Native Plant Society of New Mexico Albuquerque Chapter





The Albuquerque chapter took a late-season field trip October 1 to Ojito Wilderness. Flowers were scarce (buckwheat, snakeweed, dogweed, dwarf skyrocket) but the eroded hills with multi-colored strata and wind-sculpted hoodoos were spectacular. (Photo by George Miller)

The Native Orchids of New Mexico

By Jim McGrath

On September 7, 2016, Ron Coleman gave a presentation to the Albuquerque chapter of the Native Plant Society of New Mexico (NPSNM). The talk was entitled *The Wild Orchids of Arizona and New Mexico* and was based on Ron's 2002 book of the same name. Ron is the undisputed authority on native orchids in the southwestern United States.

Ron began his talk by addressing the influence of mycorrhizal fungi on our native orchids. The native orchids are completely dependent on mycorrhizal associations. Each orchid species has ITS OWN

SPECIFIC fungus that it depends upon for water and nutrients. If that specific fungus is not in the soil, then that orchid species will not occur in that location. Conversely, gardeners won't be able to transplant native orchids into their gardens because the garden soil won't contain the necessary fungus. Ron says that transplanting native orchids from the wild is a "death sentence."

Because the mycorrhizal fungi grow only in certain places, the native orchid populations are often very small and found in widely scattered locations.

Ron's talk featured excellent photos of all the



Cypripedium parviflorumPhoto by George Miller

native orchids known to occur in New Mexico and Arizona. Of course, we saw images of the familiar and spectacular yellow lady's slipper (Cypripedium parviflorum var. pubescens), the calypso (Calypso bulbosa var. americana), and the stream orchid (Epipactis gigantea).

There are many other

New Mexico orchid species that are

smaller and much

harder to see or find.



These include the bog orchids in genus *Platanthera*, the heart-leaved twayblade orchid (*Listera cordata*), and the small, but beautiful, purple flowers of the purple

malaxis (Malaxis

Calypso bulbosa
Photo by George Miller

porphyrea).

Some New Mexico orchids are extremely rare and, therefore, even harder to find. There are three crested-coralroot species in the genus *Hexalectris* that are on the New Mexico Rare Plant List (NMRPTC 1999). These species often occur in small



Epipactis giganteaPhoto by George Miller

colonies in widely scattered locations. The green medusa orchid (*Microthelys rubrocallosa*) was only first discovered in New Mexico in 2004. Since then several other populations of the green medusa orchid have been found – all in the Sacramento Mountains.

Perhaps the rarest and hardest to find New

Mexico orchid is the slender spire orchid (*Piperia unalascensis*). The slender spire orchid is not on the New Mexico Rare Plant List because its range of distribution extends all the way to Alaska. It has only been found twice in New Mexico – both times in the Zuni Mountains of west central New Mexico. The most recent find was a single plant found this past summer. The plant is so obscure that it looks like a stick with bumps on it.

You can obtain a copy of Ron Coleman's book, *The Wild Orchids of Arizona and New Mexico*, at Amazon on the internet. Use the Amazon link on the NPSNM web page and NPSNM will get a rebate from your purchase. Prices range from \$18-\$30.

If you would like to search for a rare orchid, join Jim McGrath (sedges@swcp.com) and Ron Coleman in mid-June of 2017, as they plan to lead NPSNM enthusiasts in the Zuni Mountains to look for the slender spire orchid.

References

Coleman, R. A. 2002. <u>The Wild Orchids of Arizona and New Mexico</u>. Comstock Publishing Associates, a division of Cornell University Press, Ithaca, NY.

NMRPTC (New Mexico Rare Plant Technical Council). 1999. New Mexico Rare Plants. Albuquerque, NM: New Mexico Rare Plants Home Page. http://nmrareplants.unm.edu (Latest update: 21 July 2016).

President's Message

Save a Place for Wildlife

Photos and story by George Miller

Last summer, my wife Carole and I visited the much-acclaimed Dallas Arboretum and Botanical Garden, a 66-acre tour-de-force of classic botanical landscaping overlooking White Rock Lake. We parked (\$15) in a mega-lot crowded with cars, tour buses, and school buses, stood in line for tickets (\$15), and headed for the information kiosk for a map of the labyrinth of winding garden paths. A smiling docent greeted us.



Dallas Arboretum –
Beautiful, but a pollinator's nightmare
Photo by George Miller

"Do you have a native plant garden?" I asked.

"Nothing specific, just plants scattered through the grounds," she cheerfully informed.

"How about a xeriscape garden?"

"No, but we have an area with water-wise plants."
"Do you have a hummingbird garden?"

"No."

"Butterfly or pollinator garden?"

"No, nothing like that."

The man beside me leaned forward and asked, "Do you at least have a golf course?"

We took the pocket map and strolled along the picture-perfect paths. The garden boasts, "During Summer at the Arboretum, the beds will burst with ageratum, impatiens, petunias, cleome, begonias, salvia, marigolds, lobelia and zinnias. As the temperatures warm, caladiums, lantana, pride of Barbados, variegated tapioca, elephant ears and coleus will be added to the gardens."

We walked through the Japanese maple garden with 80 varieties and a stream and waterfall, mulched rose gardens, an azalea garden with 2,400 varieties, sunken gardens, fern gardens, gazebos, fountains, manicured bridal paths—all immaculately maintained and magnificently beautiful.

But for the birds, bees, and butterflies, the rolling slopes, even though covered with beautiful plants from around the world, presented a barren wasteland. In our two-plus hours, we saw nary a pollinator nor nectar-sipping insect flitting among the alien flowers, and only a few songbirds perching in the trees like lost souls searching for something familiar.

Afterwards, we drove down the street for lunch at Dickie's BBQ. Behind the parking lot, bees buzzed from flower to flower in wildflower weeds volunteering in an unkempt area—to some a weed lot, to others a needed refugium.

Clearly, from municipal gardens to private yards, seed, pollen, and nectar-dependent animals increasingly need human advocates. The Native Plant Society of New Mexico is just one of the groups shouting out for more native plants and healthy habitats to protect the rapidly diminishing population of pollinators.

In Albuquerque, we want to do our part. Next year, our chapter will present a two-day workshop (February 10-11) and one-day design lab (February 18) to show participants how to create pollinator-friendly backyard habitats that are both beautifully designed and filled with diverse plants that sustain the native wildlife displaced by development. Speakers will discuss habitat requirements, attracting butterflies and bees, and basic design criteria. Check out the details in Upcoming Events, and save the dates!



Dallas Arboretum - Photo by George Miller

In case you missed the NPSNM State Conference held September 22-25, 2016, in Las Cruces, NM:

Southern Exposure

A Monumental Conference By Tom Stewart



Entering Another World - Organ Mountains
Photo by Tom Stewart

Most of the field trip group were well ahead, while I dallied along with the last plant-poking, grass-guessing, flower-fascinated friends. Finding species unknown to us every few steps, a factoid we had heard in a presentation the day before, was becoming an experience: the ecology of the Organ Mountains is closer to Mexico's Sierra Madre than to the northern half of New Mexico.

From the interstate highway, the Organs appear to the east as a fascinating but forbidding wall of sunbaked rock. Now, on closer approach, I delighted at the broad valley we had entered, the multitudes of flowering plants and cotton-topped grasses it hosted, the occasional butterfly, native morning glories, and the towering rock formations strewn about like giant furniture. Dimly-lit Bar Canyon, with its intermittent waterfall, big-tooth maples, alligator junipers, and evergreen oaks lay ahead.

Albuquerque Chapter Native Plant Society of New Mexico Autumn 2016 Issue

My last article for this newsletter, promoting the Las Cruces-based conference we were now attending, came to mind. With remorse, I recalled using such timid terms as "striking scenery," "exotic," "fun," and "memorable." I apologize to the readers for underselling this unforgettable event. But realistically, no adjectives could have done it justice. And this is not to glorify one particular field trip, as there were many of equal quality.

Back in the auditorium, the presentations surprised and enlightened us about the tricks ferns use to reproduce in the desert, mosses that come to life after thousands of years of desiccation, and a minicourse in turning prickly pear pads into a healthful vegetable by Jim Hastings, the "gringo gourmet." Photos projected by Lisa Mandelkern and Marcy Scott provided visual dessert. (Look for Marcy's new book, *Hummingbird Plants of the Southwest*, Rio Nuevo Publishers.)

The opening panel discussion, without a single wildflower slide, undoubtedly provided our most inspiring hour indoors. The subject was the creation and status of the new Organ Mountains—Desert Peaks National Monument. One by one, a state senator, the BLM district head, the Friends of the Monument volunteer group director, a hikerturned-author, a professional botanist, and the Las Cruces Green Chamber of Commerce CEO told of the diverse private and public alliance that brought about the protection of priceless lands for all of us.

The NPSNM Las Cruces chapter did an excellent job. Next year, the Taos chapter has its chance as it presents our next statewide conference. Titled "The Seed: Past, Present, and Future," it will immerse us in the archeological, botanical, and historic heritage of northern New Mexico. Please reserve September 14-17, 2017, for your enjoyment. A great benefit of your NPSNM membership.

NPSNM's Grants Program

Deadline—December 31, 2016

NPSNM awards grants and makes donations to individuals and organizations that further the mission of the **Society**. The Society will consider funding for any project within or adjacent to New Mexico that contributes to the goals of the Society (education, research, and conservation). Currently we would particularly like to assist in conservation projects.

The Society also has an award for **6th-12th grade science teachers** who incorporate teaching about plants, plant science, and/or native plants in effective and inspiring ways. A onetime award of \$500 will be granted to the teacher, along with one free teacher copy and one free classroom copy of Jack Carter's book, *Trees and Shrubs of New Mexico*.

Requests are reviewed and voted on by the board of directors, who will notify applicants of the acceptance or denial of their proposal and provide reasons for a denial. Grants are awarded to individual projects with a goal that can be completed within a stated time period and within a specified budget.

Donations are given to non-profit organizations to support ongoing work that meets the objectives and goals of the Society, including annual donations to the four main herbaria in the region: University of Texas at El Paso; University of New Mexico (UNM); Western New Mexico University; and New Mexico State University. The UNM Herbarium applies the money toward its goals of georeferencing (mapping) the specimen label

information, and with the expertise of New Mexico Natural Heritage makes the information available to the scientific community and the general public.

Grants and donations are limited to a maximum of \$1,500. Grant payments may be given over time or in a lump sum. Donations are given as a lump sum.

The deadline for applying for an NPSNM Grant for 2017 is December 31, 2016.

Requests will only be accepted electronically. Proposals received after the deadline will not be considered. Please see www.npsnm.org/conservation/grants/ for more information.

El Malpais Field Trip Photos

Pam McBride and Doris Engled the September 10th to the Narrows Rim Trail at El Malpais.



Narrows Rim Trail group



Silene laciniata and Heterotheca villosa

Photos by Philip Clark

Celebrate Sevilleta!

Jim McGrath, Pam McBride, Diane Stevenson, Sue Small, and Craig Stevenson hosted an NPSNM booth at the U.S. Fish and Wildlife Service and Amigos de la Sevilleta—Refuge Friends Group **Celebrate Sevilleta!** event, held Saturday, October 22. We made great connections with other groups participating. As you know, wildlife, like humans, ultimately depend on native plants for survival. The Sevilleta National Wildlife Refuge will be open on Saturdays through the busy winter season, but is closed in summer. There is a nice 53-page Flower ID Guide PDF on their website. Check them out for more: https://www.fws.gov/refuge/Sevilleta/

Book Review

By Diane Stevenson



I never thought of gardening as an extreme sport, even after experiencing the aches and pains of digging and planting. That is, until I read Growing the Southwest Garden by Judith Phillips. An accomplished landscape designer and part-time faculty at the University of New Mexico, Judith can propagate and grow the plants she recommends, a skill rare in the landscape design world. I have used her earlier book for years as a native plant grower, Southwestern Landscaping with Native Plants (Museum of New Mexico Press, 1987). Her earlier book is an excellent grower's guide for propagating and growing native plants for the landscape, especially those you cannot find in the nursery trade. Judith's passion for helping gardeners adapt to the climate extremes in the arid southwest (Arizona, New Mexico, southwest Colorado, southeast Nevada, southern Utah, and west Texas) shows in the book's dedication, "To the generous trees that shade our gardens." Although she missed listing western Oklahoma in her arid climate list, it is an excellent reference for this area as well.

The introduction alone would be a good read for anyone interested in arid southwest climates, plant and wildlife diversity, desert habitats, and changing Ecosystem landscape gardening: An extreme sport in the southwest.

Growing the Southwest Garden

Judith Phillips Timber Press, 2015 ISBN 978-1-60469-522-9 Hardcover ISBN 978-1-60469-521-2 Paperback \$24.95

weather patterns in this well-illustrated book. Three self-explanatory sections flesh out the book: Wisdom of Place, Taming the Elements with Design, and Good Southwest Gardening Practices. While there is no one book that covers everything, Growing the Southwest Garden is one of the best investments for landscape gardeners transplanted from greener parts of the world who must learn how to garden in the arid southwest. Finally, the book has an extensive recommended reading section with many web links, native plant societies, and an index that lists both common and scientific plant names. The plant descriptions give the gardener much information about native plants, including importance for pollinators, fragrance, and soil types. It answers questions I didn't know I had!

I added *Growing the Southwest Garden* to my collection as I prune my horticulture library to include mostly ecologically significant references, especially ecosystem services (think pollinators, biodiversity, water purification, and climate regulation). It could be considered a "coffee table" book because of its photos and garden designs, except it is also a good read. And a great book to take with you to the native plant nursery to purchase plants for your garden.

Speaking of Pollinators and Ecosystem Services: LINKS

Xerces Society -- "Protecting the Life that Sustains Us" http://www.xerces.org/

Look under "Newsletter" for the currently posted newsletter on the website: Donor Newsletter of the Xerces Society - September 2016. In the September 2016 newsletter, you can view (among other things) the Xerces Society report to the U.S. Fish and Wildlife Service 'State of the Monarch Butterfly Overwintering Sites in California'.

Pollinator Partnership

http://www.pollinator.org/

Their Initiatives:

- NAPPC (North American Pollinator Protection Campaign)
- National Pollinator Week
- Ecoregional Planting Guides

The **National Wildlife Federation** has an archived section on Wildlife Gardening related to pollinators: http://www.nwf.org/News-and-Magazines/National-Wildlife/Gardening/Archives/2010/Native-Plants-for-Pollinators.aspx

Check out the new movie and trailer "Seed: The Untold Story" here: http://www.seedthemovie.com/

The Synopsis of the film's theatrical review is "Few things on Earth are as miraculous and vital as seeds. Worshipped and treasured since the dawn of humankind. SEED: The Untold Story follows passionate seed keepers protecting our 12,000 year-old food legacy. In the last century, 94% of our seed varieties have disappeared. As biotech chemical companies

control the majority of our seeds, farmers, scientists, lawyers, and indigenous seed keepers fight a David and Goliath battle to defend the future of our food. In a harrowing and heartening story, these reluctant heroes rekindle a lost connection to our most treasured resource and revive a culture connected to seeds. SEED features Vandana Shiva, Dr. Jane Goodall, Andrew Kimbrell, Winona Laduke and Raj Patel."

Become an NPSNM Member:

Go to http://www.npsnm.org/membership/ to become a NPSNM member.

NPSNM is a non-profit organization dedicated to promoting the conservation of native New Mexico flora. The Society, and its local chapters, work to educate its members and promote the conservation of our native flora so future generations may enjoy our valuable resource.

Membership Benefits

Members benefit from regional chapter meetings, field trips, an annual meeting, and four issues of the state newsletter each year. Some chapters also hold plant sales and annual seed exchanges and offer discounts on a variety of books providing information on native plant identification and gardening with New Mexico native plants. Additional benefits to members include discounts on New Mexico Wildflower and Cactus posters.

Albuquerque Chapter Benefits

Members who show a valid NPSNM membership card

- qualify for Plant World discounts without having to purchase a Plant World membership.
- receive a 10-percent discount at Plants of the Southwest.

Upcoming Events

November 2, 2016, Meeting

The featured speaker will be Melanie Gisler, a restoration ecologist with the Institute of Applied Ecology (IAE) Southwest Program in Santa Fe, NM. IAE Southwest Programs include habitat restoration, conservation research, ecological education, and a native seed network. http://appliedeco.org/southwest-program/
Discussion of 2017 board member elections. Interested in serving and have questions? Please contact George Miller (president) or any other board member listed on the last page of this newsletter.

December 3, 2016 – 11:00 am to 2:00 pm

Annual potluck luncheon and officer election business meeting at the home of Pam McBride, 5409 9th Street NW, Albuquerque, 505-343-9472. Pam's house is in a small cul-de-sac, so park on 9th street if you can.

Directions from Montano and 4th, go south. Turn right/west at the next traffic light, Douglas

SAVE THE DATES!

MacArthur (Powdrells BBQ is on the SW corner). Turn right onto 9th Street.

January 4, 2017

Judith Phillips, whose book review appears in this publication is the featured speaker. She will give us a preview of the Habitat Landscape Workshop to be held in February 2017.

February 1, 2017

Matt Gautreaux, a UNM graduate student, will be the featured speaker and will talk about his graduate botany research project at Ted Turner's Ladder Ranch in southern New Mexico. The 245-square-mile ranch is known for its diverse and spectacular wildlife (bison, elk, deer, antelope, javelina, mountain lions, bears) and its magnificent mix of ecosystems, ranging from desert grasslands to pine forests in the foothills of the Black Range Mountains. See http://theladderranch.com/about/

Habitat Landscape Workshop and Design Lab

February 10-11 and 18, 2017



Cymopterus lemmonii with insect Photo by George Miller

The Albuquerque Chapter will present a two-day Habitat Landscape Workshop and a one-day Design Lab to show participants how to create pollinator-friendly habitats that are beautifully designed and filled with diverse plants that sustain native wildlife displaced by development.

Speakers at the two-day workshop include George Miller, Judith Phillips, Olivia Carill, Steve Cary, and Virginia Burris.

Workshop speakers will discuss habitat requirements, attracting butterflies, bees, and other pollinators, and basic design criteria. Plenty of garden photos and videos will help participants visualize their future landscape. The Saturday, 2/11 workshop

will include a box lunch and will wrap up with a speaker panel question and answer session, then slides and videos of local native plant gardens. There are separate fees for the two-day workshop and the design lab.

Albuquerque Chapter Native Plant Society of New Mexico Autumn 2016 Issue

Two-day Habitat Landscape Workshop—\$50.00 per person

Friday evening February 10, 2017 6:00 pm to 8:30 pm Saturday February 11, 2017 9:00 am to 4:00 pm

The Habitat Landscape Design Lab will be held the following Saturday, 2/18, for those wanting help with their home habitat landscape design from area design professionals. The Habitat Landscape Workshop is a prerequisite for the Design Lab.

Habitat Landscape Design Lab-\$40.00 per person

Saturday February 18, 2017 9:00 am to 12:00 pm

Registration details will be sent in an email soon!



Erigeron flagellaris with fly
Photo by George Miller

From the Editors: *Thank you all* for submitting any articles, ideas, and photographs. Submissions for the winter edition should be submitted before Monday, January 9, 2017, to Lori MacKenzie (lorimack "at" q.com) and Diane Stevenson (distevenson331 "at" hotmail.com)

NPSNM Albuquerque Chapter Current Board of Directors - 2016

President: George Miller Vice President: Tom Stewart Program: Jim McGrath Secretary: Vacant

Treasurer: Gary Runyan

Field Trip Coordinator: Carol Conoboy State Board Representative: Bettie Hines

Membership: Ann-Marie Yaroslaski

Newsletter Editors: Lori MacKenzie, Diane Stevenson

Community Outreach: Vacant

Conservation: Vacant

Educational Outreach: Vacant

Core Group (essential volunteers, invited to board meetings)

Books: Carolyn Dodson Book Marketer: Silda Mason Garden Center Chair: Irene Scotillo

Communications: Gary Hoe Hospitality: Doris Eng

Invasive Weeds Representative: Don Heinze

Publicity: Melissa Ewer

Habitat Gardening Facilitator: Virginia Burris

Refreshments: Penny Hoe Member Benefits: Vacant