

# NATIVE PLANT SOCIETY OF NEW MEXICO

## ALBUQUERQUE NEWSLETTER

Summer 2018

Flowers of the Magdalena Mts.



June, 2018  
President's Message  
George Miller

*Learning about the amazing plants and animals around us, and making new friends while doing it, enriches our lives.*

Halfway through the year and our monthly programs have highlighted bizarre bugs, state highway and Zuni Mountains revegetation projects, spectacular cacti photos, stories about growing up in a household that depended on native plants daily, and native plant landscaping.



**Above and below left Haystack Strawberry Cactus, *Echinocereus stramineus*, from A-Mountain field trip in Las Cruces.**

**Photos © George O. Miller**



Our field trips have explored the Bosque del Apache and Sevilleta National Wildlife Refuges, White Sands Missile Range, the Quebradas Scenic desert Byway, Cerrillos Hills State Park, local native plant gardens and nurseries. Close to home, we've searched for the rare grama grass cacti at San Ysidro, and hiked the Hoodoo Trail in Ojito Wilderness with its bizarre mix of rock formations and desert plants.

As you can see, our programs span multiple topics and our field trips a range of destinations. And our upcoming programs and trips are just as varied. We hope everyone can find topics of interest and trips that fit their schedule and abilities. Best of all, we have a diverse group with varied interests that we all can learn from.



**Badlands hoodoos and ponderosa pines--go figure--just one of the unexpected sights on the Ojito Wilderness field trip.**

**Photo © George O. Miller**

## Conservation Committee members visit Ute Creek Ranch

By Sue Small

Earlier this spring, two members of the Albuquerque Chapter of the Native Plant Society of New Mexico traveled to Mosquero, New Mexico to join an information session on new, innovative ranching practices in New Mexico. The Healthy Soils Roadshow was facilitated by Jeff Goebel who works to achieve community consensus with diverse groups sharing a common interest, but sometimes with opposite desires.

Sue Small and Jim McGrath met with other members of the Western Landowners Association, ranchers, conservationists, and Mosquero residents as we shared meals and ideas. Our day included a revealing tour of this ranching operation and the additional efforts made by the owners to diversify their income stream. Making soils more productive helps not only for wildlife and cattle forage, but also helps protect our native plants in New Mexico.

Jeff Goebel has also been facilitating interactions and meetings with our Conservation Committee, ranchers in Cibola County, US Forest Service personnel, and county and city officials. Here are some links:

<https://mailchi.mp/ecb6efdeeeecb/save-the-date-working-lands-economics-the-next-era-of-western-conservation-1379309?e=988510343b>

<http://www.aboutlistening.com/about/team-profiles/jeff-goebel>

<https://ladderranch.blog/2015/09/20/a-visit-to-ute-creek-ranch/>

[https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fseprd510445.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd510445.pdf)



Charlie Jackson with giant alligator juniper, *Juniperus deppeana*, in Aguirre Springs Campground on the White Sands Missile Range field trip. Photo ©George Miller

### Big Thanks to our Volunteers!

Thanks to all our volunteers who helped with the many spring activities that the Albuquerque Chapter of the Native Plant Society participated in.

We had display tables at:

- Beekeepers Annual Conference
- Earth Day - Sandia High School
- Earth Day - Nob Hill Coop
- Desert Oasis Teaching Garden Plant Sale - Albuquerque Academy
- National Public Gardens Day - Albuquerque Bio Park
- Herbfest - Rio Grande Nature Center
- Butterfly Education - Plant World
- Bee City USA - Albuquerque Open Space

There was great interest in native plants at all these events. While we have many experts in the Society, we welcome all volunteers. Reference materials are available to help the novice.

The Society plans to participate in more activities throughout the year so look for details in future newsletters and emails.

*Thank you, Bettie Hines, for coordinating the table supplies and people!*



**Mike Halverson, Santa Ana Native Plant & Tree Nursery explaining the Native Plant Island concept.  
Photo by DK Stevenson**

## Native Plant Restoration the Easy Way

By DK Stevenson

On May 2nd, the NPSNM Albuquerque Chapter meeting presentation by was given by Mike Halverson, the Nursery Manager of the Santa Ana Native Plant and Tree Wholesale Nursery. The topic: Native Plant Islands. The reason: Public land stewards of Archeological and other native plant sites, like the US National Park Service and Albuquerque's Rio Grande Nature Center, want to reestablish local native plants onto archeological (and other) sites without disturbing anything underground. The local native plants in local

soil will naturalize in adjacent areas, stabilizing soil in the process.

The well-attended Native Plant Island Restoration Workshop was held two days later at the nursery entrance on the Santa Ana Pueblo. Their nursery grows many native plants for many types of restoration projects.

The Native Plant Island consisted of a mound of local soil (collected within a mile or so) on the other side of the Rio Grande, with a specimen tree-form female New Mexico Olive, *Forestiera neomexicana* in place. As we artistically added sections of dead trees and stumps (collected within 5 miles), Mike explained that they would absorb and hold any precipitation, slowly decay, add visual interest to the site, and help the chosen native plants thrive. We added small boulders and large rocks to collect water, insulate roots from temperature swings, and keep plants from desiccating. Finally, we added native plants from the nursery, while Mike was continually answering the questions from the group.



**Mike Halverson holding Whipple Cholla, *cylindropuntia whipplei*, upside-down as a participant digs the hole.  
Photo by DK Stevenson**

Mike Halverson held the Whipple Cholla, *Cylindropuntia whipplei*, by the soil ball he divided while the hole was dug. Using his hands to speak, he waved the cacti and demonstrated 'planting' it by dropping it into the freshly dug hole and filling in with loose soil using a shovel. "They bite!" he explained.

Also planted were Fragile Prickly Pear, *Opuntia fragilis*, and Silverscale Saltbush, or *Atriplex argentea*, among others. According to Mike, the Silverscale Saltbush, which grows 2 ft. tall and 2.5 ft. wide, is a good landscape alternative to the more aggressive Four Wing Saltbush, *A. canescens*, and is better as a trimmed hedge than boxwoods (*Buxus spp.*) in the arid southwest.

Mike Halverson explained that Aztec Ruins National Monument, adjacent to the village of Aztec, New Mexico, in San Juan County, installed at least one Native Plant Island with the help of many local people and groups. A boulder-like cistern sits atop the island to help establish and maintain the island so the historically local flora can reestablish throughout the ruins. Wild native plant enthusiasts and gardeners alike enjoyed the planting and nursery tour on a beautiful May morning.



View of the finished, unwatered Native Plant Island at the Santa Ana Native Plant and Tree Nursery with the Sandia Mountains in the background. Photo by DK Stevenson



Left: Fender's penstemon, *Penstemon fendleri*, from a desert arroyo from the Quebradas field trip.  
Right: Yellow Twistflower, *Streptanthus carinatus* ssp. *arizonicus*, in the Mustard family, Brassicaceae, also taken on the 2018 Quebradas field trip.  
Photos © George Miller

BACKYARD BUFFET

Summer is fruiting time, and for many animals, feasting time. In our landscapes, fruiting plants add color, wildlife food, and even table flavor. Look for these “supermarket” species while foraging in the field or at local nurseries for your backyard habitat.



Red raspberry, *Rubus idaeus*



Elderberry, *Sambucus carerulea*



Chokecherry, *Prunus virginiana*



Red barberry, *Berberis haematocarpa*



Engelmann's prickly pear, *Opuntia engelmannii*



Wild Strawberry, *Fragaria vesca*

## THE EDIBLE PRICKLY PEAR

### Recipes and How-To tips

By Penelope and Gary Hoe

#### Preparation of Fruits (Cactus Pears, Tunas) and Pads (Nopales)

**Fruits** – extract juice from ripe fruits gathered in late summer or prepare raw ripe fruits. Either can be used at once or frozen for later use. In New Mexico use big juicy fruits from *Opuntia engelmannii*, *O. lindheimeri*, and *O. linguiformis* (“Cow’s tongue”) for best juice and jelly. Other species producing juicy fruits in red to purple color can be used. Some species produce fruits that dry up quickly, thus useless for juice.

**Pads** – pick new pads in spring during growth spurt; try again during monsoon season if new growth occurs. Or purchase Mexican nopales in your grocery.



*Opuntia engelmannii* fruit  
Photo © George Miller

#### (1) Extracting Prickly Pear Juice:

Supplies needed: Sturdy **tongs, gloves**, stainless steel or enameled **pots, paring knife**, stainless steel or plastic **potato masher**, large glass or plastic **liquid measuring cup**, plastic or stainless steel **colanders**, bottled **lemon juice concentrate**, 3 or 4 pieces of **white flannel cloth, stainless steel** or **plastic spoons** for stirring.

**IMPORTANT:** Do NOT use aluminum for utensils, pots, colanders, or anything else in contact with the acidic cactus juice. (Buy 1/2 yd of 44” inexpensive white flannel, cut it into 3 pieces of equal size, and prewash & dry the flannel. Buy the untreated, undyed kind that says “Do not use for children’s PJs.”)

Using gloves and tongs, gather shiny, ripe, juicy fruits from healthy opuntias that have not been sprayed with pesticide. Use a twist of the wrist to remove the fruits. Ripe fruits should come off easily. Do NOT touch the fruits with your skin or you’ll have to use tweezers to remove the tiny glochids (fine, hairlike spines). Avoid the PAIN! It is not necessary to remove spines from fruits you are using for juice, as the straining process will take care of that. Any fruits you wish to use whole or sliced will require peeling and removal of glochids, however.

Rinse the fruits. Using your clean tongs, pick up the fruits, slice them once to help release juices as they cook, and place them in a pot. Add fresh water to almost cover the fruits. Cover the pot and heat to boiling on stovetop. Simmer over low heat until fruits are soft (*time will vary depending on how thick the peeling is*). This softens the skins and spines. Use potato masher to squish fruits as they simmer, releasing the juice, which will be an intense magenta or purplish-red color.

Strain off the skins using a large colander. Then line a colander with a piece of damp flannel. Pour the juice and any remaining seeds through the flannel slowly to strain out tiny spines and pebble-like seeds. Strain the resulting juice once more through a clean piece of flannel just to make sure it is free of spines. The filtering through flannel will go much faster the second time because the pulp will not impede the flow. (*Rinse the flannel pieces and soak them in a solution of soapy water with a little bleach. This will take out the juice stains and you can wash and reuse them for several years.*)

Measure the extracted juice and add **1/2 cup lemon juice for every 3 cups of juice**. The lemon juice helps keep the color bright and adds tartness. Cactus juice with added lemon juice will keep for several days in the refrigerator, or it can be frozen for months. Freeze in batches of 3½ to 7 cups, which are handy amounts for jelly. Process fruits from different species separately. This yields different shades of color. It also helps to learn which fruits yield juice that will not jell regardless of the amount of pectin!

## **(2) Preparing Prickly Pear Fruits for Eating Raw or to use Chunked or Sliced in Recipes**

Use the largest unblemished ripe fruits. There are several ways described in books to remove the glochids before peeling. I have tried two ways.

(1) Rinse off most glochids with a strong blast of water from your hand-sprayer in the sink. Fill a big Pyrex measuring cup with fruits. Pour boiling water over them. Drain off hot water and cover them with ice water. Hold each fruit with tongs, cut in fourths and use paring knife to grasp the loosened peeling and strip it off. Scoop out the seeds (considered optional, but the seeds are hard enough to break a filling!).

(2) My usual method is to grip the fruit with **hot-dog tongs** and slice off the ends with a **paring knife**. I use a **plastic cutting board**. Then I hold the fruit at the cut ends with thumb and forefinger and carefully remove the peeling, trying not to let any clusters of glochids touch my fingers. (I am getting better at it!) Ripe Englemann prickly pears peel easily. Do NOT set the peeled fruits on the cutting board that has glochids "swimming" in the juice where you cut the ends off. If you get glochids in your skin, use duct tape to pull them off. If the fruits are very juicy, blot them on a paper towel. The skins, seeds, and ends can be put into the pot where you are cooking down fruits for juice extraction.

When I have a supply of barrel-shaped bare fruits sitting on a paper towel, I slice each in halves or fourths and use a grapefruit spoon to scoop out the seeds. Now you have (a) fruits to use in recipes and (b) very pink/purple fingers. Washing dishes by hand a few times will remove the stain from your hands.

*Don't put the seeds in your compost pile  
unless you want a million little cactus sprouts all over your garden!*

To store prickly pear fruit, stir in 1 tbspc concentrated lemon juice for each cup of fruit pieces, stir gently, and refrigerate in a covered plastic, stainless steel or glass container. Without lemon juice they may oxidize somewhat brownish if not used soon after peeling. The acid preserves the bright color. Refrigerated, the fruits will keep several days. If you freeze them, be prepared for more mushy fruits after thawing.



### (3) Preparing Prickly Pear Pads for use in Recipes



*Opuntia englemannii* fruit Photo © George Miller

You can eat the flat pads from any prickly pear, with two considerations: (a) Pick the pad when it is about the size of your hand and is still tender, as larger pads develop a fibrous skeleton for support, and (b) make the process easier by choosing pads from species with fewer spines. There are prickly pear cultivars that are labeled "spine-free." **Do not be deceived. Handle every prickly pear part with care and tongs**, assuming there are tiny glochids lurking even if the larger spines are absent!

I use pads from *O. elysiana* var. *cacanapa* because there are few pricklies to remove. There are others available with few spines. (Stay far away

from the hedgehog prickly pear and the porcupine prickly pear unless you are starving; I

am sure they taste wonderful but you will never be able to get all the spines off without a fire!) Singeing the spines off is one way. (I use a sharp knife and don't play with fire.)

Holding the pad steady on a non-porous cutting board, I slice off the edge of the pad all the way around, because this is where many spines congregate. Then I scrape off the remaining spines. There may be numerous little fleshy leaves, but they will fall off on their own. Wipe the knife often on a paper towel. Rinse the pads when you have them scraped off. By this time they will be exuding a slippery juice, similar to that produced by okra.

Before using pads in recipes, prepare as above and precook by one of the following methods to get rid of the slippery juice:

- (1) Steam over boiling water for a few minutes; or
- (2) Cut into strips or chunks, coat lightly with olive oil, sprinkle with salt, and bake at 375°F for 20 minutes for slightly crisp nopales; or
- (3) Sauté in a little oil and water in a heavy frying pan, covered for about 5 minutes and uncovered another 10 minutes, stirring frequently; or
- (4) Grill oiled pads on hot grill for 2-3 minutes per side. (Most of these methods, plus others, are described in *The Prickly Pear Cookbook*, by Carolyn Niethammer.)

Pads that are baked or sautéed can be bagged and frozen for later use when new growth is not available.

### **RECIPES FOR PRICKLY PEAR FRUITS**

**Fresh Fruit Salad:** Mix chunks of prickly pears with any or all of the following fresh fruits – sliced bananas, strawberries, blueberries, raspberries, apples, peaches, mangoes, etc. Stir in your favorite dressing or yogurt, etc., for fruit salads. Don't be surprised if the entire salad takes on prickly pear fruits' bright magenta color.

**Prickly Pear - Blueberry Syrup for Pancakes:** In a saucepan stir together 1 cup prickly pear juice, ¼ cup chunks of prickly pear fruits, ½ cup of fresh blueberries, and 1 Tablespoon cornstarch. Cook, stirring, over medium heat, until sauce becomes thickened. If too thick, add a little water and stir. Serve warm over pancakes. It's especially good with sweet blue corn pancakes.

**Prickly Pear Cobbler or Pie:** Because prickly pear fruits become very soft when cooked, use a firmer fruit with the prickly pear to give more “body” to the cobbler or pie. The best base is sliced Granny Smith apples. Substitute prickly pear fruits for one-third to one-half the apples in your favorite apple cobbler recipe or 9-inch lattice crust apple pie recipe. Another good fruit to pair with prickly pears is hard unripe pears or pears that have to be cooked to soften them. This will give you a prickly pear – pear pie, which is not only a tongue twister, but quite yummy, especially if you add a few snippets of candied ginger to the recipe.

Use your imagination and add prickly pear fruits to favorite recipes. Be sure to allow for the domineering magenta color and for the extra juiciness of the fruits. Niethammer’s *Prickly Pear Cookbook* has numerous deserts, sauces, fruit salsas, and such for your culinary delight. Note: in cookie or bread recipes, prickly pear chunks usually turn brown when cooked, but the flavor is not affected. Prickly pear fruit in fudge is quite tasty, but mine did not set up, so I was forced to finish off my mistake by eating it by spoonfuls!

### **RECIPES FOR PRICKLY PEAR NOPALES**

**Percy’s Chunky Nopalito Salad:** Cook one 12-oz. bag of frozen *Birdseye Steamfresh Lightly Seasoned Southwestern Corn*. Add 1 can of black beans (drained), ½ cup nopalitos (nopales, chopped and de-slimed), 1 small can sliced black olives, ¼ cup chopped red bell peppers, 1 small can chopped green chiles (OR chopped pickled jalapeños to taste), ¼ cup chopped sweet onion, dry or chopped fresh cilantro, salt and black pepper to taste. Stir together and add one of these dressings: lime juice, OR oil and vinegar, OR Italian, OR Tuscan, OR Greek. Mix well, cover, and chill thoroughly before serving. Salad can be made a day or so ahead of time.

**Nutritious Nopale Egg Frittata:** Prepare the following “accessories,” sauté them in butter and set aside to add later: chopped (de-slimed) nopales, chopped red or yellow bell peppers, sliced mushrooms, chopped shallots, purslane or spinach pieces. Beat together eggs and an equal amount of egg substitute with a small amount of milk. Stir in coarsely-ground black pepper, tarragon, basil, and garlic powder. In a large skillet melt butter, add egg mixture, and as it cooks lift the edges with a spatula to allow liquid to seep underneath and cook. Before the eggs totally cook, add the precooked accessories and continue to stir the eggs and veggies. When the frittata is done, put it on a plate and sprinkle finely grated cheese over the top. Keep warm and serve. Lots of vitamins, low cholesterol, low carbs, and not too many calories! This dish can be made for as few as 2 or as many as 20, but if you have a crowd, use several skillets or cook the egg in batches.

**Vegetarian Nopale Soup:** Simmer together until cooked and flavors blend: vegetable stock, strips of nopales (slime will cook off as soup simmers), chopped onions, chunky fresh garlic, zucchini chunks, diced carrots, celery (or try chard or bok choy stem slices), TVP (textured vegetable protein – optional), herbs of choice, diced jicama or turnips. For non-vegetarian version, use beef stock and add crumbled cooked sweet Italian sausage.

Other ideas: **add nopalitos** to canned soups, to stir fry, to chunky spaghetti sauce, to green chile stew, to posole. **Google® “nopale salads”**; there are numerous varieties available. Check Niethammer’s book for **condiments, salsas, and sauces** using nopales.

If you cannot find fresh nopales or do not have any frozen, you can find **pickled nopale strips in jars** at many groceries. These need to be rinsed, drained, and blotted to remove the brine. Then you can use them in recipes. The texture, however, is quite soft and the flavor is inferior to those you prepare “from scratch.”

## RESOURCES

***A Taste of Nature - Edible Plants of the Southwest and How to Prepare Them***, Kahanah Farnsworth, Ancient City Press, Santa Fe, NM, ISBN 0941270939, 1997. (*For the adventurer who wishes to eat wild foods.*)

***Cooking Wild***, The Native Plant Society of New Mexico – Otero Chapter, Alamogordo, NM, published in-house 2004, reprinted 2011. *Booklet of recipes using numerous native plants. Recipes include cactus candy. (Obtain from club.)*

***Edible and Useful Plants of Texas and the Southwest: A Practical Guide***, Delena Tull, The University of Texas Press, Austin, TX, ISBN 0-292781644, 1999. *Includes recipes. (Available in Bosque del Apache Visitor Center bookstore.)*

***Idonapshe – Let's Eat Traditional Zuni Foods***, Rita Edaakie, Zuni A:Shiwi Publishing, Ltd, The University of New Mexico Press, Albuquerque, NM, ISBN 0826320465, 1999.

***Prickly Pear Cactus Medicine – Treatments for Diabetes, Cholesterol, and the Immune System***, Ran Knishinsky, Healing Arts Press, Rochester, VT, ISBN 0892811498, 2004. *Studies cited pertain to species of Opuntia found in Mexico and southern California.*

***The Prickly Pear Cookbook***, Carolyn Niethammer, Rio Nuevo Publishers, Tucson, AZ, ISBN 1887896562, 2004. *The best recipe book, in my opinion. Includes nutrition info and ways to prepare the fruits and nopales for cooking. (Available in Bosque del Apache Visitor Center bookstore.)*

***Wild Plants of the Pueblo Province – Exploring Ancient and Enduring Uses***, William Dunmire and Gail Tierney, The Museum of New Mexico Press, Santa Fe, NM, ISBN 0890132720, 1995. *Ethnobotany, usages of native plants by Pueblos and Apaches in NM. (Available in Bosque del Apache Visitor Center bookstore.) See also their other book ***Wild Plants of the Four Corners Region***, ethnobotany pertaining to Navajo, Hopi, Ute, et al usages.*

*-Special thanks to Margaret Bamberger, of Alamogordo, NM, who first served me prickly pear jelly on hot biscuits and explained how to strain the juice through flannel.*

*-Thanks also to the members of the Cactus and Succulent Society of New Mexico and the Albuquerque chapter of the Native Plant Society of New Mexico, for their interest and encouragement.*

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According to Wikipedia: **A bosque (BOHS-keh) is a type of gallery forest habitat found along the riparian flood plains of stream and river banks in the southwestern United States. It derives its name from the Spanish word for woodlands.**

<http://yerbamansaproject.org/events/>

**Yerba Mansa Bosque Restoration Field Day:  
Saturday September 15, 9am to 12 noon**

**Help restore Bosque habitat with Yerba Mansa, and other native plants.** Restoration work includes the removal of invasive non-native Ravenna Grass from the understory and replanting and reseeding native grasses, herbs, and shrubs.

**Events are open to the community.** Work takes place at our restoration site located along Tingley Drive, south of Central Avenue. Park in the lot at the south end of all the fishing ponds, which is 0.8 miles south of Central. Wear protective long sleeve clothing and bring plenty of water as well as work gloves and a shovel, if you have them. The **City of Albuquerque Open Space** will be there to train our work crew and provide gloves and tools for anyone who needs them.

**Please RSVP with the number in your group so we know how many volunteers to expect:**

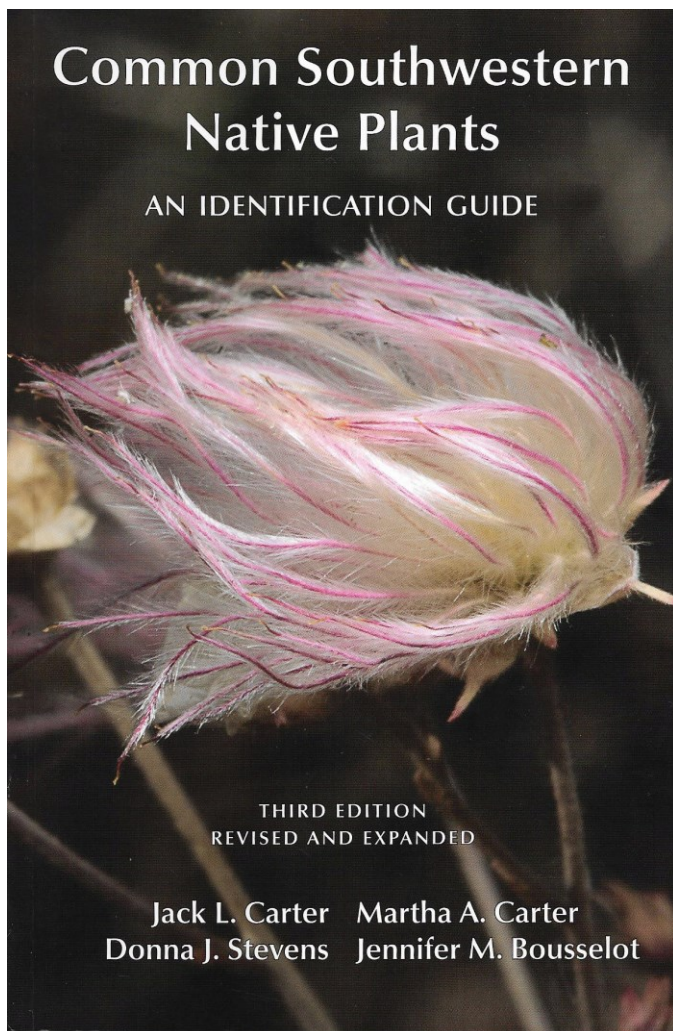
<http://yerbamansaproject.org/contact-us/>

## Book review

### ***Common Southwestern Native Plants: An Identification Guide, Third Edition* by Jack Carter, Martha Carter, Donna Stevens, Jennifer Boussetot**

George Miller

Originally published in 2003 and now by the Colorado Native Plant Society, this revised and expanded edition (186 species) will delight, educate, and assist plant identification for every serious and weekend plant aficionado. This handy 6 x 9 inch volume is a condensed version of Carter's *Trees and Shrubs of New Mexico* with a wildflower section added, except it does not include keys.



The book covers Arizona, New Mexico, southern Colorado, and the High Plains of Texas. It includes conifers (16 species), trees (12), small trees (18), shrubs (55), vines (7), cacti (8), agaves, yuccas, nolinias (6), wildflowers (64) arranged alphabetically by families.

Trees, shrubs, vines, cacti, and agave allies have detailed descriptions with photos and line drawings, as well as height, leaf arrangement, flower, and fruit measurements and details. The wildflowers, two species per page, have general descriptions with one photo and habitat, flowering season, elevation, and states of occurrence listed. A glossary of botanical terms and an illustrated glossary with drawings help, though the descriptions go light on botanical terminology. Photos by Patrick Alexander, Bob Sivinski, Bob Lagier, and Jim Pasarowicz illustrate the species.

All proceeds go to the Colorado Native Plant Society. The Albuquerque Chapter of NPSNM will carry the book, available at monthly meetings.

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## Plant Profile

### Canada Violet (*Viola canadensis*)

By Carolyn Dodson

Patches of low plants with showy white flowers among heart-shaped leaves carpet damp forest floors. Five unequal petals display purple lines and are yellow at the base. Tufts of hairs around the floral center provide footholds for visiting insects and prevent drops of water from rolling into the heart of the flower, thus diluting the nectar. Canada violet blooms in early summer.

### Violet pollination

The fragrant violet flowers attract an assortment of insect pollinators. After landing, a visitor follows the prominent guidelines on the petals to the nectar. A large insect such as a bumblebee will clasp the flower petals thrusting its tongue into the spur. This displaces the stamens, causing pollen to deposit on the bee's abdomen. Smaller insects land on the front petals and must turn upside-down to reach the nectar. In this case they carry the away pollen on their backs.



### Closed flowers

Should insects fail to appear when flowers are ready for pollination, violets have a second chance for producing seeds before the end of the season by falling back on specialized flowers that never open. Within these green inconspicuous buds that lack petals and nectaries, stamens fertilize the ovules. This self-fertilization ensures that in a year of scarce pollinators the plant will still produce seeds.

### Seeds planted by ants

When mature, violet seeds are ejected from the plant, each bearing a fragrant, nutritious lobe. Foraging ants, attracted by this enticing appendage carry the seeds back to the colony where the ants eat the the oily, nutritious lobes leaving the seeds intact. Then, neat housekeepers that they are, the ants discard the seeds in the colony refuse pile. This habit benefits both the ants who receive nutritious oil-rich food and the violets, whose seeds

are planted in fertile soil hidden from seed-eating mice.

Dodson, [Mountain Wildflowers of the Southern Rockies](#)



## Insect Consumption 101

© DK Stevenson 06/21/18

No one should worry about “bugs” in my neighborhood. By “bugs”, I mean insects, spiders, true bugs, etc.

My reason? The Barn Swallows. They rebuilt their nest adjacent to my front door after my spouse took it down last year (yep, it was messy.) It is the perfect location. Location, location. Mom and dad swallow probably visited a number of my neighbors’ yards since they only built the nest in the mornings over several weeks. Sprinkler systems run in the morning. One can see the different colors of mud on the exterior of the nest.

There are four babies in the tiny nest. All hungry, competing for whatever scarce insects and “bugs” mom and dad can find. Last year, only two survived to fly out of each clutch, so four Swallows fledged. We can only watch to see if they will try to rear a second family. After all, today is the Summer Solstice.

I have plenty of yellow aphids on my three newly planted *Asclepias subverticillata*, Horsetail Milkweed, but I think they’re going after larger flying insects as they sweep (and swallow?) low over grass and wherever they forage. Maybe they eat my neighbor’s honeybees. Something is always going to eat Milkweeds but they’ll tough it out, I’m not worried. I keep looking for funky Jurassic reptilian black and orange ladybug larva.



*Asclepias subverticillata*  
Photo © George Miller

Native plants co-evolved with insect and “bug” attacks. As an ecologist, environmental professional, and reformed horticulturist, I have witnessed the collateral damage pesticide use does to non-target insects and plants, even rendering soils unable to support broadleaf forbs because of ignorance and over-application. I disagree with Master Gardener programs facilitating pesticide use in their training. My hope is that the students are smarter and don’t encourage the use of pesticides in home gardens and the training is revised.



*Yucca intermedia* with aphids and ladybug  
Photo © George Miller

Oaks (*Quercus spp.*) alone support hundreds of insects without us even noticing. A few holes in the leaves don’t bother anyone with their nose buried in some electronic device anyway. My favorite *Pinus ponderosa*, affectionately called Rosa (with a soft s), towers above my home and garden. I know there are plenty of insects and “bugs” up there, but Rosa attracts hummingbirds, doves, house finches, goldfinches, crows and ravens, and even the neighborhood roadrunner and occasional hawk. They’re all hungry. Insects have much more protein than any sunflower seed I could feed them.

The Composite (Daisy) family, Compositae (or Asteraceae), is thought to be the largest flower family. So far, the insects have not killed off any of the Composite ragweeds that trouble us in late summer when the Composite goldenrods get the blame because they happen to be blooming simultaneously. Insects are an integral part of neighborhood ecology, just like native plants.

Native Plant Society of New Mexico

# Plants, People and Culture of the Gila

## 2018 Annual Conference



**THURSDAY, SEPT. 6**

PARTICIPANT CHECK IN



**FRIDAY, SEPT. 7**

CHECK IN CONTINUES

KEYNOTE SPEAKERS

FIELD TRIPS & WORKSHOPS



**SATURDAY, SEPT. 8**

PRESENTATIONS

TALKS, FIELD TRIPS &  
WORKSHOPS

EVENING BANQUET



**SUNDAY, SEPT. 9**

FINAL FIELD TRIPS & WORKSHOPS

***It's Time  
to  
Register!***

# SEPTEMBER 6 - 9, 2018

Western New Mexico University | Silver City, NM

**Surrounded by 3.3 million acres of national forest, including three wilderness areas,** Silver City is the perfect base for hiking and botanizing.

Join us to explore the plant communities of the Gila and to learn how the human communities, ancient and modern, have related to this land.

For more information visit [www.npsnm.org/2018-conference](http://www.npsnm.org/2018-conference)

**STUDENT / INTERN SCHOLARSHIPS AVAILABLE!**

Visit [www.npsnm.org/conference-scholarship](http://www.npsnm.org/conference-scholarship)

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NATIVE  
PLANT  
SOCIETY



**NATIVE PLANT SOCIETY OF NEW MEXICO – ALBUQUERQUE CHAPTER  
JULY–SEPTEMBER, 2018 -- 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 info on programs, contact Jim McGrath at 286-8745 or sedges “at” 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. **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.

**NOTE ON FIELD TRIP CANCELLATIONS:** Due to extreme fire conditions, many National Forests are closed to the public until adequate rainfall. Some field trips will be cancelled or rescheduled. Notifications will be announced at the monthly meetings, on the List Serve, or call the leader.

**July 11. MEETING.** “Can Agriculture and Conservation Co-Exist? What the term ‘Organic’ Actually Protects.” We all hear that we should buy organic food to protect the environment. As the organic sector grows with larger farms, what is really required to be organic? Organic farmer Monica Pless will discuss what is required of farms to be certified organic, and what that means for native plants, pollinators and soil health. Monica managed farms in New England and Missouri, one known for having the greatest diversity of native pollinators in the state and used many techniques to reduce runoff, reseed native prairie plants, include perennial buffers, and incorporate livestock and cover cropping into her soil health program. She will discuss what some of the ‘buzzwords’ mean, what questions to pose to a producer to understand their practices, and will describe some techniques used by farmers and ranchers to grow in concert with the land.



**Sculpted rock formations high-lighted the Hoodoo Trail on the Ojito Wilderness field trip.  
Photo © George O. Miller**

**July 21. FIELD TRIP. Bandelier flower walk. [TRAILS STILL OPEN FOR NOW]**  
Leader Chick Keller. Exact trail TBA as the season and moisture dictate. Meet at D at 7:30 am to carpool. Our gathering point for the hike will be at 9:00 am at the Ponderosa Campground near the intersection of routes 4 and 501 west of Los Alamos and north of Bandelier entrance.

**July 28. FIELD TRIP. Milne Trail at Cedar Crest Post Office. [CANCELLED UNLESS FOREST RE-OPENS–ALTERNATIVE DESTINATION MAY BE OFFERED]** Leader Dara Saville, 505-248-1774. Join the Native Plant Society Albuquerque Chapter for a leisurely 2 hour walk at Milne Canyon in Cedar Crest. This slow-paced outing will focus on native medicinal plants with discussions on herbal actions, healing applications, and conservation issues of these plants along the way. We will end at lunchtime, a sack lunch is optional. If you are interested in learning about medicinal plants, bring a notebook and pencil. We will meet at location A. SW corner of Smith’s parking lot at Tramway and Central at 9:15 am for a 9:30 departure time.



**August 1 MEETING.** “New Mexico Bats and Their Bacteria: Landscape Complexity and Plant Diversity as Drivers.” Post-doctoral UNM Biologist Ara Winter tells us about how changes in the bacteria populations on bats are driven by the bats’ local habitat. The bacteria populations in bats are dependent on the degree of landscape and plant diversity complexity. The need to protect local and regional native habitats is highlighted.

**August 4 FIELD TRIP. Magdalena Mts., Timber Ridge Field Trip. [CALL GEORGE AT 505-352-9019 TO REGISTER FOR HIKE OR TO CONFIRM STATUS]** Leader George Miller. Timber Ridge at 10,000-feet at the head of Water Canyon in the mountains south of Socorro yielded 40 species of flowers last time, so let’s try it again! The ridge hike leads through a meadow with views in all



*Asclepias subverticillata* with butterfly Photo © George Miller

directions and into a ponderosa forest. We hope to see lots of species not often seen in the Sandias, including Toadflax Penstemon, San Mateo Penstemon (NM RARE), Scouler's Catchfly, and Rusby's Primrose. Moderately strenuous, high-elevation hike on uneven trail. Bring rain gear, hat, sunscreen, lunch. REGISTRATION REQUIRED. Meet 8:00 a.m., meeting place G, Saver's parking lot on Carlisle on NE side of Carlisle/Menaul intersection. Park behind Mattress Firm in SW corner of lot.

**August 17-18 FIELD TRIP. Holy Ghost Trail. Pecos Wilderness. [THE SANTA FE NATIONAL FOREST RE-OPENED BUT CHECK WITH TOM OF TRIP STATUS]** Leader: Tom Stewart, 505-881-6296. Holy Ghost Canyon Walk is one of the easiest walks into a New Mexico wilderness area, featuring tall conifers, lush streamside vegetation, and the possibility of viewing the endangered Holy Ghost Ipomopsis (*Ipomopsis sancti-spiritus*) in flower. ADVANCED REGISTRATION REQUIRED and will be opened in early June. The adjacent campground fills quickly on weekends, so arrive early as possible on Friday if you wish to stay the night before the hike.

**August 25 FIELD TRIP. El Malpais - El Calderon.** Leader Pam McBride. We will look for the cinder phacelia (*Phacelia serrata*) on the El Calderon trail, a 3.8 mile loop, approximately 100 miles one way from Albuquerque. The cinder phacelia location on the trail can be reached via a section of the trail that is about 1/4 mile from one of the parking lots. The plant, dependent on having volcanic cinders as a substrate, grows on exposed cinder slopes. The El Malpais is one of only two United States locations where this species occurs, the other - Sunset Crater National Monument in Arizona. If there is a decent display of the plant during our exploratory excursion the week before our field trip, we will go to the El Calderon trail first. Those who wish to go explore the Narrows Rim Trail can carpool with us there. If not, we will drive directly to the Narrows Rim Trail. On the Narrows Rim Trail, we will be 500 feet above the lava fields and have great views and can encounter displays of a wide diversity of wildflowers including *Monarda punctata*, crag-lily (*Echeandia flavescens*), and Indian pink (*Silene laciniata*) as well as several members of the four-o'clock, borage, and asteraceae families. Meeting 8:00 am at place G. (Saver's parking lot on Carlisle on NE side of Carlisle/Menaul intersection. Park behind Mattress Firm in SW corner of lot.)

September. No monthly meeting.

**September 6-9. Annual Meeting of the Native Plant Society of  
New Mexico  
Silver City, New Mexico**

September 22. Grasses of Valle Caldera National Preserve. **[CANCELLED, MAY BE  
RESCHEDULED]**



View of Victorio Peak (center knob) from vantage point where Apache Chief Victorio ambushed the Cavalry in Hembrillo Canyon in the White Sands Missile Range. Besides an abundance of desert plants, we saw pictographs, petroglyphs, and some of the most rugged mountains in southern NM. Photo © George Miller

**FIELD TRIP MEETING PLACES**

- A. SW corner of Smith's parking lot at Tramway and Central.
- B. NE corner of WalMart 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 behind 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. From ABQ drive south on I-25 to Exit 203. Head east through 2 traffic lights. Home Depot is on left.

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Articles, photos, and news submissions for the Albuquerque chapter NPSNM Spring Newsletter should be submitted via e-mail to Diane Stevenson by Monday, September 17th, 2018 (distevenson331 "at" hotmail.com). Any mistakes you see in this newsletter are mine. *Thank you!*

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### **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% discount at Plants of the Southwest
- Receive a 10% discount at Santa Ana Garden Center

### **NPSNM Albuquerque Chapter**

#### **Current Board of Directors – 2017**

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

#### **Core Group (essential volunteers)**

Books: Carolyn Dodson, **retiring**  
Books: Vacant  
Garden Center Chair: Irene Scotillo  
Communications: Gary Hoe  
Hospitality: Doris Eng  
Invasive Weeds Rep.: Don Heinze  
Publicity: Charlie Jackson  
Habitat Gardening: Virginia Burris  
Refreshments: Penny Hoe