

Native Plant Society of New Mexico Albuquerque Chapter

President's Message
George Miller

NPS Starts 2017 with a Bang!

Thanks to the dedicated service of the board and core volunteers, the Albuquerque chapter is starting 2017 off with a dynamite schedule.

First, we have the Pollinator Habitat Design Workshop, February 10, 11, and 18. Our program of experts (see related article) include Steve Cary, author of *Butterfly Landscapes of New Mexico*; Olivia Carril, author of *The Bees in Your Backyard* (see review); Judith Phillips, author of *Growing the Southwest Garden*; Virginia Burris, award-winning habitat designer and ardent pollinator spokesperson, and myself, author of *Landscaping with Native Plants of the Southwest*.

Second, program chairman Jim McGrath and the board have lined up an intriguing and informative series of programs for 2017. One of our most popular speakers, Judith Phillips, opened the year with a landscape design program that previewed the Pollinator Habitat Workshop. In February, UNM graduate researcher Matt Gautreaux will discuss ecological work on Ted Turner's Ladder Ranch near Truth or Consequences, with a field trip planned later in the spring.



Allium geyeri with butterfly
Photo by George O. Miller

Speaking of field trips, we have another dynamic year planned with at least two per month through the blooming season. We'll visit the White Sands Missile Range again with Dave Anderson, and explore a variety of habits including badlands, the Rio Grande rift canyon near Los Alamos, alpine flowers near Taos, rare plants in the Pecos Wilderness, Valles Caldera, and a number of close-to-home sites. Our goal is to leave no habitat unexplored.

Happy trails!

Plant profile - Pasque Flower (*Anemone patens*)

by Carolyn Dodson,

from her book, *Mountain Wildflowers of the Southern Rockies: Revealing their Natural History*.



In spring, while snow lingers on shady spots in meadows among open woods among the ponderosas, six-inch-high clumps of pasque flowers are in full bloom. In early morning the flower resembles a small, nodding tulip with a lavender outer surface covered with silky hairs. Later in the day the flower spreads out into a three-inch white shiny bowl with a center of golden stamens. Petals are absent and the six or eight petal-like sepals are assigned double duty: protecting the delicate reproductive structures during the cold nights and attracting pollinators during the day. Plumed seedheads are silky and feathery. Leaves are large and fern-like, covered with grayish hairs. Pasque, a word for Easter, refers to the blooming season of this flower. A plant of wide range, it is the state flower of South Dakota and the floral emblem of Manitoba.

A Solar Heated Flower

Pasque flower thrives from Alaska to the southern Rocky Mountains. Its northern heritage has equipped it with adaptations for survival in the cold; short stalks to keep the plant below the cold winds, and a covering of hairs that insulate from the cold and dry air. Furthermore, pasque flower generates heat from the sun. When fully open, the inner white surface, in the shape of a satellite dish, focuses the sun's rays on the floral center raising the temperature several degrees above the surrounding air and thereby accelerating the development of the ovules and pollen. Also, as the stem turns slowly during the course of the day, the flower continually faces the direct rays of the sun, maximizing the sunlight available for warming.



A Warm Haven for Pollinators

On cool spring days pasque flowers lure insects with a source of sustenance . . . and more. The warm flowers offer havens for cold-blooded bees to raise the temperature of their muscles to the level needed for flying. Moving from one warm flower to another, they reward their hosts by spreading pollen. An added benefit for insect visitors is that the warm flowers provide places for 'singles to mingle.'

Attract Pollinators to Your Yard Learn from the Experts

Information and registration at www.NPSNM.org

The Albuquerque Chapter of the Native Plant Society of New Mexico is proud to present the two-day **Pollinator Habitat Workshop** Friday night and Saturday, February 10 and 11, 2017, and the optional one-day **Pollinator Habitat Design Lab** Saturday, February 18, 2017.

Both workshops will be at the University of New Mexico Continuing Education Conference Center, 1634 University Blvd. NE, Albuquerque, NM 87131.

Seating in the Design Lab is full. There are still seats for the Pollinator Habitat Workshop. The website www.npsnm.org has registration forms and mailing address for registration and check or money order for \$55.

The planning committee for this event has been busy crossing all the 't's' and dotting the 'i's' to make it come about. Planning started in June 2016, and by now everyone is excited about the event coming in a few short days

Friday night at 6:00 pm to 9:00 pm, participants are welcomed, then Albuquerque chapter president, author, and photojournalist, George O. Miller will present "Save a Place for Wildlife." This presentation is followed by Virginia Burris, a native plant landscape designer, who will discuss "Native Plant Gardening with Interconnections in Mind."

Saturday begins at 9:00 am (to 5:00 pm). Participants are welcomed, then Judith Phillips, landscape designer, author, and UNM lecturer will present "Designing Shared Habitat." Next, Olivia Carill, bee expert and author, will present, "Bees in Your Backyard."

Lunch is next, included in participant registration cost. There will be opportunities to get to know one

another and check out the books for sale by the authors.

The discussion after lunch is by author, naturalist, and 'New Mexico's Butterfly Guy', Steve Cary, who will present "Creating Butterfly and Caterpillar Backyard Habitats." This will be followed by two Landscape Garden Videos: "Through the Seasons," and "Before and After."

After a short break, the Speakers will participate in a Panel Discussion. Closing remarks: 4:30 pm.

February 18, 2017, Pollinator Habitat Design Lab Participants Please Note:

Folks enrolled in the Pollinator Habitat Design Lab, Saturday, February 18, 2017, will receive their homework and paper for the following Saturday during the February 10 and 11 workshop.

Kudos to Virginia Burris for the SPROUT Award!

Virginia Burris was awarded the SPROUT Award November 5, 2016. New Mexico Interfaith Power and Light (NMIPL) awards faith groups and individuals in New Mexico by recognizing their work to care for creation and address climate change.

"Thank you for your award. This award supports me in my efforts to foster the acceptance in the community of landscaping in the natural style." said Ms. Burris in her acceptance speech.

Virginia Burris has cared for the landscape at the First Unitarian Church for 26 years. The Church, at the corner of Carlisle and Comanche stands out among area businesses and homes. Why? The native plant landscape, of course.

Native plants bring native insects looking for homes. They also bring their predators, including native bird species feeding their young.

The First Unitarian Church habitat is certified by the National Wildlife Association. Through Virginia Burris' habitat landscaping, the church has been rated Platinum, the highest LEED (Leadership in Energy and Environmental Design) certification.

LEED was developed by the U.S. Green Building Council to help building owners and operators be environmentally responsible and use resources efficiently.

Congratulations Virginia! Keep up the good work!

Join the Garden Network

By Gary Hoe – Consider registering your yards and public spaces as a National Pollinator Garden. There are lots of gardens registered back east, but only a few in the Southwest USA - and we have so many native bees and other pollinators. I think it's a good education tool if more persons know about it. The members of the Cactus & Succulent Society of New Mexico ought to hear about this, and I am hoping the Native Plant Society will spread the word also. We registered our xeriscaped front yard, as we have a steady supply of native bees during the flowering season. Here's the web site, which allows you to register a location and to search for existing ones:

<http://pollinator.org/mpgcmmap/index.html>

Pollinator Habitat Landscape Book Reviews

Editor's note: Olivia Carril, Steve Cary, George O. Miller, and Judith Phillips are featured speakers at the Pollinator Habitat Design Workshop sponsored by the Native Plant Society of New Mexico, Albuquerque Chapter (see related article).

The Bees in Your Backyard: A Guide to North America's Bees

Joseph S. Wilson & Olivia Messinger Carril
Princeton Press, \$29.95

Bee Primer

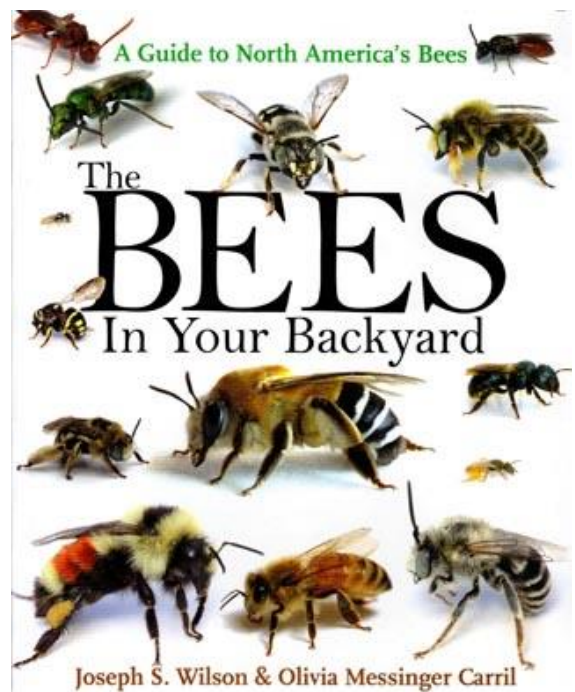
Review by George Miller

Say bee and everyone thinks of the European honey bee, but North America is home to 4,000 species of bees. That's six times more species than butterflies, and unlike everyone's favorite nectar-sipping insect, native bees are nature's best pollinator. Seventy percent of all flowering plants depend on bees.

This beautifully illustrated book begins Introduction 1.1 with the basic question, "What is a bee?" as opposed to flies and wasps. With that explained, it launches into the lifecycle from egg to adult, what bees eat, nesting requirements, and adaptations for pollination.

This is the basic info, the set up for the next chapter, "Promoting bees in your neighborhood," which provides gardening design basics for creating a landscape habitat that will sustain bees throughout their entire lifecycle, spring to fall, egg to adult. Charts list important plants for all-season blooming in seven regions, including flowers for SW deserts from February through August and into fall.

Creating a sustainable habitat garden for bees is only half the book. We all need help understanding them, much less identifying the ones attracted to our backyard pollinator gardens. The rest of the book describes North America bee families with identification tips, physical descriptions, nesting requirements, and best of all, numerous amazingly detailed, glossy photographs. You'll want to keep this reference book on the coffee table, not hidden away in a bookshelf.



Butterfly Landscapes of New Mexico

Steven J. Cary

New Mexico Magazine, 2009
\$19.95

New Mexico Butterfly Adventures
Review by Diane Stevenson



Steven Cary's glossary describes a lepidopterist as "anyone interested in butterflies or moths -" very inspirational to the Citizen Scientists in all of us. His stated goal is to show butterflies as "complex expressions of local geology, landforms, climate, and plants." Mr. Cary achieves this and educates the reader in a very enticing manner. Walks in Nature. All over New Mexico, a land with an amazing number of butterfly species because of its diverse landscape. Sounds like a lot of fun to me.

When I first flipped through this book, I saw only adult butterfly stage pictures. The photos are clear and beautiful, including plants in many of them. Leaving out other butterfly life stages seems a major omission in many identification books. I have experienced way too many folks referring to caterpillars on plants as "worms", "pests", and "bugs", then subsequently smashing or getting out the poison (really?) rather than attempting to identify them. As I began reading the book though, each page drew me in further, this is not just an identification guide. Not only were the butterflies described in a delightful prose, I found myself reading a travel book by an inspired author very familiar with habitats, plants, locations, and how to find specific butterflies throughout the state. The stories Mr. Cary includes make this book a fun adventure guide for finding butterflies wherever the reader wishes to look.

The 'eco-notes' sidebars describe research history, ecology, fire, habitat, where the females hang out, and different reasons these insects were studied in New Mexico in the first place. Beautiful photos and food plants necessary for butterfly survival graces all 137 pages of descriptive text. The 27 page 'Additional Resources' section at the back of the book includes information on how to access butterfly landscapes, species checklist, recommended reading, glossary, a state park listing, state map and more. Mr. Cary's upcoming talk at the Native Plant Society of New Mexico's Habitat Landscape workshop includes caterpillars. Cool!

**"Farming feeds the world, and we must remember
that pollinators are a critical link in our food systems."**

-- Paul Growald, Co-Founder, Pollinator partnership

Landscaping with Native Plants of the Southwest

By George O. Miller

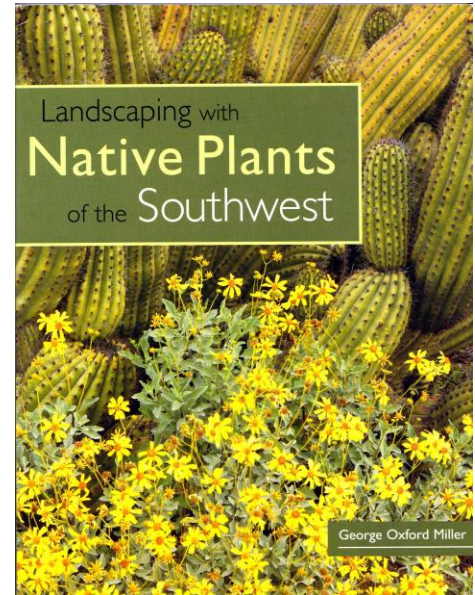
Voyageur Press, 2007

\$24.95

Native Plant Landscaping in AZ & NM

Review by Diane Stevenson

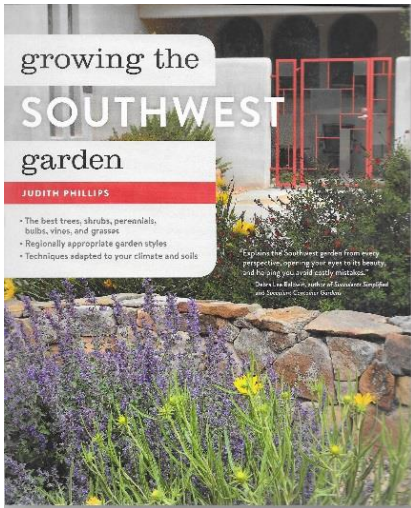
Beautifully illustrated with the author's photographs, *Landscaping with Native Plants of the Southwest* is essential for the native plant enthusiast and landscaper's library. George O. Miller's background as an "environmental photojournalist, writer, photographer, and third-generation nurseryman" shines in this exploration of native plant landscaping in Arizona and New Mexico. The focus of the book is to create a sense of place in the arid southwest. Mr. Miller features two businesses who have embraced this place-based ecological design by using native plants in landscapes, looking like nature created them.



This book is worth the price for the photography alone. Photos are exceptionally clear, well-composed, and give the reader a real sense of what the individual flowers and leaves look like. I found myself gazing at the gorgeous photography rather than reviewing *Landscaping with Native Plants of the Southwest*.

'The ABC's of Native Landscaping' chapter provides a thorough overview and points out the main features of the book and includes 'Four Steps for Developing a Master Plan': dreaming, site analysis, choosing plants, and planting. If the reader has a question about landscaping, George O. Miller has probably addressed it. The 119 page section, Native Plant Profiles, provides in-depth information on over 350 native plant species, sub-species, and cultivated varieties (cultivars), including elevation and zones. The plant profile section suggests effective uses for specific native plants in the landscape. For example, Ocotillo (*Fouquieria splendens*) was historically used as a living fence, Beargrass (*Nolina texana*) and its cousins can be featured in the landscape, and complementing Sulfur flower buckwheat (*Eriogonum umbellatum*) with other natives.

In addition to the plant profiles, the book includes a two-page listing of additional plants that attract larval or adult stage butterflies, plant lists for attracting birds, drought tolerant natives for use in Xeriscapes, and landscape maintenance. Maintaining landscapes in the arid Southwest is much different from the rest of the US. Once many native plants are established, they often do not need supplemental watering, and/or pruning is infrequent and rarely involves maintaining hedges. Thank you, George O. Miller for creating such a beautiful and useful book.



Growing the Southwest Garden

Judith Phillips

Timber Press, 2015

Paperback \$24.95

Ecosystem landscape gardening: An extreme sport in the southwest.

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

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.

NATIVE PLANT SOCIETY OF NEW MEXICO – ALBUQUERQUE CHAPTER
2017 ACTIVITIES AND EVENTS CALENDAR

Scheduled monthly meetings are normally the first Wednesday of every month at 7pm in the NM Museum of Natural History, 1801 Mountain Rd. NW. For more information on programs, contact Jim McGrath at 286-8745 or sedges@swcp.com. Meeting places for field trips (codes A through H) are described in detail at the end of the schedule. Field trip participants should bring water, hat, sunscreen, snacks or lunch, rain gear and appropriate clothing to deal with poor weather conditions.

Some field trips may be announced with only 1 week to a month notice. Spring field trips depend upon good winter and spring precipitation; therefore, such field trips may be scheduled when we know wildflowers will be present.

Please be aware that all field trip participants must sign the NPSNM liability release form before departure. Leaders should have forms available on site for those who have not signed one previously this year.

February 1. Meeting. "Flora of the Ladder Ranch." UNM Biology graduate student Matt Gautreaux describes his Master's degree project identifying and cataloging the floral diversity on this sprawling ranch just east of the Black Range north of Hillsboro, NM. Using this inventory the diversity of the ranch will be compared with similar plant ecologies in New Mexico, and its uniqueness or lack thereof will be discussed.

February 10-11. Pollinator Habitat Design Workshop. 6-9 pm, Friday evening, 9 am-4 pm, Saturday. \$55 per person. UNM Continuing Education Conference Center, Albuquerque. See NPSNM website (www.npsnm.org) for details.

February 18, 2017. Pollinator Habitat Design Lab. 9 am-Noon. \$40.00 per person. One-on-one interaction with expert landscape designers. UNM Continuing Education Conference Center, Albuquerque. See NPSNM website (www.npsnm.org) for details.

March 1 Meeting. "Adios Ojos y Ciénegas: Our Endangered Desert Wetlands." Bob Sivinski, Curatorial Associate of the UNM Herbarium and botanical consultant, describes his searches for rare and unusual plants in arid land spring ciénegas. Ciénegas are medium to low elevation wet meadows and marshes created by stable springs (ojos) in arid regions. Several southwestern plant species are confined to these habitats, making arid land spring ciénegas distinct from riverine wetlands in the region. Some ciénega plants have widespread distributions, but, since their habitat is rare, these plants are also rare and, in some cases, endangered. Ciénega habitats are clearly rare, diminishing in extent, or already eliminated. Groundwater depletion, erosion, conversion to agriculture or aquaculture, abusive grazing, and exotic weeds threaten most remaining ciénega habitats and the plants and animals in them. These are the most endangered natural ecosystems in New Mexico needing attention and rehabilitation.

April 5. Meeting. "The Yerba Mansa Project: Community-Driven Native Plant Restoration in the Bosque." Herbalist, landscape geographer, and native plant conservationist Dara Saville tells us about this all-volunteer project to restore native plant communities in the bosque and at the same time provide educational outreach. The project fosters fruitful community partnerships and creates an environment whereby citizens develop a greater appreciation of Albuquerque's most treasured resource – the river and its associated riparian forest. Our work has focused on collecting baseline data, recruiting and training volunteer field crews, engaging in active restoration work, and providing educational opportunities for all ages. Come find out how we are changing native plant communities in the bosque and how you can get involved.

April 15. Field Trip. Quebradas. Leader: Jim McGrath. This is an all-day field trip that will involve much driving on the Quebradas scenic byway with several short stops to explore different habitats: dunes, rock outcrops, arroyos. Meet at “G” at 8:00 am. We may stop for dinner in Socorro on the way home. Return to Albuquerque late (6:00 or 7:00 pm).

May 3. Meeting. “*Eriogonum* and *Penstemon*: Two Genera with Eye-catching Wildflowers and Numerous New Mexico Species.” Bob Pennington, owner / manager of the Agua Fria Nursery in Santa Fe, guides us on a photographic tour of wildflowers from these two genera. With some 255+/- *species*, and 285+/- *species* respectively, *Eriogonum* and *Penstemon* are among the most heavily populated and widely varied genera endemic to North America. New Mexico is home to at least 43 species of each genus, some fairly common and widespread, while others are restricted to very narrow habitats. Their unique characteristics make them very diverse subjects both in the wild, and at home in our gardens.

June 7. Meeting. "The Lizards of New Mexico." BLM Botanist Patrick Alexander wanted to be a herpetologist when he grew up, but took a wrong turn somewhere and ended up being a botanist instead. He'll take a break from his botanical passions to introduce you to some of his non-photosynthetic friends. He'll talk about what lizards are, the families of lizards in New Mexico, and some of our more common or particularly photogenic lizards.

July 5 Meeting – program TBD

Late July. Proposed Overnight Field Trip. Flora of the Ladder Ranch. Leader: Matt Gautreaux. This field trip will involve spending a night or 2 in a motel in T or C or staying in a campground on Hwy 152 near Kingston, NM. Matt plans to show us the Sycamore gallery forest on the ranch. The field trip is entirely dependent upon coordination with Ladder Ranch Management and Matt's work schedule, which is unpredictable. Details will be finalized in May or June once permission and conditions are obtained from the Ladder Ranch and Matt has a good handle on his work schedule.

August. No monthly Meeting in August

September 6. Meeting. “Plants and the Atmosphere: Air Pollution to Climate Change.” Botanist and plant ecologist Jim Nellessen discusses his knowledge of air pollution and climate change impacts to plants. His career has encompassed numerous aspects of how human-induced environmental changes have impacted plants, ranging from air pollution to coal mining. He has been employed by the New Mexico Environment Department, Air Quality Bureau for 10 years. Jim will talk about his early years of research on plants and air pollution, including research performed while working on his Master's Degree from Virginia Tech. He will talk about how air pollutants damage plants with special focus on ozone (O₃). The U.S. EPA recently increased the stringency of the ambient ozone standards, which will benefit not only humans but also our plants. Finally, Jim will spend some time discussing climate change and the complexities of greenhouse gas impacts to photosynthesis, subsequent ecological interactions between species, and plant phenology.

September 14-17. Annual Meeting of the Native Plant Society of New Mexico in Taos: “THE SEED: Past, Present and Future.”

October 4. Meeting. “What tree-rings tell us about historical fire occurrence on the west slopes of the Sangre de Cristo mountains, Taos, New Mexico. “Lane Johnson, a historical ecologist with Bandelier National Monument and the New Mexico Landscapes Field Station (US Geological Survey), will talk about new tree-ring based fire history records for the Sangre de Cristo mountains east of Taos. Funded by the Taos Valley Watershed Coalition, a planning group of the Rio Grande Water Fund, the fire ecology project was designed to provide historical baselines of fire-related disturbance in three drainages that provide surface water to the greater Taos area. Lane will discuss methods for developing the 700-year fire history records using tree-rings, how these records are interpreted by fire ecologists, and why these natural records are valuable for critical decision making related to local and regional fire, forest, and watershed management.

November 1. Meeting. "Forty Years of Change in the Sunflower Bee Community in the Southwestern United States." Catherine Cumberland, PhD student at UNM Biology, is conducting an historical ecology study of pollinators (bees) in the U.S. Southwest, including three sites in New Mexico. This study replicates surveys conducted in the 1970s, when a team of entomologists from the Smithsonian Institute and UC Berkeley sampled bees involved in native sunflower (*Helianthus annuus*) pollination. Survey locations have undergone a variety of changes since the 1970s: human population growth, development, and agricultural intensification have occurred in some areas, while at other locations the human population has remained static or declined. Ms. Cumberland is examining this gradient of anthropogenic impacts for correlation with changes in bee distributions, abundance and diversity. She received a \$1000 grant from NPSNM in 2016 to sample the New Mexico sites. Initial data suggest significant, ecologically important changes have taken place in the sunflower pollinator community.

December 2, 3, 9 or 10 Annual Holiday Potluck. 11am-2 pm. Saturday or Sunday. Pam McBride's House, 5409 9th St. NW. Pam will provide some vegetarian posole. Everyone bring a dish to share. From I-25 going north, take the Comanche/Griegos exit. Go west to 4th street, turn right, go to the next traffic light at Douglas MacArthur and turn left. Go to 9th street and turn north. Our driveway is just past a small dirt road, Juanita Lane, on the left. The house is straight back. Park on 9th street and walk in.

FIELD TRIP MEETING PLACES

A. SE corner of Smith's parking lot at Tramway and Central.

B. NE corner of Wal-Mart parking lot on the east side of Coors about 0.25 miles north of I-40.

C. Albertson's parking lot at Tramway and Academy. Park along east wall.

D. Far North Shopping Center at San Mateo and Academy. Park near Wienerschnitzel.

E. Placitas. Parking lot of grocery store in Homesteads Village Shopping Center. Directions: I-25 north from ABQ to exit 242 (second exit at Bernalillo). Turn right and go east on Hwy 165 for approx. 5 miles to shopping

center in Placitas on left. To car pool to Placitas, meet at D (Far North Shopping Center site).

F. Michael Emery Trailhead Parking Lot. Go east to the end of Spain Road (east of Tramway). At "T" intersection turn right and go 0.1 mile and turn left into parking lot.

G. Saver's parking lot on Carlisle on NE side of Carlisle/Menaul intersection. Park behind Mattress Firm in SW corner of lot.

H. Los Lunas. SW corner of Home Depot parking lot by the tool sheds.

Directions: From ABQ drive south on I-25 to Exit 203. Head east through 2 traffic lights. Home Depot is on left.

POLLINATOR & POLLINATOR HABITAT WEBSITES

A Look at how little night sky there is for pollinators to find their way:
https://www.nasa.gov/mission_pages/NPP/news/earth-at-night.html

People have developed land throughout the continental United States. There are very few wild and dark places left – it is all real estate, and not in a good way. Just look at the lights from the satellite.

Farm to Table New Mexico: promoting locally based agriculture through education, community outreach, and networking

<http://www.farmtotablenm.org/programs/pollinator-partners/?gclid=CLPPndLI9tACFQuMaQodYoYDQQ>

From Ponderosa to Prickly Pear: Exploring the Native Plants of New Mexico, December 2016. This is an ecoregion curriculum for grades 9-12, funded in part by the Native Plant Society of New Mexico and created by Institute for Applied Ecology, Southwest Region.

<http://appliedeco.org/programs/education/about-project-botany/project-botany-new-mexico/>

A new publication available as a downloadable pdf file or in print. Adults can have fun learning too!

New Mexico Beekeepers Association

<http://nmbeekeepers.org/>

This is for honey bee keeping, but a good link because they look at native pollinators too.

New Mexico State University (NMSU): Pollinator Project

<http://aces.nmsu.edu/ipm/pollinator-project.html>

This site has downloadable poster of pollinators and plants and the downloadable pocket guide to native bees listed below.

Pollinator Partnership

<http://www.pollinator.org/>

This site has so much information and things to do: register your pollinator garden, download a pollinator garden app, etc. The Ecoregion Planting Guides (approximately 24 page color booklets you can download and print – New Mexico has at least 4). See the download links below for more description.

The New Mexico Native Bee Pollinator Project

<http://www.pollinatorparadise.com/nm.htm>

This is an old website, but there is good information that is still relevant.

Western Integrated Pest Management (IPM) Center. United States Department of Agriculture (USDA)

<http://westernipm.org/index.cfm/ipm-in-the-west/natural-areas/helping-native-bees-and-other-pollinators-thrive-in-new-mexico/>

IPM is used in conventional agriculture and greenhouses to reduce but not necessarily eliminate pesticide use.

Xerces Society for Invertebrate Conservation: Pollinator Conservation Resources – Southwest

<http://www.xerces.org/pollinators-southwest-region/>

This organization has the motto “Protecting the Life that Sustains Us.” A fantastic resource.



Cirsium ochrocentrum – Hawk Moth
photo by George O. Miller

POLLINATOR & HABITAT DOCUMENTS TO DOWNLOAD, READ, AND PRINT

Pollinator Plant Recommendations for New Mexico

<https://efotg.sc.egov.usda.gov/references/public/NM/nmpmctn15-71-F.pdf>

This document has a listing of native annuals, perennials, shrubs, and introduced species that pollinators can utilize in New Mexico.

Pocket Guide to the Native Bees of New Mexico

<http://aces.nmsu.edu/ipm/documents/native-bees-booklet-final.pdf>

Selecting Plants for Pollinators regional Guides for Arizona and New Mexico

<http://www.pollinator.org/PDFs/Guides/ArizonaNewMexicorx4FINAL.pdf>

This 24 page color guide is a Regional Guide for Farmers, Land Managers, and Gardeners and consists of the **Arizona–New Mexico Mountains semi-desert – open woodland – coniferous forest – and alpine meadow province**. This looks like fingers on a hand over parts of Arizona and New Mexico. There are three other guides for parts of New Mexico (page 7 has a map in each document). Check out the guide page and look for these titles: <http://www.pollinator.org/guides>

- **Chihuahuan Desert Province** – Primarily southern New Mexico, Las Cruces to Socorro.
 - **Colorado Plateau Semidesert Province** – Albuquerque area & much of Arizona•
- **Southwest Plateau & Plains Dry Steppe & Shrub Province** – Eastern New Mexico & a whole lotta Texas!

How Pesticide Use Kills Bees and other pollinators

<http://www.xerces.org/neonicotinoids-and-bees/>

Hopwood, Jennifer, Aimee Code, Mace Vaughan, David Biddinger, Matthew Shephert, Scott Hoffman Black, Eric Lee-Mader, and Celeste Mazzacano. *How Neonicotinoids Can Kill Bees: The Science Behind the Role These Insecticides Play in Harming Bees*, 2nd Ed. 76 pp. Portland, Oregon: The Xerces Society for Invertebrate Conservation, 2016

The site also has a downloadable (pdf) graphic illustration showing what can happen to neonicotinoids in the environment.

Become an NPSNM Member:

Join at <http://www.npsnm.org/membership/>

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.

NPSNM Albuquerque Chapter

Current Board of Directors – 2017

President: George Miller
Vice President: Tom Stewart
Program: Jim McGrath
Secretary: Dara Saville
Treasurer: Gary Runyan
Field Trip Coordinator: Carol Conoboy
State Board Rep.: Bettie Hines
Membership: Ann-Marie Yaroslaski
Newsletter Editor: Diane Stevenson
Community Outreach: Vacant
Conservation: Vacant
Educational Outreach: Vacant

Core Group (essential volunteers)

Books: Carolyn Dodson
Garden Center Chair: Irene Scotillo
Communications: Gary Hoe
Hospitality: Doris Eng
Invasive Weeds Rep.: Don Heinze
Publicity: Melissa Ewer
Habitat Gardening: Virginia Burris
Refreshments: Penny Hoe