



FRIENDS OF CITY OF ROCKS NEWSLETTER
(Vol. 3, No. 2, Dec 2019)
MISSION STATEMENT

The purpose of the Friends of City of Rocks State Park, Inc. (website: <http://www.friendsofcityofrocks.org>; e-mail address: friends@friendsofcityofrocks.org) is to help support the New Mexico State Parks in the enrichment of the park area. Specifically, the Friends aim to enhance, preserve and promote park use, to participate in nature as responsible stewards of the earth, to create an awareness of the wonder, fragility and importance of the park, to develop and improve existing education/interpretive programs, to develop and improve public awareness of the park, and to encourage public participation and/or membership in the Friends group.

BECOME A MEMBER OF THE FRIENDS!

Interested in helping out City of Rocks State Park? Consider joining the Friends. Typical Friends activities include highway cleanup, cutting and splitting firewood for sale to park campers, operation of a gift shop in the park Visitor Center, fund-raising, etc. To join, a) complete and send in the membership application form at the end of this newsletter, OR b) download, complete and submit a membership application from the Friends website (see above). NOTE: If you are already a member of the Friends, it is time to renew your membership! You can do so using the same form mentioned above.

UPCOMING EVENTS*

**[*Day Use Fees Apply to All Events
Scheduled Inside the Park]**

***PROTOCOL FOR ALL STAR PARTIES: Meet at the Gene and Elizabeth Simon Observatory in the Orion Group Area. Please arrive before sunset so you can familiarize yourself with the area.**

Please watch for people walking down the road to the Star Party. If you have a flashlight, please make sure you have red cellophane or a red light on it. It helps with the light pollution. Parking is across the road at the vault toilet.

Note: All Star Parties are “Weather Permitting”

Saturday, Dec. 28 2019. Star Party.
Sunset is 5:14 PM, Program begins at 6:15 PM.

Friday, Jan. 10 2020. Friends Meeting,
7:00-8:30 PM on the Western New Mexico University campus (Harlan Hall, Rm 111). Program: “Light Pollution” by Ms. Vandy Starkweather. Refreshments will follow.

Saturday, Jan. 18 2020. Field Trip:
Winter Botany at City of Rocks State Park (10:00 AM – noon). Event sponsored by the Friends. Come learn about desert plants (cacti, agaves, yuccas, ocotillo) from local botanists Richard Felger and Russ Kleinman during a short field trip around the Visitor’s Center and the Botanical Garden. Meet at the park Visitor’s Center at 10 AM.

Saturday, Jan. 25 2020. Star Party.
Sunset is 5:38 PM, Program starts at 6:30 PM. Bill Nigg is presenting.

Saturday, Feb. 15 2020. Field Trip:
Winter Birds of City of Rocks State Park (8:00 AM – 10 AM). Event sponsored by the Friends. Come hike the Cienaga Trail to look for quail, roadrunners, owls, hawks, wrens, thrashers, towhees and more. Hiking distance is approximately 2 miles along moderate, sloping terrain. Meet at the Cienaga Trailhead at 8:00 AM. Leaders: Karen Beckenbach and William (Bill) Norris.

Saturday, Feb. 22 2020. Star Party.
Sunset is 6:03 PM, Program starts at 7:00 PM. Charles Turner is presenting.

Saturday, Feb. 29 2020. Field Trip:
Winter Birds of City of Rocks State Park (9:00 AM – 11 AM). Event associated with the Natural History of the Gila Symposium. Come hike the Cienaga Trail to look for quail, roadrunners, owls, hawks, wrens, thrashers, towhees and more. Hiking distance is approximately 2 miles along moderate, sloping terrain. Meet at the Cienaga Trailhead at 9:00 AM. Leaders: Karen Beckenbach and William (Bill) Norris.

Saturday, Mar. 21 2020. Star Party.
Sunset is 7:23 PM, Program starts at 8:30 PM. Bill Nigg is presenting.

Friday, Apr. 10 2020. Friends Meeting,
7:00-8:30 PM on the Western New Mexico University campus (Harlan Hall, Rm 111). Program: “Moths of the Southwest” by Mr. Ron Parry. Refreshments will follow.

Friday, May 8 2020. Friends Meeting,
7:00-8:30 PM on the Western New Mexico University campus (Harlan Hall, Rm 111). Program: “Lichens of the Southwest” by Russ Kleinman. Refreshments will follow.

RECENT FRIENDS ACTIVITY

- **Dr. Richard Felger gave an engaging presentation on “Ethnobotany of City of Rocks State Park” at a meeting of the Friends on Friday, Nov. 8 2019 on the campus of Western New Mexico University. Who knew that mesquite and sacaton grass offer so many culinary options?**

- Susan Moseley and Steve Collie report that the Friends have just purchased an ice machine for the park so that visitors can purchase bags of ice and provide some income to the Friends (all of which benefits park operations).
- Susan and Steve also report that the Friends have also just purchased a PA system for use at monthly Star Parties.

The Making of City of Rocks State Park Video 2019

By Roxanne Solis-Snyder

In the late part of the Spring semester of 2018, Dr. Bill Norris at WNMU presented me with an opportunity to complete my BIOL 481 Practicum course by completing my required Service-Learning hours through volunteer work at the City of Rocks State Park that summer to count towards the Fall semester.

I jumped at the chance being my minor is in Geology and I have a great affinity for the natural formations of the earth, such as what is displayed here at the park. I learned quickly that the land formations were not the only wonders of the park as spectacular as the 40-foot volcanic tuffs were, but the people, animals, and plant life were as equally interesting. Where my heart lies with the rocks!



**Where my Heart Lies with the Rocks!
(4-24-2019)**

Most of my time was spent in the Visitors Center or VC helping the visitors of the park with information, park merchandise, and reservations. Housed within the VC was an 8-minute video about the park. While this video was good in informing visitors of the park's attractions, it was 20+ years old. In learning about the park and how New Mexico State Parks operate I found out that it relies heavily on donations and volunteer work. So, for projects like a new state park video; funds are just not available.

During this time in the summer, I went out whenever I had a chance and started photographing and filming with my smartphone camera the land formations, animals, and plant vegetation I encountered just for my own collection. I think it was around the end of the practicum Dr. Norris asked if I would be interested in remaking the video for the park by completing an Internship that

would incorporate a new video, not knowing what I was getting myself into, I agreed.

I remember thinking to myself at first, how hard could it be, to make a short video? Well, I have to admit I asked myself probably a thousand times during the making of the video, “Roxanne what in the world were you thinking to agree to this task, crazy lady! You know nothing of producing a film or what it takes to make one.” But I had a secret weapon in my back pocket, the dynamic duo team Michael Acosta, and Jason Stahlhut from Media Technologies Services at WNMU. Who reassured me a thousand times I was capable, and they would guide me through the process.

Michael initially provided me with a production style Sony camera, but this equipment was hard to carry around being I was out walking the trails looking for wildlife. I needed the assistance of my husband and two sons in carrying this equipment. This became a problem because I did not always have my family around to help me when the opportunity arose to film. So, Michael then provided me with a handheld Sony camera that had all the same functions as the production style camera, which made filming a lot easier. However, another issue is when I was filming with the production camera, I could see a lot of shaking in the videos I took. So, Michael provided a smooth gliding tripod that allowed for a smoother shot. Another piece of equipment I had to learn to use was the DJI Drone which was a whole other issue. All of which I had to learn to

use in a 60-minute instruction session with Michael. Within the park setting, I also learned that it is always better to go out with another person because as I learned the hard way the weather and perception of distance can become skewed considerably fast.

I set out on my own to the Cienega trail of the park in the early morning when the air was still cool enough to wear a hoody and stumbled across a Great Horned Owl, I became enamored with and steadily followed it. Not paying attention to where I was going, I soon found myself a lot further out and it was becoming hot fast by midmorning. I had plenty of water, but this was not enough to ward off the blaring desert sun and I became ill from the heat. I made my way to a small shaded area by a rock outcrop and went to jump over but stopped to find a crack in the earth and realized I needed to sit down to evaluate my predicament because I could have fallen into the crack if I would have jumped. I found myself in two dangerous situations that could have gone very wrong, but I was able to get my composure to determine where I was and steady my pulse to make it back to my vehicle but not without suffering a severe sunburn. But I did get the shot of the Great Horned Owl I was after!



Great Horned Owl (4-14-2019).



**Me trying to take drone footage on a windy day.
(4-14-2019)**

The biggest obstacle during the production of the film was the weather and being able to film with the DJI Drone. By the time it came to the drone the seasons had changed and the wind became a hindrance in the production of the film and I found myself struggling to get all the perspectives of the park I was hoping to capture for the film. However, I was able to get enough to contribute to the video.

After photographing and filming I had to spend hours, I think something like 3-4 days, of going through film and photos putting them in a sequence that was much like the old video at the request of Gabe Medrano the Park Ranger. He had requested a similar format as the current video which made the weeding out process easy to follow.

Once I had all the footage I wanted to incorporate I presented it to Jason and he went in with Adobe film making software and informed me I had 45 minutes of footage and needed to edit it down to 10 minutes or less to make it similar in length to the current video. I also had to add the script that was thankfully copied from the previous producers of the first film. I just updated the relative information and had the amazing Bryant Chaffino the Music Program Coordinator at WNMU in the Expressive Arts read the script giving a professional sound to the video along with an upbeat melody and sounds of coyotes howling that I captured one early morning.

This is where the second biggest challenge came in was editing all the footage and picking out the best shots. This process took an additional two days of weeding film, footage, and aligning the vocals, music, and coyote calls to the film. This process was quite interesting as it is like a GIS (geographic information system) program in that information obtained can be layered and manipulated to make a video much like a map.

All in all, I have to say this project was challenging in different ways, but the experience and the opportunity are that of a lifetime. I would do it again if the opportunity was presented. Thank you to all who contributed to helping me in the making of the City of Rocks State Park video! I could not have done it without you!

MESQUITE: TREE OF LIFE IN A DRY WORLD

by Richard S. Felger, Herbarium, University of Arizona, Tucson, AZ [first published in the newsletter of the New Mexico Native Plant Society (https://www.npsnm.org/wp-content/uploads/2012/02/NPSNM-Newsletter_Jan2018.pdf)].



Honey Mesquite (*Prosopis glandulosa*) Tree.
Photo by Russ Kleinman.



Honey Mesquite Leaf.

<https://www.naturalmedicinefacts.info/plant/prosopis-glandulosa.html>

Mesquite will become a major, global food crop for the hot, dry parts of the world. It is a nitrogen-fixing tree in the legume family. Mesquite was one of the most important resources of diverse native peoples in southwestern North America. Across the hot deserts mesquite and several other major perennial wild crops were predictably available for harvest at the height of the pre-summer dry season and at the onset of the summer monsoon season, making this a time of plenty. European introduction of winter-spring agricultural crops, namely winter wheat, provided a substitute for the mesquite harvest.

Mesquite served people in dry regions of southwestern North America and South America as a primary resource for food, fuel, shelter, weapons, tools, fiber, medicine, and many other practical and aesthetic purposes. Every part of the

plant has been used. Utilization of mesquite was the common denominator among hunters and gatherers to agriculturalists. Because mesquite is such an important and usually unfailing resource, it came to feature in the everyday life from cradle to grave, and is prominent in native oral literature. Mesquite wood is the preferred cooking fuel; it imparts a good flavor to food.



Honey Mesquite Winter Twig. Photo by Russ Kleinman.



Honey Mesquite Stipular Spines. Photo by Russ Kleinman.

The mesocarp, or pulp, of the pods was a major source of carbohydrates and calories in traditional native diets. It was primarily prepared as flour made into gruel, cakes, and beverages. The seed was not extensively utilized in historical times

even though it is high in protein. However, a specialized tool, the gyratory crusher, was developed in ancient times for processing mesquite seeds. Large quantities of whole pods, flour, and sometimes prepared cakes were stored for future use. Early settlers in the Moapa Valley, Utah, remarked seeing conical mesquite cakes weighing fifty to sixty pounds apiece. These dried cakes were stored in grass-lined pits in rock shelters along the rear wall of Paiute dwellings.

Mesquite herbage and sap or gum featured prominently in the regional pharmacopoeia. A common use of the whitish gum was for treating eye ailments. The use of mesquite pitch hair plaster was used to cleanse the hair, make it glossy, and dye it black. The plaster was usually prepared by boiling black mesquite pitch, or bark with the black pitch, and river mud, preferably black mud.

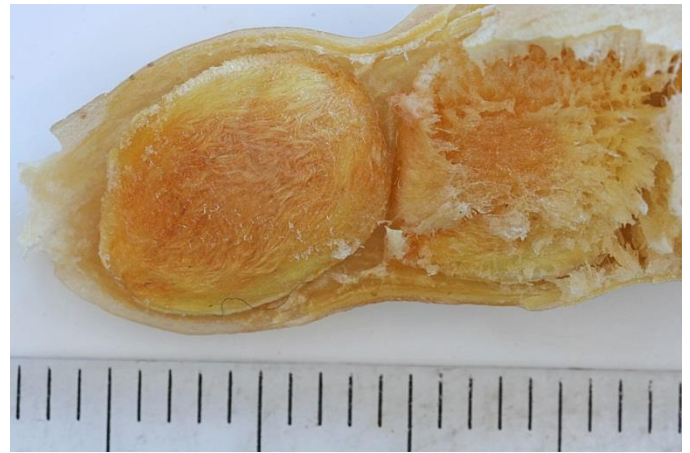


Honey Mesquite Flowers. Photo by Russ Kleinman.



Young Honey Mesquite Pods.

https://en.wikipedia.org/wiki/Prosopis_glandulosa#/media/File:Prosopis-glandulosa-seed-pods.jpg



Honey mesquite pod, after opening outer covering (exocarp) and exposing mealy interior (mesocarp) and secondary covering (endocarp) over brown seed. Photo by Russ Kleinman.

Mesquite was the first plant recorded by Europeans in the American Southwest; Cabeza de Vaca included it in the report of his epic wandering across the continent between 1528 and 1536. Subsequent explorers and missionaries have provided extensive information on mesquite, mostly as food and fuel, but also as a medicinal plant.



Mature Honey Mesquite Pods.

https://serv.biokic.asu.edu/imglib/seinet/Fabaceae/Prosopis_glandulosa-sm.jpg

The term mesquite or mezquite is the common name applied to species of Prosopis in the subgeneric section Algarobia in southwestern North America. Among Spanish speaking people the fruit is known as *pechita*. In South America these trees are known as *algarrobo*, the Spanish name for the carob tree native to the Mediterranean region, another legume with large, edible pods. Both the Spanish name and the section name derive from the Arabic word for “the tree.” There are about six species of Algarobia in North America and two dozen in South America.

Two species in section *Algarobia* are native to southwestern United States, from southern California to Texas: the velvet mesquite, *Prosopis velutina*, and the honey mesquite, *Prosopis glandulosa* with two varieties. Western honey mesquite, *P. glandulosa* var. *torreyana*, is found in southeastern New Mexico. Traveling eastward across southern New Mexico, the western variety intergrades with the nominate variety, the honey mesquite, *P. glandulosa* var. *glandulosa*. The mesquites are not aware of our attempts to classify them, and distinguishing the varieties can sometimes be problematic. These three mesquites recognized by botanists have been used similarly by native people in southwestern United States and northern Mexico.

Harvesting mesquite pods or other major wild harvests during the late spring dry season often meant temporary encampment close to the resource. These crops tend to produce massive quantities of fruit during a relatively short time, and needed to be harvested quickly. Although most wild plant food collecting was done by women, entire families assisted in arduous and complicated harvests such as mesquite. For many hunting-gathering societies as well as agricultural peoples, it was a time of coming together. Among the Quechan Indians, as the mesquite pods ripened, runners notified outlying districts and people converged on the mesquite groves. Evenings were spent storytelling, singing, dancing, playing games, and making love.

Various species of mesquite from South America as well as North America are becoming important agronomic crops in hot, dry regions of the world. Mesquite harvesting and preparation are increasingly popular in southern New Mexico and Arizona. In southwestern New Mexico mesquite pods are available in early spring at lower elevations in late summer and fall at intermediate elevations. *Pax et Prosopis*.

A few references:

- Desert Harvesters. 2018. *Eat Mesquite and More: A Cookbook for Sonoran Desert Foods and Living*. Rainsource Press, Tucson. Also see: Desertharvesters.org
- Felger, Richard S. 1977. *Mesquite in Indian Cultures of Southwestern North America*. Pages 150–176, in B. B. Simpson (editor), *Mesquite: Its Biology in Two Desert Scrub Ecosystems*. Dowden, Hutchinson, and Ross. Stroudsburg, Pennsylvania.
- Felger, Richard S. 2007. *Living Resources at the Center of the Sonoran Desert: Native American Plant and Animal Utilization*. Pages 147–192, in Felger & Bill Broyles (editors), *Dry Borders: Great Natural Reserves of the Sonoran Desert*. University of Utah Press, Salt Lake City.
- Rea, Amadeo. 1997. *At the Desert's Green Edge: Ethnobotany of Gila River Pima*. University of Arizona, Tucson.

Membership Application

Friends of City of Rocks State Park, Inc. (FCR)

FCR is a non-profit 501(c) organization dedicated to enhance, preserve and promote park use. Your contribution and membership will give you the satisfaction of helping preserve and protect one of the most beautiful places on the planet.

_____ New _____ Renewal

Name(s) _____

Address _____

City, State, Zip _____

Phone _____ E-Mail _____

Yes, I want to support FCR. Enclosed are my annual membership dues. Dues and donations are tax deductible.

***ACTIVE MEMBER: (Voting)**

SPONSOR (Non-Voting)

_____ \$15 Individual

_____ \$25 Friend

_____ \$20 Family

_____ \$50 Good Friend

_____ \$10 Senior (single or couple)

_____ \$75 Very Good Friend

_____ \$500 Lifetime

_____ \$100 Best Friend

_____ \$500 Special Best Friend

In addition to my dues, I enclose \$ _____ as a donation (optional)

*Active dues paying members are those individuals who are entitled to vote at annual meetings and MUST participate in at least one of the following. Please check at least one of the following:

_____ Hospitality _____ Newsletter _____ Programs _____ Membership _____ Publicity
_____ Garden Care _____ Fund-Raising _____ Events _____ Scrapbook _____ Officer

Active Members receive free day admittance to City of Rocks State park

Thank you for your support and interest. Together we can create an awareness of the wonder, fragility, and importance of City of Rocks State Park.

Please send your check to: Friends of City of Rocks State Park, Inc., PO Box 74, Hurley, NM, 88043

Upon receipt of our completed membership application, you will receive a welcome letter, receipt, and membership card. For further information or questions, please call 1-228-363-1403.

Official use only

Date Received: _____ Ck#: _____ Cash: _____ Membership Card: _____