

# **HAPPY NEW YEAR 2021!**

- Trevor Edmonson, Jessica Gomez, Garet Litwiler, Alyssa Nyberg, Olivia Schouten, Brian Chill, Meigan Day, Maria Egyed & Emma Lord

Due to COVID-19, our office building will remain closed until April 1, 2021.

During this time, our staff will be working from home and in the field to continue our conservation work.

## Monarch Butterflies Roost at Kankakee Sands

Kankakee Sands is an important migratory stopover site in the spring and fall for migrating birds who need a place to rest and refuel before continuing on to their destinations. We were thrilled to see that Kankakee Sands has also become a migratory stopover site for monarch butterflies making their long journey south to their overwintering sites in Michoacan, Mexico.

In September, more than 2,000 monarchs congregated on the oak trees in the Bison Viewing Area! TNC's Trevor Edmonson woke up early on a September morning to capture the monarch migration through Kankakee Sands on video. You can watch the video at nature.org/indiana. The monarchs stayed for just a few days before they continued southward to Mexico. We look forward to April when the monarchs return.



Monarch butterflies at the Bison Viewing Area © Trevor Edmonson/TNC

# Bison Have a Hankering for Willows

This summer, we mowed several large stands of willows in the bison pasture to reduce the negative impacts that they were having on plant diversity. Even though they are native, willows can colonize large areas and be problematic by outcompeting other prairie wildflowers and grasses, thus reducing the overall diversity of prairie plants and wildlife. While we were mowing, the bison came over and began eating immediately!

Although willows typically comprise about 30% of our bison's diet, we rarely see them eating willows. But when the willows were cut, we saw first-hand how much bison enjoy eating them. They stayed in those mowed areas for days eating every last branch. We've often said that the bison are our prairie's lawn mowers. Turns out they are stick picker-uppers too!



Bison grazing in recently mowed willow patch © Laura Mitchell

## Our Newest Prairie

With funding from the USDA Natural Resources Conservation Service, we were able to convert a 324-acre agricultural field on the west side of Kankakee Sands to a seeded prairie. The ambitious project involved harvesting and processing seed of 147 species of native grasses and flowers for a total of 772 pounds of seed. As soon as the soybeans were harvested in the fall, four water structures were installed on the interior ditches to retain water during normal times and drain water during high water events.



Seed barrels © Alyssa Nyberg/TNC

As the snow fell in mid-December the seeding of the prairie began. Hoorah! In February of 2021, we'll be setting our sights on our next prairie planting – a 550-acre parcel just north of the bison pasture.



Seed on the newly fallen snow © Jessica Gomez/TNC



Ditch work being completed © Trevor Edmonson/TNC

## Violet Research at Kankakee Sands to Benefit Butterflies

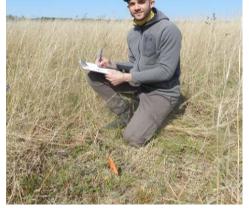
Marcello De Vitis, PhD, is a postdoctoral research associate at the Chicago Botanic Garden, investigating the many factors that affect the establishment of violet species native to the Midwest. His work is very important because prairie violets are in decline, and that directly impacts the species that rely on them, such as the regal fritillary butterfly, whose caterpillars feed exclusively on violet plants. This rare butterfly species has declined by 99%.

Violet species have proven challenging to establish in tallgrass prairie habitats due to difficulties encountered in several steps, from wild seed collecting to propagation and reintroduction. In collaboration with Ball Horticulture Company, Marcello is investigating the role of genetic versus environmental factors affecting germination



Marcello planting violets at Kankakee Sands © Stenhanie Frischie

mechanisms in lance-leaved violet, bird's foot violet and arrow-leaved violet. At Kankakee Sands, he is investigating the role that soil fungi and light availability have on seed germination and seedling establishment in the field.



Marcello making notes on violet germination and establishment © Stephanie Frischie

The results of Marcello's study will help advance our understanding of

these valuable plants, which will help us tailor our work to restore large, genetically diverse populations of violets capable of supporting the state endangered regal fritillary butterfly.

#### Kankakee Sands Wish List

As we all know, using the right tool for the job makes the work so much easier! Below is a listing of tools that would help us increase our efficiency in managing the prairies and savannas of Kankakee Sands. Thank you!

- Birchmeier 15K Iris Backpack Sprayers
- DJI Mavic 2 Enterprise Dual Drone
- Lincoln Electric Eagle 10,000 Plus Multi-Process Welder/Generator
- New or Gently Used Car/SUV With Good Gas Mileage
- Stihl BR Backpack Blower, Models 600, 700, or 800

contacting Trevor Edmonson at trevor.edmonson@tnc.org. As a small token of our BIG thanks, we will send you our annual Indiana chapter newsletter and our quarterly Nature Conservancy global magazine.

# Volunteer Thank You and 2021 Opportunities

We have said it before and we will say it again, Kankakee Sands certainly would not be the amazing place it is without our volunteers!

Thank you to all who were able to come out to assist with: harvesting seeds, removing trees, monitoring bluebird boxes, checking on trails, assisting with bird and butterfly surveys, photographing the beauty of Kankakee Sands, looking for the rusty-patched bumble bee, walking dogs on a leash to deter bunnies at the nursery, filling brochure boxes, and upgrading infrastructure and signage. Thanks also to those who worked from home folding brochures, entering data, making signs, constructing blue bird boxes and repairing our equipment. We are so grateful! Thank you all! Even during Covid-19 times, volunteers still generously gave us 900 hours of their time and effort. As of the writing of this newsletter, we are in the process of outlining safe and engaging volunteer activities for 2021.

To stay in the know about our volunteer opportunities, visit our website at nature.org/kankakeesands, or reach out to Alyssa Nyberg at anyberg@tnc.org or 219-866-1706.



Free sapling removal workday in February, pre-COVID © Susan Vanes



Seed cleaning and seed harvesting at Kankakee Sands in September during COVID © Alyssa Nyberg/TNC

## Want to volunteer, make a donation or learn more about Kankakee Sands?

If you would like more information about our conservation work and/or how you can be involved, visit us online at nature.org/kankakeesands or contact Alyssa Nyberg at (219) 866-1706 or anyberg@tnc.org. Thank you!