensive native plant ecology and conservation training in the Santa Fe and Cibola Forests for 13-18 year-old students.

We are all lucky that visionary partners like Zoe Davidson, BLM, and Kathryn Kennedy, Forest Service, came onto the scene at a critical time for native plant materials and rare plant conservation strategies, not just for NM, but also for the country. The IAE SW Technical Advisory Board (Bob Sivinski, Anne Bradley, Steve Cary, Mollie Walton, and Tiana Baca) have helped to guide our conservation efforts for the past 4 years and have generously volunteered time to make our projects stronger. Last but not least, I am grateful for the current and past staff at our SW office who had the passion, drive, and creativity to successfully deliver our programs and shape the conservation work we do. I am excited to work together with NPSNM on future projects that advance native plant conservation in our state-there is so much potential when people care about our natural environment. Thank you Native Plant Society of New Mexico! 🏶

The following remarks were prepared by Tom Antonio and Maggie Parish. They were given by Dr. Antonio when he presented the award to Ms. Gisler.

Ms. Gisler is the director for the Southwest Program for the Institute for Applied Ecology. Melanie received her MS degree in Botany from the University of British Columbia and Bachelor's degree in Biology from the University of New Mexico. Prior to relocating to Santa Fe in 2014, she directed the Institute for Applied Ecology's Habitat Restoration Program in Oregon and led regional native plant materials development programs as well as recovery projects for rare plants and butterflies. Before joining IAE, Melanie worked in botany and restoration ecology for several public agencies including the Bureau of Land Management, the Pacific Northwest Research Station of the Forest Service, the NRCS Los Lunas Plant Materials Center, and the Austin Texas Zilker Botanical Garden.

Melanie opened the Southwest Branch of IAE in 2015, and in the past four years has provided the vision and leadership to implement successful, collaborative projects related to the conservation of New Mexico's diverse biological resources. Projects include native plant materials development through the Southwest Seed Partnership; seed collection and conservation strategies for rare plant species; local restoration and invasive species removal projects; applied ecological research for native species restoration practices; and a variety of pollinator projects. Not only does Melanie have a passion for native plants and habitats, she is also passionate about education and connecting the people of New Mexico with their botanical heritage. Melanie has developed and led educational programs including Forest Bound, a native plant ecology training program for high school age youth; From Ponderosa to Prickly Pear, a native plant curriculum for classroom teachers; New Mexico Nature in Prisons, a native plant and horticultural education at NM prison facilities; and too many workshops to count. Melanie works tirelessly on behalf of native plants and habitats in New Mexico. We are excited to see the great things she will accomplish in the future. �



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 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.

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 information on programs contact Jim McGrath at sedges [at] swcp.com or George Miller at goxfordm1844 [at] yahoo.com. For field trips, contact Carol Conoboy, carolconoboy [at] gmail.com, 505/897-3530. For meeting places indicated A through H see website.

Oct 2 Meeting. "Wildflowers of Socorro County." New Mexico Tech Emeritus Professor of Physics and avid wildflower photographer Tim Hankins takes us on a wildflower photo tour of Socorro County: the Rio Grande Valley, the Quebradas, the Plains of San Agustin, and mountains up to nearly 11,000 feet.

Oct 12 Grass Field Trip. 9:00 a.m.—noon. Leader Jim Mc-Grath. We will re-visit Pueblo Montano Park, the site of our 2018 grass field trip. We will walk along the drain toward San Antonio Oxbow. Meet at Pueblo Montano Park (located on the west side of the Rio Grande on Montano just east of Coors) at 9:00 am.

Oct 19 Upland Grass Field Trip – Three Gun Spring Trail. 9:00 a.m.–noon. Leader Jim McGrath. Join Jim on his favorite trail in the Sandia Mountains. Bring water, snacks, hat and sunscreen. Meet at 9:00 a.m. at 🖹 (SW corner of Smith's parking lot on Tramway at Central).

Nov 6 Meeting. "Early Ethnobotanists of the Late 19th and Early to Middle 20th Centuries." Paleoethnobotanist and past President of our Albuquerque chapter of the Native Plant Society of New Mexico, Pam McBride, will describe her professional field of paleoethnobotany followed by a discussion of four of the pioneering ethnobotanists whose research makes interpretation of the past possible.

Dec 14 Annual holiday potluck and officers election. 11 a.m.–2 p.m. Pam McBride's House, 5409 9th St. NW. Pam will provide some vegetarian posole. Everyone bring a dish to share.

El Paso

El Paso Chapter meetings are at St. Alban's Episcopal Church, 1810 Elm Street (Elm at Wheeling, off Piedras). Programs are second Thursdays at 7 p.m. (coffee social at 6:30) unless otherwise noted. All events free unless a fee is specified. Nonmembers always welcome. Info: John White, 575/640-7555; jmwhite [at] utep.edu.

Gila (Silver City)

All programs are free and open to the public. Meetings are held on third Fridays from October to May (except December) at 7 p.m. at WNMU's Harlan Hall, Rm. 219, with refreshments following the program. Field trips are third Sundays (April to September). Each field trip will be to a different location in order to explore the diversity of our native plants. Meet at 8:00 a.m. at the south parking lot next to the Fine Arts Center Theatre on the WNMU campus for carpooling. For more information, go to www.gilanps.org/Events/programs.

Oct 18 Meeting. Program TBA

Nov 21 Meeting. Program TBA

Dec 15 Holiday Party at The Commons noon–3:00 p.m.

Las Cruces

Meetings are second or fourth Wednesdays (unless otherwise noted) at 7:00 p.m., in the NMSU Herbarium, at the Biology Annex on the NMSU campus. Field Trips are usually on the Sundays following the Wednesday meeting; most last into the afternoon. Bring lunch/snack, water, sun protection, and wear good walking shoes. Where and when we meet to carpool varies with each field trip; please check each listing. Participants must sign a release of liability form. Children must be accompanied by their parents. Programs and field trips are free, unless we are going a fee area; non-members are always welcome. Contact: Carolyn Gressitt, 575/523-8413. Leave a message so we can get back to you.

Oct 23 Meeting. NMSU Herbarium 7:00 p.m. Dr. Patrick Alexander of the BLM will present "The processes botanists use for finding rare plants."

Oct 27 Sunday Field Trip. Dr. Ivette Guzman will lead us on a tour of the NMSU Chile Pepper Institute Garden. Meet 9:00 a.m. NMSU Botanical Gardens, 140 W University Ave, Las Cruces, NM 88005. From there we will walk to the chile field.

Nov 13 Meeting. NMSU Herbarium 7:00 p.m. Subhankar Mandal, NMSU Graduate Research Assistant in the Onion Breeding Program, will present "Breeding for improving resistance against Fusarium basal rot in short-day onion cultivars."

Nov 17 Sunday Field Trip. Robledo Mountains, South Slot Canyon. (Easy-medium difficulty, a few gentle slopes with some very minor scrambling, lasting into mid-afternoon, two-mile round trip walk.) Meet 9:00 a.m. Parking lot east of Telshor 12 Cinema by former K-Mart lot.

No events in December.

Otero (Alamogordo)

For workshop and field trip information, contact Elva Osterreich, echoofthedesert [at] gmail.com, 575/443-4408, or Jennifer Gruger, jengruger [at] gmail.com, 505/710-2924. More information will be available on the website of by contacting Elva or Jen by the beginning of each month.

Oct 12 Field Trip. White Sands Missile Range adventure led by retired Range Manager Dave Anderson. We will visit a graveyard, Pat Garret's homesite and other native plant havens nestled in the foothills to the West of the Tularosa Basin.

Nov 9 Otero Chapter annual meeting and potluck at the home of chapter member Leanne Roberts. Contact Elva or Jennifer for location information.

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). For more information, contact Tom Antonio, 505/690-5105. Meetings and talks are free and open to all.

Oct 16 Olivia Messinger Carril will speak on "To Bee or Not To Bee: The status of North America's best pollinators." While we know that native bees are essential to seed set in the vast majority of our flowering plants, our understanding of their population dynamics and current health is less wellknown. Olivia Carril will discuss our current understanding of the state of North America's bee species, pulling from research that has been conducted across the U.S. and Canada in the last 20 years as well as her own ongoing studies.

Nov 20 Clay Meredith from the Albuquerque BioPark will be speaking. His talk is titled, "Improving plant conservation through assessment and planning: Recent collaborations between ABQ BioPark and the IUCN."

Dec 15 Annual Holiday Potluck at a Santa Fe member's home—TBA.

Taos

Meetings are third Wednesdays at 6:00 p.m. in the boardroom, Kit Carson Electric Cooperative, 118 Cruz Alta Rd. Free, open to the public. Videotaped. Videos of past meetings are at https://tinyurl.com/TaosNPSvideos. Check NPSNM website or Facebook for updates, or phone Jan Martenson at 575/751-0511.

Oct 16 Ken Bower of Santa Fe will speak on "The Importance of Pollen."

No events in November or December.

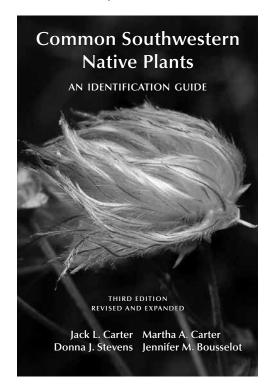


AVAILABLE NOW!

A fully revised & expanded edition of

Common Southwestern **Native Plants:** An Identification Guide (3rd Edition)

By Jack L. Carter, Martha A. Carter, Donna J. Stevens. & Jennifer M. Bousselot



This Brand-New Edition Features:

- * Over 350 full-color photos
- * Over 200 finely detailed illustrations
- # 192 species described (25 more than 2nd edition)
- * Updated nomenclature and taxonomic information
 - * Distribution and habitat descriptions
 - Native American uses noted
 - * Landscaping tips for native plants

Order your copy through CoNPS.org for \$25 + shipping

Also available from several of your local chapters of NPSNM!

For wholesale orders:

contact CoNPSpromote@gmail.com

- \$12 per book + shipping
- In multiples of 5 or a case of 16



People and Native Plants, A Journey Through Time

2020 Native Plant Society of New Mexico Conference hosted by NPSNM Otero Chapter

Location: Tays Center in Alamogordo and surrounding areas throughout the Tularosa Basin Field trips in Tularosa, La Luz, and Cloudcroft

Field trips and workshops over the three-day conference will reveal the rich history of both the people and the native plants throughout the Tularosa Basin and surrounding ranges.

The conference theme is inspired by the goals of the Native Plant Society of New Mexico, 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.

Our confirmed keynote speaker is Dr. Dave Anderson, retired range manager at the White Sands Missile Range.

Additional workshops and field trips will focus on topics such as:

- History and native plants of the Tularosa Basin and surrounding ranges
- Utilization of native plants throughout the southwest (historical, traditional, and current uses)
- Appropriate utilization of native plants, including the elements of ethical harvest and alternative sources
- Water conservation and related topics specific to the area of the Tularosa Basin and surrounding ranges
- Appropriate use of native plants for soil conservation, land management, and wildlife

For more information, to participate as a speaker, or to volunteer for a committee, please contact Jen Gruger, President of the NPSNM Otero Chapter at jengruger [at] gmail.com or (505) 710-2924.

Memories of... the NPSNM Santa Fe Conference

Enjoy these images taken by member Vicky Ramakka during some of the recent conference events. If you have some of your own images you'd like to see in the next edition of the newsletter, email them to Margaret at: npsnmnewsletter [at] gmail.com.

Vicky Ramakka lives near Aztec and enjoys photographing the flora and fauna that reside in her "back yard" (any place within a mile walk.) Vicky is a member of both the Colorado and New Mexico NPSs. Writing is another of Vicky's pursuits. Her first novel, The Cactus Plot, will be released this fall by Artemesia Publishing. Read a review on page 14.

Captions for Images from Conference

1 Cactus Gardens field trip visited Nancy and Obie Oberhausen's prolific cactus collection

2 NPSNM President Tom Stewart and Aztec member, Vicky Ramakka, at Governor's Mansion Reception

3 Cabin used in Longmire TV series, in Valles Caldera National Preserve

4 Endangered Santa Fe Cholla, Opuntia viridiflora, Eldorado Community Center



LOCALLY GROWN PERENNIALS, SHRUBS, TREES, & SEASONAL VEGETABLES

Specializing in Native and Low-Water plants to ensure a successful garden and landscape for the health and conservation of New Mexico!

Also available: Organic products, seeds, houseplants, plant books, great plant information, and much more!

No tax, low prices

RETAIL Santa Ana Garden Center 960 Hwy 550 Suite C • Bernalillo • 505/867-1322

WHOLESALE Santa Ana Native Plant Nursery

2 Dove Road • Santa Ana Pueblo • 505/867-1323



2

Conservation Corner, Continued from page 4



Pinyon-juniper woodland in the Santa Fe watershed, treated to protect McClure reservoir from the effects of high-intensity wildfire. Forest health treatments may differ from infrastructure protection treatments such as this one.

Photo: Rachel Jankowitz

Fe Mountains Landscape Resiliency Project. The purpose of the project is to improve the ecosystem resilience of a priority landscape to future disturbances including wildfire, climate change, and insect outbreaks.

NPSNM expressed our support for the component activities of thinning, controlled burning, riparian restoration, and road improvements and closures, in the interest of forest resiliency. We were also encouraged to learn that this project results from cooperative interagency planning by the Greater Santa Fe Fireshed Coalition.

However, the scoping document raised several questions and concerns that we recommended should be addressed in the Draft Environmental Impact Statement (DEIS). We made the following points in our letter, based on the information in the document released by the Forest:

- 1. How is the Fireshed boundary defined? And, how was the Project Area selected?
- 2. The spruce-fir forest type is not adapted to frequent fire, and normally occurs as even-age stands with only

MOUNTAIN STATES WHOLESALE NURSERY

Serving New Mexico Since 1969

We specialize in:

New Plant Introductions

Native Plants

Custom Growing

Deliveries throughout New Mexico

P.O. Box 2500
Litchfield Park, AZ

800.840.8509 • 623.247.8509

www.mswn.com

- small incidence of disturbance. We appreciate the public safety and infrastructure need to protect Highway 475 (Hyde Park Road) from high severity wildfire; however, treatments in this forest type should be limited to those necessary for this purpose.
- 3. The scoping document discusses the desired effect to "stimulate the growth of an herbaceous understory that provides forage". It is important that the increase of forage for wildlife not be entirely negated by increased livestock grazing. This issue should be addressed specifically in the DEIS, since there is a segment of the public who are suspicious that Forest Service motives are driven entirely by a desire to benefit grazing on public lands.
- 4. The document mentions site-specific "applicable resource protection measures" that will be followed when planning treatments. While these measures will necessarily be customized for each treatment, it is important that the DEIS list the measures that may be considered in each case. NPSNM especially urges the Forest Service to identify, and where necessary conduct surveys for, the locations of rare plant species and their habitat, and avoid adverse effects to rare plants.
- 5. Riparian restoration practices that involve removal of non-native elm, olive, tamarisk and Tree-of-Heaven, should only be approved where funding and plans are in place to re-treat with chemical controls for at least three years. Cutting these species without follow-up treatment will only lead to a worse infestation through re-sprouting.

Continued next page

Conservation Corner, *Continued from previous page*

NPSNM will review the DEIS for this project when it becomes available.

State Forestry Rare Plant Reports

The state Energy, Minerals and Natural Resources Department Rare Plant program is responsible for conducting status surveys and reports on sensitive, proposed, candidate and listed species. The following new reports are now available on their website at http://www.emnrd.state.nm.us/SFD/Forest-Mgt/Endangered.html.

Lee's Pincushion Cactus (Escobaria sneedii var. leei) Final 5-Year Post-fire Monitoring Report. This plant grows in Carlsbad Caverns National Park area and adjacent BLM lands in the Guadalupe Mountains of Eddy County.

Pediocactus knowltonii (Knowlton's Cactus) Summary Report. Knowlton's cactus is only known to occur at its type locality on a small hill of about 10 acres in San Juan County, New Mexico, just south of the Colorado/New Mexico border above Navajo Lake.

Post-fire Status Report Heartleaf Groundsel (Packera cardamine) and Mogollon Death Camas (Anticlea mogollonensis). From the Mogollon Mountains of southwestern New Mexico.

Monitoring Report Mancos Milkvetch (Astragalus humillimus: Fabaceae) San Juan County, New Mexico 1990-**2018.** The Four Corners region of New Mexico and Colorado.

Pecos Sunflower (Helianthus paradoxus) 2013 - 2018 Monitoring Report Blue Hole Ciénega Nature Preserve Santa Rosa, NM. A highly disjunct distribution, it is known from only seven populations, two in west Texas and five in New Mexico.

Wright's Marsh Thistle (Cirsium wrightii) 2017 - 2018 Monitoring Report Blue Hole Cienega Nature Preserve Santa Rosa, NM. Wet meadows associated with alkaline springs and seeps (ciénegas) primarily in New Mexico, and a few historic locations in Arizona and northern Mexico.

Ipomopsis sancti-spiritus (Holy Ghost Ipomopsis) Recovery Summary Report 1996 - 2018. Known from only a single location (Holy Ghost Canyon) in the Sangre de Cristo Mountains of north-central New Mexico.



www.plantsofthesouthwest.com

Native Seeds and Plants— Grasses, Wildflowers, Shrubs, Trees—Veggies too

6680 4th St NW, Albuquerque 3095 Agua Fria St, Santa Fe

505.344.8830 505.438.8888

NM CloseUp: Our Shrinking Inheritance

by Pam McBride, Albuquerque Chapter

Loren Eiseley wrote in his book *The Immense Journey*, "As for men, those myriad little detached ponds with their own swarming corpuscular life, what were they but a way that water has of going about beyond the reach of rivers?" If we would only keep this in mind, wouldn't we be doing our best to protect the rivers, wetlands, and riparian corridors that are in fact our ancestral homes? Instead, we have destroyed wetlands like those that were once beneath the town of Wagon Mound, New Mexico in order to have more solid ground on which to build.

Wagon Mound got its name from the geological feature at the foot of which the town is built. To settlers who were moving west, the butte looked like a Conestoga wagon. It was an important stop on the journey since sighting of the landmark feature told travelers that they were near Santa Fe, for many the ultimate destination, and near a reliable source of water from the spring at Santa Clara Canyon, two miles to the northwest. The spring brook that runs into the wetland beneath Wagon Mound (called the Salt Lake basin by the United States Geological Survey) has since been channeled and dammed (Berlier Reservoir). Some of the lower part of the wetland was filled to support houses as well as construction of the railway, the old highway (Wood Avenue), and I-25.

Established just after the end of the Civil War, the dependable water source and lush grazing land quickly attracted sheep farmers. In the 1870s, the railroad was built in this area. For a time Wagon Mound, then called Santa Clara, was the last stop on the line. Along with this dubious honor came a crop of saloons, con men, soldiers, and cowboys. The population grew to over a thousand. When the tracks were extended to Las Vegas, New Mexico, the majority of residents moved with it.

Today, the town has less than 300 residents. It is a collection of abandoned businesses and homes, although a few have been well maintained.

See photo on front cover

A small cienega at the edge of town gives testimony to what must have been a lush ecosystem of wetland plants. Here, plant

enthusiasts can still find the NM checker-mallow, a rare plant in the hollyhock family and remnants of the past environment like Plain's cottonwood, willows, and seaside arrowgrass. The largest New Mexico population of swamp milkweed (Asclepias incarnata) grows here too and in late summer one can see evidence of another long-distance traveler seeking refuge at this Santa Fe Trail wetland: monarch butterfly caterpillars.

Without these wetlands we could lose our precious places of emergence along with many plants and other animals that are "obligates", who cannot survive anywhere else. They are calling us to defend them, asking us to remember where we came from 🌺

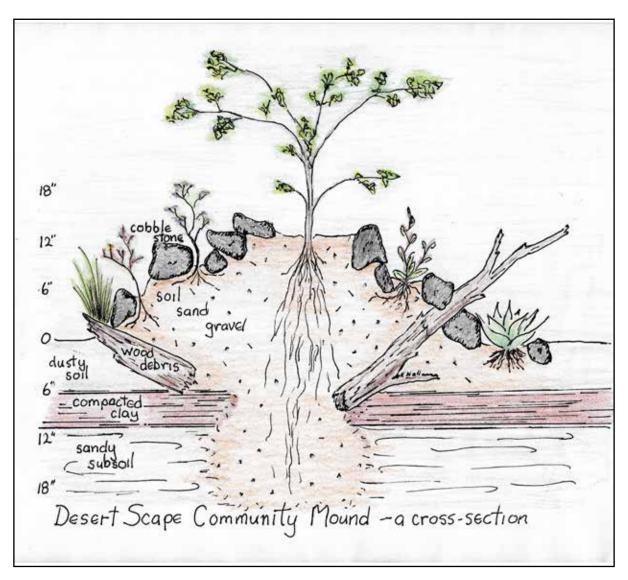
A Desertscape for Mariposaville at Rio Grande Nature Center State Park

article and illustration by Kathleen Hall, Albuquerque Chapter

Residential and commercial landscaping design in New Mexico has been evolving over the last few decades from lush, heavily fertilized, sprinkler-dependent lawns and shrubs to the ominous "Zeroscape" of gravel, a moss rock and a parched ash tree. Neither is ecologically sustainable, and both are wasteful of resources: one gulps down precious water, and the other absorbs and transfers heat to adjacent buildings and public areas. An appropriate landscape mimics nature. Plant communities commingle, developing roots at many depths, providing a variety of wildlife needs, and developing a resilient and adaptable groundcover. The challenge is to help plants meet their soil, light and water requirements in an urban setting that has been subject to nutrient depletion, mechanical manipulation, erosion and other abuses. Even tough native plants need some help getting established in a dirt lot.

The volunteers and staff at the Rio Grande Nature Center (RGNC) have been expanding their Mariposaville Pollinator Garden beyond its original cottonwood-shaded plot north of the Education Building. As young cottonwoods grew, the understory natives – New Mexico olive (Forestiera neomexicana), wolfberry (Lyceum spp), threeleaf sumac (Rhus trilobata), blue grama grass (Bouteloua gracilis) – thrived, but many plants selected for pollinator attraction and drought tolerance struggled in the shade. Adjacent to Mariposaville, a crude swathe of dirt parking lot became available. A gravel path to the Education Building cuts between the old and new garden areas, marking a transition between cottonwood bosque and desertscape. Here's how the project is evolving.

This article originally appeared in *Bosque Tracks*, *Winter 2019*.



A Desertscape, Continued from previosu page

Once there was a parking lot – dusty surface over compacted subsoil with goatheads and saltbush. Most of the old RGNC overflow parking lot is now neatly graveled and landscaped. The southwest corner was added to Mariposaville Pollinator Garden in 2017 in response to a cry for more sunny areas. But what would grow on this dusty space that would provide bees, butterflies and hummingbirds with a living? We're finding out.

Along with the goatheads are some native flowering plants: Adonis blazingstar (*Mentzelia multiflora*), copper globemallow (*Sphaeralcea angustifolia*), velvetweed (*Gaura mollis*), and warty caltrop (*Kallstroemia parviflora*). Common milkweed (*Asclepias subverticillata*) was sown on the farthest edge of the desertscape soon after it was annexed. Much to our surprise, it has flourished on almost no irrigation this year. A buffer of threeleaf sumac, New Mexico olive and four wing saltbush (*Atriplex canescens*) are well established along the south property line. Our desertscape is already working to provide pollinator habitat. It's a good start.

Our plan for the desertscape is to establish a self-sustaining landscape using arid-adapted plants. Being on the northern edge of the Chihuahuan Desert and not far from the arid high country plains east of the Rockies, we have a diverse palette of dryland flora to choose from. We looked at what was already successful, thought about how to best take advantage of rainfall, and poked around in the soil.

The former uses of this land, plus its history as a river flood plain gives us the layered soil strata common in the valley. On top, the crust crumbles into dusty silt from a few inches to a foot deep. Next, a four-inch thick layer of compacted clay that resists a shovel but breaks up when wetted, so, not the dreaded saline, impermeable caliche. Under the clay is fine to coarse river sand. With a little help, our new plot will be able to provide a variety of soil conditions and access to groundwater

Imagine a flood incident that rips out old tree roots, tumbles rocks and logs with mud, gravel, sand and seeds, and leaves swathes of this material to vegetate in the sun. Nature would have spread this detritus over a wide area, but we concentrated on a few small areas. We punched holes through the clay, stirred in gravel and turned up sand to aid in drainage, hauled cobble-sized stones to hold our heaps of soil in place, and buried cottonwood branches to hold moisture and provide nutrients as they decompose. These mounds will catch wind-blown seeds, provide a little shade, and eventually – we hope – support communities of low-water plants, starting with the penstemons, mule ear daisies (*Wyethia scabra*) and succulents we added.

Four wing saltbush has run amok, especially on the areas where water ponds briefly after a rain. Saltbush is tough, versatile and prolific but can be a bit of an aggressor in a landscape, so we removed many of the volunteers, replacing them with winterfat (*Krascheninnikovia lanata*), Apache plume (*Fallugia paradoxa*), and threeleaf sumac.

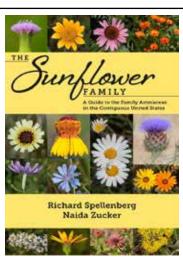
Not every plant needs to provide food for pollinators. Grasses are members of plant communities that together provide shade, moisture retention, shelter from predators, roosts, windbreaks, and soil stabilization along with a breakfast buffet. The giant sacaton grass (*Sporobolus wrightii*) we planted along the rail fence is an example, holding soil and becoming a visual backdrop for the garden as it develops.

Our desertscape plant list includes volunteers that were transplanted from elsewhere in 'Posaville, many donated succulents, and seeds collected in and near the park, as well as purchased plants. In fall of 2018 we planted more than a hundred shrubs, succulents, grasses and perennials in the desertscape and in the transition area along the path to the Education Building. We will continue to add smaller plants, prune a few limbs, remove elms and Russian olives, and hand water to ensure that our shrubs are well established and encourage seed sprouting over the next year or two.

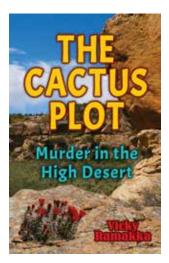
The new desertscape area increases the size of Mariposaville by more than fifty per cent. More importantly, it lets us work with more sun-loving plants and try some soil-building techniques. We hope you'll soon enjoy the view on the garden's east side, and our pollinator friends will find new habitat to explore.

This book news comes from Las Cruces Chapter member John Freyermuth:

Longtime NPSNM members Dr. Richard Spellenberg & Dr. Naida Zucker worked for 10 years on their book titled, The Sunflower Family: A Guide to the Family Asteraceae in the Contiguous United States. It was published July 31, 2019, by the Botanical



Research Institute of Texas Press. The book is described by the publisher as "the only comprehensive identification guide to the Sunflower Family of the contiguous U.S. and southern Canada. Here, 1765 photos help identify 428 genera and nearly 700 species of sunflowers, daisies, asters, and their relatives found outside of cultivation. From lowly cudweeds to lively daisies and statuesque sunflowers (baffling to the beginner), the plants in this family are often notoriously known as DYCs (the damned yellow composites). Includes geographic ranges, habitats, genus descriptors, supplementary comments, with cross-referencing to similar genera. All in minimally technical language." The price is a very reasonable \$45.00. For more information and photos see: https://shop.brit.org/collections/frontpage/products/sunflowerfamily



The Cactus Plot By Vicky Ramakka

Artemesia Publishing, Albuquerque Release date November, 2019

276 pp

A review by Kathleen Hall

A mystery wrapped in a Four-Corners landscape studded with botanical gems. Author and Native Plant Society of New Mexico member Vicky Ramakka has called upon her literary fluency and love of place to frame her novel The Cactus Plot. She leads us into wild places, throws us a handful of trail mix, and reintroduces us to the community of people, plants and critters we've met out there — the good, the brutal, and the prickly.

Oil-well-studded dryland landscape with its hidden hazards and treasures is seen through the eyes of a young botanist who is just beginning to explore her adulthood and her newly chosen profession. We meet Millie Whitehall at dawn on the day she crosses the state line and makes her way northwest to a seasonal field botany position with the BLM. With growing affinity to the terrain, the task, and the people who populate the upper left hand corner of our state, Millie gains confidence. She makes mistakes and works to resolve them. She marks her successes, defends her integrity, and when things get gritty she rises up with humor and solid survival skills. She's a scientistas-hero in the process of discovering her strength, ultimately using her botanical training and professional curiosity to crack the puzzles at the heart of *The Cactus Plot*.

And she makes time for a sunset, a petroglyph, a raven calling, an appreciation of the Enchantment that makes this place worth all the stale canteen water and dust it dishes out. That makes her one of us.

The people she meets are also us — a plausibly drawn assortment of companions and suspects. And like Millie, the reader doesn't always know which is which. Satisfying mystery material.

The cast of plants, too, are old friends to native plant aficionados, and like Millie, one of the botanical actors is fictional, but so credible in its cryptobiotic environment that the reader may recall having seen it on a field trip.

Ramakka's contribution to the New Mexico mystery genre is an obvious choice for the inveterate mystery reader. It's a genial introduction to the fragile balance of a complex and enigmatic environment, as well, and an agreeable companion for the fan of character-driven fiction.

LONE MOUNTAIN NATIVES NURSERY Plant Native & Buy Pesticide Free

- * Native flowers, trees, shrubs, succulents and cacti
- * Organic fertilizer, soil amendments & seeds
- * Knowledgeable consultations for thriving gardens

Call or email us to visit our home nursery.

Or visit us Downtown at the Farmers Market every Saturday See us @ www.lonemountainnatives.com, 575-538-4345

Plant Native for Native Pollinators!



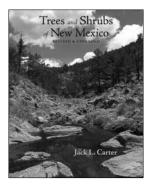
Amazon will donate 0.5% of the price of your Amazon purchases to NPSNM if they are made through the AmazonSmile portal. Purchases made at www.amazon. com will not result in donations. Type smile.amazon.com into your browser (or click on the link on the npsnm.org home page), type in Native Plant Society of New Mexico, select, and start shopping. Bookmark the link on the home page to return to the site quickly.

Available only through the Gila Native Plant Society:

Trees and Shrubs of New Mexico

by Jack L. Carter

2012 edition, fully revised and expanded



Order your copy through www.gilanps.org

While there, browse through our excellent selection of guides for plant and pollinator identification, native-plant landscaping, aridland gardening, and more!



The Gila Native Plant Society is committed to promoting the education, research, and appreciation of the native flora education, research, and approximately of the southwest; encouraging the preservation of rare and

endangered plant species; and supporting the use of suitable native plants in landscaping.

Membership in the NPSNM is open to anyone supporting our goals of promoting a greater appreciation of native plants and their environment and the preservation of endangered species. We encourage the use of suitable native plants in landscaping to preserve our state's unique character and as a water conservation measure. Members benefit from chapter meetings, field trips, publications, plant and seed exchanges, and educational forums. The Society has also produced a New Mexico wildflower poster by artist Niki Threlkeld and a cactus poster designed by Lisa Mandelkern. These can be ordered from our poster chair—check out http://www.npsnm.org/posters/





Wildflower poster: 22"×34", \$8 (nonmembers, \$10) Cactus poster: 18"×24", \$5 (nonmembers, \$8)

Contributions to the Jack & Martha Carter Conservation Fund

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 support of more early education programs from K–12 in New Mexico schools.

Use the form provided below, or contribute through Pay-Pal on the website, www.npsnm.org. Every contributed dollar is being used to protect the flora of New Mexico well into the future.

~Jack & Martha Carter

NPSNM Membership Application Name(s) Address City State Zip Telephone E-Mail/Fax *I (we)* wish to affiliate with the checked chapter: (Please check only one) ☐ Albuquerque ☐ Otero (Alamogordo) ☐ El Paso, TX ☐ Santa Fe ☐ Gila (Silver City) ☐ Taos ☐ Las Cruces ☐ No affiliation ☐ *I am interested in forming a new chapter in:* **Annual Dues:** ☐ Individual 30 ☐ Family 45 ☐ Friend of the Society 60 ☐ Sponsor 125 ☐ Patron 250 ☐ Life Member 1,000 ☐ Student/Teacher 20 **Additional Contribution: \$** Total: \$ _____ Remember that 25% of contributions are returned annually to the individual chapters! Make your check payable to **Native Plant Society of New Mexico** and send to **Membership Secretary** PO Box 35388, Albuquerque NM 87176

	Jack & Martha Carter Conservation Fund Donation Form
i	Yes! I would like to help New Mexico's flora! Enclosed is my contribution of \$
Name(s) _	
Address	
City	State Zip
Phone	E-Mail
ı	All contributions are tax-deductible as provided under the law.
	Make your check payable to: NPSNM—Carter Endowment Fund
i	and send to: Administrative Coordinator PO Box 35388 Albuquerque, NM 87176-5388

Native Plant Society of New Mexico

Non-Profit Organization U.S. Postage PAID Las Cruces, NM 88005 Permit No. 946



NEWSLETTER

of the

NATIVE PLANT SOCIETY OF NEW MEXICO

is available online.

Download PDFs of this and recently archived issues at the NPSNM website:

www.npsnm.org

Did you miss the Santa Fe Conference?

See page 8 for a sneak peek of what Otero will offer in 2020... Mark your calendars now!



Valles Caldera National Preserve field trip participants Vicky Ramakka

More photos from the conference on page 9



Adonis Blazingstar, Mentzelia multiflora, 2004

Old friends you can expect to see in the desertscape at Mariposaville on page 12!

Photos: Robert Sivinski



Copper Globemallow, Sphaeralcea anguistifolia, 2004

Blue Grama, Bouteloua gracilis, 2008