



NEWSLETTER

F. I. S. H. Day at Smithville Lake



Dawn Burkheimer at work on a barge on Smithville

F.I.S.H. Day at Smithville Lake

by Gerry Crawford

March 28 marked the 10th anniversary of FISH DAY on Smithville Lake. F.I.S.H. otherwise known as “Friends Improving Smithville Habitat” has become an annual event sponsored by the US ARMY CORPS OF ENGINEERS (USACE) and MISSOURI DEPT. OF CONSERVATION (MDC) with assistance by Gary Burton of Burton's Bait and Tackle and supported by volunteers from the area. The activity is dedicated to improving fish habitat in the lake.

USACE staff at Smithville Lake extensively prepares before the day of the event. Trees from around the lake are felled and moved to the site. Shingle Oaks, Cedars, Locust are the usual tree types used to create the sunken brush piles. Concrete weights are prepared with rebar loops for tie eyes to be attached to the trees to keep them in place when dropped into the lake. A loading site is selected each year and a temporary rip rap rock ramp is built and covered with rubber mats for loading the trees and weights onto the work barges used to carry the trees to locations selected on the lake for placing the brush piles.

MDC fisheries staff brings barges along with a barge from the USACE that are loaded using a skid loader, then the barges go to the locations on the lake, preselected by Gary Burton and others to provide fish habitat in key fishing spots. Some locations are selected by the fishery staff as well, usually with recruitment protection in mind for newly spawned fry. Other locations are typically in deeper water usually near some existing structure such as drop offs and old creek channel edges or bends.

Typically 70 to 80 trees each year are placed creating the brush piles and each location is GPS marked and added to a data base which is made available to fishermen for use as key areas to explore in hopes of catching fish using modern fish finder electronics. Over the past 9 years of the program 847 brush piles and 30 rock piles have been placed in Smithville Lake providing new habitat in support and improvement of the lakes fish population. The 2019 event had a bit of added interest, in that the weather forecast called for imminent rain and indeed the rain did come ending our time on the water and getting everyone safely back on shore. However, by the time the rain came, 70 new brush piles had already been placed in the lake making all the effort a huge success. Back inside the Litton Center, lunch of pizza, cookies, and bottled water was provided for participants in appreciation for support of the event.

A special thanks to Dawn Burkheimer from our MMN chapter for her help. Dawn bravely made her way thru the various tree's limbs, on the barge, to tie weights onto the inner tree trunks. Dawn was an excellent addition to the crew on the big habitat barge; and she enjoyed listening and participating in the serious information of the project, and maybe also the tall fishing tales shared by the other crew members. Great job Dawn. Hoping to see Dawn again next year and maybe more participants from our chapter.

A Visit to the Iowa Tribe Reservation

by Dennis Rush

On June 22, 2019, 13 members of the Loess Hills Missouri Master Naturalist were invited to visit the Iowa Tribe of Kansas-Nebraska Reservations lands. We would be led by tribal member and Vice Chairman of the Executive Committee, Alan Kelly, and Tribal

Member Lance Foster, tribal historian. We started our day meeting Alan and Lance at the Odgen Community Building where many tribal artifacts in show cases were seen along with pictures on the walls of past tribal members. Included in these pictures were some of both Alan and Lance's past family members.

First, Lance explained some of the tribe's background and history. The Tribe, beginning in the 1600's, had been scattered over land in several states. Many battles were fought between tribes with treaties following. A big landmark in their history was the signing of the Platte Purchase Treaty in 1836, which gave the tribe 4,000 acres in NE Kansas and SW Nebraska. Currently, only about a third is still tribal ground. The rest has become privatized over time. The tribe is now trying to retrieve these grounds that have been lost by purchasing them. A recent victory occurred in April 2018 when the tribe secured 160 acres of bluff land over-looking the Missouri River from the Nature Conservancy. The agreement was for the land to stay in a native state never to be sold off.



Loess Hills Chapter Members on Tribal Land

After the introduction, we jumped into our vehicles to visit some sites on the reservation. First, we went to Partlow cemetery, the oldest and most important cemetery on the reservation. Its location is the highest in elevation on the reservation, making it the most sacred of the four cemeteries on the reservation. Next we drove to the remaining home of Chief White Cloud. It is now a museum. Did you know our government has taken away the right of tribes to have a Chief? Chief White Cloud was their last chief and thus gives more

importance to his home for tribal members. We stopped after our tour at the tribal Casino for a buffet lunch. Even though the casino employs more than 130 people, of which a third are tribal members, the financial rewards to the tribe are small due to its location far from a major highway.

After lunch we were shown the tribal Pow Wow grounds. Every September the tribe has a Tribal Pow Wow with about 1,000 members attending, some coming from surrounding states. Campgrounds are available with many members staying several nights. Gourd Dancing is one of the highlights of the weekend, along with the choosing of a Princess and Jr. Princess. We also visited the Leary Site. This is a field and hillside, approximately 25 acres in size where in the 1800's, three tribes converged and lived together for the purpose of trade among tribes. As many as 4,000 Indians lived together here for several years.



Jessica highlights the Leary Site marker

At a tribal convenience store and gas station, not only was an ice cream bar a welcome treat on a hot day, but I picked up a jar of creamed pecan honey. The tribe not only has its own farming program, but also a bee and honey operation to package their honey in many creative ways. On to our last stop we visited a small, beautiful stone building constructed in the 30's by the tribal CCC. It is currently being renovated into a museum for the tribe. It not only will have a library, but will also house many artifacts found on the reservation. One display shows the use of pipestone for the making of peace pipes. The clay is found in a small deposit in Minnesota at one time protected by the Iowa tribe. However, for the past several decades, it has no longer been protected, and many non-natives have been allowed

to remove this sacred stone. Through Allen's diligent efforts most recently, this practice has been reversed.

It was a very informative and great day. We all felt it was well worth our time and encourage those of you who were unable to go, to take advantage if another opportunity arises.

Helton Visitors Glimpse Jewel of the Prairie

by Hayley Howard

To the casual observer, the land beyond the sign marking the Helton Prairie Natural Conservation Area in Harrison County, Mo., looks like any other uncultivated pasture land in rural Northwest Missouri. Tall brome and fescue grasses line the ditches of the gravel road that borders the north and west perimeter of the 12-acre tract of land the Missouri Department of Conservation acquired for public use.

Step a few feet further, however, and the invasive cool season grasses taper off and native plants reclaim the land, providing a visual feast for all to see. Here, even to the casual observer, nature's splendor is evident in the form of native wildflowers that have been returning year after year for millennia. This tract is part of the less than one percent of remnant prairie, land virtually untouched by man, that still exists in Missouri.

What makes this land even more special is the large ratio of forbs to grasses, creating a landscape blooming with life. And on this peaceful June morning, a rare orchid on the verge of extinction is blooming, too.

Several Audubon and Master Naturalist members are here to get a glimpse of this lasting northwest prairie and an education on one of our state's rare landscapes in its peak flowering season. Lucky for us, plant experts Tom Nagel, a retired Missouri Department of Conservation natural history biologist and Dr. John Rushin, a retired MWSU biology professor are leading this interpretive session.

Rushin begins by explaining how the Helton prairie, part of the bigger approximately 2,500-acre Helton Memorial Wildlife Area, was discovered within the larger parcel in the 1980's. Through haying the remnant part of the prairie and using it as mulch for adjoining land, MDC is gradually restoring the surrounding land to its former glory as well.

Tallgrass prairies are comprised mostly of grasses, sedges, legumes and composite flowers, but more forbs than grasses dominate Helton because of its mesic nature, meaning it is more moist, which helps support a wider variety of flowers.

With 25-30 different plant species in any cubic square foot, there's a lot to observe, so Rushin and Nagel take turns highlighting several species specific to prairies and their biological features, such as Ohio spiderwort, rosinweed, gamagrass, culver root, prairie phlox, butterfly milkweed, lead plant, rattlesnake master, mountain mint, quinine and wood

betony. As we gingerly make a path through the prairie, occasionally stopping to listen, ask questions and get up close and personal with the native flora, it's apparent we are close to the pinnacle of our outing.

About 20 feet ahead, we notice a flag stuck in the ground and beside it stands a peculiar plant. As we all approach it, a hush comes over the group as we gaze in awe at the dainty star of our session, the western prairie fringed orchid. Most of us have either never heard of it or have only admired it from the pages of a field guide. The cluster of delicate, creamy white-toothed blossoms of the western prairie fringed orchid beg to be noticed. Standing at less than two feet tall, what it may lack in height compared to some of its fellow forbs it makes up for in beauty and rarity.

In fact, it is the only one we see and only one of three surveyed this year by MDC



Prairie Fringed Orchid

Natural History Biologist Steve Buback. This is an improvement over last year, as he didn't find any among the three locations he surveys annually in Northwest Missouri, the only region this species is now known to exist in the state.

Buback attributes drought conditions for the absence of the endangered plant last year. Although a drought situation can impact its appearance on the prairie in a particular year, the perennial remains dormant in the soil. Buback adds that it is an extremely slow growing plant as well, with it taking up to seven years for one to bloom. Not only is its growth a factor, it also contains a long nectar spur that only the equally long tongue of a night-flying hawk moth can reach, making the reproduction of this orchid a rare feat in itself.

The future of the western prairie fringed orchid is dependent on many factors. Without the diligent work of people like Buback, the prioritization of prairie preservation and restoration projects by MDC, and the awareness of the important role native plants play in our ecosystem that prairie walks like these afford, we stand to lose a lot more than just this jewel of the prairie

Cheyenne Bottoms Shorebird Outing

by Dennis Rush

Six brave Loess Hills Master Naturalist Dennis Rush, Bill Blackledge, Gerry Crawford, Dan McCann, Mort Nelson, and one of our new members Scott Grier, whom we were so glad to see come along, headed out to Cheyenne Bottoms National Wildlife Refuge Near Great Bend Kansas on April 26 to encounter the spring migration of shorebirds migrating back to their home nesting areas as far north as the Arctic. This was supposed to be the peak time for shorebirds to migrate through this area where they will feed and rest up. We were not disappointed. We were able to spot some 30 or more shore birds and water birds including the most beautiful Avocets, Black Necked Stilts, Wilson's Phalarope with its entertaining dancing in circles, Egretes, Sandpipers, Plovers, Ibis, Grebes and so many more. Along with the shore birds were over 30 song birds, hawks, a great horned owl, and many others. Cheyenne Bottoms encompasses 20,000 acres. Close by is Quivera National Wildlife area that we visited on Sunday before returning home. Our last bird before returning home was a new one for me, the Snowy Plover. One of the cutest puffball's you'll ever see.

We had what I call a ball. So much fun shared between all of us. And I can't tell you how much I learned from these other experienced birders. It was a learner's delight. Of course the highlight of the trip is when Bill would disappear to put on his Muck Boots and we'd spot him again later trudging through the water carrying this huge camera and tripod to obtain a closer picture of the birds. So fun to see! I plan to do the trip again in 2020. Shore birds and their colorfulness are my favorite group of birds. I hope more will join us in this adventure next year. See you then!



Bill photographing at
Cheyenne Bottoms