

# Sevilleta Sentinel

*Amigos de la Sevilleta Quarterly*  
Summer, 2014



## Save the date to...

### **Celebrate Sevilleta!** **Saturday, September 27**

In the morning, take one of two extended tours of Sevilleta National Wildlife Refuge (bag lunch included).

In the afternoon, enjoy walking and hiking tours, plus presentations, children's craft workshops, and live animal demonstrations.

### **Details to follow in August.**

**Volunteers are needed to assemble lunches, check-in participants, set-up and take-down tables and chairs.**

Contact Jeannine Kimble,  
505 864 4021,  
jeannine\_kimble@fws.gov

[www.amigosdelasevilleta.org](http://www.amigosdelasevilleta.org)

## ***A Summer of Working & Living at Sevilleta***

From Memorial Day until early August, a diverse group of undergraduate students from around the country live and work at Sevilleta UNM Field Station as participants in one of the most prestigious of National Science Foundation (NSF) programs, Research Experiences for Undergraduates (REU).

REU may be a student's first research experience, first time in a high and hot desert, or even first time away from home. The experience demands a lot -- physically, intellectually and socially. There are 16 students in all this year, all but one funded through NSF. They live in houses with two roommates per bedroom and share kitchen and laundry facilities.

### **A Sampling of Students**

Cassandra Miller, originally from Las Vegas, New Mexico and now at Grinnell in Iowa, jokes that she "came to New Mexico to study aquatic biology." She is out in the middle of the night with a white sheet and a black light, collecting invertebrates at natural springs and manmade watering places around the refuge. The Chihuahuan Desert is new to Dottie Stearns from Emory University in Atlanta, "You think it's barren, but once you get up close and look... it's actually beautiful." Dottie's project focuses on below ground productivity, measuring root growth in plots set up for the regional Extreme Drought Grassland Experiment. Roy Moger-Reischer from the University of Rochester is researching bacteria found in soil crusts in plots of blue and black grama grasses. Roy spends two days a week analyzing samples in the UNM labs and is now waiting for the rains to come.

Jenny Sparks is one of two Art & Ecology students. She is studying at Rhode Island School of Design and Brown University – working on both a BFA in Sculpture and a BA in Geology. Right now, Jenny is sketching and scouting sites as she awaits the arrival of materials to create a stop-action animated video. Ariana Ananda from UC San Diego is pursuing a degree program of her own design, combining wildlife conservation and photography. Last summer, she was researching food preferences in bats in Costa Rica; this summer it's bat diversity and climate change at Sevilleta, plus photographs of her subjects.

### **An Education in the Sciences**

NSF began funding undergraduate research programs in 1958, the year after the USSR's launch of Sputnik made education in the sciences a national priority.

Encouraging students to pursue a career in the sciences remains important at NSF and at the UNM Field Station. As the program's title indicates, the focus is on providing research experiences for students, not assistance for ongoing work. Each student has a mentor but each is designing and conducting his or her independent project.

This is the second summer that Project Manager Amaris Swann has coordinated the program. Her goal is to offer an experience akin to an introduction to graduate school. To improve communication with mentors, students now prepare weekly progress reports detailing what they have accomplished and their goals for the week to come. Students present and critique journal articles every week in order to develop their ability to read critically and to practice their public speaking. Refuge Manager Kathy Granillo has introduced students to the Toastmasters approach, which stresses communication and leadership development. Most Thursday afternoons, a 5:00 pm seminar is followed by a pot luck. At Swann's instigation, a student now speaks with the presenter ahead of time and makes the introduction, something graduate students are frequently called on to do.

On June 26, Gabriela Rio-Sotelo, a research associate in Voyles Lab at NM Tech, gave a most interesting talk on her research into a pathogen decimating New Mexico amphibians. The probing questions afterward came fast and furious. It was the kind of response a speaker hopes to get, but rarely receives.

Sotelo herself was an REU participant, an experience that changed the direction of her career. She was a student athlete in Houston, planning to focus on the human body. REU took her outside – to study ecology and invertebrate parasitology, which meant she had “to think about *everything*..it was so much more *thrilling*.”



### **Banana Cream Pi**

*It's not all work. This is an apt entry in the annual REU pie-making contest, which garnered 16 entries.*

*Other off-duty activities have included a camping trip to White Sands, Bottomless Lake and (yes) Roswell.*

### **An Invitation**

If you would like to hear about current biological research in New Mexico and see REU students in question-asking mode, you are welcome to attend a seminar at the field station (check out [facebook.com/sevifs](https://facebook.com/sevifs) for weekly speaker and topic).

There will be an all-day symposium on Friday, August 8 at the conclusion of this REU summer at Sevilleta. Each student will offer a 15-minute presentation on her or his project. The public is welcome to attend what promises to be an invigorating day.

Principal Investigator Scott Collins observed that each group is different – this year's is especially “cohesive and high energy” in his view – but all REU participants are self-selected and so arrive with an interest in research (and a welcome level of enthusiasm).

Soon, Collins will be writing a proposal for a third five-year REU grant from NSF. It is hard to imagine a better way to introduce students to the pleasures and challenges of biological fieldwork or to acquaint them with the other aspects of a successful career as a research scientist. May this impressive program continue and thrive.

-Tamara Coombs

## Field Note: The Blues



People are used to groups such as the moths/butterflies/skippers. However, as interest grows smaller groupings become useful. A smaller butterfly group is *Lycaenidae* (gossamer wings) which includes lots of small, quick, and beautifully decorated species. Within this group are the *Polyommata* (the blues). But, many species in this group are grayish on the underside. So, why are they the blues?

They often sit with wings together. But when sunning with wings spread, the blue color is apparent. The picture above includes three of the blues that occur at Sevilleta. The Acmon Blue with its orange spots and the Marine Blue with its unique pattern are above. Below are two pictures of the Reakirt's Blue including one that reveals the rich blue that gives the group its common name.

The British naturalist Thomas Henry Huxley said, "To a person uninstructed in natural history, his country or sea-side stroll is a walk through a gallery filled with wonderful works of art, nine-tenths of which have their faces turned to the wall." If a person wants to they can spend the rest of their lives turning the pictures around.

- John Wilson

## Hard Work, No Pay

The board of Amigos de la Sevilleta is seeking candidates who want a challenging and satisfying opportunity to serve.

It is a working board. We need individuals with ideas, with follow through, and with a willingness to pitch in where needed – whether driving a four wheel drive vehicle for a tour or preparing food for the annual meeting.

No experience necessary. The only thing all board members share is a passion for the high desert and a desire to support Sevilleta NWR.

You will have the opportunity to learn about the refuge at all scales, from butterflies to ecosystems. You will have the chance to experience Sevilleta as few do, to see its beauty in all seasons. You will enjoy the camaraderie of Sevilleta's dedicated staff and fellow Amigos. You will know that your work makes a difference.



Tom Miller

To learn more, contact Ian Jenness [mandijenness@gilanet.com](mailto:mandijenness@gilanet.com), 575 854 3410, or Tamara Coombs, [tcoombs@centurylink.net](mailto:tcoombs@centurylink.net), 505 242 4354.

-Tamara Coombs

## Message from our President



In April, the Amigos board met for a half-day planning session moderated by Don Boyd (husband of our secretary, Deb Caldwell). We all found it to be a very productive meeting which resulted in new vision and mission statements:

***New Vision Statement:** Amigos de la Sevilleta creates an engaged, diverse community of concerned citizens who support the goals of Sevilleta National Wildlife Refuge to protect and sustain healthy ecosystems for current and future generations to enjoy.*

***New Mission Statement:** Amigos de la Sevilleta fosters an environmental ethic among those who learn about and visit Sevilleta National Wildlife Refuge and supports the goals of the refuge, especially "wildlife first," through education, advocacy, networking, service, and fundraising.*

We are continuing to hammer out our goals and objectives and will keep you informed of our progress.

Deb Caldwell, who is also the director of the Socorro Chamber of Commerce, suggested that we participate in the clean-up of Socorro on April 26. In addition to making Socorro a more pleasant place, a small group of us earned \$112 for the Amigos coffers. We all enjoyed the experience and hope to expand our efforts next year.

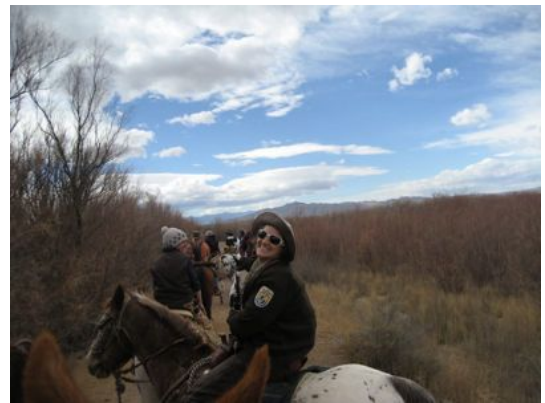
On May 3rd, the Amigos held their annual tour and picnic in the foothills of the Los Pinos Mountains on the east side of the refuge. While John Wilson waxed enthusiastically over the various butterflies, others found interest in the many spring wildflowers and the numerous birds and a small group of oryx.

The weather was fantastic and the great Mediterranean feed organized by Tamara was delicious. If you missed the picnic, you might really want to consider joining us next year. It is a great opportunity to visit some of the more remote sites on the refuge, as well as to get to know some of your fellow Amigos.

Ian Jenness, President

## Horseback Tour Saturday, July 19 9:00 am – 3:00 pm

Join us for a guided horseback exploration of Sevilleta National Wildlife Refuge. Enjoy mountain views of the Los Pinos from your saddle. Load up your horse, saddle, water and lunch. Dress for the weather. Space is limited so make your reservations *now* at 505 864 4021.



*Jeannine Kimble enjoying a 2013 horseback tour of Sevilleta NWR.*

## Exploring a Corner of Sevilleta



*This year's Amigos-only tour and picnic included a visit to an old line camp in Pino Canyon, used as temporary lodging when Sevilleta was a ranch.*

*Photo by Don Boyd*

## Manager's Corner



*Wildfire photo by Roland Phillips, taken on June 11.*

The Black Butte wildfire on the east side of the refuge started June 11, and was declared contained June 14. It burned 515 acres of grassland and juniper shrub in the foothills of the Los Pinos Mountains. We had about 85 personnel on the fire including crews from the FWS, BLM, Forest Service, NM State Forestry, BIA, and volunteer fire department crews from Veguita and Abeytas. All in all, this fire will most likely be beneficial to the plants and animals in that area.

I am mentoring two Research Experiences for Undergraduates (REU) students (see article on front page). One is researching Gray Vireos nesting in the Los Pinos, and one on grassland birds across several study sites through the east side. Refuge Biologist Jon Ertz is mentoring a REU student studying prairie dog behavior. The REU program is administered by the Sevilleta LTER and is funded by the National Science Foundation. This summer there are 16 students in the program. They will be presenting the results of their projects at an all-day symposium on August 8.

We are hosting a Directorate Fellows student this summer. This is a new FWS program, aimed at bringing more young scientists into the agency. It gives current undergrad or graduate students a chance to conduct their own research for 11 weeks, and includes the opportunity to receive a

permanent job once they graduate from college. Our student, Ariel is studying the small mammal populations on sites with prairie dogs and on sites without prairie dogs to see if there are differences in the small mammal communities on these two types of areas.

Thanks to the generosity of Marion and Dana Gebel, the Mesa View Trail now has three new six-foot benches on the loop portion of the trail. The YCC crew from Valle de Oro NWR carried the bench parts up to the top of the mesa, where they were assembled. Now hikers can sit comfortably as they enjoy spectacular vistas.



*New bench on the Mesa View Trail. Photo by Marion Gebel.*

We are saying farewell to Marlene Brown, who has been a residential volunteer at the refuge for a year (most volunteers who live on site stay for three to six months). We thank her for her excellent work and wish her well on her future refuge assignments. Volunteers are essential at all National Wildlife Refuges. Last year, Sevilleta's volunteers donated time equivalent to three full time employees.

Meanwhile, we continue to limp along with just the five permanent staff, and no end in sight to our budget and staffing woes.

On the brighter side, the clouds are building almost everyday. Come on, rain!

Kathy Granillo,  
Refuge Manager