REFUGE UPDATE

May 2021

Spring Migration

Published bi-monthly by the Amigos de la Sevilleta

Calendar

Due to the COVID-19 pandemic all planned events have been cancelled. There will be a special notification sent to all if things change before the July Refuge Update is published.

Refuge Manager Notes

Kathy Granillo, Refuge Manager

Spring bird migration is in full swing. Black-chinned hummingbirds are back in the Middle Rio Grande Valley, and the first Bullock's orioles, western kingbirds, and northern mockingbirds have arrived along with several other species. This is one of the best times of year to get and look for birds – they are in fresh breeding plumage, often singing, and fairly easy to get good looks at as they wing their way north. The Sevilleta riparian area is a great place to view many of these migrants as many species use the Rio Grande and adjacent vegetation as a migration corridor and stop-over sites to rest and refuel. We now have a directional sign up to indicate the way to Units A and B, and will soon have a trail map available for the birding trails at Units A & B. There are also interpretive panels at both A and B that include the map for each trail.

The refuge will be saying goodbye to the radio antennae and tower at the Visitor Center. We are getting a much smaller tower that will be installed on the roof. The red-winged blackbirds love perching and singing from the tower, and I'm not sure where they will perch once it is removed.

Speaking of removals, the underground propane tank (located at the south end of the Visitor Center) will be excavated and removed. In its place we will install a new above-ground propane tank. The portions of trails near the tank will be closed during construction, but there are alternate routes so the public can still access the trails.

Please come visit your National Wildlife Refuge – check out the hummingbirds mobbing our feeders, hike the trails, enjoy the views, and breathe deep.

Amigos Board News

Ann Adams, Board President

. Hola Amigos,

Imagine…it's April 5th. I am sitting on my veranda enjoying the feel of Spring in the air, listening to the birds singing love songs, and the breeze ruffling a few new leaves on the trees. Waiting for a specific sound. Morning passes, afternoon creeps by…still waiting. Dinner time approaches. Bzzzt! Wait was that it? Bzzzt! There it is again. Where is he? I know that sound but I can't see the sound-maker. Then, out of the corner of my eye, I catch the flash of movement, heading toward my feeder. Bzzzt! Mr. Black-chinned Hummingbird. Woohoo! They're baaack! I can now record 2021 First Observed Date: April 5, as expected. Every year the hummers return to my Albuquerque garden on April 5. How do they do that? How can they arrive on the same date every year? How do they find my location? Have they been here before?

As many of you know, I am a federally permitted hummingbird bander. I have been studying these tough little guys since 2000 and banding them since 2004. Every Spring, I watch for their return from wintering in Mexico where they have enjoyed tropical breezes, repasts of different nectar sources and tiny arthropods, and replaced their old worn out feathers with shiny new breeding plumage. Sounds rather like a vacation we would enjoy ourselves, right? But for hummingbirds, the time is actually spent preparing for their return north to their breeding grounds. Most return to the places they were hatched or lived in previous seasons. This is called site-fidelity. Once there, males (the ones with the colored throats, called gorgets) will engage in claiming a territory, hopefully rich in protein (those bugs gain) and nectar sources (think flowers and feeders). Males arrive roughly two weeks ahead of females in order to be on territory when the ladies arrive. Female hummingbirds essentially run the breeding operation. They build the nest, choose a mate, lay the eggs (two tiny eggs that look like TicTacs), then hatch and raise the young hummers … like many human single-moms, without help from the males. Females are less colorful than males. Their dull plumage allows females to hide in plain sight and, with their nestlings, remain protected from predators. Hummingbirds do not "pair up". In fact, the two youngsters that each female raises may be only half-siblings, each with a different male parent. This approach helps to maintain important genetic diversity in the species and contributes to overall good health.

During the time that hummingbirds are in our neighborhoods (most of the Summer and into early Fall), they are busy defending territory, breeding and raising two, or possibly three broods of young. We have all noted how feisty and fierce they can be and wonder why they are always fighting. It would seem that all the adults hate each other and the youngsters and vice versa. In reality, these birds, which burn energy at a very high rate, are busy defending the nutritional resources they need to keep themselves alive. Hummingbirds are highly competitive and rarely hesitant to claim a seat on the feeder. They don't share. They don't flock together. They do entertain us immensely. So fill your feeders (1 part sugar, 4 parts water, no food coloring) and prepare for a terrific show.

I look forward to sharing more about hummingbirds over the summer. We hope to hold a banding session at the refuge again sometime this year. Watch the calendar for more information.

Ann

Progress in the Pollinator Garden

Submitted by Sandy Barnett

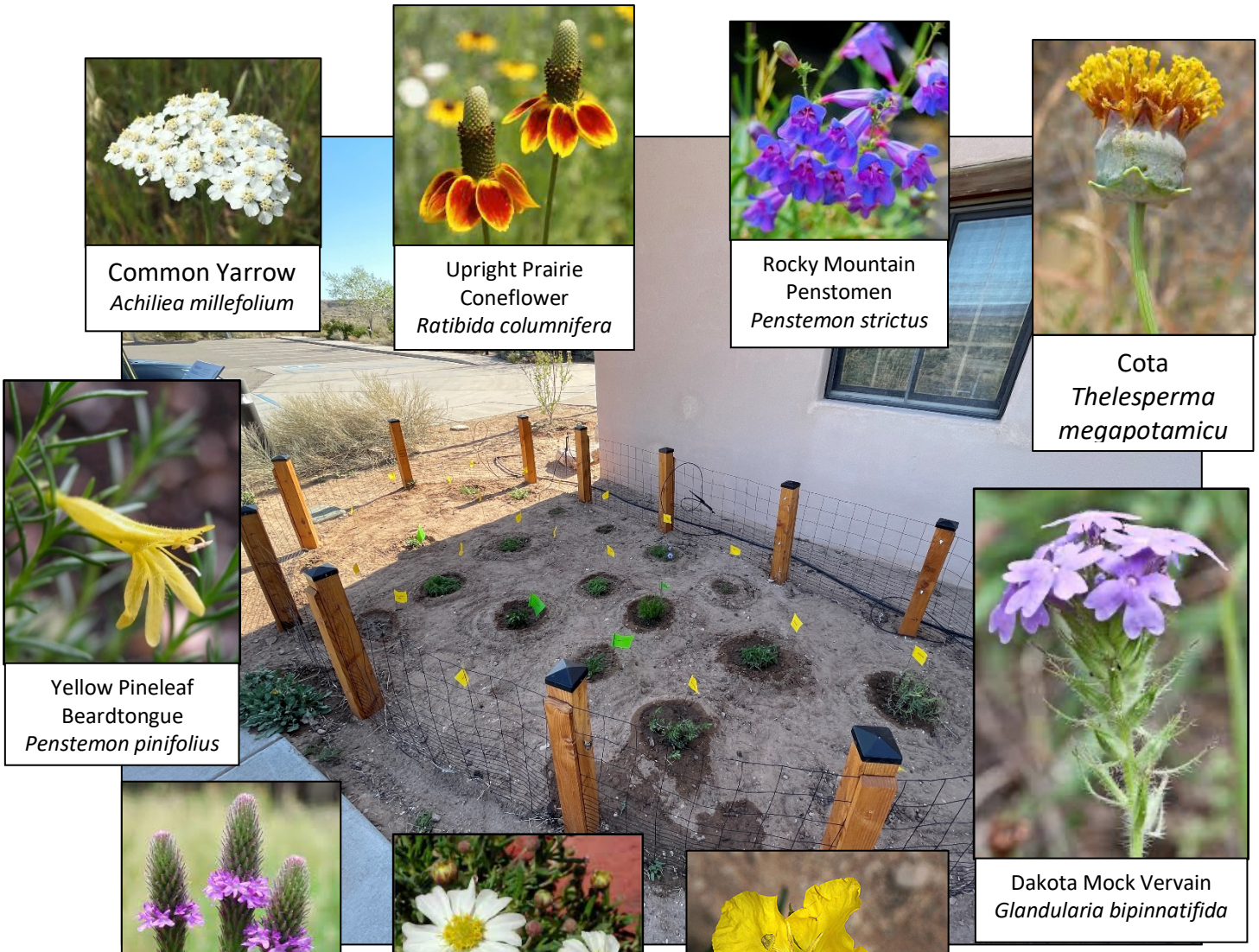
Volunteer Sandy Barnett installing plants, leaving 18-31 inches between plants, depending on species, to allow for future growth. At maturation, the leaf canopy from the plants will shade most of the soil, helping to keep roots cooler and reduce evaporation.

Volunteers leveling the garden bed and hauling away extra soil to best insure proper water flow to the plants. Left -right: Rex Meyers, Jim Lommen, and Colin Barnett.

Volunteer Jim Lommen installed drip irrigation for the pollinator garden. As native plants of the southwest, the vegetation selected for the garden are well adapted to high incident sunlight, heat, and low water usage.

Work on the new pollinator garden by the Visitor's Center is continuing. Volunteers from the Amigos levelled the ground and planted 16 of the planned 25 herbaceous perennials (plants that die back to the ground each winter but develop new growth from the roots the following spring). The rest will be planted when they become available from Plants of the Southwest, probably in a few weeks.

Black-tail jackrabbits (*Lepus californicus*) and desert cottontail rabbits (*Sylvilagus audubonii*) are out and about and would certainly enjoy feasting on the new plants. Fortunately, our rabbit fencing extends six inches below ground, which should prevent them digging their way into the garden.



When mature, the new garden will be attractive to an array of pollinators in the area - hummingbirds, butterflies, bees, wasps, moths, flies, and other beneficial insects. Some of the seed heads will provide food for birds after the flowers die.

Migration Facts
Submitted by Penny Lommen

In my past life, I was a reference librarian. People would come in the library with all sorts of questions and my job was to find the answers. This was before the internet so you had to look in a book to find the answer and sometimes you had to look in several books! Then the internet came along. I can't tell you how much easier my life became! My only problem is that I go off on strange tangents and end up spending all afternoon on the internet. Oh well!

For this newsletter I typed "bird migration" into GOOGLE and came up with all kinds of information. The information was provided by birding organizations, birding supply manufacturers, wildlife organizations, park and rec groups, you name it. I spent several hours reading all sorts of interesting bits of info. I'm sharing some of them here.

Did You Know????

The Great Snipe is the fastest flying bird going up to 60 miles per hour.

The Bar-Tailed Godwit can fly for almost 7000 miles without stopping.

The highest, flying bird in the world is the Bar-Headed Goose who has been recorded as flying 29,500 feet above sea level, over the Himalayas in India.

Before migrating, many birds enter a state of hyperphagia, which means that they increase their body weight by eating nearly non-stop for several days or weeks to store extra energy before leaving on their journey. Some birds actually double their body weight before flying.

Birds use the stars to determine their bearings. They can determine their longitude and latitude by the position of the stars. The glare of the moon can interfere with this orientation.

There is a science called Radar Ornithology. It uses radar technology in studies of bird migration and prevention of bird strikes to aircraft. Radar has tracked migrating birds, bats and insects since the 1940s.

Birdcast.info is a fascinating website that features bird migration forecast maps. These maps are produced by the Cornell Lab of Ornithology and Colorado State University. Using the United States weather surveillance radar network, they show the predicted nocturnal migration starting three hours after sunset and are updated every six hours. Three of these radar sites are located in New Mexico.

Hazards to migrating birds include such things as tall structures, bad weather, fog, reflective windows, electronic towers and their supporting cables and wind turbines. Another problem is disorientation at night due to light pollution. There is a program called "Lights Out" whose focus is to protect migrating birds by turning off all non-essential nighttime lighting on structures from 11pm to 6am each night. Supported by the National Audubon Society, the program started in Chicago in 1999 and is now in over 30 cities in the U.S.

Bird Watcher's Digest has an on-line migration quiz. You can find it at www.birdwatchersdigest.com/bwdsite/solve/quizzes/migration.

May 8, 2021 is World Migratory Bird Day. Happy birding everyone!

Volunteers

Submitted by Rex Myers

Dave Love

Dave Love is the Sevilleta Volunteer Naturalist familiar to anyone who has taken a tour involving geology. A retired faculty member with 37 years at New Mexico Tech, Dave has been reviewing research projects on the refuge since 2001 and studying Rio Grande sediments since before that. “Sevilleta is a magical place,” he says and relatively “unstudied” as far as its geology. Asked if he has a favorite rock, he replies “not really,” but West Mesa is most certainly a favorite area. Stay tuned for a San Lorenzo Canyon tour after the pandemic. And thanks, Dave, for bringing Sevilleta’s rocks to life.

New At The Visitor's Center

Please do not climb on sculpture.

Rainfall data has been collected in the Sevilleta National Wildlife Refuge 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" was designed to represent the variance and overall decline in rainfall totals in New Mexico and to help the public understand how an increasingly drier and more variable climate impacts ecosystems.

The Sculpture

The blue jagged line portion of the sculpture is 27 feet long and shows how rainfall varies from year to year. The highest point is 9 feet above grade for a particularly moist year; and the line goes below ground level to show the very low years. The blue line is created out of 1-inch powder-coated steel tubing, welded to 2-inch diameter circles that indicate the total rainfall in a single year. The line connects the circles to illustrate the variance.

The five rammed earth square columns consist of local soil and a small amount of concrete mixture to enhance the durability of the piece. Each column is 3 feet by 3 feet, with 6-inch thick walls. The height of each column decreases from left-to-right to show the declining average amount of rainfall, starting at 68 inches tall (100+ years ago) and ending at 20 inches (2018).

The columns include a drainage system to allow plants to grow in the centers of them. The refuge is home to over 1,200 species of plants. In order to highlight some of these, Creosote Bush, Black Grama, Blue Grama, Mormon Tea, and Desert Marigold seeds have been planted within the columns. The root patterns on the sides show how far native desert plants typically must send their roots in order to find water.

The Project

Completed in 2020, the "Variance Line" project was developed by the University of New Mexico's Art and Ecology program in collaboration with the Sevilleta National Wildlife Refuge. The lead artists were Catherine Page Harris, Celestino Crowhill, and Lucas Zuniga. The art installation was made possible by a grant from the University of New Mexico, plus support from the UNM's Museum of Southwestern Biology Herbarium and Sevilleta Long Term Ecological Research (LTER) Program.

The next Amigos board meeting is May 19th 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
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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

Spring Hiking Tips

Submitted by Penny Lommen

Wear a mask. There is a new federal mandate masks MUST be worn in all Federal buildings and on all public lands.

Dress in layers. This time of year, it can look warm and sunny but a sudden wind can be quite chilly.

Wear appropriate footwear. Tennis shoes and hiking boots are good, flip flops and high heels aren't!

Carry water, have a hat, use sunscreen.

Distance yourself from others who aren't part of your group.

Watch for wildlife. As the weather warms up the animals are coming out to enjoy it too. Be aware!

Remember the old saying, "Take only pictures, leave only footprints".

More information on Sevilleta NWR Trails is available at:

https://www.fws.gov/refuge/Sevilleta/visit/visitor_activities/trails.html

Editor's Note

Steve Randall

This month's newsletter is the second one to have a "theme;" in the months to follow we will try to have different themes. In the upcoming months the planned themes are:

JULY – pollinator benefits, cactus blooms, and species information

SEPTEMBER – geology, history, natural features on Sevilleta, historic facilities (line shacks, fence/gate/ranch remnants)

NOVEMBER – Fall Family Fair, connecting people with nature

Anyone can submit an article for consideration, preferably in .docx format; email to sdrandall72@gmail.com