Field Trips and Workshops: Directions and meet-up locations will be in your registration packet. Fees for workshops should be paid with your registration to reserve your spot. Remember to wear appropriate shoes and a hat and bring plenty of water, sunscreen, snacks, and hiking poles where needed, lunch on Sunday (unless you plan to leave early) —and don't forget your hand lens. Carpooling is encouraged; on longer drives you may be asked to contribute a couple of dollars to your driver for gas.

# **Saturday August 3 Morning Sessions-Field Trip and Workshop Descriptions**

(Noon-1:30 pm Lunch at IAIA café (included with registration) ticket with name tag Building #4)

1. Living Lines in Botanical Art Workshop: Drawing and watercolor for new and experienced artists Whether you are a new or an experienced artist this workshop provides specific subjects for various levels. Drawing and watercolor demonstrations support your drawing technique, watercolor control, color mixing, creating dimensional botanical forms, and refining details. To make the most of your workshop drawing and/or painting time, you can view all, or whichever demonstration that best supports your artistic goals. Keep your drawing, and painting flowing after the workshop with take home handouts and resource list. Minimum: 4 Limit:10 Location: Room LTC lecture room in Building # 5 Time 9:00 am-noon Cost \$35. Facilitator: Lisa Coddington, MA, this Santa Fe Artist has been teaching art for over 18 years at numerous non-traditional educational locations, as well as University of New Mexico, and Santa Fe Community college. (Workshop supplies are provided)

## 2. Indigenous Foods Cooking Workshop

Join renowned indigenous chef Lois Ellen Frank for a Learn to Cook Indigenous Native American Foods of the Southwest. Prepare Lois' favorite Cactus Pad Salad and Sunflower Seed Cakes. Discover the history of foods from the Southwest Indian Nations while you are cooking. **Location:** kitchen located in the lower level of the Hogan, Building # 1. **Limit:**10 **Time:** 9:00 am – noon **Facilitator:** Dr. Lois Ellen Frank is from the Kiowa Nation on her mother's side and Sephardic on her father's side. She received her Ph.D. from the University of New Mexico in Culinary Anthropology. The title of her dissertation was "The Discourse and Practice of Native American Cuisine: Native American Chefs and Native American Cooks in Contemporary Southwest Kitchens." Fee \$10.

### 3. Ancient Life Ways Technology Workshop

This workshop will focus on Yucca production of sandals, textiles and other uses of yucca. Each participant will be making one yucca sandal. **Limit:** 10 **Location**: Room 121 Conservation Lab in Building # 9 **Time**: 9-noon **Facilitator**: Mary Weahkee She is an Archaeologist for the Office of Archaeological Studies (OAS) and part of the education outreach program for the Department of Cultural Affairs Museum of New Mexico. Her tribal affiliation is Comanche Nation and Santa Clara Pueblo. She has been teaching ancient life ways since 2006 for the OAS. Fee \$10.

## 4. A Beginner's Guide to Mosses Workshop

Using both compound and dissection microscopes we will explore the amazing world of mosses. We examine a teaching collection as well as collecting samples from the IAIA nature trail. **Location**: Science Lab Room 120 SCITEC Building #9 **Time**: 9:00 am –noon. **Limit**: 10 **Facilitator**: Dr. Russ Kleinman is an Associate Botanist, at the Dale A. Zimmerman Herbarium at Western New Mexico University in the Department of Natural Sciences. Silver City, NM

### 5. Beautiful Cactus Gardens of Eldorado

Join us as we tour the beautiful cactus gardens around Eldorado, NM. We will start our tour at the cactus garden near the Eldorado Community Improvement Association, 1 Hacienda Loop where we will see plantings of the endangered Santa Fe Cholla. Then we will drive past the Vista Grande median

and the LaTienda entrance to see the installation next to Santa Fe Brewing, and then a final stop at Nancy and Obie's place. Their address is 4 Duende Road in Eldorado. **Limit**: 15 **Difficulty**: Easy **Elevation**: 6500' **Leader**: Joe Newman who has worked with the cactus rescue project for years. Each participant may receive a small Santa Fe cholla to take home. We will car pool from the IAIA campus leaving at 8:30 AM or you can meet us at the first location 1 Hacienda Loop at 9:30 AM on Saturday morning.

# 6. Randall Davey Audubon Center Wildflower and Garden Walk

Climbing a flagstone stairway and walking the half-mile loop trail, we should find a good selection of wildflowers typical of the Rocky Mountain foothills piñon/juniper habitat in "monsoon" season. Going a quarter mile up Bear Canyon into the Ponderosa Pine/Douglas Fir habitat should reveal additional plants. Included will be a stroll through the Master Gardener maintained xeriscape gardens up to the Herbarium maintained by Dr. Roger Peterson and Mimi Hubby. The Audubon Center does not charge an admission fee, but is always grateful for donations. See <a href="mm.audubon.org">mm.audubon.org</a>. Limit: 15 participants Difficulty: Easy Distance: 2 miles. Elevation: 7,400' Leader: Carlyn Jervis has studied the environment of northern New Mexico for decades, worked as a ranger naturalist at Bandelier National Monument, and has led bird and plant walks at Randall Davey Audubon Center.

# 7. New Mexico Wildlife Center

Visit the native plant gardens established by the Santa Fe Master Gardeners on land being restored from a 20 acre former rodeo ground at the New Mexico Wildlife Center south of Espanola, a center devoted to conserving and rehabilitating native wildlife and their habitat <a href="https://newmexicowildlife.org">https://newmexicowildlife.org</a>. Near the mews where animals that cannot be released into the wild are located, we will see native plant pollinator gardens, a Cactus Rescue Coalition planted cactus garden, monitoring sites for the endangered Santa Fe Cholla and other restoration efforts. The walk will begin with a photo show and talk by Kate Whelan on native bees foraging on native plants. **Difficulty:** Easy **Distance:** about 1 mile, **Elevation** about 5600' **Limit:** 20 **Leader:** Kate Whealen is a master gardener, farmer, retired nurse and beekeeper who has been photographing native bees and growing native plants for years.

#### **8. Leonora Curtin Wetland Preserve**

Leonora Curtin Wetland Preserve is a 35-acre cienega being restored from invasive Russian olives managed by the Santa Fe Botanical Garden with accessible trails in the uplands and wetlands containing over 250 plant species. See santafebotanicalgarden.org **Limit:** 20 participants **Distance:** 1-2 miles **Elevation:** 6500' **Difficulty:** Easy **Leader:** Natali Steinberg is a long time docent for Leonora Curtin and the Randall Davey Audubon Center.

# 9. Downtown Santa Fe Walking Tour

This tour will reveal the tapestry of trees and architecture in Santa Fe's built environment. Majestic cottonwoods and romantic Spanish-Pueblo Revival, enhanced by unusual exotic specimens and Territorial Anglo inspirations, provide a rich diversity that will surprise you as we stroll through the heart of the City Different. **Leader**: David Rasch is former historic preservation officer for the City of Santa Fe and an avid amateur botanist, focusing on ancient pines. **Limit:** 15 participants **Distance**: 1.5 miles **Difficulty**: easy.

## 10. New Mexico Capitol Building ("The Roundhouse") and Grounds Tour

This tour will begin with the interior of the Capitol, with explanations of the legislative process and views of some of the Capitol's impressive collection of art. We will then move outside for a tour of the capitol grounds and the extensive plantings designed by Clay Buchanan. **Distance:** 1-mile **Difficulty:** Easy **Limit:** 20 **Leaders:** Christal Branch guides tours for the Legislative Council Service. Tracy Neal is a certified arborist and experienced landscape designer who incorporates native plants into his work.

## 11. Terrero Mine Restoration in the Pecos

The Terrero Mine in upper Pecos canyon was one of the country's most productive lead and zinc mines in the 1920s and 30s. Site reclamation started in the late 1990s under direction of the NM Environment Department. Learn about mining history and the reclamation project, as we visit the El Molino mill site near the village of Pecos to look at what is growing and how it compares with the list of species that were seeded there 15 years ago, with an optional 1/4 mile walk to the borrow pits. **Leader:** Rachel Jankowitz is a biologist with the NMED Surface Water Quality Bureau and the NPSNM Conservation Chair **Distance**: 30 miles E of Santa Fe **Distance**: less than 1-mile **Elevation**: about 7200' **Difficulty**: Easy **Limit**: 20

# 12. Black Canyon

Join us for a hike near downtown from the Black Canyon campground on NM Hwy 475 in the Santa Fe National Forest through a thinned part of the forest up to a meadow where a prescribed burn was conducted. **Distance:** 2 miles Elevation: up to 9,000' **Difficulty:** Easy to Moderate **Leaders**: Sam Berry, a former wildland firefighter and current Southwest Program Coordinator for the Forest Stewards Guild and Maria Mullins, a botanist for the Bureau of Land Management. **Limit:** 15

## 13. Beautifully Restored Cienega at Simons Ranch

Enjoy the rare opportunity to view a restored ciénega with its rare and unusual wetland plants on a private ranch next to the Leonora Curtin Wetland Preserve. Leader: Bob Sivinski is the former NM state botanist for rare and endangered plants and co-author of The Wetland Action Plan for NM Arid-Land Spring Cienégas available at: <a href="https://www.env.nm.gov/wp-content/uploads/2017/07/WAP-Arid-Land-Cienegas-NM-2018-Final-for-Printing.pdf">https://www.env.nm.gov/wp-content/uploads/2017/07/WAP-Arid-Land-Cienegas-NM-2018-Final-for-Printing.pdf</a> Difficulty: Easy Elevation: 7,000' Distance: 1 mile or less Limit 15

### 14. Santa Fe Botanical Garden at Museum Hill

Join us for a tour of the lovely Santa Fe Botanical Garden, with a focus on the native plants of the recently opened Ojos y Manos, which is also an ethnobotanical garden and will include a discussion of the traditional uses for these plants. **Leader:** Scott Canning the Horticulture and Special Projects Director at the Santa Fe Botanical Garden **Difficulty:** Easy **Distance:** 1-mile **Limit:** 20 participants

### 15. Railyard Park to St. Francis Underpass

Enjoy a hike from the north end of the City Railyard Park to the new underpass below St. Francis Dr. that connects the neighborhood once severed from downtown. The 13- acre Railyard Park is planted with many natives and was created by Trust for Public Land. **Leaders:** Gail Haggard is the owner of Plants of the Southwest and a founding member of the NPSNM and Soulange Serquis is a landscape architect for the St. Francis underpass. **Elevation:** 7,000' **Distance**: about 1 ½ miles **Difficulty**: Easy **Limit**: 20

# **Field Trips Sunday**

## 16. Mosses on My Mind: Bryophytes for the Beginner

Enjoy the spectacular cool drive to up to the Santa Fe Ski Basin. If you've previously given mosses only a passing glance, you'll learn how to actually see and identify them, all the while engaging in informative conversations. Handouts provided. Bring a 10x hand lens if you have one. **Difficulty**: Easy, less than 1 mi. **Elevation**: 10,000' **Limit**: 15 **Leader**: Dr. Russ Kleinman is an Associate Botanist, at the Dale A. Zimmerman Herbarium at Western New Mexico University in the Department of Natural Sciences, Silver City, NM

## 17. Holy Ghost Canyon

The endemic endangered Holy Ghost Ipomopsis (*Ipomopsis sancti-spiritus*) occurs only along a small stretch of road in the Holy Ghost Canyon near Pecos, NM. Lean about this beautiful plant and the struggles to save it, in addition to seeing many other plants in this rich canyon habitat. **Limit:** 15 **Difficulty:** Easy to Moderate **Elevation**: 8,000-8,500' **Distance:** 2 -3 miles or more **Leader:** Danny Burton is the US Forest Service Biologist for the Pecos District of the Santa Fe National Forest.

# **18. The Other Side of Town:** Acequia Trail, Two Cemeteries, Baca Railyard & Santa Fe's First City Well

Learn about the history of the former farmland and industrial area once outside the City of Santa Fe. We will see: the two cemeteries moved in the 1880s from downtown, the developing City-owned Baca Railyard, the Baca Street Well, once part of PNMs power plant where groundwater contamination is continuing to be addressed. Learn about changing land uses occasioned by drought, population growth, culture change, city water system and possible brownfields treatment for potential public benefit, including the role of native plants. **Leaders:** Barbara Fix is a landscape designer/gardener who has long been involved in the Baca neighborhood and Alysia Abbott is an archaeologist with an undying interest in cemeteries **Limit**: 20 **Difficulty**: Easy **Distance walked**: 3-4 miles **Elevation**: 7,000'

# 19. Butterfly Walk in the Jemez Mountains

Enjoy a hike in the Jemez Mountains where we visit three different butterfly habitats, including two in post-wildfire recovery. Starting at the Trailhead for Burnt Mesa, on the Pajarito Plateau on north edge of Bandelier National Monument, in an often burned, dry grassland with interspersed stands of oak and ponderosa pine, the tour will continue to Camp May, located next to the Pajarito Ski area, to see high meadow and mixed conifers. Then, we will end at Valle Canyon, a recently burned area in the early stages of recovery. **Leader:** Steve Cary has studied butterflies and their habitats for decades. He is the author of **Butterfly Landscapes of New Mexico**. **Distance** 2-3 miles Elevation: 7500' to 9500' **Difficulty:** Easy to Moderate, on & off trail **Limit:** 15

### 20. Kasha-Katuwe Tent Rock National Monument off NM-22 Cochiti Pueblo

Enjoy a hike through this expansive geological park amid cone-shaped tent rock formations that are the products of volcanic eruptions that occurred 6 to 7 million years ago. There are many native plants along these twisting and curving trails, including the unusual Manzanitas. **Elevation**: 5,500' -6,700' **Difficulty**: Moderate **Distance**: 2 miles NOTE there is a \$5 fee per vehicle to enter the park. **Limit:** 15 **Leader:** Gail Haggard is the owner of Plants of the Southwest and a founding member of the NPSNM. **Directions**: from Santa Fe, head south on I-25 and take the Cochiti Pueblo Exit 264 off I-25 onto NM 16. Turn right off NM 16 onto NM 22, and follow the signs to Cochiti Pueblo and the National Monument.

#### 21. Rio en Medio

See butterflies and native flora as we hike through forested areas, open meadows, up steep inclines and cross many streams to a beautiful waterfall in the Sangre de Cristo Mountains near Tesuque. **Difficulty**: Moderate with some steep inclines and wet crossings **Distance**: 8 miles **Limit**: 12 **Leader**: Linda Wiener has a PhD in entomology and has worked as a field biologist, curator, educator and activist. She has been active in surveying New Mexico insects and spiders for many years, leading the official *Santa Fe Butterfly Count* for over 20 years.

### 22. Big Tesuque Plant Ecology Walk

Starting at the Big Tesuque Campground, in the Sangre de Cristo Mountain this mostly easy trail winds through aspen and conifer forests and a lovely meadow. We will see a wide variety of high elevation plants in different plant communities and we will discuss the plant community types and plant-animal interactions encountered on the walk. **Limit:** 20 **Elevation**: 9600' **Difficulty**: Easy to Moderate **Distance:** 3 miles **Leader:** Dr. Sylvan Kaufman consults, writes and teaches about ecology, botany

and restoration topics New Mexico. She co-authored "Invasive Plants, Guide to Identification and the Impacts and Control of Common North American Species.

#### 23. Santa Fe Ski Basin

Santa Fe Ski Basin is nestled high in the beautiful Sangre de Cristo Mountains just 16 miles from the heart of historic Santa Fe. Enjoy a cool hike through majestic Engelmann Spruce and Cork-bark fir forests, stream-side meadows and montane grasslands. More than 215 plant species, including 5 orchids, 4 gentians and many other montane species may be seen. **Limit**: 15 **Elevation**: 10,000' **Difficulty**: Easy to Moderate **Distance** 1-2 miles **Leader:** William Neuwirth has a MS in Biology and has been studying and enjoying the plants of the area for over 40 years. He has instructed Wildflower classes for the Santa Fe Community College and UNM. We will meet near the steps leading up to the lodge at 9:30 AM, break for a quick lunch and end at 2 PM.

#### 24. Cañada Bonita

This hike starts at Pajarito ski area Road/trail to high meadow (Cañada Bonita) is about one mile level walk. Wildflowers all along the trail and many more in the meadow such as *Pedicularis parryi*, sneezeweed, Geyer's onion, death camas four species of paintbrush, kittentails and many more. **Difficulty:** Moderate **Distance**: 2-3 miles **Elevation**: 9,000 ft. **Limit**: 15 **Leader:** Chick Keller is an avid plant collector, superb botanist and past-president of the NPSNM. Please car pool and plan to meet at the Sullivan Field Parking Lot across from the Los Alamos High School.

# 24 A. Norski Cross Country Ski Track

An easy hike through an area about 1 mile below the Santa Fe Ski Basin, along trails maintained by volunteer cross country skiers. Pass through mixed conifer and mature aspen forest and open meadows abounding in beautiful wildflowers. **Leader:** Chick Keller **Driving Distance** 17 miles **Hiking distance** & difficulty: About 2 miles, easy on paths with gradual changes in height. **Elevation:** approx. 8000-9000 ft Limit 15

## 25. Valles Caldera National Preserve Van Tour

Take a full-day van tour through valleys and highlands of the extraordinary natural treasure of the Valles Caldera Natural Preserve in the Jemez Mountains, a place of unique geological, cultural, scientific and ecological importance. Great Southwest Adventures is offering this tour at a 40% discount to NPSNM attendees. Co-owners Monique Schoustra and Tom Ribe are both environmental educators. Tom played a crucial role as environmental advocate from the time the Valles Caldera was a private ranch through the legal proceedings to save it from the PNM OLE transmission line to the present-day environmental monitoring, restoration, forest management and development of its public use. A van will pick riders up in the morning at IAIA or in town. Stops with short walks will be made at various native plant habitats. Lunch will be provided. See <a href="mailto:swadventures.com">swadventures.com</a> for further information.

Fee: \$75 cash, check or credit card (at a discount of \$50 from regular \$125 fee), payable at pick up time. Difficulty: Easy Distance: About 2 miles in short walks Elevation: 8000' to 8600'

## 26. Hike into the Watershed

Starting at the Nature Conservancy's Santa Fe Canyon Preserve, we will hike up the Santa Fe River with the hope of arriving at the rarely seen upper part of the watershed, closed to the public since 1932, and visit the lower of the two reservoirs that provide 40% of Santa Fe's water in a "normal" year. Along the way we will see beavers, riparian areas and forest and learn about the natural and cultural history of the area and how the watershed is being managed. In addition to the abundance of native plants we'll see, we may spot and report on invasive weeds. Bring your GPS units to help. The hike is from 9 to 2 pm. **Leaders**: Santa Fe Water Association and others TBA **Difficulty**: Easy to Moderate **Distance**: 5 miles **Elevation**: 7500' to 8000' **Minimum**: 10 **Limit**: 25

## The Wild Flower Special Sunday, August 4, 2019

Although not an official field trip of NPSNM, the Cumbres & Toltec Scenic Railroad is offering NPSNM members a 10% discount on tickets for its unique Wildflower Special on Sunday, August 4th, an all-day 64-mile train trip starting from Antonito, Colorado to Chama, NM to study the unique Southern Rocky Mountain ecosystems along the Cumbres & Toltec Scenic Railroad. Daniela Roth, the NM state botanist for rare and endangered plants, and Bob Pennington, native plant promoter and owner of Agua Fria Nursery, will be the botanical leaders for this train trip. Seating is limited, so early reservations are advised. Please call 1-888-286-2737 for reservations. You will need to use the code NPS19 to get the discount. For more info and reservations, go to <a href="http://cumbrestoltec.com">http://cumbrestoltec.com</a>.