

Native Plant Society of New Mexico



Friday, August 20 to Sunday, August 22



Welcome to Otero County, its history and its wonderful native plant life.

The Native Plant Society of New Mexico (NPSNM) is a non-proft organization that strives to educate the public about native plants by promoting knowledge of plant identification, ecology, and uses; fostering plant conservation and the preservation of natural habitats; supporting botanical research; and encouraging the appropriate use of native plants to conserve water, land, and wildlife. We have approximately 900 members in 7 chapters located throughout New Mexico and El Paso, Texas.

The Society was organized in 1976, making 2019 the 43rd anniversary of the founding of the Society. That first meeting was held in Santa Fe, but new members hailed from around the state. The first statewide meeting was held August 16, 1980 at the Fourth of July

Canyon in the Manzano Mountains, making this the 40th annual meeting of the NPSNM.

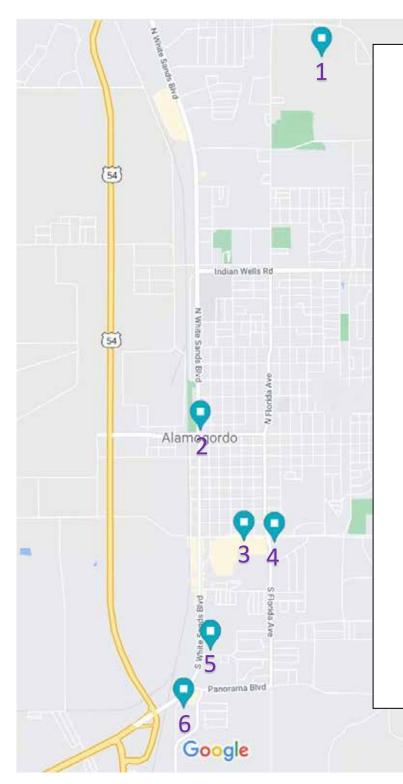
And what a meeting it will be! Your Otero Chapter Planning Committee was tasked with making this conference informative, inspiring and entertaining. Those goals alone would have been more than enough to keep any group of volunteers on its toes. Add in the challenges of doing so during a worldwide pandemic, weathering a year-long postponement AND then finally delivering said goals both in-person and virtual platforms – simultaneously – and you have a serious band of rock stars!

I couldn't be more grateful for this group of humans and want to thank every one of them. We are also grateful for all of the encouraging words and thoughtful suggestions that have come in from the NPSNM Board members and leadership from every chapter. The support gave us the lift we needed and the energy to keep moving forward. Thank you.

Jen Gruger, President NPSNM – Otero Chapter

Sgt. Willie Estrada Memorial Civic Center (SWEMCC) 800 E First St., Alamogordo, NM 88310

WIFI user name: Civic_Center_Guest Password: CCguest!



Alamogordo area locations

- Roberts Residence WS1 and D
 34 High Sierra Drive
- 2. Tularosa Basin Museum of History FT7 1004 N. White Sands Blvd.
- 3. Clay Time WS6 700 East First Street, Suite 756
- Sergeant Willie Estrada Memorial Civic Center
 800 E. 1st Street
- 5. The Classic Desert Aire Hotel 1021 S White Sands Blvd
- 6. Holiday Inn Express & Suites 100 Kerry Avenue
- 7. Alamo Canyon Trailhead FT10 (meet at SWEMCC parking lot)

Not on map

Meet up spot in **Tularosa**: From Alamogordo, drive north on 54 to Tularosa. Two blocks past the light turn right on Fresno. Park on the south edge of the dirt lot. – Meet here for FT8 and E

Meet up spot in **Cloudcroft**: From Alamogordo, drive north on 54 to light at 82. Turn right. Drive 16.5 miles to parking lot of Cloudcroft Highschool – Meet here for B and I

Oliver Lee State Park: 409 Dog Canyon Road. From Alamogordo, take 54 south and turn east on Dog Canyon Road for 4.1 miles. F11 and H

2021 Annual Conference Program

People and Native Plants, a Journey Through Time

Thursday, August 19

1:30 pm-3:30 pm

NPSNM Board Meeting, The Classic Desert Aire Hotel, 1021 S White Sands Blvd, Alamogordo

Friday, August 20

7:30 am-4:00 pm 8:00 am-4:00 pm	Check-in/Registration, Sergeant Willie Estrada Memorial Civic Center (SWEMCC) Silent Auction/Vendors open
9:00 am-9:30 am 9:30 am-10:30 am	Welcome and opening remarks, Jennifer Gruger, president of the Otero chapter Keynote speaker, Evidence for plant use from archaic traditions (~ 6,000 BC–200 AD) through the El Paso phase (AD 1275-1450), Pamela McBride

10:30 am-10:45 am Break

JORNADA MOGOLLON PERIOD

10:45 am-11:30 am Prehistoric evidence of native plant utilization and landscape modification in Tularosa Canyon, David Greenwald (Companion FT #E on Sunday)

People and environment of the Three Rivers culture and their record in stone, 11:30 am-12:15 pm

Joan Price (Companion FT #F on Sunday)

12:15 pm-1:30 pm Lunch

MESCALERO APACHE PERIOD

1:30 pm-2:15 pm **Tribal historic preservation – Uses of plants**, Holly Houghten

2:15 pm-2:30 pm Break

MEXICAN SETTLERS PERIOD

2:30 pm-3:15 pm Historic and modern uses of native plants, Alex Mares

3:15 pm-4:15 pm Panel Discussion - What is a "Native Plant?" Moderated by Jen Gruger.

Panel speakers: David Anderson, Pamela McBride, Michael Drinkwater

5:00 – Sunset Group area in the dunes – reception with light hors d'oeuvre, beer and wine. Feel free to bring additional picnic food. Please check website for allowable items and other information www.nps.gov/whsa. **Location:** Turn right at the Group Use sign 6 miles in from the fee station.

Private screening of Christina Selby's documentary "Saving Beauty: Learning to Live With the Rare Ones Among Us," is concurrent with the reception. The equipment used to project outdoors under the moon and stars needs repair so the park has arranged for three consecutive small-group screenings in the indoor amphitheater. The theater is accessible from the Visitor's Center. Each showing will accommodate about 30 guests and the film is 62 minutes long. There is an entrance and separate exit and masking is required. You must be ready to go into your selected showing 5 minutes before the start time. You can enjoy the dunes around the reception area before and/or after your showing. You will have the opportunity to select a time when you check into the conference.

Park entrance fees apply and US National Park Annual Passes are accepted. Guests must be 21 to enter the group area but if you have family under 21, they can still view the film and enjoy the rest of the park.

Saturday, August 21

SATURDAY MORNING: Field Trips and Workshops, 8:00 am-noon, unless otherwise indicated.

Items marked with an asterisk (*) indicate a companion workshop or field trip during another part of the conference. Fees will be payable at registration. Items marked with two asterisks (**) indicate a slight change in workshop content or leadership from the original program.

- WS1 **Using Native Plants in home landscaping—notes from a rookie** Leader: LeAnne Roberts **Location:** 34 High Sierra Drive, Alamogordo (home of LeAnne and Ron Roberts) **Limit:** 15
- WS2 *Elderberry uses: Eating, cooking, medicinal and dyes Canceled. Second or third choice was substituted.
- WS3 **Apache uses of plants in food preparation Leader: Zelda Yazza Location: SWEMCC Kitchen Limit: 15.
- WS4 Nature's Pharmacy identification of native plants and their uses Leader: Mimi Kamp (Companion to FT #B on Sunday) Location: SWEMCC Conference Room B Limit: 20.
- WS5 **Sunflower workshop Leader:** Dr. Richard Spellenberg
 Recommended materials: A 10x handheld magnifying glass and a copy of "The Sunflower Family: A Guide to the Family Asteraceae of the Contiguous United States" by Dr. Richard Spellenberg and Naida Zucker.
 This volume is available for sale at the Otero Chapter book table. **Location:** SWEMCC Main Hall. **Limit:** 20.
- **Pit Fired Pottery (Change from Traditional pottery of the Ysleta del sur Pueblo) Leader: Hank Hanglesben See beautiful examples of pit fired pottery. Learn the basics of how traditional pottery was made and used. Each participant will create their own pot using food safe clay and given instructions on how to fire their pot at home using a variety of techniques including a BBQ grill.

Location: Clay Time, 700 East First Street, Suite 756. Limit: 20. Materials Fee: \$10

FT7 Tularosa Basin Museum of History private tour and optional self-guided walking tour of early homes in Alamogordo Leader: Joe Lewandowski

A historical Pueblo Revival building. Exhibits range from prehistoric to the Space Race. Helpful in understanding the geography, people, and development of the area. **Location:** 1004 N. White Sands Blvd. **Limit:** 20.

FT8 Tularosa acequia system tour Leader: Michael Gruger

Taking place throughout the historic 49 blocks of Tularosa, this is a driving/walking tour of the longest actively utilized acequia (open ditch irrigation system) in the southwest.

Meeting location: SW corner of 3rd and Fresno in Tularosa. Limit: 20.

FT9 Historical trees of Tularosa and surrounding areas Leader: Elva Osterreich

Driving and walking in Alamogordo, La Luz, Tularosa and surrounding area. We will be looking at the types of trees in the area and exploring some of the oral history and tales surrounding them, including ghost stories and more. **Meeting location:** SWEMCC Parking Lot. **Limit:** 20.

FT10 Alamo Canyon hike and plant identification Leader: Peg Crim

High desert vegetation in Alamo Canyon just east of Alamogordo.

Meeting location: SWEMCC Parking Lot. Difficulty: intermediate. Limit: 20.

FT11 People and Plants, wisdom of an Apache medicine man Leader: Joey Padilla

Meeting location: SWEMCC Parking Lot. Limit: 20. Location: Oliver Lee State Park.

SATURDAY AFTERNOON - SWEMCC

12:30 pm-4:00 pm Silent Auction/Vendors open

12:00–1:30 pm Lunch – On site at the SWEMCC, Alamogordo Mayor Pro Tem Nadia Sikes will read the

Governor's Proclamation of Aug. 21, 2021 as New Mexico Native Plant Day

TERRITORIAL PERIOD

1:30 pm-2:15 pm	"Cienegas from Decline in the Territorial Period to Restoration Today,"
	a conversation with filmmaker Christina Selby.

MODERN ERA

ecology , Marisa Mancillas and Justin Lopez
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3:00 pm-3:45 pm Experimental range, range grasses, impact of grazing and shrub encroachment,

Brandon Bestelmeyer

3:45 pm-4:00 pm Break - Silent Auction closes at 4:00 pm

4:00 pm-4:50 pm Weed ecology and restoration ecology, Akasha Faist and Erik Lenhoff

4:50 pm-5:00 pm **Closing Remarks**, Jennifer Gruger

5:00 pm-5:30 pm Pick up Silent Auction Items

NOTE: The SWEMCC hall will be closed between 5:30 and 6:30 to prepare for the banquet.

6:30 pm **Evening Banquet** – SWEMCC Main Hall

Presentation of Jack and Martha Carter Native Plant Conservation Award, quilt drawing, and a conversation with a very, very special guest

Sunday, August 22

Field Trips start 8:00 am unless otherwise indicated. Many of the field trips on Sunday range farther afield and you may want to pack a lunch. Some of them might be on your route home. Items marked with an asterisk (*) indicate a companion workshop or field trip during another part of the conference. Fees will be payable at registration.

- A White Sands National Park Leader: David Bustos
 - Walk to a behind-the-scenes area that is not normally accessed by the public, look at the survival techniques of the cottonwood trees, and visit some of the interdunal areas to learn how they work. Ideal for those headed south toward El Paso or Las Cruces. **Difficulty:** easy to moderate. **Limit:** 20. **Location:** Meet in the parking lot of White Sands National Park. Look for conference logo signage.
- B *Identification and responsible harvest of herbs Leader: Mimi Kamp (Companion to WS4) Cloudcroft/High Rolls area. Difficulty: easy to moderate. Location: Meet at Cloudcroft High School parking lot. North side of Highway 82 in Cloudcroft Lot Limit: 20.
- *Elderberry hunting skills: Canceled. Second or third choice was substituted.
- D Health benefits of being in nature: Meditation practices to increase awareness Leader: LeAnne Roberts Location: LeAnne and Ron Roberts home at 34 High Sierra Drive in Alamogordo Limit: 20.
- *Creekside Village tour Leader: David Greenwald
 Observe the effects prehistoric and historic land-use activities have had on the landscape. Discuss what native plants were exploited by the Jornada Mogollon who occupied the canyon.
 Difficulty: moderate to difficult (Companion presentation at 10:45 am on Friday.) Limit: 20.
 Location: Meet at SW corner of 3rd and Fresno in Tularosa.
- The petroglyphs, dating back to ~900–1400 AD, were created by Jornada Mogollon people. More than 21,000 glyphs of birds, humans, animals, fish, insects plants, and geometric and abstract designs are scattered over 50 acres of New Mexico's northern Chihuahuan Desert. **Difficulty:** easy to moderate, the trail is 1/2 mile. **Location:** Meet at SW corner of 3rd and Fresno in Tularosa. Site is 17 miles north of Tularosa and 28 miles south of Carrizozo on U.S. 54. (Companion presentation at 11:30 on Friday.) Ideal for those headed north to Albuquergue or Santa Fe. **Limit:** 20.

- G Life zones of the Sacramento Mountains Leader: Dr. Jennifer Smith
 Driving tour up Laborcita Canyon Road that will stop at five different life zones. Explore plants, animals and birds at each zone. Difficulty: easy. Limit: 20. Location: Meet at SWEMCC Parking Lot.
- Oliver Lee State Park Leader: Katherine German
 Set against the Sacramento Mountains, this park features Frenchy's cabin, an historic ranch house, and riparian trail (hopefully with dragon flies). We will visit a unique oasis of water pools under the cottonwood trees of Dog Canyon. The 620-acre park is named after a colorful and influential character, Oliver Lee, from the turn of the 20th century. Ideal for those headed to El Paso or Las Cruces.

 Difficulty: easy to moderate. Limit: 20. Location: Meet at Oliver Lee Memorial State Park at 409 Dog Canyon Road, Alamogordo, NM 88310.
- Osha Trail hike and identification of plants Leader: Esther Fyock
 The easy-to-follow 2.2 mile loop passes through high mountain vegetative and geological environments typical of the Cloudcroft vicinity and other nearby areas at similar elevations. Douglas-fir, oak, and aspen abound opening up into meadows of vast variety. Difficulty: Moderate. Limit: 20. Location: Meet at SWEMCC Parking Lot.
- Aguirre Springs Pine Tree Trail Leader: TBA

 The four-mile trail offers spectacular views of the Tularosa Basin, and includes streams, grassy areas, a variety of shrubs and trees and involves the transition zone from the Chihuahuan Desert to the pinon pine/juniper belt including cacti, yucca, sotol, mahogany and gray oak. Difficulty: Moderate with some steep areas. Limit: 20. Location: Meet at SWEMCC Parking Lot.

Watch for the August 2022 conference in Albuquerque!

An Ecology for Seven Generations

Climate change is challenging our stewardship responsibility to conserve water, forests, soils, wildlife and plants like never before. Come together in Albuquerque as scientists and citizens to learn from indigenous, philosophical, and data-driven perspectives about how to nurture greater respect for nature and the "land ethic" we need for the future in New Mexico.

"The last word in ignorance is the man who says of an animal or plant," What good is it?' If the land mechanism as a whole is good, then every part is good, whether we understand it or not. If the biota, in the course of aeons, has built something we like but do not understand, then who but a fool would discard seemingly useless parts? To keep every cog and wheel is the first precaution of intelligent tinkering."



The new edition of "Carter's Trees and Shrubs of New Mexico" can be purchased (\$30) at our table at the state conference. Case of ten discounts (20%) available to booksellers.



Dr. David Lee Anderson began working at White Sands Missile Range in 1990 and retired as land manager in 2019. He created three small regional herbaria: one at Uinta National Forest, Utah; one at San Luis Province, Argentina and one at White Sands Missile Range, New Mexico. He has led numerous field trips for various NPSNM chapters as well as for other organizations and over the years has been a tremendous supporter of NPSNM.



Dr. Brandon Bestelmeyer is the director of the USDA-ARS Jornada Experimental Range in Las Cruces, NM. He leads the Jornada Experimental Range Long-Term Agroecosystem Research program and is a co-principal investigator of the Jornada Basin Long-Term Ecological Research program at New Mexico State University. Dr. Bestelmeyer's personal research focuses on the causes of ecosystem change in rangelands, the development of Ecological Site Descriptions as tools to manage change, and the use of monitoring for collaborative decision-making.



A forester by training, **Peg Crim** worked for 35 years with the US Forest Service in timber, recreation, and finally her favorite job, collaborollogist. Peg collaborated with anyone and everyone who would collaborate with her; individuals, agencies, organizations, tribes, and schools, connecting people to their National Forest. Now retired, Peg works with 100% Otero, a grassroots organization working to eliminate childhood trauma in Otero County.



Dr. Akasha Faist is an assistant professor in the Department of Animal and Range Sciences at New Mexico State University. She has worked across the western United States with the core theme of understanding what drives native plant communities and how can we return them to a system if needed. Her current work is focused on rangeland restoration ecology where she and her research group work overcome barriers to restoration success to improve ecosystem function and biodiversity. afaist@nmsu.edu



Esther Fyock graduated with a Bachelor of Science in forest management and wildlife management from Purdue University. It was during her time at Purdue that she developed a love for native plants. She and her husband, Joel, were one of the first crews to do permanent plots called Current Vegetation Surveys in the Pacific Northwest that included identifying and recording vegetation on fixed plots in eastern Oregon, Idaho and the Hell's Canyon Wilderness. She also has done forestry surveys throughout the country and enjoys "botanizing" during her time on and off the job wherever she goes. She has lived in the Cloudcroft, New Mexico area for 20 years.



David Greenwald has been an archaeologist for over 45 years, beginning his career at the Museum at Texas Tech University. Joining the Archaeology Department at Arizona State University in 1976, he worked on various Hohokam sites in the Phoenix Basin. From that time to the present, he has spent most of his career conducting cultural resource management projects in Arizona, Colorado, New Mexico and west Texas. In the '80s, he worked on Anasazi, Mogollon and Hohokam excavation projects while at the Museum of Northern Arizona in Flagstaff.



Michael Gruger who was born and raised in Tularosa currently manages irrigation for multiple properties in the historic 49 blocks of Tularosa and has been studying the history of Tularosa and the acequia system since 2014.



Carl "Hank" Hangsleben is an artist and instructor who owns the retail store, studio, classroom and art gallery known as Clay Time in the historic Granada Shopping Center in Alamogordo. He is a retired U.S. Marine with a love of Asian style culture and art. His interest in wheel thrown pottery started while stationed in Hawaii from 1975 to 1978 when he was introduced to the works of a local potter, artist and craftsman who was also a close friend. "The purpose of my pottery is to bring both pleasure and function to the owner with artistic beauty and value of my pieces," he said.



Holly B. Houghten has been the Tribal Historic Preservation Officer for the Mescalero Apache Tribe since August 2003. Previously she was employed by the Tribe as the Tribal Archeologist from 1997-2003 and as an archaeologist for the Lincoln National Forest from 1992-1997. From 1989-1996 she worked as an archaeologist and museum technician at the Gila National Forest, Grand Canyon National Park and various National Parks in the Great Lakes region for the Midwest Archeological Center. Holly is married into the Mescalero Apache Tribe, lives on the reservation and has two children and 10 step children.



Mimi Kamp grew up in the woods of Pennsylvania, went to college in Iowa, and spent seven years in the northwest studying botany, acupuncture and plant medicine. She moved to south-eastern Arizona 45 years ago and began her life-long study of desert plants and medicine. While homesteading, raising 3 girls and gardening, she delved into arid land botany – worked at endangered species monitoring on Fort Huachuca, did botanical inventory for folks seeking conservation easement, and co-founded the Cochise County Herbarium.



Dr. Erik Lehnhoff is originally from South Carolina but has spent most of his adult life in the west. He studied plant ecology at Montana State University and had the pleasure of working for many years in the Greater Yellowstone Ecosystem. Now he conducts research on the ecology and management of invasive plants and agricultural weeds at NMSU. When not working he can probably be found playing in the beautiful mountains of New Mexico. lehnhoff@nmsu.edu



Justin P. Lopez is an undergraduate in pursuit of a bachelor's degree in Fisheries and Wildlife Conservation Ecology at New Mexico State University. He is going into his senior year this fall and plans to explore as many sub-disciplines in his field as possible, hence his interest in plants. He plans to work in the field and eventually return to school to pursue a master's degree. Justin said he hopes to make an impact on something that is bigger than me i.e. global climate change, conservation and preservation of natural resources and the wildlife that accompanies them.



Marisa Mancillas is a graduate student working on her master's at New Mexico State University. She is a field botanist interested in the ecology of rangelands and prairie ecosystems and has experience working in over 10 Western states on wetland mitigation, reclamation and restoration sites as well as managing field botany crews for endangered species, invasive species, and rangeland surveys.



Pamela McBride graduated from the University of New Mexico in 1990 with a BS in Anthropology and has been doing archaeobotanical analysis since 1988. She has worked in the Alentejo of Portugal on an Islamic period site and all over New Mexico, Arizona, southern Utah, northern Texas, and southern Colorado. She has had her own consulting business since 1994 and worked at the Museum of New Mexico, Office of Archaeological Studies as a paleoethnobotanist from 1995 until she retired in September of 2017. She has authored or co-authored over one hundred reports or papers and has presented several of these at professional meetings.



Elva K. Österreich has been a journalist, photographer and editor in Southern New Mexico for 20 years. She has written thousands of articles about the state's history, people and environment for newspapers and magazines. Falling in love with the people and the history of the area, she especially loves the stories she hears from the old-timers and is fascinated by the way folks used to live and their experiences. She feels the trees of the Tularosa Basin tell an elegant story of the history of the area and are wise old-timers in their own right.



Joan E. Price, MFA, writer, photographer and educator, has been visiting and studying the vast Three Rivers Petroglyph Site fifteen miles north of Tularosa, New Mexico, for over 25 years. She is a Research Associate with Jornada Research Institute, a non-profit educational organization based in Tularosa and a member of the El Paso Archaeological Society. She has given presentations presentations at numerous professional lectures and local venues.



Christina Selby is a conservation photographer, writer, and naturalist who uses visual and narrative storytelling to enchant people's hearts and inspire action for wild places and wild things. She has a bachelor's degree in ecology from the University of Minnesota-Twin Cities and a master's in Environment & Community from Antioch University- Seattle. From 2002-2013, she co-founded and directed Earth Care (www.earthcarenm.org), a Santa Fe-based environmental education nonprofit. She is the author of the guidebook "Best Wildflower Hikes of New Mexico" published in March 2020

by Falcon Guides and of the forthcoming New Mexico Family Outdoor Adventure available in September 2021 from UNM Press. She also produced the documentary film "Saving Beauty: Learning to Live with the Rare Ones Among Us."



Jennifer Smith, PhD, is currently a professor of both biology and fish, wildlife and conservation ecology at New Mexico State University in Alamogordo. The Chihuahuan Desert ecosystem has been the subject of her research where she studied the Rio Grande water quality at Sul Ross State University and a rare species of mud turtle in Presidio, County, Texas. She has engaged students in conservation projects in the region through field work, research projects and handson learning experiences in the unique ecosystem of the Chihuahuan Desert.



Richard Spellenberg was a biology professor at New Mexico State University in Las Cruces, throughout his careers. He arrived at NMSU in 1968 and retired in 2000. He has written technical papers on the taxonomy of native plants and has contributed taxonomic treatments of various genera to regional floras. He has written several books directed toward plant identification for the lay botanist, among them "The Audobon Society Field Guide To Wildflowers, Western Region," "Sonoran Desert Wildflowers," and, as presented here, "The Sunflower Family, A Guide to the Asteraceae in the Contiguous United States." The last was co-authored with his wife, also a biologist retired from NMSU, Dr. Naida Zucker.



Patty Cascio

Texas, New Mexico, Oklahoma and Colorado Sales

602-663-3782 Cell patty@mswn.com www.mswn.com



13803 W. Northern Ave Glendale, AZ 85307 1800-840-8509







