

ISSUE 4 - MARCH 2022

Above: Common sunflower in Alligator Canyon, July 7, 2021. Photo by Stella F. Uiterwaal. Below right: Dickcissel, July 15, 2021. Photo by Stella F. Uiterwaal.

# **CEDAR POINT TIMES**

The Newsletter of Cedar Point Biological Station (CPBS) School of Biological Sciences University of Nebraska - Lincoln

# Cedar Point contributing to UNL's renewed dedication to experiential learning

Here at Cedar Point, we are excited about the University of Nebraska – Lincoln's (UNL) increased attention to experiential learning. What is experiential learning? UNL (follow this <u>link</u> to their website) defines experiential learning as "application of theory and academic content to real-world experiences". Put simply, it's content layered with skills and context.

We couldn't agree more with the goal of increasing experiential learning opportunities at UNL. Of course, that's at least partly because experiential learning has been central to CPBS's existence for our 47-year history. The station owes its very existence to parasitology field excursions (a kind of experiential learning), when a chance sighting of an old camp (see page 4) on the shore of Lake Ogallala led to some inquiries. Since then, the station has offered a wide range of classes that feature skill development, direct interaction with nature while learning concepts, travel, independent research, and a first-hand sense for the land and the world as the context for knowledge. In the past few years, we have stepped up our experiential learning opportunities, with station, hospitality, and insect internships as part of our Cedar Point Works program (see page 2). This summer, our course and works programs continue, hopefully anchoring a moment in time and place that clarifies the meaning of the word 'experience'. In this case, the Cedar Point Experience. See you out there.—John DeLong

# In this issue

Cedar Point and experiential learning

PAGE 1

Cedar Point Works: Yousif Ibrahim

PAGE 2

Field Herpetology PAGE 3

From the Vault
PAGE 4

Announcements, Events, and Updates PAGE 4







Yousif Ibrahim and Dru DeLaet building a retaining wall along the new path between the lodge and researcher housing. Massive erosion over the last few decades has taken its toll on the station, and the new on-grade paths are helping to direct water, stabilize banks, and provide foot access that is easier to travel. This effort has been a lot of work but is already having an impact. The work also provides valuable training for CPW students. Photo by John DeLong

## Cedar Point Works student Yousif Ibrahim takes in the breadth of biology

"If there is a dull moment, you made it so," says Yousif Ibrahim, nearing the end of his second full summer working at Cedar Point. Yousif is referring to the breadth of biology, wide array of opportunities for work and travel, and chances to do your own thing at Cedar Point. Yousif made a point of taking or eavesdropping on nearly every class we offer, getting to know the students and the instructors and getting a little sample of each class. He's amazed by how big and broad biology is, how Cedar Point pulls in students and researchers from around the world, and how seamlessly biology melds with arts and humanities that are tied to nature and the outdoors.

As a CPW student, Yousif had a big impact on the station. As we've retooled our station trails to control erosion and be easier to travel, Yousif has been there installing retaining walls, pouring concrete, reshaping slopes, and landscaping. He also handled many of the less glamorous station needs such as classroom set-up and cleaning. It's safe to say Yousif's contribution will still be visible a half-century from now.

Yousif's biological interest is in bioinformatics, which is fitting because bioinformatics is relevant to everything, and everything is what Yousif is interested in. Now graduated, Yousif is adding even more tools to his toolkit working in virus operations at Zoetis and preparing to look for biology work overseas. So, here's a big thank you to Yousif for all he has done, and we all hope that your time at Cedar Point prepped you for what comes next!



Yousif Ibrahim with Harrison Hall (and Stella Uiterwaal, in back) out on a Field Epidemiology excursion. Photographer unknown.

If you would like to support students like Yousif and help them gain experience at Cedar Point Biological Station, please consider a taxdeductible gift or pledge to our Cedar Point Works Fund. You may donate directly online at this link.

If you would like to learn about other ways to give to Cedar Point, please contact our Foundation representative Joye Fehringer at joye.fehringer@nufoundation.org or 402-875-0611.





### Teaching Focus: Field Herpetology students learn to be ectotherms

"We flipped so many rocks...", says Zach Hess, describing the Field Herpetology course at Cedar Point in 2021. Led by state herpetologist and UNL School of Natural Resources professor Dennis Ferraro, Field Herp students scoured the roads, prairies, and canyons of western Nebraska in search of all manner of snakes, toads, frogs, lizards, and salamanders. The field setting for this course generates an immersive experience through which students can understand the ecology, habitat, behavior, and diet of lizards and amphibians. Students thrive on this approach: "I really like taking one class at a time, living and breathing herps," says Megan Snow. Zach Hess said "it felt like I was on the job and working rather than in class."

We had some wild swings of weather in the summer of 2021. The field herp class had to adjust to heat, then cold, and heat again, shifting their daily routines to line up with the active times of herps. Since lizards and amphibians need heat to warm up (they are ectotherms), the students had to become facultative ectotherms themselves in order to find them! Nothing like living the life of a herp to better understand them.

Just finding herps is a key skill for the students. Documenting range expansion or population decline often requires very specialized techniques. For example, the Cope's gray tree frog has been expanding its range westward along the Platte and Niobrara rivers. Dennis uses special PVC tubes strapped to trees to mimic refuges into which the frogs will crawl, allowing researchers to find these frogs even when they are rare. All of the sightings that are gathered in the class are shared with Nebraska Game and Parks, helping the state monitor and conserve Nebraska's wildlife.

Students in Field Herp also benefit from Dennis's ongoing rattlesnake research. For twenty years, Dennis has been studying the effect of the loss of prairie dog towns on rattlesnake populations. Rattlesnakes brumate (the reptilian version of hibernation) in prairie dog towns and then spread out from there during the summer to forage. Since prairie dog towns are now few and far between, there is little chance for snakes to mate with snakes from other towns, potentially causing inbreeding. Using radio transmitters and DNA samples from blood, Dennis is assessing movement and genetics of rattlesnakes in different towns across Nebraska.



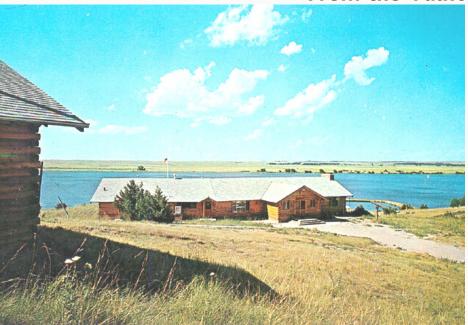


Sunset over Lake Ogallala. Photo by John DeLong.

#### **About the Station**

Cedar Point Biological Station is a site for research and experiential learning located along the banks of Lake Ogallala in western Nebraska. CPBS is surrounded by a wide range of habitats, ponds and lakes, and landscape features such as box canyons, making it an ideal place to learn about and interact with nature. CPBS is operated by the School of Biological Sciences at the University of Nebraska - Lincoln. The station provides unparalleled experiential learning in the high plains through a wide range of courses and partnerships with the School of Natural Resources; the School of Art, Art History, and Design; the College of Architecture; the Department of Hospitality, Tourism, and Restaurant Management; and the School of Global Integrative Studies at UNL.

From the Vault



Cedar Point Biological Station was once the Goodall-Cedar Point Girl Scout Camp on the Cedar Point Ranch, owned by the Gainesforth family. Back in the late 1960s, the camp put out a postcard showing the lodge and Locust cabin (little bit on the left). In the five decades since this postcard was printed, a lot has changed, but the feel of the place remains. There were far fewer trees back then, and red cedar has grown up around the station in the absence of fire. In the distance you can see the pier on the lake (now gone), and just to the right of the lodge, the dinner bell (now missing).

#### Summer 2022 schedule

May 11 to May 14 Grad Student Writing Retreat Session 1 (full) - May 15 to June 3 Avian Biology Fundamentals of Biology II Session 1 (part) - May 22 to June 3 Literature and the Environment Session 2 - June 5 to June 24 Predator Ecology Field Herpetology Art at Cedar Point Session 3 - June 26 to July 15 Field Epidemiology Fundamentals of Biology II Session 4 (full) - July 17 to August 5 Field Parasitology **Ecology and Evolution** 

#### **Contact or Follow Us**

Session 4 (part) - July 17 to July 29 Underwater Forensic Investigation

Director: John P. DeLong
 Email: jpdelong@unl.edu
Associate Director: Jon Garbisch
 Email: jgarbisch2@unl.edu
Program Coordinator: Airrica Roddy
 Email: aroddy2@unl.edu
CPBS website:
 <a href="https://cedarpoint.unl.edu/">https://cedarpoint.unl.edu/</a>
CPBS Facebook page:
 <a href="https://cedarpoint.unl.edu/">https://cedarpoint.unl.edu/</a>

CPBS Twitter: @CPBS.unl Mailing address: 170 Cedar Point Dr., Ogallala, NE 69153 Station phone: 402-472-5977

Cedar Point Works is supported by grants and donations. If you would like to support experiential learning at CPBS, please consider donating to one of our student-oriented funds.