

REFUGE UPDATE

July 2021

Pollinator Benefits, Cactus Blooms

Published bi-monthly by the Amigos de la Sevilleta

Calendar

Due to the COVID-19 pandemic there still are not any planned events. A special notification sent to all if things change before the September Refuge Update is published.

Refuge Manager Notes July 2021

June was a hot month here at Sevilleta NWR. We were very dry, except for an incredible hailstorm that beat up the SE quarter of the refuge. On the flip side, that area is now the only green portion of the refuge. The breeding birds on the refuge seem to be nesting later this season and laying fewer eggs. Perhaps linked to the hot, dry weather. Hummingbirds seem to be down in number around the Visitor Center — perhaps numbers will pick up in July as the Rufous Hummingbirds arrive for their post-breeding stay. They are often here into October.

Speaking of pollinators, June 21-27 was National Pollinator Week. This is an annual event celebrated internationally in support of pollinator health. I hope those of you that can are providing resources at your homes for pollinators and other wildlife. Native flowering plants, water features, and bare dirt patches for ground-nesting bees, for example. The Pollinator Partnership has created an easy-to-use guide for identifying 10 types of bees commonly found in home landscapes across North America (www.pollinator.org). Check out the website for more information about pollinators and what you can to help them.

Did you know the refuge is host to a bee study that started in 2000? This study looks at community or population level fluctuations in bees over the season and on a long-term basis. This study is designed to be compared with the data from a concurrent plant phenology project on the refuge, to look at spatial and temporal patterns within pollinator and flowering plant communities.

If you've been to the refuge in the last year or two, then you've seen the art and ecology installation art piece called "Variance Line." Rainfall data has been collected in our area for over 100 years. During that time, average total rainfall amounts have declined, while the variability from year to year has increased. "Variance Line" represents the variance and overall decline in rainfall totals over the past 100 years and illustrates the data graphically.

This art installation now has a plaque that gives some information about it and dovetails nicely with the brochure available at the Visitor Center. The plaque was installed in late June thanks to refuge volunteers.

Variance line photos on pgs. 3 & 4
See the cactus photos on page 5

Amigos Board News

Ann Adams, Board President

Greetings Amigos,

As you read in Kathy's report, we celebrate pollinators on the refuge and across the country in June each year. Most of us think about bees as our primary pollinators, and there are indeed more of them than I had imagined. In fact, I believe there have been some 400+ varieties found on Sevilleta alone. We've learned lots about them, where they live, what they pollinate, and how weather affects them through studies on the refuge that have been ongoing, as Kathy said, for over a decade.

But bees aren't our only pollinators. Transfer of pollen from one plant to another or within a single bloom, is performed by insects and animals as well. Some are "designed" for the role, with mouth parts or legs hairs picking up grains of pollen with each stop to feed. In fact, you may know that most specialty pollinators have co-evolved with their blossoms of choice, helping each other to survive, spread, and prosper through matching "parts" that make it easy to feed on nectar and pick up pollen to spread.

Beetles and bats count among the many pollinators critical to the flourishing of our desert and , in fact, to perpetuating the life cycle of the crops that feed us all. Moths and butterflies contribute as well. Having a Butterfly Count in late summer helps us learn how many types are on the refuge and how they are surviving. While we often find some of these pollinators to be problematic (bag worms and gypsy moths for instance), most have roles to play that have evolved long before we arrived.

We have all watched hummingbirds moving from plant to plant...have you noticed that they have collected yellow powder on their bills and foreheads? When we band them, it's easy to collect some of that pollen for studies of where they have been and what plants they prefer. Pollens are easy to identify under a microscope and collecting them can provide another clue to the inhabitants of the refuge and their general health and proliferation.

Life moves slowly AND rapidly in the desert Southwest, where we live. Some plants have very brief bloom periods, perhaps only a day following the arrival of moisture. Some bloom only at night. Their pollinators have tuned themselves to the habits of their plant partners so as not to miss an opportunity. If you pay attention, you can also spot unexpected pollinators working hard to spread the good stuff!

Enjoy!!

Ann

New exhibit at visitor center completed Submitted by Kathy Granillo





Completed sculpture



Sculpture in progress

Summer Volunteers Submitted by Rex Myers

Don and Janet are Sevilleta's RV volunteers for the coming summer. They hail from Tennessee, have two children and two grandchildren, and both are retired U.S. Army. For the last 4 years they've been RV volunteers serving at 3 other wildlife refuges and a national fish hatchery. At Sevilleta they've been busy from feeding birds in the morning to helping with the prairie dog and wolf programs. Seeing national parks is one of their hobbies and, so far, their total is 38 parks. For them, exploring the region around Sevilleta, and hiking New Mexico have been real bonuses, and they look forward to weekend travels.







Recent Cactus photos





Photos by Kathy Granillo

A Colorful "Transient" Submitted by Jennifer Keyser Staff Biologist



When I read about Bullock's Oriole returning to the Refuge in May's Newsletter, it reminded me of my first experience with this beautiful bird. It came while I was volunteering at the Rocky Mountain Arsenal National Wildlife Refuge, near Denver. One morning, as I was headed to the Refuge Visitor Center a male Bullock's Oriole was there to greet me on the front lawn! With his bright breeding plumage, there was no mistaking who he was.

In addition to the male Oriole's distinctive orange tones, they have a black back and large white wing patch. Their face is orange, with a black line through the eye and a black throat. Females are less striking in color, with yellowish-orange on the head and tail, and a grayish back. Both are Robin-sized, measuring approximately 7 to 8 ½ inches in length, with a wingspan of about 12 inches.Bullock's Oriole (*Icterus bullockii*) is generally found in the arid West in open woodlands, along streams, and particularly among cottonwoods.

Most winter in western Mexico but some are year-round residents of coastal Southern California. They feed on insects, berries, and nectar.

At one time, the Bullock's and Baltimore Oriole (*Icterus galbula*) were thought to be a single species – the Northern Oriole. Subsequent genetic research determined that the two are not very closely related. However, the two species interbreed where their ranges overlap, on the western Great Plains.

Matings between Bullock's and Baltimore Orioles in the "hybrid zone" produce apparently healthy offspring. That led some scientists to believe that the hybrids might be expanding their range. However, a 2020 study indicated that the hybrid zone has been shrinking. The study also concluded that ongoing natural selection pressures limit the expansion of the hybrid zone and prevent the homogenization of the two species. The study's authors suggested that Bullock's and Baltimore Orioles should remain separate species.

Besides their genetic history, there are other interesting facts about the Bullock's Oriole, a few of which follow:

The bird is named after William Bullock, an English amateur naturalist of the 19th Century.

Bullock's Orioles take nectar from flowers and will also drink sugar water from hummingbird feeders.

Both males and females sing, but with different songs.

Continued on page 7

Sources:

Cornell University Lab of Ornithology, All About Birds

www.allaboutbirds.org/guide/Bullocks Oriole

One Species or Two? A Winner Emerges in the Great Oriole Debate | All About Birds All About Birds

Research Article. *The Auk. Ornithological Advances*. Volume 137, Issue 4, 1 October 2020. American Ornithological Society.

Genomic and plumage variation across the controversial Baltimore and Bullock's oriole hybrid zone | Ornithology | Oxford Academic (oup.com)

Journey North. Citizen Science Program of the University of Wisconsin-Madison Arboretum

Oriole Migration and Annual Cycle | Baltimore Orioles | Bullock's Orioles (journeynorth.org)

Audubon Guide to North American Birds

www.aububon.org/field-guide/bird/bullocks-oriole

The next Amigos board meeting is July 24th at 4:30 By Zoom

All Amigos members are welcome and are encouraged to attend. Contact Ann ann.d.adams@comcast.net, for access information if you would like to attend.

Amigos Contacts

Amigos web site

https://www.amigosdelasevilleta.org/

Amigos on Facebook

https://www.facebook.com/amigossevilleta

Refuge Web Site

Http://www.fws.gov/refuge/sevilleta

Jeannine Kimble

Visitor Services Manager

505-864-5021ex106

Past editions of this Newsletter are available at the Amigos website: https://www.amigosdelasevilleta.org/contacts

There are openings on the Amigos de la Sevilleta board of directors.

Contact Steve Randall at 505-861-1088

Editor's Note

Septembers Refuge Update theme will be Geology/History, Natural features on Sevilleta, Historic facilities (line shacks, fence/gate/ranch remnants)

Items for consideration in the update are encouraged. Email your submission to sdrandl72@gmail.com in .doc format.