

Bitter Lake News

January 2024

UPCOMING EVENTS AT BITTER LAKE

Saturday, Jan. 27 – General Meeting at 12:00 pm at the Visitor Center. Please bring a side dish or dessert. The main dish will be provided. Our guest speaker will be Melissa Fry from Ecological Services, a part of Fish and Wildlife

Thursday, Feb. 22 – 6:00 pm. Meet and greet at Stellar Coffee. Come learn more about the refuge!

Saturday, April 20 – 9:00 am. Earth Day Butterfly Trail work day. Volunteer to help the refuge and Friends clean up our popular walking trail by the Visitor Center and get it ready for our pollinator friends! The back-up date for this spring clean-up will be Saturday, April 27th, in case of inclement weather.

*More information can be found on <https://www.friendsofbitterlakenwr.org/>



President's Corner

By Meredith Hildreth

HAPPY NEW YEAR! 2024 dawned with some chilly weather, light precipitation in the Pecos Valley, and snow on El Capitan and the Sacramentos. The Refuge is still responding to climate change episodes from the past couple of years including flood damage as well as last summer's prolonged hotter, drier climate. I'm currently reading the State of New Mexico's 2018 Drought Plan while thinking

about resiliency planning. To explain the hotter, drier climate, I recommend an excellent book published by UNM Press, *At the Precipice: New Mexico's Response to a Changing Climate* written by NMPBS environmental correspondent Laura Paskus. Paskus also produces "Our Land" series on NMPBS program New Mexico in Focus; episodes can be found online. A hundred years ago, Aldo Leopold was instrumental in Congressional designation of the Gila Wilderness. Celebrations will be held this year.

https://www.gpkmedia.com/news/gila-national-forest-celebrates-100-years-of-gila-wilderness-in-2024/article_a5ebc742-ab1e-11ee-b5f5-033da95dcb65.html

Join us at noon on Saturday, January 27, 2024, at the Refuge Visitor Center for the Winter Membership Meeting. Be sure to renew your membership, shop in the Nature Store, and bring your favorite potluck dish! We are excited that Melissa Fry, with FWS Ecological Services, will be the keynote speaker!

Let's make 2024 the best year ever by helping the Friends build membership and volunteerism. Stay tuned for information on upcoming Friends events to be held at Stellar Coffee and at the Refuge. Cheers to the New Year!

Award



Bob Darrow has designed a special award for Bitter Lake. He based his design on the entrance sign as you enter the refuge. The presentation to the Roswell Daily Record was featured on the front page of the paper. We appreciate all the coverage the Record has given to the refuge over the years.

Get to Know Our Refuge Volunteers

If you visit the refuge, you may get the opportunity to visit with our RV volunteers, Carrie and Paul Poster. They arrived in October and will be with us until March helping out on the refuge and in the visitor center. Carrie and Paul have been full-time volunteers and RVers since their retirements in 2016. They have volunteered at refuges in New Jersey, Florida, and Minnesota. They plan their travels to see as much of the country as they can as they make their way between assignments, and feel that the experiences they have as they move around are much more important than owning homes and possessions. One of their goals is to visit all the national parks, and they have already seen 336 of them! Another goal is to give back to the national refuge system in return for the pleasure they have received from America's wild, protected lands.

Carrie and Paul lived in the beautiful Pine Barrens of New Jersey, when they began their nomadic life. Paul retired as a quality control manager, working on aircraft with companies such as Boeing. Carrie was a property manager before she retired. They are using their skills to make a valuable contribution here at Bitter Lake. Stop by and meet this energetic, friendly couple when you are out at the refuge!

Big Trouble For Little Snails

By Eric Dow

Koster's Springsnail is a small federally endangered aquatic snail that lives only in spring-fed habitats. They improve water quality by feeding on algae and are an important part of the food web as they provide food for fish. It used to be found at locations throughout Chaves County; however, due to habitat loss, it currently lives only at a few protected springs and sinkholes at Bitter Lake NWR. Extreme heat combined with the failure of the summer monsoons in 2023 caused portions of Bitter Creek, one of the last remaining strongholds of the Koster's Springsnail, to run dry. In mid-August there was a great deal of uncertainty about how much of the creek would go dry, forcing Bitter Lake Biologist Carl Jacobsen to recruit help and act fast to save the Koster's Springsnail. On the morning of September 9th, FWS refuge and fisheries staff with the aid of BLM biologists moved 1,500

Koster's Springsnails from Bitter Creek to the Southwestern Native Aquatic Resource and Recovery Center in Dexter, New Mexico.

Springsnails require specific spring habitat to survive. This ecosystem is quickly disappearing from the desert southwest as demand for water increases. Further, how best to care for them in captivity is not well understood and previous efforts to raise other species have not been successful. While a great deal of thought and planning was put into the snail rescue, there was a consistent worry that the snails would not survive due to their strict habitat requirements. Amazingly, our snails not only survived, but reproduced in captivity.

On October 17th we brought the snails we saved from the drying creek along with several hundred new baby snails to a temporary snail lab at Bitter Lake NWR. Once some rain arrived along with the seasonal slowing of agricultural irrigation the spring flow of Bitter Creek recovered enough for us to safely release the snails back to their natural home. In order to know how many snails we were going to release and how many of those snails were born in captivity we needed to conduct a census of the captive snails. Our initial expectation was that we could count and measure all the snails in a couple of days, allowing us to release the snails by the end of that week. However, because they range in height from 0.4mm to 4mm and like to burrow in sand, finding all the snails proved to be exceptionally difficult. Over the next 2 months hundreds of hours were spent in the lab sifting through sand and hunched over microscopes in search of tiny snails.



On December 20th we released the last of the snails back into Bitter Creek. In total, we released 2,700 snails back into Bitter Creek. We also founded a captive population with 300 of the rescued snails at the visitor center. The new snail tank provides a great opportunity to educate the public about this unique species and keeps a population safe from potential future ecological disasters.

This past summer's snail salvage is only a small victory in the battle to save the springsnails. Many species of springsnails are threatened with extinction in the

Southwest due to the drying of spring habitats and a continuous effort is required to secure their future. Currently Bitter Lake NWR is engaged in a partnership with the Albuquerque BioPark to establish captive breeding populations of the Koster's and Roswell springsnail. The question remains, "With the climate warming and human demand for water from the aquifer growing is it possible to ensure that Bitter Creek continues to flow?" Moving forward, we must work under the assumption that the answer to that question is yes. Building upon decades of work, the fight to restore and protect the habitat of Bitter Lake's snails continues.

Refuge was an Eclipse Mecca



The annular solar eclipse, which was total in our part of New Mexico, occurred on October 14. Peggy Bohlin, of the Astronomy Club came out and spoke about the eclipse. The club also arranged for Astronaut Duane "Digger" Carey to come and speak. The refuge turned out to be a very popular spot for eclipse watchers to gather. Four to five hundred people showed up to set their telescopes and watch the entire eclipse take place. Most of these visitors were from out-of-state. We were honored to have had so many choose our refuge as the ideal spot to see this interesting and spectacular event.



Fall Youth Hunt

The Bitter Lake Youth Hunt had 3 sessions this year, one each in October, November and December. The young people who participate must be younger than 18, and have an adult to guide them, usually a parent. All of the hunters had a great time and many were successful! Whether or not they harvested a deer, they learned about hunter safety and conservation and spent quality time in the outdoors.

The youth hunt was originally started by Ken Butts, who was the refuge manager in the early 2000s. The first hunts were for pheasant, and the aim was to introduce young people to hunter safety, conservation, and then to use these lessons and go out in the field, using the skills they had learned. Classes were held where the main objective was to teach future hunters good ethics. The hunts have helped reduce the population of deer on the refuge, solving the overpopulation problems while giving youngsters a safe place to learn the skills of hunting.

Why hunting on a wildlife refuge? Wildlife refuges actually had their start with waterfowl hunters who pushed for regulations and wildlife conservation. They were able to purchase land that eventually became our wildlife refuge system. Funds raised through the mandatory purchase of Federal Duck Stamps were used to buy wetland habitat. Ninety-nine cents per dollar from the Federal Duck Stamp goes towards wetland conservation. A large amount of these wetlands now make up the National Refuge System. Hunting and the refuge system traditionally work hand in hand to protect areas for, not only waterfowl, but many other creatures such as amphibians, reptiles, mammals, and insects like dragonflies and butterflies.



Cranes and Cocoa

Unfortunately, we have discovered that the cranes who come to Bitter Lake do not check their calendars to make sure they are here when the Cranes and Cocoa event is being held. Many of the cranes leave before Thanksgiving to continue southward on their annual migration. One of the highlights of the afternoon (besides cookies and cocoa) is watching thousands of cranes come in from the fields to spend the night in the refuge. So, the decision was made to move Cranes and Cocoa to November 4th this year instead of over Thanksgiving weekend. The move allowed the date to coincide with the time the greatest number of cranes are visiting the refuge. Our longtime volunteer and crane surveyor, Jim Montgomery, gave an informative presentation about the sandhill cranes that visit the refuge.

Jim Montgomery National Award Winner

Jim Montgomery, one of the volunteers here at the refuge, was given an award by the North American Crane Working Group in Wisconsin for his lifelong work with sandhill cranes. Jim has documented nearly 40 years of population trends and has shared his observation of sandhill crane numbers and patterns in Eastern New Mexico. He was also recognized as the National Volunteer of the Year in 2003, for over 25,000 volunteer hours! He is one of the most knowledgeable people in the country on cranes, and richly deserves this recognition. We are honored to have Jim be a partner with Bitter Lake!



Friends of Bitter Lake National Wildlife Refuge

4200 E. Pine Lodge Rd., Roswell, NM 88201 Contact phone: 575-244-6256

e-mail: bitterlakefriends@gmail.com, <https://www.friendsofbitterlakenwr.org/>



Friends of Bitter Lake National Wildlife Refuge

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Membership Form

- Individual \$10 Family \$15
 Student \$5 Business \$50

Date: _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Cell Phone: _____

Mail to:

Friends of Bitter Lake NWR
 4200 E. Pine Lodge Rd.
 Roswell, NM 88201

Friends of Bitter Lake National Wildlife Refuge
 Membership Form Instructions



Just two easy steps to join:

1. Complete the form on the left side of the sheet and mail it with your dues to the Refuge.
2. Complete the Membership Card below and keep it for your records.
3. Membership includes 10% discount at the Nature Store.

(Fold Here)



Friends of Bitter Lake
 Membership Card

www.friendsofbitterlakenwr.org
 (575) 244-6256

Name: _____

Date: _____

*Membership expires 1 year from above date.

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