



# NEWSLETTER

of the

## NATIVE PLANT SOCIETY OF NEW MEXICO

JANUARY, FEBRUARY, MARCH 2018

VOL. XXXXIII No. 1



Photo: Steven Gisler

Happy hikers at Williams Lake, 11,000' elevation, during the 2017 Annual Conference in Taos. See page 6.

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## From the President

by Tom Stewart

We are all about conservation of the natural resources that are *out there*, but we sometimes have to pause in gratitude for the priceless resources among us—the volunteers who give their time and energy, the botanists and other professionals who share their knowledge and skills, and those who take responsibility for leading each NPS chapter. Their dedication is almost an unnatural resource.

We owe a special thanks to Helgi Osterreich, who has served as president of the Otero chapter for 13 years! She now hands the reins to the very capable Jennifer Gruger, coincidentally one of her own daughters. Extraordinary service is also personified by Gary Runyan, who has just turned over the title of treasurer of the Albuquerque chapter to Debbie Conger. Gary has been handling the chapter's finances since . . . well, no one knows how long! We only know that anyone who works unselfishly for years on end for the benefit of the group belongs in our hall of fame.

We think of names like Aldo Leopold and John Muir as superstars of an earlier conservation movement, calling attention to the slipping away of America's heritage. In the late 20th century, environmental consciousness was revived and informed by such icons as Rachel Carson, Jacques Cousteau, and Jane Goodall.

The need for such passion and guidance struck me this fall at the Bosque del Apache Festival of the Cranes weekend. I took a turn playing a simple matching game (described in this issue) with visitors to the Albuquerque chapter's table. I asked a curious twenty-something-year-old man, looking through our assorted plant stuff, to pick a card, any card.

"Ponderosa pine," he read.



"OK, now pick out what you can find here from a ponderosa pine," I prompted.

On the table were cones from a ponderosa and a piñon pine, very different in size and appearance. He had grown up in New Mexico, yet he drew a blank and couldn't even make a guess. I showed him the large, open ponderosa pine cone, to which he nodded and moved on. Similarly, an older man, longtime resident, couldn't pick out unique screwbean mesquite pods. He also tried to walk off with our piñon nuts, showing he knew the value of at least one native species!

Here comes the "E-word" again. The celebrities of conservation had their day, with new preserves and regulations resulting, along with a thousand feel-good nature shows. Without the continued education of each generation, so that the value and the nature of nature can be appreciated, people will never understand that the "environment" is not somewhere removed from us where cute or sensational creatures dwell—it is where we live. Otherwise, all those legal protections and wild places will be lost to indifference.

In this, we can all be the heroes. We can spread our enthusiasm about native plants, explaining why they have a place in city landscapes as well as the wild to neighbors and friends. Heap praise on park or church planners and teachers who use them wisely. Show our grandchildren how blue grama grass looks like it has big eyelashes, and let them know that they are its flowers! Maybe you aren't able to name more than a handful of native plants right now, but you can keep learning, keeping your brain young and your experience alive. And knowing that you are in great company from coast to coast and around the world. ❖

### Did You Know . . .

The **Native Plant Conservation Campaign** is a nonprofit that has emerged as a national advocate for native plants and habitats. It is composed of over 50 native plant societies, including NPSNM, and other plant conservation organizations. Its website (<https://plantsocieties.cnps.org/index.php>) has national and international news about native plants, especially from a national as well as local perspective, that could be helpful in these dire times of political, legal, and climate change upheavals. ❖

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to consider including  
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For further information,

[Please contact us through the website](#)

## Outreach Update

by Sara Digby, NPSNM Outreach Coordinator

The year is wrapping up for outreach, and I am excited to start 2018 with many new ideas and in collaboration with all of the chapters. At this point I have visited almost all the chapters and have enjoyed meeting each of you and seeing the wonderful areas where you live. New Mexico is so diverse!

Recently Tom Stewart and I returned from a visit to the Otero and Las Cruces chapters. For the first time I was able to see the White Sands National Monument and the landscape of the southern part of the state and to hear the voices of many NPSNM members in the region. What a beautiful place we live in! And so many members are engaged in the community.

We have also been working hard to get the word out about the native plant curriculum, *From Ponderosa to Prickly Pear*, developed by the Institute for Applied Ecology. We recently facilitated a webinar for educators throughout the state, which discussed the concept of plant blindness and how we can combat this issue through establishing relationships and making connections to native plants. Working with youth, I have found that the best way to engage them is to show them that they are specifically connected to each plant they see, whether through its value as food, medicine, or fiber, its use in restoration, its connection to an animal, or its intrinsic beauty. In this webinar we discussed how educators can incorporate *From Ponderosa to Prickly Pear* into their existing programming and spread the word about New Mexico

native plants. We specifically mentioned NPSNM as a resource, with all of your many meetings and events and the outreach that you do annually.

If you are interested in viewing these resources, simply go to [www.npsnm.org](http://www.npsnm.org) and click “Community Engagement—From Ponderosa to Prickly Pear.” The information on the webinar and resources is halfway down the page.

As we look toward 2018, I am very excited to continue this work, and I hope you will come to me with your ideas



for outreach within your community, so we can partner and give that voice to native plants! Remember, I have provided each chapter with a PowerPoint presentation that has many ideas to choose from for events, talks, and outreach opportunities. Now I want to hear from you as to what you would like to do!

One particular project that we are very excited about is the 2018 Native Plant Photo Contest. We hope to launch this in late spring, and go through summer, so the various ecoregions in New Mexico have plants in bloom to photograph. Be on the lookout for the promotional materials package that will be created for each chapter to easily promote this project. If you have any questions on this, feel free to e-mail me at [sara \[at\] appliedeco.org](mailto:sara[at]appliedeco.org).

As always, I love to hear from members. Whether you would like to chat over the phone, send me an email, or schedule a meeting, just let me know! Contact me at 360/927-2147 or [sara \[at\] appliedeco.org](mailto:sara[at]appliedeco.org). ❖



### The Newsletter of the Native Plant Society of New Mexico

January–March 2018. Vol. 43 No. 1. 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 March 1, 2018.** Articles and high-resolution artwork supporting the NPSNM's mission are welcomed and can be sent to the editor, Sarah Johnson, *sarita [at] gilanet.com*, or PO Box 53, Gila, NM 88038.

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**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.

## Conservation Corner

by Rachel Jankowitz, NPSNM Conservation Committee Chair

### Monuments Update

Secretary of the Interior Ryan Zinke concluded his review of national monuments with a memo to the president that included recommendations to amend the proclamations for the Rio Grande del Norte and Organ Mountains–Desert Peaks NMs in New Mexico. The recommendations are vaguely worded and include concerns about road closures in the RGDN and border security at OMDP. Tribal comanagement is recommended for both monuments. The memo repeatedly urges Mr. Trump to prioritize “public access; infrastructure . . . ; traditional use; tribal cultural use; and hunting and fishing rights.” It is not clear on what basis the secretary considers those rights to be infringed, nor what specific management changes would be implemented.

On December 4, the president announced reductions to the size of Bears Ears and Grand Staircase-Escalante NMs, in Utah. The monument areas would be reduced by 85% and 46%, respectively. Tribes and environmental conservation groups have already filed suit to contest the changes.

### Department of Transportation Comments

NPSNM has sent a letter to the state DOT, recommending the adoption of a statewide Integrated Vegetation Management plan. IVM is a coordinated decision-making process that uses the most appropriate site-specific vegetation management practices, along with a monitoring and evaluation system, to achieve roadside maintenance goals and objectives in an environmentally and economically sound manner. An IVM plan is designed to determine the right tool for the right plant at the right place and time. In addition to mowing, trimming, and the selective use of herbicides, those tools might include release of weed-eating insects, soil improvement, planting native species, and hand-pulling or hoeing. The plan should include identification, mapping, and voluntary avoidance of rare native plant species.

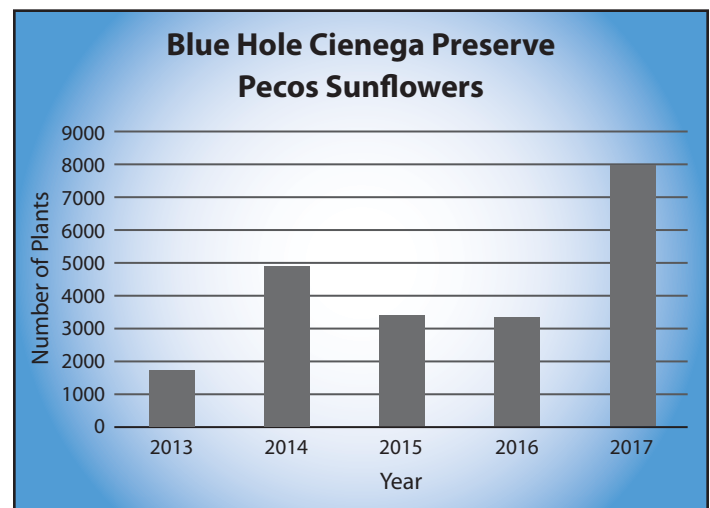
Many other DOTs across the nation have significantly reduced mowing costs and herbicide use through the use of IVM programs. The Federal Highway Administration and NM DOT already spend millions of dollars per year on revegetation of construction projects with native species; this investment should be protected from damage by subsequent DOT maintenance practices. In many areas, roadside vegetation is already being properly managed with minimal herbicide use and single-pass mowing. NPSNM encourages NM DOT to follow other state DOTs in adopting progres-

sive and ecologically sensitive vegetation maintenance practices on a statewide level.

### Santa Rosa Update

The New Mexico Forestry Division did a prescribed burn at Blue Hole Cienega in Santa Rosa during the first week of February 2017. The goal was to reduce competition from aggressive perennial grasses and other vegetation to enhance germination and establishment of seedlings. Forestry has monitored population trends of the federally and state listed Pecos sunflower (*Helianthus paradoxus*) since 2013. Following the fire and an excellent rainfall year in Santa Rosa, the sunflowers have increased significantly from any of the four previously recorded years within the ten permanent vegetation transects on the cienega.

In addition, just prior to the fire, five permanent transects were established for Wright’s marsh thistle (*Cirsium wrightii*), a candidate for federal listing and a state-listed endangered plant. Although presumed to be adapted to frequent fires, no data was available on the response of this rare thistle to fire. Due to the difficulties of the terrain and accurately counting rosettes, only flowering stems were counted. The number of flowering stems was reduced from 579 plants in February to 321 plants in October of 2017. This is likely due to the mortality of overwintering rosettes, caused by the fire. However, since this is a biennial plant, it is possible that the fire may have caused an increase in seed germination and establishment of rosettes, which may result in increased flowering plants by 2018. Stay tuned. ❖



## Name That Plant!

by *Bettie Hines, Albuquerque Chapter*

Inspired by the Taos chapter's annual conference theme, "The Seed: Past, Present and Future," the Albuquerque chapter developed an activity for the NPS table they set up at Bosque del Apache's November Festival of the Cranes.

Since we figured there wouldn't be much in bloom, we decided to think about seeds and seed pods. Chapter members gathered piñon pine cones, ponderosa pine cones, yucca pods, screw bean mesquite pods, honey mesquite pods, buffalo gourds, and desert willow pods. We wrote the names of the plants on little slips of paper and had the kids—and adults, too—try to match the names with the fruits and cones.

It was a simple thing to put together, with unlimited and diverse possibilities, and it was simple for the participants.



Many folks were glad to learn the names and all enjoyed it.

Some of our members did find some natives in bloom, so our table was really pretty, too. ❖

## 2017 NPSNM Annual Conference Wrap-Up

by *Jan Martenson, Taos Chapter*

From the captivating keynote presentation by Thor Hansen, author of *The Triumph of Seeds*, to the engaging final talk by Julie Etersson, director of the native seed bank Project Baseline, the annual conference of the Native Plant Society of New Mexico held in Taos was deemed a tremendous success. Over 170 people attended, including over 30 nonmembers, many from out of state. Many attendees expressed their delight with the location and facilities at the SMU-in-Taos/Fort Burgwin campus south of Taos. The September weather proved to be perfect for enjoying the campus, the Friday evening reception in the courtyard of the Millicent Rogers Museum, and the Saturday and Sunday field trips.

The field trips ranged over most of northern New Mexico's habitats, from sage-scrub at 6000' elevation to ponderosa pine at around 8000' and an alpine lake at 11,000'. Although much of the native flora was in seed (for which the organizers of the seed collection field trip were grateful!), many wildflowers were still in bloom at all elevations.

The NPSNM Taos chapter decided to share our financial gains from the conference with our local teachers and

students by offering two \$250 grants for projects relating to native plants in the fields of botany, biology, or ecology. In addition to the cash award, a hard copy of the grade 9–12 curriculum guide, *From Ponderosa to Prickly Pear*, will be awarded to each grant recipient. Throughout the fall, via local Taos media and email networks, schools and educators in Taos County were encouraged to apply for these grants by the end of the year.

After the grant money is used in 2018, the Taos chapter will request a short statement describing how the funds were used, and photos (with photo releases if necessary) to be used in print media, social media, and the NPSNM website and newsletter. We plan to offer such grants for the next several years.

The Taos chapter sends its gratitude to all conference attendees for their generous response to the book sales and silent auction. It is with this extra income that we are happy to be able to "pay it forward" to help educate students about our native flora in its beautiful and diverse habitats in northern New Mexico. ❖

## Mesquite: Tree of Life in a Dry World

by Richard Felger, Gila Chapter; Herbarium, University of Arizona, Tucson

Mesquite will become a major, global food crop for the hot, dry parts of the world. It is a nitrogen-fixing tree in the legume family.

Mesquite was one of the most important resources of diverse native peoples in southwestern North America. Across the hot deserts mesquite and several other major perennial wild crops were predictably available for harvest at the height of the pre-summer dry season and at the onset of the summer monsoon season, making this a time of plenty. European introduction of winter-spring agricultural crops, namely winter wheat, provided a substitute for the mesquite harvest.

Mesquite served people in dry regions of southwestern North America and South America as a primary resource for food, fuel, shelter, weapons, tools, fiber, medicine, and many other practical and aesthetic purposes. Every part of the plant has been used. Utilization of mesquite was the common denominator among hunters and gatherers to agriculturalists. Because mesquite is such an important and usually unfailing resource, it came to feature in the everyday life from cradle to grave, and is prominent in native oral literature. Mesquite wood is the preferred cooking fuel; it imparts a good flavor to food.

The mesocarp, or pulp, of the pods was a major source of carbohydrates and calories in traditional native diets. It was primarily prepared as flour made into gruel, cakes, and beverages. The seed was not extensively utilized in historical times even though it is high in protein. However, a specialized tool, the gyratory crusher, was developed in ancient times for processing mesquite seeds. Large quantities of whole pods, flour, and sometimes prepared cakes were stored for future use. Early settlers in the Moapa Valley, Utah, remarked seeing conical mesquite cakes weighing fifty to sixty pounds apiece. These dried cakes were stored in grass-lined pits in rock shelters along the rear wall of Paiute dwellings.

Mesquite herbage and sap or gum featured prominently in the regional pharmacopoeia. A common use of the whitish gum was for treating eye ailments. The use of mesquite-pitch hair plaster was used to cleanse the hair, make it glossy, and dye it black. The plaster was usually prepared by boiling black mesquite pitch, or bark with the black pitch, and river mud, preferably black mud.

Mesquite was the first plant recorded by Europeans in the American Southwest; Cabeza de Vaca included it in the report of his epic wandering across the continent between 1528 and 1536. Subsequent explorers and missionaries have

provided extensive information on mesquite, mostly as food and fuel, but also as a medicinal plant.

The term mesquite or *mezquite* is the common name applied to species of *Prosopis* in the subgeneric section *Algarobia* in southwestern North America. Among Spanish-speaking people the fruit is known as *pechita*. In South America these trees are known as *algarrobo*, the Spanish name for the carob tree native to the Mediterranean region, another legume with large, edible pods. Both the Spanish name and the section name derive from the Arabic word for “the tree.” There are about six species of *Algarobia* in North America and two dozen in South America.

Two species in section *Algarobia* are native to southwestern United States, from southern California to Texas: the velvet mesquite, *Prosopis velutina*, and the honey mesquite, *Prosopis glandulosa* with two varieties. Western honey mesquite, *P. glandulosa* var. *torreyana*, is found in southeastern New Mexico. Traveling eastward across southern New Mexico, the western variety intergrades with the nominate variety, the honey mesquite, *P. glandulosa* var. *glandulosa*. The mesquites are not aware of our attempts to classify them, and distinguishing the varieties can sometimes be problematic. These three mesquites recognized by botanists have been used similarly by native people in southwestern United States and northern Mexico.

Harvesting mesquite pods or other major wild harvests during the late spring dry season often meant temporary encampment close to the resource. These crops tend to produce massive quantities of fruit during a relatively short time, and needed to be harvested quickly. Although most wild plant food collecting was done by women, entire families assisted in arduous and complicated harvests such as mesquite. For many hunting-gathering societies as well as agricultural peoples, it was a time of coming together. Among the Quechan Indians, as the mesquite pods ripened, runners notified outlying districts and people converged on the mesquite groves. Evenings were spent storytelling, singing, dancing, playing games, and making love.

Various species of mesquite from South America as well as North America are becoming important agronomic crops in hot, dry regions of the world. Mesquite harvesting and preparation are increasingly popular in southern New Mexico and Arizona. In southwestern New Mexico mesquite pods are available in early spring at lower elevations in late summer and fall at intermediate elevations. *Pax et Prosopis*. Continued page 10

## 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](http://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 [sedges\[at\]swcp.com](mailto:sedges[at]swcp.com) or George Miller at [oxfordm1844\[at\]yahoo.com](mailto:oxfordm1844[at]yahoo.com).

**Jan 3** Meeting. Beyond Automobiles: Native Plant Stewardship, Revegetation, and Highway Ecology at the New Mexico Department of Transportation. Steven Gisler, New Mexico DOT's environmental coordinator and newly appointed liaison with NPSNM.

**Feb 7** Meeting. Cactus Chronicles: The Joy of Finding, Identifying, and Photographing Cacti in the Las Cruces Area. Lisa Mandelkern, naturalist and award-winning photographer.

**Mar 7** Meeting. Landscape Scale Forest Restoration in the Zuni Mountains: Restoring What, to What? Matt Piccarello, Southwest Assistant Director, Forest Stewards Guild.

### 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: Jim Hastings, 915/240-7414, [jimhastings\[at\]elp.rr.com](mailto:jimhastings[at]elp.rr.com).

**Jan 11** Chihuahuan Desert Region Riparian Plants. Dr. Elizabeth Walsh, Professor, Department of Biology, University of Texas at El Paso.

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.

**Feb 8** Native Plants Are for the Birds. Marcy Scott, botanizer, birder, former wildlife rehabilitator, author, and co-founder of Robledo Vista Nursery near Las Cruces.

**Mar 8** Chihuahuan Desert Native Pollinators. Bashira Chowdhury, Auburn University Bee Biodiversity Initiative.

### 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, Rm. 219, with refreshments following the program.

**Jan 19** Meeting. The Intriguing and Wonderful Natural History of Uncommon Southwestern Mustards. Sara Fuentes-Soriano, plant scientist, and director and curator of the NMSU herbaria.

**Feb 16** Meeting. March to the North: The Last Tropical Orchid. Richard Felger, noted botanist and associate researcher of the University of Arizona Herbarium.

**Mar 16** Meeting. Program TBA.

### Las Cruces

*Note new meeting schedule:* Meetings are fourth 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 usually 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. Contact: Carolyn Gressitt, 575/523-8413.



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**Jan 24** Meeting. The Herbarium Experience and Native Plants. Chloe Battista and Trystan Harpold, NMSU Herbarium student assistants.

**Jan 27** Field trip. Mesilla Valley Bosque State Park. Meet 9 a.m. at Bank of the Rio Grande (corner University/Telshor) to carpool, or meet at MVBSP.

**Feb 28** Meeting. Transhumant Pastoralism in West Africa and Nepal. Dr. Lara Prihodko.

**Mar 3** Field trip. Otero Mesa. Meet 8 a.m. at Bank of the Rio Grande (corner University/Telshor).

**Mar 28** Meeting. Mexican Long-Nosed Bats and Their Relationship with Columnar Cacti—and Tequila! Dr. Kathryn Stoner.

**Mar 31** Field trip. Cedar Hills, northwest of Robledo Mtns. Meet 8 a.m. at Bank of the Rio Grande (corner University/Telshor).

### Otero (Alamogordo)

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

**Jan 20** Presentation. White Sands Moth Update. Eric Metzler. 10 a.m. Location to be announced.

**Feb 17** Presentation and workshop. Cooking Wild. Elva Osterreich and Judy Tribble. 10 a.m. Location to be announced.

**Mar 24** Field trip. Spring at Bosque del Apache. Meet 8 a.m. at the Y in Tularosa (junction Hwys 54/70). Tour of the Bosque, lunch in San Antonio. Bring snacks.

### 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, 505/690-5105. Meetings and talks are free and open to all.

**Jan 17** Meeting. Climate, Fire, Salamanders, and Forests: Through the Lens of Tree Rings. Ellis Margolis, research ecologist, USGS New Mexico Landscapes Field Station.

**Feb–Mar** TBA

### Taos

Meetings are third Wednesdays (except Dec. through Feb.) at 6 p.m. in boardroom, Kit Carson Electric Cooperative, 118 Cruz Alta Rd. Free and open to the public. Check NPSNM website or Facebook for updates, or contact TaosNPS [at] gmail.com, or phone Jan Martenson at 575/751-0511.

**Jan–Feb** No meetings.

**Mar 21** Meeting. Beyond Automobiles: Native Plant Stewardship, Revegetation, and Highway Ecology at the New Mexico Department of Transportation. Steven Gisler, New Mexico DOT's environmental coordinator and newly appointed liaison with NPSNM.

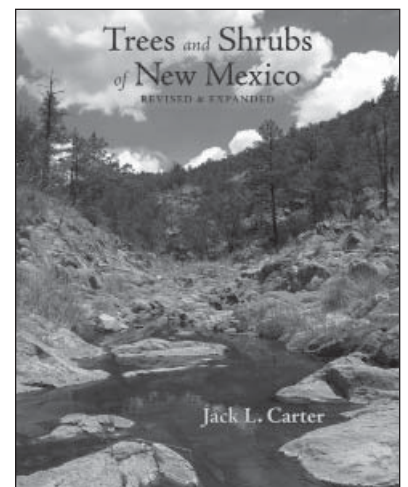
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**Mesquite** (continued from p. 7)

**A few references:**

Desert Harvesters. 2018. *Eat Mesquite and More: A Cookbook for Sonoran Desert Foods and Living*. Rain-source Press, Tucson. Also see: [Desertharvesters.org](http://Desertharvesters.org)

Felger, Richard S. 1977. Mesquite in Indian Cultures of Southwestern North America. Pages 150–176, in B. B. Simpson (editor), *Mesquite: Its Biology in Two Desert Scrub Ecosystems*. Dowden, Hutchinson, and Ross. Stroudsburg, Pennsylvania.

Felger, Richard S. 2007. Living Resources at the Center of

the Sonoran Desert: Native American Plant and Animal Utilization. Pages 147–192, in Felger & Bill Broyles (editors), *Dry Borders: Great Natural Reserves of the Sonoran Desert*. University of Utah Press, Salt Lake City.

Rea, Amadeo. 1997. *At the Desert's Green Edge: Ethnobotany of Gila River Pima*. University of Arizona, Tucson.

*To be continued:* The next newsletter will feature present-day, local mesquite harvesting and preparation. ❖



(Left) Richard Felger and participants at Mesquite Workshop, Gila River Festival, Silver City, NM, September 23, 2017; (center) Earth Day 2017, Silver City: mesquite cookies (provided by Chelsea Rittchen); (right) Gabriel Feldman and Asher Gelbart feeding mesquite pods into a hammermill at The Volunteer Center, for the Gila River Festival.

Photos by Adrienne Booth

## Unexpected Encounter: *Ceanothus integerrimus*

by Kevin Keith, Gila Chapter

Several years ago, I was hiking up a box canyon when I came across an interesting shrub that I'd never seen in the Gila Region of New Mexico. What caught my eye were the bright green bark and elongated clusters of white flowers. The glossy leaves were several centimeters in length, many of them with squiggly striations from the activities of leaf miner beetles. Not knowing what this plant was, I made a careful collection: a few small branches with leaves and a terminal branch with intact flowers, some notes, a GPS coordinate, and several photos. The shrub turned out to be *Ceanothus integerrimus*.

There are four species of *Ceanothus* in the family Rhamnaceae in the Gila Region: *C. fendleri*, *C. greggii*, *C. pauciflorus*, and *C. integerrimus*. The least common is *C. integerrimus*, seldom encountered here, this being the fringe of its range. Its major distribution is farther west from Sonora, Mexico, through Arizona, California, Oregon, Washing-

ton, and into Canada. This is a plant that likes to travel. Five varieties are recognized along that journey.

*Ceanothus integerrimus* (deer brush) is a spineless shrub to three meters in height, distinctive in its genus by its green bark and elongated, racemose inflorescence. The inflorescence is axillary (emerging from between the stem and leaf), with a cluster of small white flowers extending well beyond the leaves. The glabrous leaves are alternate, palmately three-veined, darker above than on the lower surface, and larger than the others of the same genus. Deer brush grows in a variety of forest types and habitats.

There is likely more *C. integerrimus* to be found in the Gila Region. And who knows what else? It inspires me to get out into the wilds.

*To see color photos of the bark, inflorescence, and leaves, visit [www.gilaflora.com](http://www.gilaflora.com).* ❖

## New Mexico Close-Up: Indigo Bush (*Dalea formosa*)

by Carolyn Gressitt, Las Cruces Chapter

Indigo bush is a member of a large and very widespread genus, *Dalea*, of the legume family, Fabaceae, spreading from Argentina to Canada. Mexico is home to about half of *Dalea*'s known species. The flowers, though quite small, are stunning, with rose-mauve petals, a contrasting yellow-tinged banner petal, and flowers growing in clusters. The seedpods are small and contain two seeds. The sepals are very hairy; thus one of its many common names, "feather-pea bush."

When the monsoon is good to us, the profusion of these little shrubs is amazing. We were on the Jornada range on a field trip some years ago, and as we were driving toward Ropes Spring, we saw a line of purple in the distance. We got out of our vehicles to see what this was, and discovered it was a huge field of *Dalea formosa*! ❖

**See photos on back cover!**

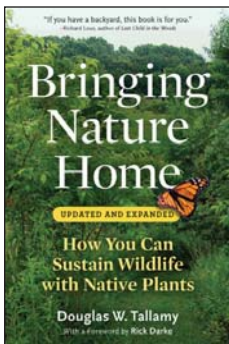
## New and Recent Books

***Bringing Nature Home: How You Can Sustain Wildlife with Native Plants.***

By Douglas W. Tallamy.

Timber Press. 2015. 358 pages.

Review by Jack Carter, NPSNM President Emeritus



This is not a new book, but it was new to me when I had an opportunity to attend a lecture by the author, purchase a copy, and delve more deeply into the message. For some time, based on the plants I have planted on my property in New Mexico and in Colorado, I have thought I was attending to the needs of birds and other animals. But Doug Tallamy has demonstrated to

me that we all have much to learn if we are to conserve an earth crowded with *Homo sapiens*, and make the connections among plants, insects, birds, and people. The book is designed to assist each of us in utilizing the spaces around us and adjacent to our homes, be that 100 square feet or 5,000. The book is written for the educated layperson, and it teaches ecosystem biology and a lot of science without using a heavy scientific vocabulary.

This attractive publication is loaded with beautiful photographs of plants and animals that Tallamy uses in teaching important points concerning their role in what I like to refer to as the total garden. With a background in entomology, he brings insects to our attention, using many outstanding photographs of insects in their several stages of development. Although I have some background in studying aquatic invertebrates, I have totally missed the development

of terrestrial insects. This book not only describes insect development, but also makes clear the relationships among insects and their plant hosts.

There are 14 relatively short chapters in the book. Each chapter is concise in answering specific questions that are important to the gardener, so the book becomes a valuable reference text. I especially enjoyed the writing style, which is direct and easy to read, and it is full of usable information. Only chapter 5, "Why Can't Insects Eat Alien Plants," required a second reading, because it goes into leaf chemistry and metabolism. But it is an extremely important chapter because it assists us in determining the plants we may want to include in our gardens, and some plant species we may want to extirpate. You will want to read chapter 12 carefully, as the chart on page 147 provides some general information that will aid you in making decisions concerning "What Should I Plant?"

Appendix 1, page 314, is just what we have all been looking for, a listing of native plants that make sense right where we live. The title here is "Southwest," and it includes southern California, Nevada, Arizona, New Mexico, and west Texas. Of the approximately 100 species listed, not all occur in New Mexico, but practically all those listed help to define the flora of the state and are available. The plants are listed by common and scientific names, and this list will certainly assist gardeners and landscapers in selecting some species that are common to New Mexico.

Finally, Appendix 2, page 317, titled "Host Plants of Butterflies and Showy Moths," was extremely interesting for me because I know so little about the butterflies that visit my lawn and garden. This listing consists of the names of but-

*Continued page 14*

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**New and Recent Books** *(continued from p. 11)*

terflies by scientific and common names, followed by a listing of the host plants that meet the requirements of specific insect species. The plants are listed by family and genus and by both common and scientific names.

For me there was only one significant error in the book. The Rocky Mountain states of Colorado and Wyoming are not included. When I had an opportunity to visit with the author when he spoke at the Denver Botanical Garden, the first and only question I had concerned omitting these two

states. His response was that he does not include the flora of a region until he has adequate data, and that in the next edition the Rocky Mountain states will be included. I appreciated his honesty.

I can almost promise that if you are a student of natural history and gardening and you pick up a copy of this book and thumb through it, you will purchase it.

~Jack L. Carter  
 apacheplume29 [at] gmail.com  
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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-

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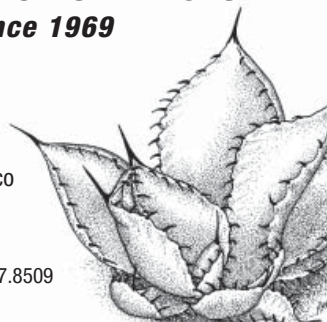
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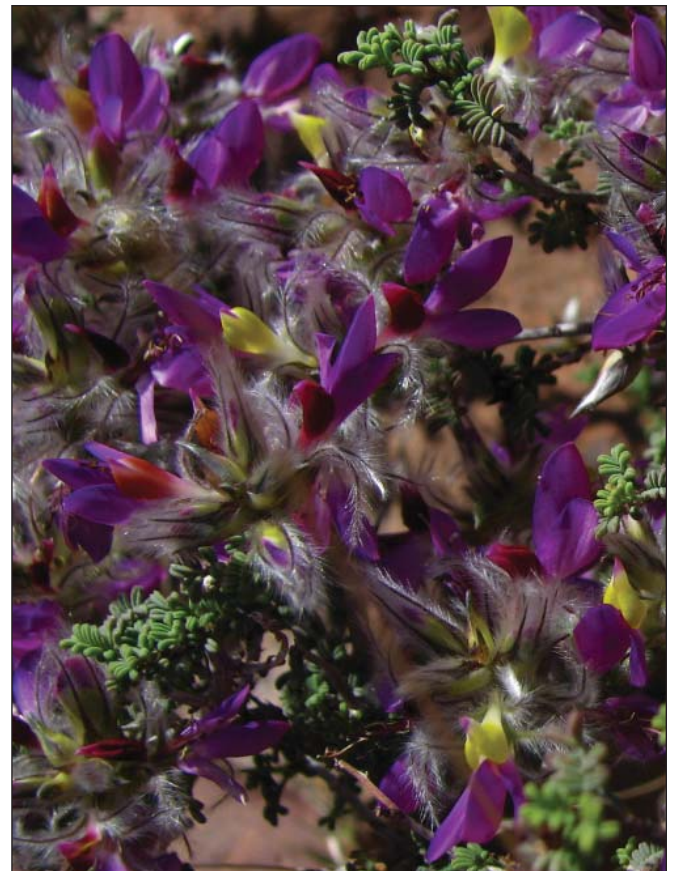
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## **New Mexico Close-Up**

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**Indigo bush, *Dalea formosa***

**Photos: Carolyn Gressitt, Las Cruces chapter**

***See article on page 11!***