

Nebraskaland
magazine

P.O.Box 30370
Lincoln, NE 68503
nebraskaland@nebraska.gov

To renew your subscription or change your
address call **1-800-632-5263**



Take Someone Fishing, Win Prizes!



Share the joy of fishing! | April 15 – September 15



Fishing is better with company! Introduce — or reintroduce — a family member or friend to the sport of fishing and take them on your next trip. Then submit a photo of your adventure online and you'll be entered to win a number of prizes!



NEBRASKA
— GAME  PARKS —

LEARN MORE AT

OutdoorNebraska.org/TakeEmFishing

Nebraskaland

May 2020



See
Chris Helzer's

One Square Meter

SKEETER®

FORGED WITH STRENGTH,
DESIGNED FOR DURABILITY.

**WX
2060**
\$65,395*

With Yamaha
V MAX SHO® VF250XA

ACTUAL SALES PRICE DETERMINED
BY DEALER. PRICE DOES NOT INCLUDE
FREIGHT, DEALER PREP & T.T.L.

NATIONALLY ADVERTISED MANUFACTURER'S
PRICE BEFORE REBATES SUGGESTED RETAIL PRICE

\$66,895' \$76,500'

**Summer
SIZZLING
Savings!**

UP TO **\$1,500** INSTANT REBATE*
LIMITED TIME OFFER

VALID MAY 1ST - JUNE 15TH, 2020

INSTANT REBATE APPLIED AT TIME OF FINAL SALE BY DEALER.

TEAMING UP WITH THE BEST

SKEETERBUILT

HUMMINBIRD

MINN KOTA



Visit **SkeeterBoats.com** to locate your nearest Skeeter Dealer.



LIMITED LIFETIME WARRANTY

Limited Lifetime Structural Warranty
10 Year Limited Transferable Structural Warranty
3 Year Limited Component Warranty

*Warranty compared against three of our leading competitors.

*Nationally Advertised Price; actual sales price determined by dealer. Price does not include freight, dealer prep, and T.T.L. *Manufacturer's Suggested Retail Price (MSRP). Prices may vary due to supply, location, freight etc. Actual prices are set by the dealer. *Terms and Conditions: Nationally Advertised Price with \$1,500 Rebate. Consumer benefit for purchasing a new (unused, not previously warranty registered) eligible MY 2020 and prior boat from 5/1/20-6/15/20 is an instant rebate applied at time of final sale by dealer, at no extra cost to consumer. Actual rebate amount is determined by model selected. NO BENEFIT SUBSTITUTIONS. Promotion is only applicable from authorized participating Skeeter dealers in the U.S.A. and Canada sold to purchasing consumers residing in the U.S.A. and Canada. Promotion is limited to available stock in dealer inventory that is sold. PDI completed, delivered and warranty registered in accordance with Skeeter's promotion and warranty registration requirements during applicable dates. No model substitutions, benefit substitutions, extensions or rain checks will be allowed. Not redeemable for cash. Boats sold or provided for commercial, camp, resort, rental, promotional/demo, government agency, competition, tournament or sponsorship use are not eligible. This promotion cannot be used in conjunction with any other Skeeter offer or discounts. Some exceptions may apply. See authorized, participating Skeeter dealer for complete details. Skeeter reserves the right to change or cancel this promotion at any time. Other restrictions and conditions apply. ©2020 Skeeter Products, Inc. All rights reserved. This document contains many of Skeeter's valuable trademarks. It may also contain trademarks belonging to other companies. Any references to other companies or their products are for identification purposes only, and are not intended to be an endorsement. Remember to observe all applicable boating laws. Never drink and ride. Dress properly with a USCG approved flotation device and protective gear. Boats may be shown with optional equipment. See your local Skeeter dealer for complete details.

Nebraskaland

Volume 98 • No. 4
May 2020

Cover: A Cope's gray tree frog perches on a grass stem from a prairie near Aurora. Photo by Chris Helzer.



FEATURES

22 ONE SQUARE METER

Story and photos by Chris Helzer

28 OUTDOOR NEBRASKA

What to Do in May

By Renae Blum

30 PLATTE RIVER STATE PARK

Take a Deep Breath

Story and photos by Jeff Kurrus

38 HOW LONG WILL CHIMNEY ROCK LAST?

By David L. Bristow, History Nebraska

40 THE INVASION OF GARLIC MUSTARD

Story and photos by Jenny Nguyen-Wheatley

46 KEARNEY WATER TRAIL

Story and photos by Eric Fowler

50 MAKING A DIFFERENCE Nebraska's Master Naturalists

By Renae Blum

DEPARTMENTS

6 Your Nebraska

10 In the Field

56 Mixed Bag

68 Portraits from the Past

70 The Last Stop

ON THE WEB

To see additional content including photos, videos and additional articles, visit Magazine.OutdoorNebraska.gov/digital.

Nebraskaland (VOL. 98 / NO. 4 ISSN 0028-1964) is published monthly, except for the combined Jan./Feb. and Aug./Sept. issues, by the Nebraska Game and Parks Commission, 2200 N. 33rd St., Lincoln, NE. Periodicals postage paid at Lincoln, Nebraska, and additional mailing offices. POSTMASTER: Send address changes to Nebraskaland, P.O. Box 30370, Lincoln, NE 68503-0370.

PHOTO BY JULIE GERSEN

Published by the Nebraska Game and Parks Commission since 1926. The Commission is dedicated to the conservation and protection of all the state's natural resources and the people who use them.



Administration

Director Jim Douglas
Deputy Director Tim McCoy
Commissioners
Chairman - Dan Kreitman, Wahoo
Vice Chairman - Pat Berggren, Broken Bow
2nd Vice Chairman - Rick Brandt, Roca
Robert Allen, Eustis
Dick Bell, Omaha
Scott Cassels, Omaha
Jim Ernst, Columbus
John Hoggatt, Kearney
Doug Zingula, Sidney

Commission Offices

Headquarters/Southeast District Office
2200 N. 33rd Street Lincoln, NE 68503
Phone 402-471-0641
Northeast District Office
2201 N. 13th St. Norfolk, NE 68701
Phone 402-370-3374
Southwest District Office
301 E. State Farm Rd. North Platte, NE 69101
Phone 308-535-8025
Northwest District Office
East Hwy. 2, Box 725 Alliance, NE 69301
Phone 308-763-2940
Bassett Office
524 Panzer St., Box 508 Bassett, NE 68714
Phone 402-684-2921
Kearney Office
1617 First Ave. Kearney, NE 68847
Phone 308-865-5310
Ak-Sar-Ben Aquarium/Schramm Education Center
21502 W. Highway 31 Gretna, NE 68028
Phone 402-332-3901
Omaha Office
8495 Frederick Street, Omaha, NE 68124
Phone 402-595-2144



OutdoorNebraska.org

Any program that receives federal funding from the National Park Service, or the United States Fish and Wildlife Service prohibits unlawful discrimination on the basis of race, color, religion, age, gender, marital status, national origin, age, disability or political affiliation. Any person who believes he or she has been discriminated against in any program, activity, facility, or service, should contact the Nebraska Game and Parks Commission, Lincoln, NE 402-471-0641, the Equal Opportunity Commission, Lincoln, NE 402-471-2024, TTY/TDD 402-471-4693; United States Fish Wildlife Service, Civil Rights Coordinator, 4401 N. Fairfax Drive, Arlington, VA 22203; Director, Equal Opportunity Program, U.S. Department of Interior, National Park Service, 1849 C Street NW, Mail Code 0008, Washington, D.C. 20240-0001.

Magazine Staff

Communications Director Christy Firestone
Public Relations Manager Shawna Richter-Ryerson
Editor Jeff Kurrus
Associate Editor Jenny Nguyen-Wheatley
Regional Editors Eric Fowler, Julie Geiser, Justin Haag
Contributing Editor Michael Forsberg
Regular Contributors Renae Blum, Chris Helzer, Chris Masada, Ryan Sparks, Gerry Steinauer
Art Director Tim Reigert
Graphic Designer Mel Severin
Photo Librarian Jaclyn Cruikshank Vogt
Circulation
For address changes and questions about your subscription, call 800-632-5263
Advertising Sales Manager
For advertising information contact
Shane G. Gilster, 402-742-0125
Email: shanegilster@gmail.com

Nebraskaland Magazine Copyright 2020, all rights reserved.
Nebraskaland is available in audio from the Nebraska Library Commission Talking Book and Braille Service, Suite 120, 1200 N St., Lincoln, NE 68508. 800-742-7691. Nebraskaland Magazine and the Nebraska Game and Parks Commission reserve the right to reject any advertising not in keeping with the agency mission.
Rates: \$18 for one year; \$33 for two years; \$44 for three years. Nebraska recipients must add appropriate sales tax. To subscribe call 1-800-NEBLAND (632-5263), or go online to: NebraskalandMagazine.com.

Conservation Officers

ADMINISTRATION (Lincoln)
Craig Stover (Administrator) 402-471-5531
Duane Arp (Asst. Administrator) 402-471-5531
Jeff Clauson (Asst. Administrator) 402-471-5531
Travis Shepler (Asst. Administrator) 402-471-5531
NORTHWEST (Includes counties covered)
Jim Zimmerman (District Supt.) 308-641-6138
Kelsey Glodowski (Box Butte, S 1/2 Sheridan, Grant) 308-763-8226
Sean McKeehan (Kimball, Banner, Scotts Bluff) 308-672-1824
Dan Kling (Sioux, Dawes) 308-430-0572
Tyler Prochaska (E 1/2 Dawes, N 1/2 Sheridan, W 1/2 Cherry) 308-430-3984
Terry Brentzel (Deuel, Garden, Grant) 308-458-7650
Frank Miller (Cherry, Hooker) 402-389-0444
Josh Widhelm (Morrill, Cheyenne) 308-279-9133
NORTHEAST (Includes counties covered)
Tom Zimmer (District Supt.) 402-649-8053
Dale Davis (Keya Paha, Brown, Rock) 402-760-0712
Jonathan Andreasen (Holt, Boyd) 402-340-3981
Kyle Gaston (Dodge, Colfax) 402-719-6226
Mitch Johnson (Knox, Antelope, Pierce) 402-613-8612
Jeff Jones (Knox, Cedar) 402-762-5022
Jon Reeves (S 1/2 Thurston, Burt, Washington) 402-889-8508
Andrew Heyer (Pierce, Madison, Stanton) 402-613-2241
Cory Krause (Cuming, Wayne, Stanton, Dodge) 402-380-6410
Steve Oberg (Colfax, Platte, Madison, Stanton, Nance) 402-910-3366
Owen Johnson (Dixon, Dakota, N 1/2 Thurston) 402-266-1759
Doug Pollard (Loup, Garfield, Valley) 308-730-7050
Ethan Teter (Boating - eastern Nebraska) 402-620-8129

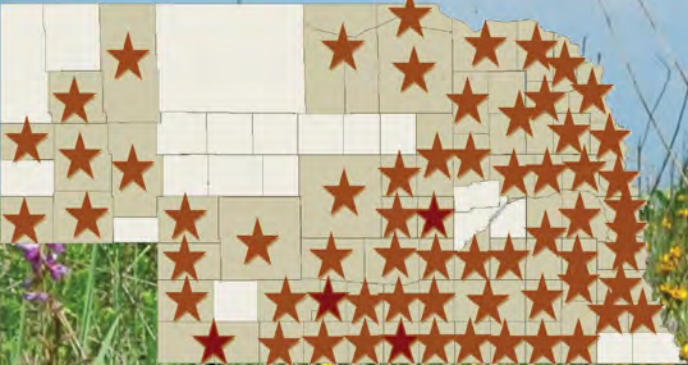
SOUTHWEST (Includes counties covered)
Roger Thompson (District Supt.) 308-530-3097
Matt Brandt (Sherman, Howard) 308-202-0819
Tim Williams (Hall, Hamilton, Merrick) 308-380-7331
Pat George (Harlan, Franklin, Phelps) 308-920-2762
Matt Andrews (Gosper, Furnas, Frontier, Red Willow) 308-746-2418
Brian Piernicky (Red Willow, Frontier, Hayes, Hitchcock) 308-340-6627
John Lee (Hitchcock, Dundy, Chase, Hayes) 308-414-1432

Nicholas Fix (Keith, Perkins) 308-289-0427
Bryce Streger (Keith, Arthur) 308-289-1169
Sean Schultz (Keith) 308-760-0145
Brandon O'Neal (Lincoln, McPherson, Logan) 308-530-3157
Alex Hasenauer (Lincoln, McPherson, Logan) 308-660-4671
Mike Thome (Dawson) 308-529-8146
Ray Dierking (Custer, Thomas, Blaine) 308-870-0322
Taylor Dixon (Dawson, N 1/2 Gosper, N 1/2 Phelps) 308-217-2108
Eric Javins (Adams, Clay, Nuckolls, Webster) 402-902-2017
Kevin Bergstrom (Boating - central Nebraska) 308-520-1031
Daryl Teter (Boating - central Nebraska) 308-440-1863
Greg Hesse (Buffalo, Kearney) 402-440-3847

SOUTHEAST (Includes counties covered)
Stacey Lewton (District Supt.) 402-890-7140
Rich Berggren (Douglas) 402-619-1355
Dan Evasco (Sarpy) 402-616-5961
Heath Packett (Cass) 402-210-0888
Russell Mort (Otoe, Johnson) 402-209-1506
Matt Taylor (Thayer, Fillmore, Jefferson) 402-200-9597
Matt Seitz (Gage, Saline) 402-806-0915
Dina Barta (Lancaster) 402-890-6463
Dudley Sorensen (Lancaster, York) 402-937-3422
Trevor Stahlecker (Lancaster) 402-314-9641
Mike Luben (Saunders, Butler, Polk) 402-443-6392
Scott Eveland (Lancaster) 402-853-3273

Pheasants Forever & Quail Forever
No-Till Grass Drills and Seed Mixes Available

Over 65 drills are available with the support from local PF and QF Chapters, NGPC, NRCS, and the Nebraska Environmental Trust.



Custom Mixes

Wildlife Habitat Mixes

Pheasants Forever and Quail Forever strive to make every acre count on the landscape. With over 280 species of grasses, legumes and wildflowers available, cost effective seed mixes are designed for maximum results. Pricing includes delivery to your location in 6 to 8 business days with High Quality Customer Service!



Honey Bee and Monarch Mixes



For more information about grass drills or to place a seed order visit www.NebraskaPF.com or call 308-850-8395



Hunter Eckert, Valley
Sweet Talkin'



Instagram Photos

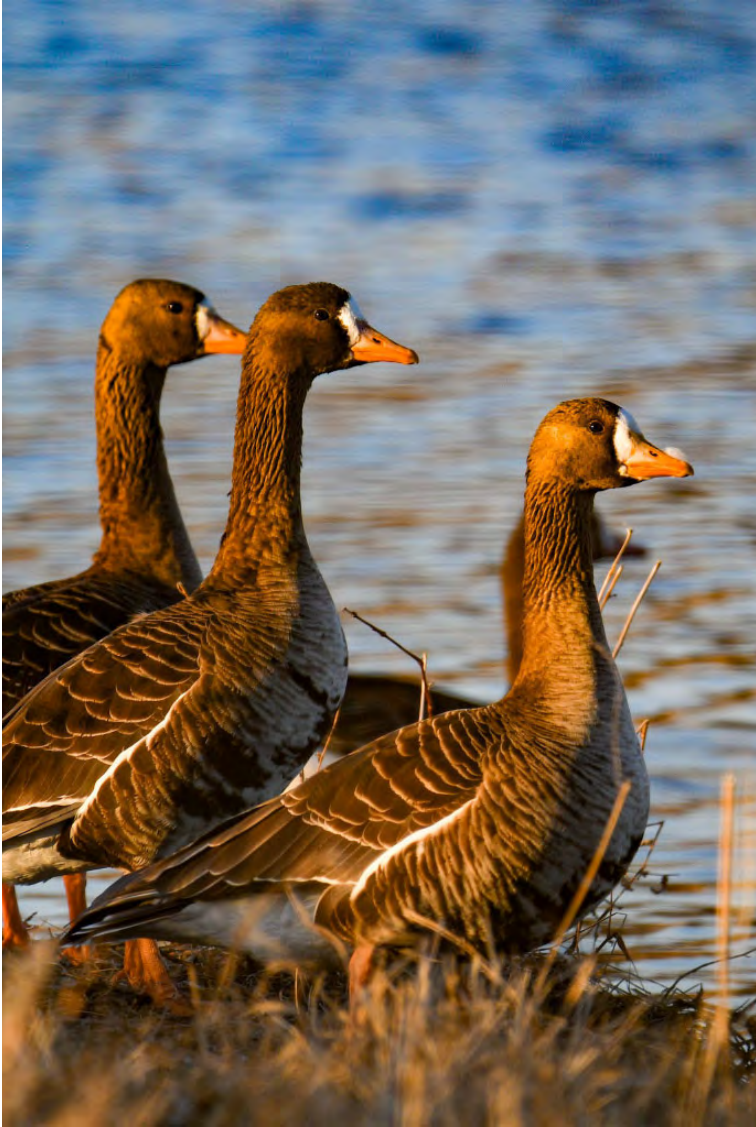
Follow us (@nebraskaland)
and tag us in your photos
to be featured in an
upcoming issue.

Kory McConnell
New Florence, Pennsylvania
Hayes Center Hawk

Matt Hollamon, Martell
Severe Thunderstorm



Hunter Eckert, Valley
White-tailed Forky



Sheila Stevens, Lincoln
Greater White-fronted Geese

Joshua Redwine, Lincoln
Farming

Send your comments and photos to:
Jeff Kurrus, Editor
Nebraskaland Magazine
P.O. Box 30370
Lincoln, NE 68503
or email Jeff.Kurrus@Nebraska.gov

Please include your postal address
and telephone number. Letters may be
condensed and edited. Photographs are
also welcome.

OTHER-WORLDLY ROCKS

Water flows along an ephemeral stream at Toadstool Geologic Park following a spring thunderstorm.

PHOTO BY JUSTIN HAAG



FISHING AT VALENTINE NATIONAL WILDLIFE REFUGE
PHOTO BY JEFF KURRUS

DIVIDE AND CONQUER

By Jeff Kurrus

When bank fishing, my dad has always wanted to keep more than a 6-foot distance. It's been a joke of ours forever, me complaining that he never wants to fish beside his son, then him turning this same comment around when I choose to move away from him when we're fishing together. Because we have practiced social distancing for many years, we have learned its advantages.

When we start fishing, I don't want him working the same habitat that I am. If I'm fishing riprap, for example, he shouldn't be. Most bodies of water have various habitats throughout, including emergent and submergent vegetation, timber and riprap. There are also subtle and stark contour changes along with these habitats as well as many other possible structures in a waterbody.

If one were to spend much time thinking about where to start, it could drive an angler crazy. Yet as we all know, each time you fish you're adding memory and skills to your

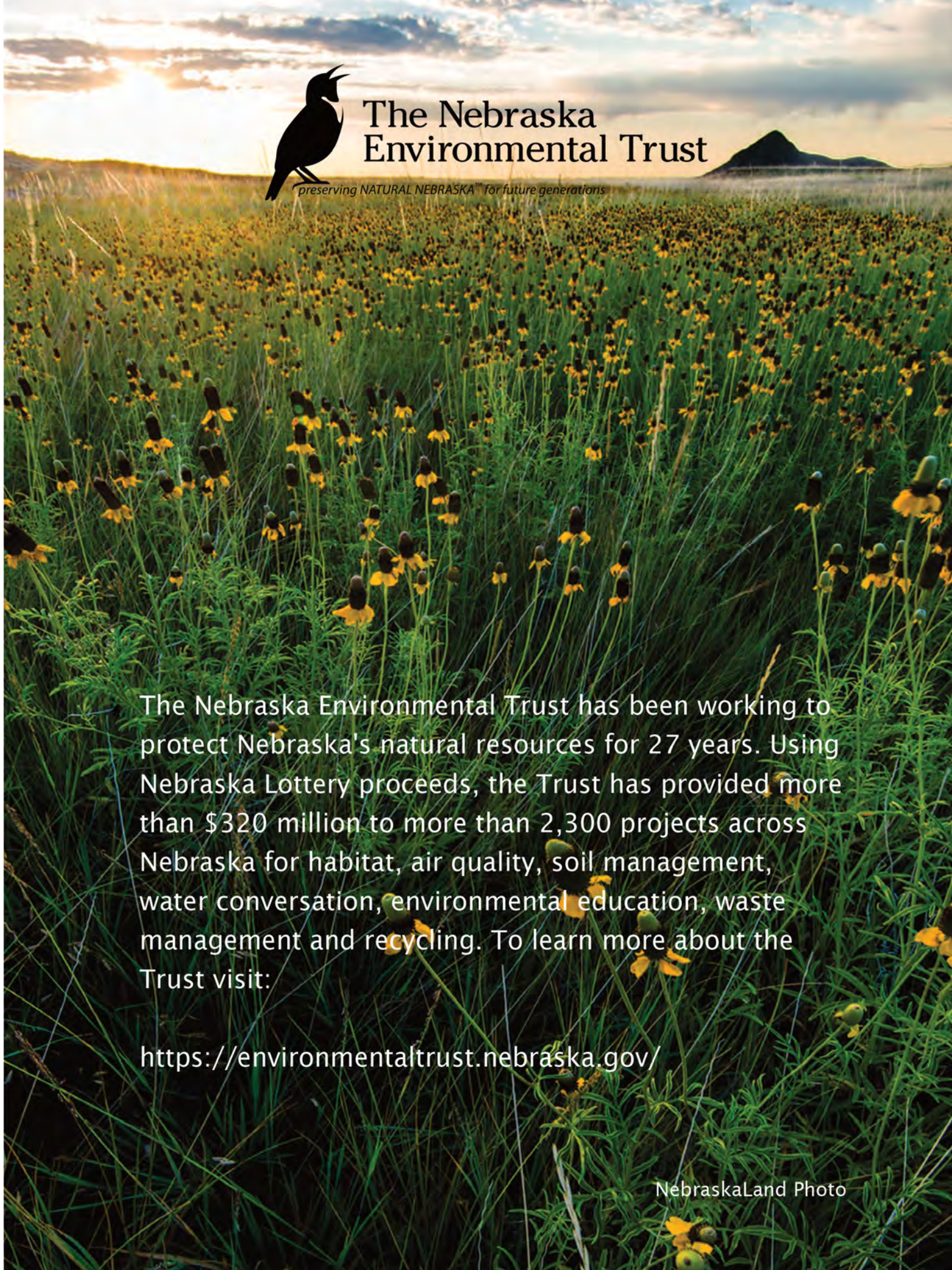
growing repertoire of ideas on how to fish that lake or others like it.

Fishing with a partner just makes it that much easier. "I'll go this way," one of us will say, and each will watch the other as we fish. One fish doesn't raise much of an eyebrow, yet when those numbers start to increase, a quick phone call always occurs. We discuss habitat, lure and color, and retrieve speed.

Do we ever fish beside each other from the bank? Yes, there have been a handful of times, but it was always predicated on the fish or a juicy piece of family gossip. We can talk later. It's time to fish now.

So during this time of social distancing, take advantage by spreading your crew out across a lake. Learn the area twice as fast, and always remember that when one of your friends or family has caught a fish, you're catching it, too.

As long as you remember how they did it for the future.



The Nebraska
Environmental Trust

preserving NATURAL NEBRASKA™ for future generations

The Nebraska Environmental Trust has been working to protect Nebraska's natural resources for 27 years. Using Nebraska Lottery proceeds, the Trust has provided more than \$320 million to more than 2,300 projects across Nebraska for habitat, air quality, soil management, water conversation, environmental education, waste management and recycling. To learn more about the Trust visit:

<https://environmentaltrust.nebraska.gov/>

NebraskaLand Photo



PHOTO BY JEFF KURRUS

LATE-SEASON GOBBLES

By Todd Mills

While the majority of turkey hunters have put away their gear for the season, I usually have not. Since the joy of hunting turkeys for me comes solely from the experience, not the harvest, I like to spread out my hunts over the course of the season. Here are some late-season tactics that have worked for me.

Establish Where They Are Roosting

By late May many toms are roosting on their own. Although they still have interest in hens, most hens are nesting and move quickly from roost to nest. If you can get close enough, and they can hear you calling, a single tom may just be curious enough to come investigate. It is crucial that they hear you from the roost, so getting in the woods early enough is important. You can also catch them coming back to roost in the evening as birds tend to sleep in the same spot if not bothered.

Decoys and Calling

Both should be kept to a minimum. They've seen and heard it all by this time, so thinking a large decoy set-up with a bunch of calling will trigger them is a recipe for disaster. Late in the season I've used one hen with success, including one last day hunt close to sunset. The big tom had actually gone to roost but some purring and soft calling made him curious enough to come out and find my lone decoy. They are also not as territorial it seems, so a lone jake decoy doesn't work like it does early.

Cut and Run

You need to be mobile this time of year. Because they are not strutting as much and not moving in big groups, toms will cover a lot of ground in a day. Any gobblers should be pursued in a non-traditional way. Get out in front of them and hope they find a path within range. If you call, only continue if you get a response. If not, shut it down. Although it's not my preference when hunting turkeys, stalking might be your best option.

Weather Changes

Look for a cool day to get after them late season. Heat will shut them down and they won't move near as much. I've seen turkeys lay for hours in the shade once it heats up. On windier days they tend to be more cautious, but can also allow you to stalk on the downwind side of them. Look for early morning and later evening on warmer days as the turkeys will be more active during that time when it's hot.

Turkeys are unpredictable creatures. Just when you think you have them patterned, they can change. However, as a turkey hunter the single most important ingredient is knowing your terrain. I spend way more hours scouting than hunting it seems ... and late season this is no exception.

Todd Mills is a former Avian-X and Mossy Oak pro staffer who divides his outdoor time between hunting waterfowl and turkeys.

NEBRASKA LAND FOR SALE

\$1.3 BILLION
344,000 ACRES
sold company wide
in 2019



KNOX CO, NE - 42.16 AC.
Here is one of those rare opportunities to own a smaller piece of incredible hunting property that packs a mighty punch. This property was designed, implemented, and managed by some of the foremost professionals on whitetail habitat-related improvements as well as low-pressure hunting techniques. Surrounded by large ag fields, this thick and very secluded property has been transformed into a whitetail paradise. The spring-fed pond and a small creek that meanders through the property year-round provides all the wildlife with an ample supply of water.

JEFFERSON CO, NE - 160 AC.

Here is a great opportunity to own an excellent piece of pasture that has also been manicured into a top-notch whitetail property! The live waterways provide supreme habitat as they wind back and forth through the property. The benches, funnels, and pinch points on this property are seemingly endless. The creek bed coupled with the rolling topography makes this quarter section feel like a half section. Take advantage of the already fenced off food plot and feeder site while simultaneously generating income from the pasture rental.



CONTACT JASON OR LUKE TO LEARN MORE ABOUT THESE AMAZING PROPERTIES



JASON SCHENDT | BROKER
jason.schendt@whitetailproperties.com
402.707.4885



LUKE WALLACE | AGENT
luke.wallace@whitetailproperties.com
402.340.6187



WHITETAIL TROPHY PROPERTIES REAL ESTATE

HUNTING | RANCH | FARM | TIMBER

WHITETAILPROPERTIES.COM



Whitetail Properties Real Estate, LLC - DBA Whitetail Properties | In the States of Nebraska & North Dakota - DBA Whitetail Trophy Properties Real Estate LLC | Licensed in IL, MO, IA, KS, KY, NE & OK - Dan Perez, Broker | Licensed in AR, CO, GA, MN, ND, SD, TN & WI - Jeff Evans, Broker | Licensed in FL, OH, NY & PA - Jefferson Kirk Gilbert, Broker | Licensed in TX & NM - Joey Ballington, Broker | Licensed in IN - Bill Minor, Broker | Licensed in AL, GA, LA, & MS - Sybil Stewart, Broker | Licensed in TN - Chris Wakefield, Broker | Licensed in TN - Bobby Powers, Broker | Licensed in AR - Anthony Chrisco, Broker | Licensed in SC, NC & VA - Chip Camp, Broker | Licensed in NC - Rich Baugh, Broker | Licensed in MI - Edmund Joel Nogaski, Broker | Licensed in WV - Debbie S. Laux, Broker | Licensed in ID, MT, OR & WY - Aaron Miliken, Broker





SNOWY PLOVER PHOTO BY JOEL JORGENSEN

THE OTHER PLOVER

By Joel Jorgensen

Plovers are migratory shorebirds with short bills and long bodies that occupy a variety of habitats ranging from wetlands to shortgrass prairie. Nebraska has seven plover species that annually occur within our borders. Many people may only be familiar with two of these species. The first is the killdeer, a common, ubiquitous and vocal species that occupies just about any open habitat: wetlands, gravel parking lots, or even soccer or baseball fields. The other well-known species is the piping plover. This plover receives a great deal of attention because of its status as a state and federally threatened species.

However, the many other plovers, such as the snowy plover, deserve some attention. The snowy plover's size and coloration is similar to the piping plover, but rather than having orange on the legs and bill like the piping plover, the snowy plover's bare parts are all black. Even if key field marks are too distant to be observed, the snowy plover's behavior compared to the deliberative nature of its relative usually allows for straightforward identification. The snowy plover's feeding style is spastic and frenetic, as birds dart across mudflats or open sand chasing invertebrates and other tasty morsels.

Snowy plovers are found along the Gulf and Pacific coasts, but they also breed at wetlands in the Intermountain West and southern Great Plains, including central Kansas. Snowy plovers are rather rare in Nebraska and mostly occur as an "overshoot" migrant in spring. The term "overshoot" refers to individuals that migrate north of, or past, their normal breeding range.

The most reliable area to find a snowy plover are wetlands in the Rainwater Basin, but individuals can show up at just about any waterbody with shore or beach habitat. Most overshoot migrants are one-day wonders, gone the following day after they were discovered. Snowy plovers occasionally nest in the state, especially at Lake McConaughy during drought years when large expanses of habitat are available. Small numbers have also colonized islands created for other nesting birds at Lewis and Clark Lake.

So whether you find a snowy plover spending the summer in Nebraska or see one for just a day in spring, take a little extra time to appreciate the unique and quirky nature of this uncommon plover.

Visit birdsofnebraska.org for more Nebraska bird information.

Saving Wildlife and Wild Places



The Nebraska Wildlife Conservation Fund improves land and water for native fish and wildlife, supports important research projects, and connects people with nature. Learn more about the fund, the projects it funds and how you can help at...

NebraskaWildlifeFund.org

Look for the Peregrine Falcon image on your Nebraska tax return.





PHOTO BY JENNY NGUYEN-WHEATLEY

DUTCH OVEN COOKING

By Julie Geiser

In the summer, cooking with a Dutch oven outside prevents me from having to heat up the house, and while camping, it allows me to cook a homemade meal. Here are my tips on using and maintaining cast iron cookware for outdoor use.

Dutch ovens come in many sizes. I recommend an 8-inch oven to feed two or three people, a 10-inch oven for four and a 12-inch oven for six. For outdoor cooking, buy an oven with three 1-inch legs, or longer, to keep it off the coals. The best iron casting should be uniform in thickness across the oven. If an oven has many pits and excess metal at the mold seams, don't buy it. Names such as Lodge, Cabela's, Camp Chef, Coleman and Texsport are good ovens.

Look for a rimmed lid to keep coals and ash from falling into your food when you move it. Lids should also have a handle with an open space to lift the lid; don't get an oven with a solid handle or no handle. Make sure

the lid is tight fitting. I prefer one that could be turned upside down to use as a make-shift skillet as well.

To contain my Dutch oven and charcoals while cooking, I use a galvanized hog pan to keep fire hazards at bay in campgrounds and in my backyard. Large-size, disposable aluminum foil roasting pans are also great for camping; when you are done cooking, cool the coals with water, fold everything up and throw it in the trash.

Whatever you can cook in your oven at home, you can make in a Dutch oven. The diameter of the oven determines how many coals to use. To moderate the temperature of a Dutch oven, use the rule of two: For a 12-inch oven you'll need two coals per inch, or 24 coals total. Divide the coals between the top and bottom, placing two or more coals on the top. Space coals evenly in a circular pattern on the outside edges of the top and bottom of the oven, i.e., 10 coals underneath

and 14 on the top with four coals in the middle of the lid for a steady 350 degrees. Each charcoal equals about 25 degrees, so adding or subtracting heat is easy.

Hand wash cast iron by scraping off excess food from the oven with a rubber scraper. Then fill the oven with water and heat to remove stuck-on food by scraping with a brush, scraper or stainless steel chain scrubber. If needed, use a small amount of soap to help remove food – some people will disagree with this method, but I've used soap for years. Wipe the Dutch oven dry and coat the entire oven with a thin layer of oil on a paper towel before returning to storage.

Useful accessories for Dutch oven cooking include a good pair of leather gloves to prevent burns, a lid lifter or hammer to remove the hot lid and a lid stand to keep the lid off the ground when checking your food. There are many other accessories to add to your collection as you advance.

NEBRASKA
— GAME  PARKS —

Online Learning Resources for All Ages



Both kids and adults will stay busy and learn new things with a wide range of free educational activities, lesson plans and resources now available on our website.

Check us out today at
OutdoorNebraska.org/OnlineEducation

This one-stop compilation offers a variety of resources:

- Fun, age-appropriate lesson plans
- Citizen science projects
- Videos and chats
- Craft activities
- Wildlife identification guides
- Email experts for your nature questions
- Learning resources for all ages
- Facebook posts and updates



PHOTO BY JENNY NGUYEN-WHEATLEY

FROM A MUSHROOM EXPERT

By Jenny Nguyen-Wheatley

Tersh Kepler of Omaha is Nebraska's morel mushroom expert. Here are his thoughts on the 2020 season.

The 2019 flood is on every mushroom hunter's mind. From Kepler's experience hunting after the previous flooding event, he isn't worried about this one.

"The major flood we had in 2011 wiped out the spot I had been going to for 50 years. It was like walking on the moon," Kepler said. "The year after was terrible for hunting, but two years later, it was unbelievably strong. It was like nature reset the land, and the morels came back in huge numbers. I'm actually excited about that."

However, Kepler urges hunters to continue to avoid flooded areas this year. The honeycomb-like texture of morels can easily attract lingering contaminants and grit. Kepler recommends starting at the river bottoms above the floodline and working up to higher ground as the season progresses.

After a mild winter and favorable March, this year's season could shift a few days earlier. Kepler predicts the season could begin sooner than April 10 and last through the

third week of May. Start looking for morels when ground temperatures reach 50-55 degrees Fahrenheit.

"If the dandelions are starting to pop in your yard, that goes hand-in-hand with morels," he said.

Search near freshly dead trees that are still holding their bark and maybe a little greenery at the top, especially around cottonwood, elm, ash and apple. When you find morels near a tree, walk out 20-30 feet from it and start working your way back in.

"Take your time. Most people hunt too fast," Kepler said.

Use a mesh bag to carry gathered morels, which will allow spores to disperse while you walk. To preserve his finds at home, Kepler dehydrates halved morels at 135 degrees until fully dried; do not wash mushrooms prior to dehydrating.

For gear, Kepler offers "everything but the mushrooms" on his website morelmushroomsupply.com.

For real-time reports on where morels are popping state-by-state, check morels.com and thegreatmorel.com/morel-sightings.

TAKE YOUR FAMILY HUNTING IN NEBRASKA!



**The family hunt is
alive and well in Nebraska!**

**Turkey and deer tags are readily available,
and those 15 and under can get deer and
turkey permits for only \$8.
Make your hunting plans today!**

Get the details at OutdoorNebraska.org/YouthPermits



One Square Meter

Story and photos by Chris Helzer

On January 30, 2018, as I inserted four yellow pin flags into the frozen ground at Lincoln Creek Prairie, I had no idea what I was getting into. I'd just come up with a quirky way to challenge myself as a photographer and – hopefully – demonstrate the abundance of life in prairies. Those four flags marked out one square meter of prairie, within which I planned to photograph as much life and beauty as I could over the next year. I hoped the peculiar little project, if I stuck with it, would at least

provide me with something new to talk about on my blog. It did that, to be sure, but that peculiar little project also took me on one of the most inspirational journeys of my career.

Lincoln Creek Prairie is on the eastern edge of Aurora and includes a mixture of small prairie patches, wooded oxbows and creek channels. The narrow strip of prairie hosting my square meter plot was seeded to prairie vegetation in 1983 by Bill Whitney of Prairie Plains Resource Institute. A little-used walking trail passes through



Above: The author and his camera at the square meter plot.
Opposite: This collage highlights 49 of the 113 species of plants and animals photographed within a square meter of prairie during 2018.



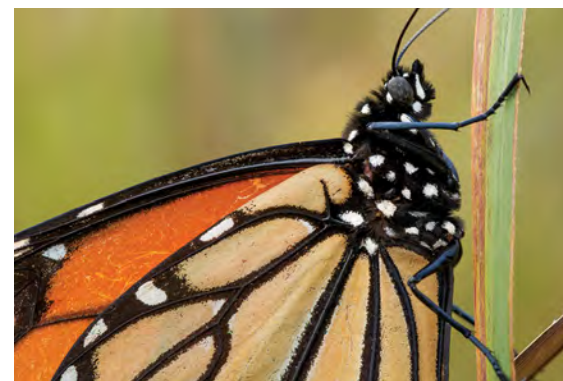
Four yellow flags mark the square meter plot in January 2018.



This native miner bee (*Andrena quintilis*) is a specialist feeder on lead plant flowers.



A small ant (*Lasius neoniger*) backlit on a sunflower leaf.



A monarch butterfly that stopped at the plot during fall migration.



An Arabesque orbweaver spider (*Neoscona arabesca*) dangles daintily on a silken thread.

the strip, and the nearly constant sound of barking dogs emanates from the adjacent animal shelter. I placed my flags between the mowed trail and a wooded oxbow, selecting a plot that contained some charismatic plants, but was representative of the prairie around me. Over the next year, my camera and I visited that plot 46 times.

One aspect of my invented challenge was to document as many species of animals and plants as I could within the square meter plot. My rule was that I could only count a species if I got a solid publishable photo of it. That rule definitely limited my grand total of species. I didn't, for example, get to count the juvenile rabbit that liked to sun itself right next to my plot. I also missed out on the vole(s) that had a trail through the plot but never stuck around to be photographed. And, of course, there were countless butterflies, moths, flies and other wary invertebrates that I saw but couldn't photograph before they escaped. Despite all those misses, I was still able to document an astonishing 113 species within that 1x1 square meter.

That grand total of species included 15 different kinds of plants – a respectable number for a square meter of restored prairie in central Nebraska. Apart from one fabulous tree frog, the rest of the tally consisted of invertebrates. I photographed 14 kinds of bees, 18 beetles and an astounding 22 species of flies. The count also included seven species of spider, seven true bugs (a distinct category of insect), five ants, five moths and butterflies, and many more.

I've spent more than 25 years studying and exploring prairies, so I knew I'd find quite a few species within that tiny area of prairie. Nevertheless, I was blown away by the final total. I frequently tell people prairies are incredibly diverse, but that they usually make you work to find it. I talk about the way grassland communities are constantly in flux, with new flowers

blooming as others wilt, and new insects emerging as others go dormant. Plants and animals grow, mature and die, each on their own individual schedule. As a result, every visit to a prairie yields a different set of stories and experiences. I say those things all the time, but I still didn't realize the full extent of those truths about prairie until I spent a year studying one tiny piece of it.

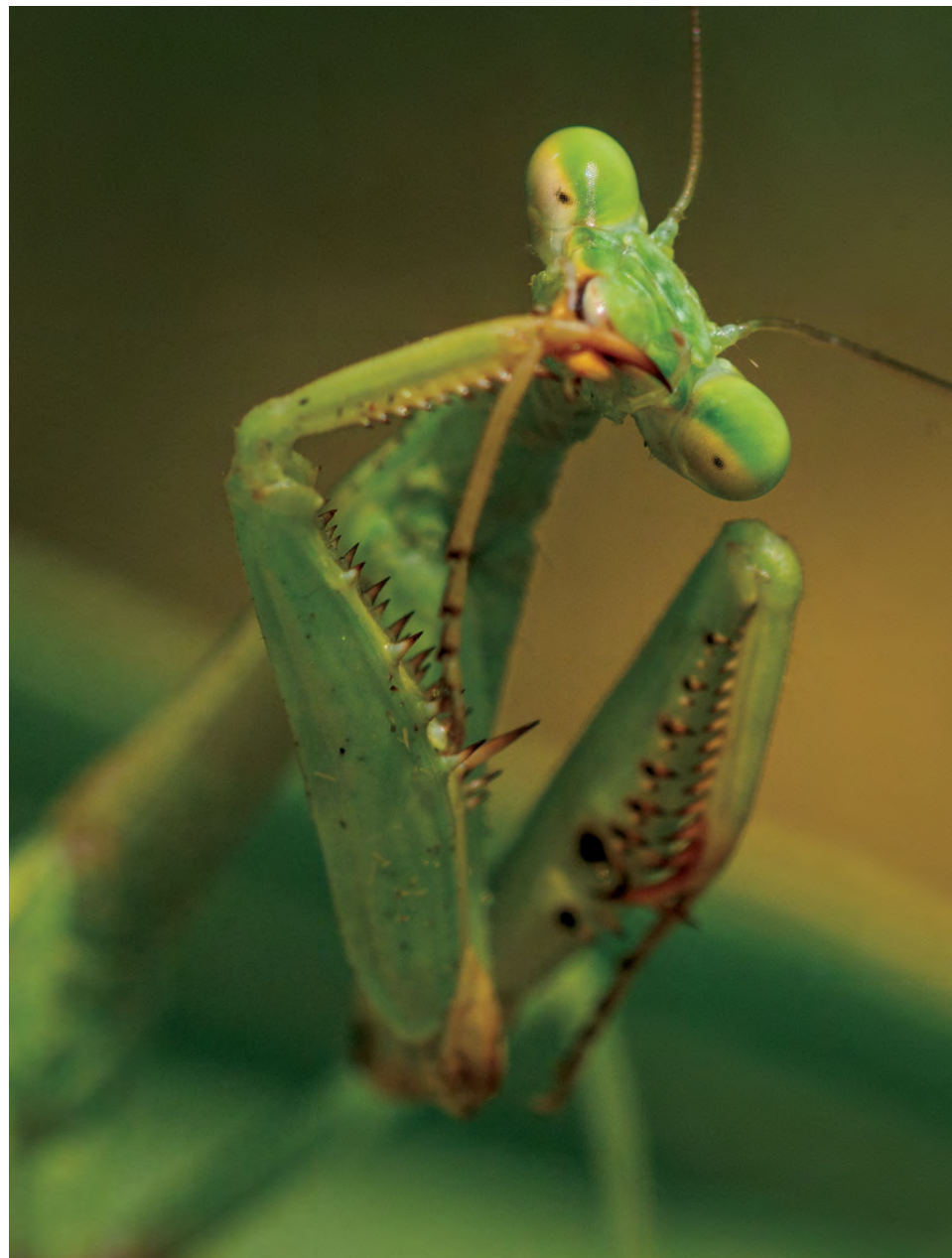
My biggest fear about the project was that I'd end up wasting a lot of great photography light by sitting by my plot and not chasing the light across the prairie. Normally, when the wind is relatively calm and the sun is close to the horizon or behind thin clouds, my camera and I go on long meandering journeys, searching for interesting subject matter. Over the years, I've become adept at spotting distinctive insects or flowers, or just interesting combinations of light and texture, while on the move. By covering a lot of ground, I feel like I take maximum advantage of what's available at a particular site. As a result, the thought of kneeling and peering into a tiny square seemed like it might quickly become frustrating.

The opposite happened. Instead of being irritated about sitting at my square meter plot, I found myself feeling anxious when I wasn't. I would be wandering around a beautiful Platte River meadow or cresting a Sandhills dune, surrounded by wonder and light, and all I could think about was what might be happening back at my little square. Why? Because once I started staring into that tiny world, I found an incredible diversity of narratives, images and life.

Sitting quietly and staring into a tiny space allowed me access to stories I never would have experienced otherwise. I watched spiders and other small predators stalk and catch – and miss – prey. I discovered flies, wasps and other creatures so small I didn't notice them until they moved. I photographed numerous insect species I'd never seen



Cope's gray tree frog (*Dryophytes chrysoscelis*)



European mantis (*Mantis religiosa*)



Smoky haze from western North America wildfires diffuses the morning sun through stiff sunflower (*Helianthus pauciflorus*).

before, despite more than 20 years of frequent trips to that same prairie.

In addition, I became invested in the stories of individual organisms. I felt bad for the sunflower blossoms being ravaged by leaf beetles and for the vigorously blooming milkweed plant that only managed to produce a single seed pod. I rooted for both predators and prey, sitting spellbound as chase scenes played out. I learned the favorite perches and trails of individual insects and was disappointed when they didn't appear during my visits.

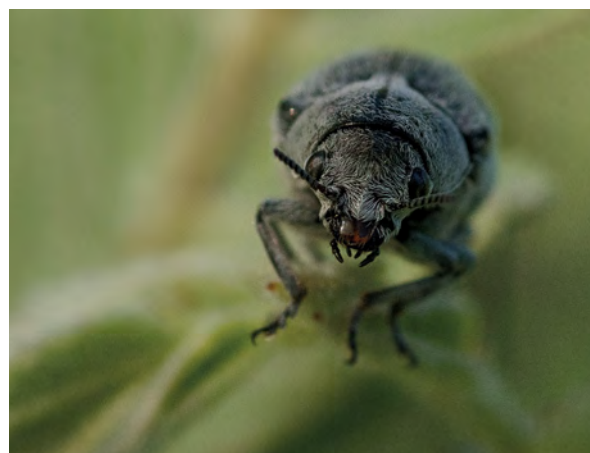
Repeatedly staring at a square meter of prairie over an entire year is an eccentric venture, to say the least, and I don't expect others to follow my example. However, I do earnestly hope that the diversity and beauty I documented within one tiny portion of one small prairie will inspire others to think about prairies a little differently. I think it's fair to say that most people envision prairies as flat, boring grassy places that stand between them and the forests, lakes or mountains they want to visit. While they are certainly grassy, and often (relatively) flat, prairies are only boring to those who are unfamiliar with them. If you take a closer look, there is an incredible

abundance of life hiding among the grasses. [N](#)

Chris Helzer is the director of science for The Nature Conservancy in Nebraska. He has been a contributor to Nebraskaland since 1994. Chris blogs at prairieecologist.com.

The Book

This project has been captured in a new book coming out this spring called *Hidden Prairie: Photographing Life in One Square Meter*. It contains more than 100 photos from the project, along with a dozen essays and stories on the species Helzer observed during the year he spent photographing a square meter of prairie. The book is available for pre-order from the University of Iowa Press (uiupress.uiowa.edu).



Far left: Beetle (*Coleothorpa dominicana*)



Middle: Butterfly milkweed seeds (*Asclepias tuberosa*)



Left: Big bluestem flowers/anthers (*Andropogon gerardii*)

Outdoor Nebraska

By Renae Blum

Ready to get outdoors? This is a great month for it. Here are just a few suggestions of where to go and what to do. Stay up-to-date with park offerings at OutdoorNebraska.org. 



Get some exercise – go hiking

Throughout the month | Statewide

Not only is hiking good for your mental and emotional health, it's also a great form of exercise, offering a whole-body workout. In Nebraska, you can find a range of trails to meet the needs of almost any hiker. Visit OutdoorNebraska.org/hikingtrails to learn about some of the state's most popular trails.

Record bird sightings on eBird

Throughout the month | Statewide

Birders have a great tool at their disposal: the free eBird app. As you're out birding this month, use eBird to find more birds and share and track your sightings. eBird has many nifty features, including dynamic maps of birding hotspots and customizable alerts of bird sightings submitted by other users.



Stargaze at Merritt Reservoir

Throughout the month | Merritt Reservoir State Recreation Area

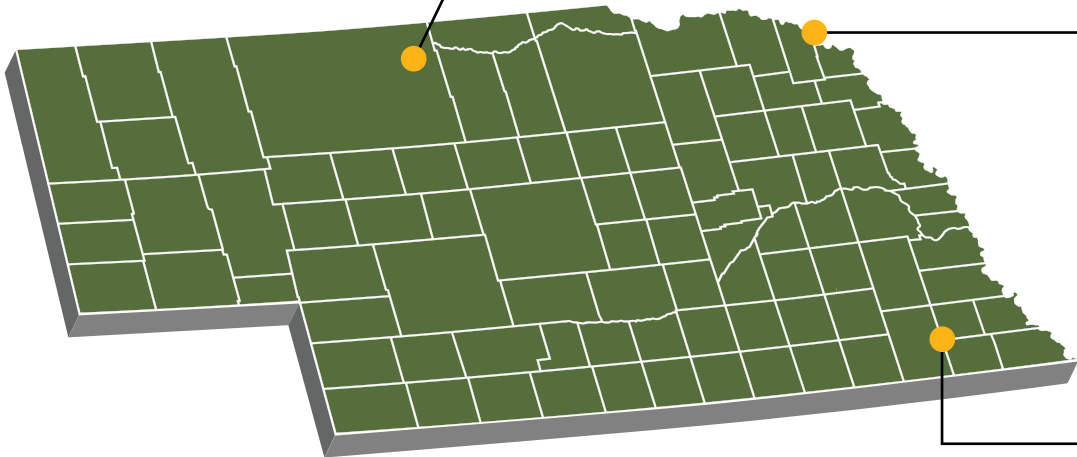
This remote area enjoys some of Nebraska's darkest skies and best stargazing, with no light pollution to dim celestial sights. Take advantage of Merritt's other opportunities and enjoy some fishing and hiking, too.



Fish for smallmouth bass in the unchannelized Missouri

Throughout the month | Northeastern Nebraska

The unchannelized portions of the Missouri in northeastern Nebraska offer the state's best smallmouth bass fishing "by far," said Daryl Bauer, Game and Parks' fisheries outreach program manager. "You can spend days exploring new water and catching fish," he said. Crankbaits, jigs and flies work well.



Hunt for turkey in southeastern Nebraska

Throughout the month | Southeastern Nebraska

In the southern half of southeastern Nebraska, a cluster of wildlife management areas and Open Fields and Waters sites offer great turkey hunting. Most areas are fairly accessible and don't require tons of walking. Hunt on weekdays and you'll feel like you have the place to yourself. Learn more at OutdoorNebraska.org/publicaccessatlas.



Platte River State Park

Take a Deep Breath

Story and photos by Jeff Kurrus

I never feel overwhelmed at Platte River State Park. Whether there are thousands of kids attending an Outdoor Discovery day or just a few vehicles, I can always take a deep, relaxing breath whenever I pull into the park. Located three miles from Louisville – between Omaha and Lincoln – the park is a welcomed break from city life. It offers both family-friendly attractions and solace in its 450 acres, even on the busiest of weekends.

I love playing with my kids at the spray park, and I could watch them for hours exploring at Crawdad Creek. When I can visit alone, fly-fishing at Jenny Newman Lake keeps me coming back, while solo hikes through the woods have been inspiration for many

photographs. I've enjoyed climbing the observation tower to view the forest and Platte River from afar, and also walking to Decker Creek to see both up close. The Roger G. Sykes Outdoor Heritage Education Complex is where I go to learn something new, while my need to get away has led me wandering to a quiet bench near a waterfall. I like options when I'm outdoors, and Platte River State Park continues to deliver. The park's newest attraction is a 4.5-mile addition to its trail system, fortifying an already-popular destination for mountain bikers in eastern Nebraska.

It's your choice, whatever you decide to do first. Your first deep breath will surely be unique from mine. [N](#)



During an Outdoor Discover day, a student grabs a fish to the excitement of his peers.



The waterfall on Stone Creek at Platte River State Park is a must-see for park-goers.



TOP LEFT: Larry Kurrus roll casts while fly-fishing at Jenny Newman Lake, a catch-and-release pond perfect for families and avid anglers alike.

TOP RIGHT: A family photo is taken at the Walter Scott Jr. Lodge from the observation tower during the height of fall color.

BOTTOM RIGHT: Archers take aim at the Roger G. Sykes Outdoor Heritage Education Complex.

BOTTOM LEFT: Trophy bluegill can be caught and released at Jenny Newman Lake.



PHOTO BY JENNY NGUYEN-WHEATLEY





ABOVE: Kylie Raess of Gretna finishes her day at the spray park.

RIGHT: Park naturalist Sophia Gobber of Syracuse holds a bullsnake.

OPPOSITE: Francis Pesek of Lincoln is all smiles as he plays in Crawdad Creek.



Lodging Options

New RV Campground

The new, state-of-the-art campground has 49 full hookup concrete pads with electric, water and sewer.

Cabins

Glamping Cabins – There are three year-round glamping cabins that feature a queen bed, modern bathroom and furnished kitchen. All have heating and air conditioning. This is a luxury stay under the stars.

Modern Cabins – There are 21 year-round modern cabins with two, three or four bedrooms and kitchenettes. Some have fireplaces, and all have heating and air conditioning along with bathrooms, showers and linens.

Camper Cabins – The 27 camper cabins are grouped around a central shower-latrine building. Each cabin has a refrigerator and bedding. Each also has air conditioning, except for the Whitetail cabins.

Tepees

Pawnee Tepee Village – For a unique camping experience, four rustic tepees are available to rent and each accommodates six to eight people. Each has a platform floor.



The tepee campground offers a unique camping experience.



Roll your bed out onto the patio and experience a night in the forest at a Platte River State Park glamping cabin.

PHOTO BY JENNY NGUYEN-WHEATLEY



Modern cabins at Platte River State Park are nestled into the trees. The back of this one overlooks Jenny Newman Lake.



The park's RV campground has 49 full hookup sites.

PHOTO BY JENNY NGUYEN-WHEATLEY



The Rohloff and Draheim families of Hampton, Virginia, stay at a camper cabin.

PHOTO BY ERIC FOWLER



A series of challenging elements can be found on the new 4.5-mile addition to the Platte River State Park trail system. Trisha Kramer of Lincoln rides a downhill trail and Paul Hunter of Omaha flies off a limestone ramp.

Bike Trails

Platte River State Park offers 17.5 miles of trails, including challenging obstacles for experienced riders and bypasses for novice users.

The views from the trails overlooking the Platte River are amazing and seeing wildlife is a given.

Because of these reasons, this trail is considered one of the best in all of Nebraska, and it remains a popular destination for riders throughout the region.



BIKING PHOTOS BY ERIC FOWLER

How Long Will Chimney Rock Last?

By David L. Bristow, History Nebraska

The Chimney is rough and looks as if it would not stand a week,” wrote Franklin Starr in 1849. Starr was one of hundreds of thousands of emigrants who passed Nebraska’s most famous landmark on his journey. More travelers wrote about Chimney Rock than any other landmark along the Oregon, California and Mormon trails.

While travelers called Chimney Rock “the most remarkable thing I ever saw” and “a wonderful display of the eccentricity of Nature,” many people didn’t think it would be around

much longer.

“It is fast mouldering to ruins and if you don’t look sharp, my friends, you will never see it,” wrote John Wood in 1850.

Chimney Rock was millions of years in the making. About 38 million years ago, streams and wind started carrying silt and sand from the Rocky Mountains to the Nebraska Panhandle. This material built up into layers of clay that are visible in the Rock and surrounding buttes. Erosion slowly carved out the North Platte Valley and sculpted Chimney

Rock into its unusual shape.

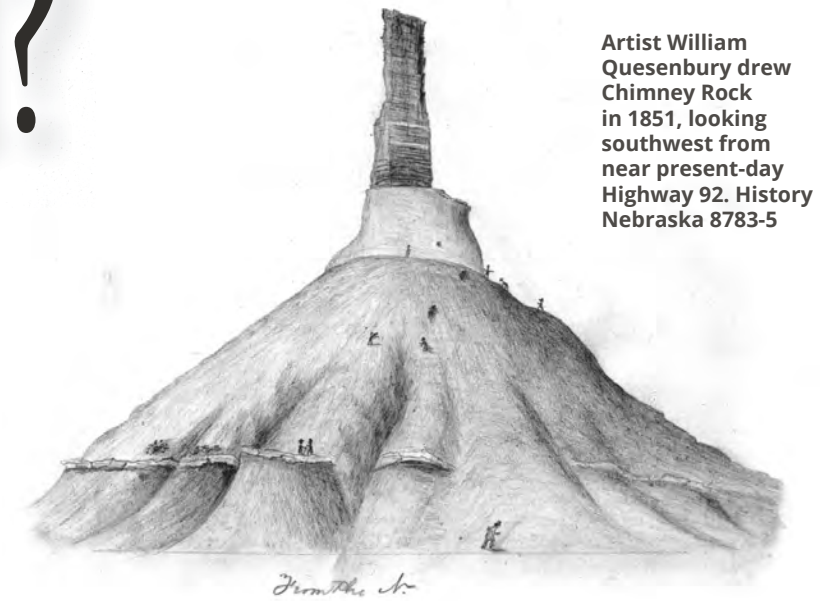
So, yes, the “Rock” is mostly clay. This surprised some emigrants. “It is called rock, but it is nothing but sand and dirt,” wrote Alonson Sponsler in 1850. Sponsler didn’t know it, but it is also accurate – and more awe-inspiring – to say that Chimney Rock is made of bits of the Rocky Mountains, and that it contains a good deal of volcanic ash besides. Ancient volcanoes in western Colorado erupted over millions of years, mixing ash with the clay. Particularly violent eruptions created two lighter-colored bands of ash that are visible in the rock’s base and spire.

About five million years ago, the North Platte Valley started to erode faster than it was built up. So why didn’t Chimney Rock erode away too? It might be the hard cap of sandstone protecting the spire. Prominent buttes such as Scotts Bluff are similarly protected. Even so, wind and water continue to wear the spire away.

Erosion isn’t the only thing that affects Chimney Rock’s shape. Pieces have also been broken off by lightning strikes. And at least since the 1860s, rumors have circulated that soldiers used to fire cannons at the Rock for target practice – but that seems to be just a story.

An expanded visitor center with new exhibits is scheduled to open later this year at Chimney Rock National Historic Site. All plans are tentative during these unusual times, but be sure to stop at Chimney Rock when you next visit western Nebraska state parks. [N](#)

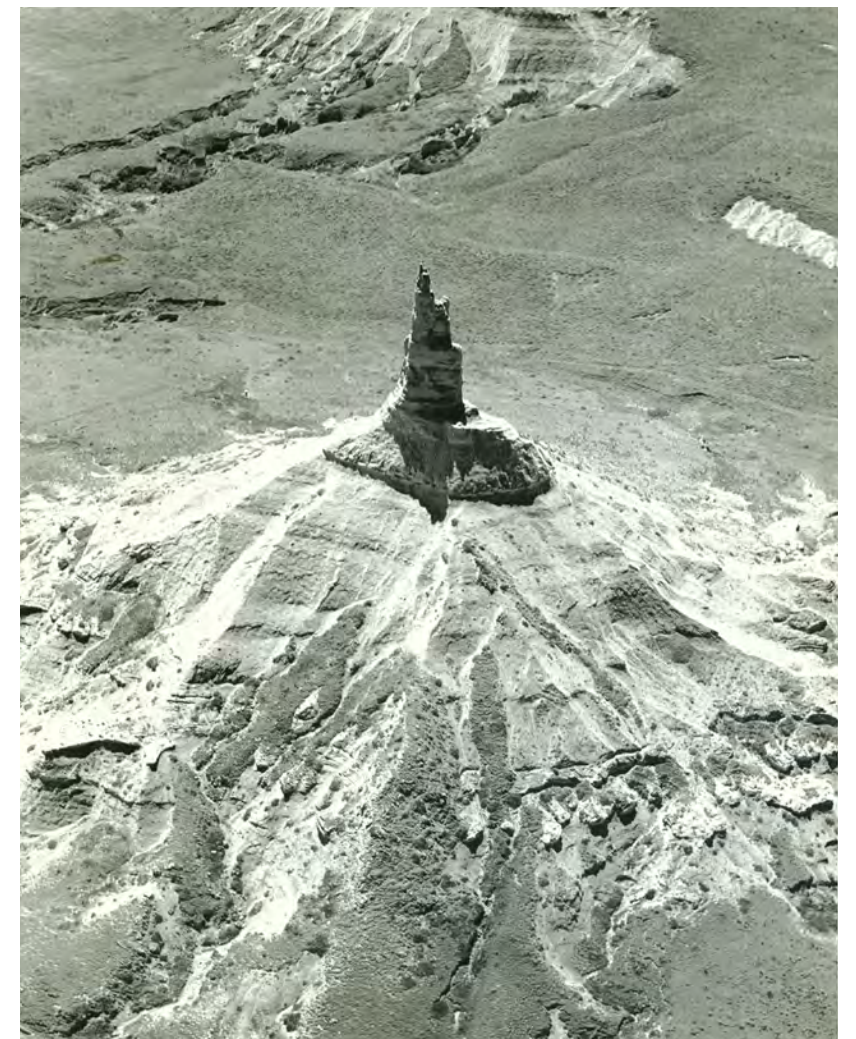
Visit History Nebraska’s website at history.nebraska.gov.



Artist William Quesenbury drew Chimney Rock in 1851, looking southwest from near present-day Highway 92. History Nebraska 8783-5



The exact shape of Chimney Rock depends on where you are standing, and shadows vary with the season and time of day. Still, the spire is definitely more pointed in this early 1900s view from the east. Oregon Trail pioneer and re-enactor Ezra Meeker stands in the foreground. History Nebraska RG959-5-1



A bird’s-eye view highlights the Rock’s layers and sharp angles. How long would it take to carve this using nothing but water and wind? History Nebraska RG3319-PH1-44

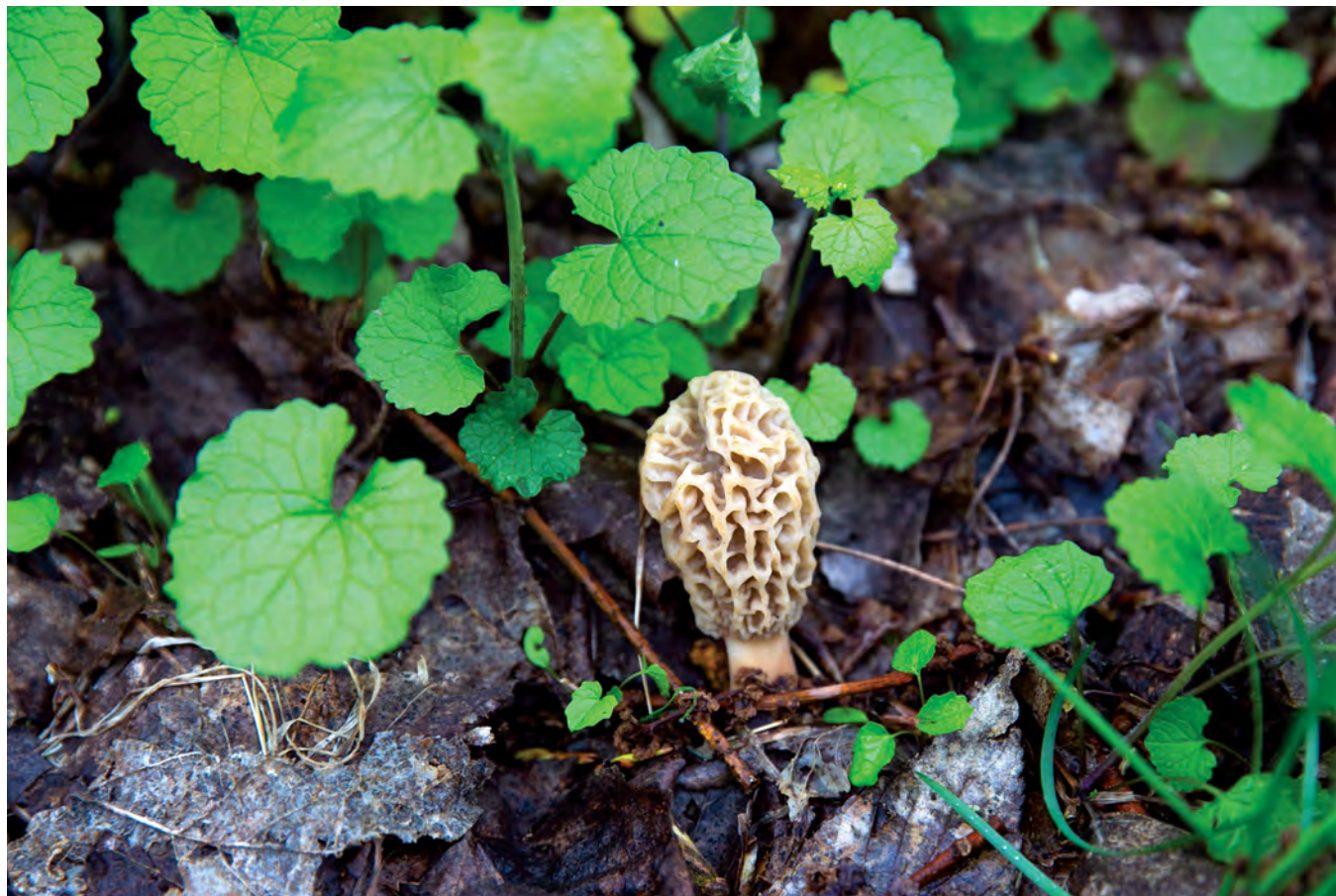
The Invasion of Garlic Mustard

Story and photos by Jenny Nguyen-Wheatley

Morel mushroom hunters will know this plant: Garlic mustard (*Alliaria petiolata*), a biennial, is one of the first signs of green-up in Missouri River woodlands. This low-lying plant prefers moist soils, shade and limited sun, and while its heart-shaped leaves might look inviting during the bareness of early spring, garlic mustard is highly invasive. It outcompetes native plants and threatens the biodiversity of our woodland ecosystems.

Distribution

The story of how garlic mustard arrived to the New World is similar to that of other invasive plants. Early European settlers brought garlic mustard to North America primarily for food and medicine, and finding conditions exceedingly favorable, the species escaped from gardens, thrived and spread uncontrollably. Today, garlic mustard has spread over practically all of northeastern and midwestern United States.



Garlic mustard seedlings are one of the first signs of spring in Missouri River woodlands. Morel mushroom hunters may recognize the scalloped, heart-shaped leaves.



A biologist uses a drip torch to target garlic mustard plants during a controlled burn at Basswood Ridge Wildlife Management Area in Dakota County.



Game and Parks biologists Russ Hamer, Kelly Corman, Bekah Jessen and Josh Kounovsky conduct a prescribed burn to control garlic mustard at Basswood Ridge WMA in 2014.



Pulling garlic mustard by hand ensures removal of the seed source and avoids the use of harmful chemicals.

It has also made its way into Colorado, Utah and as far west as Oregon.

In Nebraska, garlic mustard is becoming an increasing concern and annoyance among land managers. It is well established in eastern Nebraska woodlands, and although infestations are concentrated along the Missouri River and its lower tributaries, biologists have detected populations as far west as Bassett on the Niobrara River, Kearney on the Platte River and Cambridge on the Republican River.

Mustard Advantage

“Garlic mustard is equipped with a special chemical called sinigrin, which it releases by its roots into the soil,” said Chance Brueggemann, a Northern Prairies Land Trust biologist. “Sinigrin is toxic to many native plants and their supporting mycorrhizal fungi.”

Chance and Krista Lang, another NPLT biologist, have been trying to control the infestation at Indian Cave State Park’s oak woodlands over several years.

When matured, one garlic mustard plant can produce thousands of seeds, which readily hitchhike on animals that brush up against it, hikers who get the seeds stuck on their shoes and clothes, or on the tires of vehicles that collect mud containing the seeds. According to Lang, garlic mustard can



When controlling garlic mustard by prescribed fire, following up the second year is imperative to knocking back second-year growth and reducing seed production.

also spread via waterways. The infestation at Indian Cave appears to have originated from seed that washed down the Missouri River during floods, she said.

In addition to these advantages, garlic mustard has none of its natural “enemies” in North America, therefore no insects, fungi nor diseases to control its populations. Debby Kleinstein of Columbia University wrote that, in Europe where garlic mustard originated, more than 30 insects attack its leaves, stem and seeds; specialist herbivores also use garlic mustard as a food source.

The plant has few if any benefits to wildlife in North America. Brueggemann noted that while native pollinators might find garlic mustard useful in spring, flowers are gone by mid-June. Also, garlic mustard’s tendency to create monocultures outcompetes native plants, eliminating food sources that would otherwise benefit pollinators and other wildlife.

“This is why biodiversity is so important,” said Brueggemann. “Deer tend to nibble on garlic mustard once in a while, but we don’t see a significant amount of herbivory on it.”

Methods of Control

Methods of controlling garlic mustard include herbicides, pulling mature plants by hand and the use of prescribed fires. Brueggemann urges land managers to limit herbicide treatment to fall or winter to lower the chances of overspray and killing nearby native plants, which have gone dormant. Plants pulled by hand should be hauled out and disposed where seeds can’t spread later on; better yet, make a pile and burn it onsite. Although pulling garlic mustard is time consuming, it ensures the removal of the seed source and



Garlic mustard produces flowers and seeds during the second year of growth.

avoids the use of harmful chemicals on the ecosystem.

NPLT biologist Chris Wood, who helps manage the infestation in northeastern Nebraska, said that a follow-up prescribed burn is imperative to controlling garlic mustard.

“Something I’ve noticed is that if you conduct a woodland burn in the fall and don’t follow up with a burn the following year, it seems to help garlic mustard spread even faster,” Wood said. “Basically, a fall burn will clean up the debris, release nutrients and create a perfect space for garlic mustard to grow. Burning two years in a row will help knock back some second-year growth by potentially killing plants and reducing seed production, in addition to killing seedlings, which will reduce an infestation over time.”

The best plans incorporate all three methods.

What Landowners Should Do

Once established, management of garlic mustard will be time consuming and ongoing. Early detection is key.

“It’s the ‘ounce-of-prevention-is-worth-a-pound-of-cure’ concept,” said Cassidy Wessel, a Game and Parks Commission biologist in Norfolk. “As some invasive species become established, they create a positive feedback loop, altering soil chemical properties through allelopathic traits, building up a seed bank and so on. The longer you wait, the tougher it gets to control it.”

Allelopathy is when an organism produces one or more biochemicals that are released through its roots into the soil, making growing conditions less tolerable for other species. It’s a strategy some plants use to outcompete others, and in the case of garlic mustard, that is the chemical sinigrin mentioned previously.

If a landowner detects garlic mustard on his or her property, Brueggemann recommends taking the following steps.

Step 1: Determine the area of the infestation. “Usually by the time a landowner notices an infestation of invasive plants, the population size is often larger than one thinks,” he said.

Step 2: Begin control on the smaller, outlying populations of the infestation and then work inward toward the areas of higher densities.

Step 3: Revisit the area annually and continue controlling the plants.

“Similar to other invasive or exotic species, once garlic mustard is well established it will be hard to eradicate,” Wood said. “However, through the various control methods mentioned, it could be managed to the point where it’s not damaging woodland ecosystems.”

Studies

Debate exists among experts on the necessity of controlling garlic mustard. Lang referenced a handful of land managers who have stopped actively controlling garlic mustard by pulling and spraying, and are only employing prescribed fires as a part of larger habitat goals to limit its density.

“Some sources back East, where garlic mustard has been established for much longer, suggest that infestations go through a period of growing in dense patches but then begin to thin out with time,” Lang said. “Some say garlic mustard becomes ‘naturalized’ rather than ‘invasive’ after a while, perhaps a decade or so. If garlic mustard does indeed thin out and allow space for native plants to once again grow in some reasonable level of plant diversity, then it is not a huge problem.”

However, land managers, including Lang, are hesitant to accept this observation as fact. It is unknown if the plant will do that in our region.

“It is really hard to just let things go and hope that things turn out OK,” Lang said.

Studies on controlling garlic mustard are continually evolving, including a potential bio-control method. Canada has been testing several insect species with the hopes of combatting garlic mustard with a natural predator introduced from Europe. Agriculture and Agri-Food Canada has identified the root mining weevil (*Ceutorhynchus scrobicollis*) as most promising.

In August and December 2018, the Centre for Agriculture and Bioscience International released *C. scrobicollis* into the Canadian wilderness under close monitoring. Before release, CABI in Switzerland conducted years of safety testing, including under quarantine conditions at the University of Minnesota, to demonstrate that the species would effectively target garlic mustard without negatively affecting native species.

“If the project is successful, it could be a very important addition to helping us manage garlic mustard infestations,” Wood said.

For the time being, Nebraska land managers remain vigilant. 🐞

Wild Garlic Mustard Pesto

Garlic mustard (*Alliaria petiolata*) is a biennial flowering plant that can outcompete native species and quickly take over forest floors. While common methods to control garlic mustard include burning, pulling and spraying, few Americans actually eat it. The whole plant is edible, and historically, garlic mustard is one of the oldest herbs and spices used by humans in Europe.

Crush the leaves between your fingers and you will smell the familiar aroma of its namesake – garlic; and like mustard, its taste is mildly peppery and spicy, a nice alternative to common store-bought greens such as mustard greens, arugula or watercress. Harvest garlic mustard in the spring when leaves are still young and mild. Once warm weather arrives, leaves will become bitter.

Use garlic mustard in a variety of dishes, and eat it raw or cooked. A few ideas include adding garlic mustard into a salad mix, substituting lettuce in wraps and sandwiches or use it in place of spinach in your favorite egg dishes. Lightly sauté the leaves and stems with olive oil or butter for a side dish, adding a dash of sugar and lemon juice or vinegar to balance out the bitterness.

Or you can make pesto, which is basically a thick Italian-style herb paste that has many uses: toss it with warm pasta; use it as a dip for chips or crudités; or spread it onto bread, sprinkle cheese on top and broil for cheesy garlic mustard bread.

Important: When foraging wild edibles, make sure to positively identify wild plants before consuming. Consume only a little at first to rule out possible allergic reactions.

Servings: Makes about 1½ to 2 cups of pesto
Prep Time: 20 minutes
Ingredients:

- 6 cups of young wild garlic mustard leaves, washed and dried
- 3 cloves of garlic
- ½ cup of shelled pistachio nuts
- ½ cup of grated Parmesan cheese, plus extra
- ¾ teaspoon of sugar
- Juice of half a lemon
- ¾ to 1 cup of extra virgin olive oil
- Salt and pepper, to taste

1. If using older garlic mustard plants, trim off woody stems. In a food processor, pulse cloves of garlic, pistachios and grated Parmesan cheese until coarsely crushed. Next, add wild garlic mustard leaves and pulse until you can get the mixture as finely chopped as possible, stopping periodically to push down leaves sticking to the sides.

2. Next, add olive oil in a steady stream while you work the food processor on low, allowing ingredients to emulsify into a paste. Add or detract oil as necessary, depending on how you like the consistency of your pesto. Finally add lemon juice, sugar and season to taste with salt and pepper. Pulse a few times to combine. Store pesto in an airtight container in the refrigerator for up to a week or freeze leftovers for later use.

3. To make pesto pasta, toss pesto with freshly cooked al dente pasta in a pan over low heat until warmed through and fully incorporated. Add cooking liquid from the pasta to thin out the pesto and create a sauce. Season to taste with salt, pepper and lemon juice and/or lemon zest. Sprinkle with plenty of grated or shaved Parmesan cheese on top, and serve immediately.



Kearney Water Trail

Story and photos by Eric Fowler

At 2.3 miles, the Kearney Water Trail is undoubtedly one of the shortest in Nebraska. Despite that fact, it might also be one of the busiest.

On any given day from April through October, you're apt to see kayakers paddling down the trail, which utilizes the Kearney Canal and Turkey Creek on the southwestern corner of this central Nebraska city of 38,000. Its location certainly plays into its popularity.

The trail opened in 2016, a joint

effort between the city, the Nebraska Public Power District, and a group of paddling enthusiasts who formed the Kearney Whitewater Association and spearheaded the effort. Whitewater? In Nebraska? More on that later.

The idea for the water trail was first discussed among city staff and citizens about 20 years ago, but for various reasons never got off the ground. It was resurrected by Kearney resident Bruce Karnatz, who in 2010 was regularly riding his bike on



Bruce Karnatz of Kearney paddles a kayak down the Kearney Water Trail. Karnatz and other water enthusiasts founded the Kearney Whitewater Association and pushed for development of the trail.



Michaela Lewis, Betty Warren and Lori Gartner round a bend on Turkey Creek, part of the Kearney Water Trail.

the Kearney Hike-Bike Trail, which parallels the creek and canal. He had done some paddling, but didn't even own a kayak at the time.

"I always thought this stream is about like the Dismal River," Karnatz said. "It's perfect for floating. It's not too fast. It's not too little. It's dependable."

Karnatz figured there were others in the community who thought the same, and he went online and found them. They met at a local watering hole in 2011, approached the city about opening the creek to recreational use and officially formed the Kearney Whitewater Association in 2012.

A few people were already using the creek, but there was plenty of

work to be done before it could be opened to the general public. "The first couple of times I floated it I [capsized] because there were so many trees and log jams," Karnatz said.

Members of the group did some cleanup on their own. That same year, the city and the Central Platte Natural Resources District teamed up to do more, clearing downed and overhanging trees and old car bodies. Nebraska Public Power District, which operates the canal, granted permission to use the canal. Through memberships and fundraisers, KWA was able to split with the city the cost of constructing a put-in at Yanney Park and a take-out at Central Avenue. And in 2016, the trail opened to the

public. It operates from April through October when NPPD is diverting water from the Platte River into the canal for irrigation and hydropower generation.

A leisurely float down the Kearney Water Trail begins with a straight shot south down the Kearney Canal from Yanney Park. In this half-mile stretch, the high banks of the canal are lined on the east by a crop field and on the west by the park and bike trail. At the canal's confluence with Turkey Creek, the trail turns east and the stream starts to meander through the countryside, which isn't really country at all. While there are industrial and housing developments north of the creek and numerous hotels on the south, you rarely see them through

the trees, grass, phragmites and high banks that line it.

You might see wood ducks and turtles, or fish jumping. Your paddle will bump bottom on many occasions, but your kayak won't often, especially if you stay on the outside of the bends. You can occasionally set your paddle down, but keep it handy, as you will need it to navigate the many turns. While you could float the creek in a tube, the brush and riprap on the banks are not kind to tubes, and it is not recommended.

When you re-emerge in civilization at Second Avenue, the creek narrows and pours through a short rapid. Less than two city blocks later you will reach the take-out point on the right

Kearney Water Trail



MAP ILLUSTRATION BY TIM REIGERT

Flooding on Turkey Creek

Flooding on Turkey Creek in 2019 also toppled many trees in the creek below Central Avenue, an unofficial section of water trail that is now nearly impossible to navigate.

Before the flood, many people would continue down this stretch. Those included customers of Kearney Water Sports, a local river outfitter operated by Jason Thee, a founding member of the Kearney Whitewater Association, who opened a private landing 1.3 miles below Central Avenue. Others would continue to Cherry Avenue near the Great Platte River Road Archway Monument, adding another 2 miles to the float. A few went even farther, continuing down

Turkey Creek, under Interstate 80, into the North Channel of the Platte River and on to another access point developed by the Nebraska Game and Parks Commission at Bassway Strip Wildlife Management Area at the Interstate 80 Minden Interchange, roughly 8 miles below Central Avenue.

Three and other members of the Kearney Whitewater Association are working to clean up the creek below Central Avenue, which would allow him to reopen his business. But he is unsure when, or even if, that might happen. Work to repair flood damage to the Kearney Hike-Bike Trail near the Archway will limit access at Cherry Avenue, but should be complete by fall.

The Kearney Water Trail is a unique amenity in central Nebraska that attracts thousands of users each year. The typical season is April through October. The trail follows the Kearney Canal, which flows into Turkey Creek. A launch and parking area is located at Yanney Park ❶. It ends at a landing on the west side of Central Avenue ❷ totaling a distance of 2.3 miles.

bank above Central Avenue. In all, the trip should take less than an hour.

Flooding on Turkey Creek in July 2019 toppled several trees along the trail, forcing its closure for the remainder of the year. Those trees have been removed, and the trail was set to reopen in April. That will please the thousands who utilize the trail, which sees use nearly every day in the summer, even for a quick float after work on a summer weekday, thanks in part to the ease of only having to shuttle vehicles 2 miles on city streets.

“That’s probably my favorite

Whitewater in Nebraska?

There are a few stretches of whitewater in Nebraska, most notably on the Niobrara River. There could soon be another in the most unlikely place: Turkey Creek in the city of Kearney.

Members of the Kearney Whitewater Association, the grass roots group that helped develop the Kearney Water Trail, came up with the idea, even adding whitewater to the group’s name when it formed to make sure people knew what their ultimate goal was. It also helped pay for a feasibility study and preliminary design work.

The city committed \$200,000 to the project, which according to preliminary designs by S2O Design and Engineering, a Lyons, Colorado, company that has helped build whitewater parks around the country, could cost \$600,000. The association is committed to raising \$550,000 for the remainder of the

cost and unforeseen overruns. For the second time in as many years, however, fundraising efforts are on hold, stopped by flooding in 2019 and the Coronavirus outbreak this year.

Plans call for two Class II rapids on the trail, one above and one below Second Avenue, as well as locations for those who would rather portage around the rapids, and those who just want to watch from the bank. Located adjacent to a cluster of hotels and other businesses at the south entrance to the city, the project will also include work to beautify and landscape the area between Second and Central avenues.

Man-made whitewater parks are a growing trend in the U.S. There are more than 130, including three in Iowa, and several in Denver and other Colorado Front Range cities.

For more on the project, visit kearneywhitewater.org.



ILLUSTRATION BY S2O DESIGN AND ENGINEERING

A rendering shows proposed whitewater features on Turkey Creek above and below Second Avenue in Kearney.

outdoor summer recreational activity, and has been for a number of years, be it on a kayak or paddleboard,” said Scott Steinbrook, a teacher and coach at Kearney High School who uses the trail at least twice weekly. “It’s a little slice of heaven out there on the water in the summer and fall.

“Once you are on the water, with the embankments going up, it feels like you’re not even in Kearney anymore. You might as well be somewhere in Colorado or Montana or somewhere a little more isolated.”

At the beginning of the school year, when Steinbrook shares his hobbies with students, he asks how many others have floated the trail. “I’d say over the years you probably see about half of the hands come up in the classroom and say they’ve at least gotten out there a time or two. It’s definitely one of Kearney’s most popular outdoor recreation spots.”

The popularity of the trail pleases Scott Hayden, director of Kearney’s

Park & Recreation Department. “It’s kind of cool to drive around town and see all the kayaks on the roofs of vehicles in the middle of Nebraska,” he

said. “It’s great to utilize that resource and clean it up a little bit and, at the same time, beautify our entrance to town.” 



People carry their kayaks to the launch on the Kearney Canal at Yanney Park.



Master-naturalists-in-training get a close-up look at a bullsnake during the herpetology session.

PHOTO BY KAREN KLEIN

Making a Difference

Nebraska's Master Naturalists

by Renae Blum

For two years, Joe Heatherly of Lincoln rose before dawn on Saturdays and drove to Nine-Mile Prairie on the northwestern edge of the city. He'd settle at a picnic table to watch the sun rise and then head out to hike for a couple hours.

"Hiking through there is almost a spiritual experience," Heatherly said. "That's my church every week."

Over time, though, "you start feeling guilty for enjoying something that much without putting something back into it," Heatherly said. He wondered if there was a way he could help maintain the prairie so others could enjoy it, too.

The prairie seemingly brought the answers to him, in the form of an ecology professor Heatherly met during one of his

morning hikes. The two began talking, and Heatherly shared his passion for the prairie and desire to help.

"Check out the master naturalist program," the professor told him.

Creating Home-grown Naturalists

Since 2010, more than 500 people have been trained as certified master naturalists in Nebraska. This involves 60 hours of in-depth training by natural resource experts that can cover a wide range of topics including insects, mammals, reptiles, native plants, geology, grasslands ecology, outdoor skills, conservation biology and more. No prior in-depth



PHOTO BY MATT JONES

At the end of a day of master naturalist training in the field, Dan Deffenbaugh of Hastings explores the Niobrara Valley Preserve's Norden Chute.

knowledge is needed.

“It’s really a crash course in all these different things,” said Matt Jones, who coordinates the Nebraska Master Naturalist Program from its base at University of Nebraska-Lincoln’s School of Natural Resources. “There’s really not any other comprehensive training that would give you that much information, unless you went back for your fish and wildlife undergrad.”

To keep their certification, a Nebraska master naturalist must complete at least 20 volunteer hours and eight hours of continuing education each year. Volunteer opportunities include education and outreach, citizen science, resource management and outdoor skills mentoring.

For the program’s 40-some partner organizations, this volunteering aspect is a godsend.



Andrea Jenkins of Lincoln holds a crayfish during a master naturalist training session on aquatic ecosystems.

PHOTO BY KAREN KLEIN



Nebraska master naturalists helped release lab-reared Salt Creek tiger beetle larvae back into the wild.

PHOTO BY OMAHA’S HENRY DOORLY ZOO AND AQUARIUM

“Many of those organizations look to us as their arm into volunteer recruitment,” Jones said.

Being a master naturalist gives you an “in” with them that the average person doesn’t have, he added.

“Our partnering programs know what that training looks like and the background of what that individual received, so it really breaks the ice,” he said.

The Life of a Master Naturalist

The master naturalist experience begins with the training, which gets rave reviews from participants. Trainings take place in areas that lend themselves to outdoor learning, such as Heron Haven in Omaha, Rowe Sanctuary, Spring Creek Prairie and DeSoto National Wildlife Refuge. Organizers schedule several trainings each year and try to spread them out across the state.

Participants can choose from two training formats, a weeklong version or the “core” training, which covers 24 hours of content across two weekends. While both include hands-on field activities, the weeklong training, which includes meals and lodging, is especially memorable.

“It was awesome. You walk out of your cabin and there’s a mule deer standing right there,” said Debra Kaufman of Papillion, who completed her training at Cedar Point Biological Station near Ogallala.

She spoke with excitement about all the activities she participated in, including examining rocks during the geology session, taking water samples and getting a close-up look at nocturnal insects.

“[The training] was intense, but it was a lot of fun,” she said.

Once initial training is finished, master naturalists enjoy



Carol Hinkle of Lincoln collects seeds of rough gayfeather at Dieken Prairie for Wachiska Audubon Society. Wachiska sold the seeds to Prairie Legacy Inc. to be used in prairie restoration.

PHOTO BY RENAE BLUM

the freedom to explore their interests and fashion a volunteer life that suits their schedule and personalities. Taking kids on educational hikes, leading sandhill crane tours or teaching fishing and hunter safety can all be great options for those who like working with people. For the less extroverted, there’s behind-the-scenes opportunities, too: planting pollinator gardens, tending bluebird boxes, harvesting native seeds and conducting bumble bee surveys, to name a few.

Kelly Kelly of Omaha found her niche in bur oak conservation. She adopted a trail assigned to her by the Iowa-based Hitchcock Nature Center, and over the course of a year, surveyed every bur oak along it for signs of a harmful fungus, submitting detailed notes along the way.

“I feel like I’m making a real impact,” she said.

For her, as well as other master naturalists, part of the program’s draw is its sense of community.

“I’m rather shy,” said Kelly, while attending the program’s winter celebration with about 100 others from across the state. “But I come in here today, and I have connections to almost every table. And I’m so happy to see these people that are also passionate about the environment.”



During training, master naturalists learn about Nebraska’s native bees, their habitat, their services as pollinators and the challenges they face. After training, some master naturalists have volunteered to conduct bumble bee surveys for the Nebraska Bumble Bee Atlas, a statewide citizen science project.

PHOTO BY RENAE BLUM



PHOTO BY RENAE BLUM

Bob Wells reaches for a peregrine falcon at Fontenelle Forest in Bellevue, where he provides interpretive education for visitors. Wells contributes about 1,000 volunteer hours each year as a master naturalist.

By the Numbers

- Nebraska master naturalists' accomplishments since 2010:
- Contributed a total of 84,131 volunteer service hours statewide, valued at \$2,139,451 in salary savings to Nebraska's workforce
 - Participated in more than 7,000 volunteer opportunities and projects
 - Positively affected 97,971 acres through resource and habitat management projects
 - Connected with 794,444 people through education and outreach

The Nebraska Master Naturalist Program also connects its members to the state's natural resource experts. Andrea Wiggins had studied citizen science professionally, but when she moved to Omaha several years ago, she lacked connections to Nebraska's citizen science community.

"This gave me a fast track right into the inside circle of people who are really involved in the state," she said. "It also gives me access to a lot of volunteer opportunities to do citizen science that I don't think I would necessarily find otherwise."

Helping with a Wider Mission

One of the program's top partners is the Nebraska Game and Parks Commission. Part of the agency's mission is the conservation of Nebraska's natural resources, and through their volunteering, master naturalists have played an active role in that mission.

"Their help is greatly appreciated because it expands our capacity for work," said Melissa Panella, Game and Parks' wildlife diversity program manager.

Master naturalists have helped the agency record sightings of rare species, collect data through citizen science and conduct large events. In recent years, master naturalists helped with efforts by Game and Parks and other partners to conserve the endangered Salt Creek tiger beetle. The volunteers helped with habitat monitoring, feeding lab-reared larvae and releasing the beetles back into the wild.

"It was a unique opportunity to literally handle an endangered species," Jones said.

Another contribution master naturalists have made to Game and Parks' mission has been through their work with prescribed fire, Panella said. Prescribed fire can be used to reduce wildfire risk, maintain grassland ecosystems, control invasive species and increase or maintain wildlife habitat. Experts say it's one of the most cost-effective ways to manage the spread of eastern redcedar, a fast-growing invasive species that replaces natural grasslands with thick tree cover.

"We have found ourselves fighting to save our grassland ecosystem that supports our wildlife," said Brian Teeter, a coordinating wildlife biologist with Pheasants Forever.

To help with this effort, master naturalists have attended prescribed fire workshops and worked with organizations like the Tri County Prescribed Burn Association and Pheasants Forever to conduct prescribed fires.

"Over the last few years they've been able to positively impact over 6,000 acres with prescribed fire," Panella said.

Giving Back

These days, Joe Heatherly's Saturday routine looks a little different. He still hikes at Nine-Mile Prairie, but twice a



PHOTO BY RENAE BLUM

Dan Leuenberger instructs Cameron Copple, one of Leuenberger's hunter education students, during a mentored quail hunt. Teaching fishing and hunter safety are among the many volunteer opportunities in which a master naturalist can participate.

month, he's out at Platte River Prairie, helping at The Nature Conservancy's volunteer work days. He harvests seeds, removes thistles, treats invasive species, repairs fences and collects trash.

"I love my volunteer work," said Heatherly, who is a social worker at the Lincoln VA Clinic. "It's going from helping people to helping the environment, so I really like that."

And when he does head back to Nine-Mile Prairie, he appreciates it more. Before becoming a master naturalist, he could identify few of the plant species growing there. Now, Heatherly says, he can stand in any given spot and name two or three.

The Nebraska Master Naturalist Program was exactly what he was looking for, he said.

"I tell as many people as I can about it," Heatherly said. "If people have any interest in the outdoors, or nature or environmental issues or conservation, they should really check it out." 

To learn more about the Nebraska Master Naturalist Program and upcoming training dates, visit nemasternaturalist.org.



PHOTO BY RENAE BLUM

"It feels like I'm helping conserve [the prairie], because there's not a lot of it left. It feels like I'm doing something useful."

Joe Heatherly of Lincoln examines a stalk of smooth sumac at Nine-Mile Prairie, the place that inspired him to become a master naturalist.



BISON AT WILDLIFE SAFARI PARK. PHOTO COURTESY OF THE NEBRASKA TOURISM COMMISSION

YOUR CASS COUNTY TO-DO LIST

By Erin Lenz, Nebraska Tourism Commission

Editor's Note: Though you may or may not be able to travel right now, Cass County has many great things to see and do. Put these places on your list of places to go in the future. Remember to check all state and local health and travel advisories before making travel plans. Do not travel if you are sick; if you have a fever of 100.4 or greater; if you have knowingly been exposed to a person with COVID-19; or have been to an area with known community spread of the virus. Maintain proper social distancing of at least six feet and follow the 10-person limit rule. Follow good hygiene practices with frequent handwashing.

Get out and enjoy Nebraska's outdoors, but do it safely and keep your health in mind.

When in Cass County, start at Platte River State Park (see page 30) and its many opportunities, then visit nearby Louisville State Recreation Area. Fish for bass, catfish, bluegill and crappie in the area's five sandpit lakes, and don't forget to try out the new floating playground.

Look for adventure for the whole family right off of I-80 Exit 426. Tour the Strategic Air Command & Aerospace Museum and experience the flight simulator or view their large collection of aircraft and spacecraft. After visiting the museum, head to nearby Eugene T. Mahoney State Park. Explore the park's hiking and biking trails, treetop ropes course and observation tower in the warmer months, and enjoy indoor rock climbing, sledding and ice skating in the

winter. This park has activities available year-round. Also off Exit 426 is Lee G. Simmons Conservation Park & Wildlife Safari. From your vehicle, see elk, bison, white-tailed deer and more on this 4-mile, drive-through, North American wildlife experience.

Looking for a new activity to try? Try paintball with Mad Cow Paintball near Cedar Creek. Located on a family farm, 40 acres of fun has been set aside exclusively for paintball.

Once you've worked up an appetite, try Round the Bend Steakhouse, one of Nebraska's premier steakhouses. For a drink with a view, head to Cellar 426 for a tasting of award-winning Nebraska-crafted wines and beautiful views from the winery terrace. To satisfy a sweet tooth, head to Bakers Candies in Greenwood to shop for those delicious renowned chocolate meltaways and other goodies.

Spend a weekend in Cass County and take advantage of the unique overnight accommodations in the area. Try glamping at Slattery Vintage Estates. While there, try Nebraska wine in their tasting room. Green Gables Inn also is the perfect place to stay with your family or a group of friends. Located in peaceful Murdock, this B&B is a rebuilt farmhouse that sleeps more than 10 people. Relax on the front porch and enjoy a delicious breakfast each morning.

Begin planning a trip to Cass County today and go to VisitCassCounty.com or VisitNebraska.com for more information.

Mad Cow Paintball
Catch the Fever

Our open season dates are March 7th through November 28th, 2020
(Depending on Temperatures)

[f @madcowpaintballne](#)
[t @MadCowP8ballNE](#)
[v MadCowPaintball](#)
[i madcowpaintballnebraska](#)

11212 Cedar Creek Road • Louisville, NE 68037
402.234.2024 | madcowpaintball.com

Visit
CASS COUNTY
NEBRASKA

Start your next Adventure Right Here!

Alvo • Avoca • Cedar Creek • Eagle • Exit 426 • Elmwood
Greenwood • Louisville • Manley • Murdock • Murray
Nehawka • Plattsmouth • South Bend • Union • Weeping Water

visitcasscounty.com 800.965.8479

Green Gables Inn

Let us host your wedding, shower, reunion, retreat, or special gathering on our six country acres.

1905 Farmhouse with Fireplace and Wrap-Around Porch. Conveniently located between Lincoln and Omaha in scenic countryside.

Bed & Breakfast • Lovely Garden • Sleeps 12
Plenty of Parking • Multiple Fire Pits
Superhosts with Over 250 5-Star Ratings

GreenGablesNebraska@gmail.com
Phone: 402-429-3648

30312 Alvo Rd., Murdock, NE 68407
Rent the whole house - airbnb.com/h/greengablesnebraska

Find us on Facebook

SNIFF | SWIRL | SIP | STAY
SLATTERY VINTAGE ESTATES VINEYARD & TASTING ROOM

Come relax with some local flavors and see the best of what nature has to offer at Nebraska's ORIGINAL Glamour Camping destination!

Slattery Vintage Estates
www.svevineyards.com

DEAR DIARY

By Roger Welsch



A nightly ritual here comes about halfway through the evening news during the weather report. Linda drags out her battered weather journal, jots down the high and low temperatures for the day, some notes about the day’s events, any precipitation, unusual events ... first mourning doves of spring, the sound of frogs at the pond, an eagle cruising the river, even personal notes ... visitors, health issues, anything funny or unexpected that happened. Perhaps as she scans entries for the previous few years: She’ll report to me that it was on this day two years ago that we got together with Jim and Tess, or Daughter Joyce came visiting, or although we had a high temperature of 78 today, two years ago on this date the high was only 41.

Then sometimes she mumbles something like “I don’t know why I do this. One of these days I’m just going to stop.” I shake my head and maybe even say out loud, “I sure hope you never do.” I find such memories interesting. But just as important, they are useful. “Last year we found wild asparagus down at the cabin” means it just might be a good time to check down there again.

For a good part of my life I worked as a consultant developing living history farms – museums where curators work to recreate life as it was at another time. I like to boast that in my 80 years, I actually lived in many centuries – the early 1600s as a pilgrim at Plimoth Plantation [sic that spelling], 1700s at the Colonial Pennsylvania Plantation Project outside of Philadelphia, and the 1800s at Stuhr Museum here in Nebraska. An invaluable resource in helping us understand the ordinary farmer’s year in various geographies and historical periods are journals (or “daybooks,” another word for “journal”) precisely like Linda’s. Yesterday’s farmer wasn’t so much interested, however, in renewing old memories as he was in keeping track of things. If he bred the mare in February, he needed to remember that she would be due to foal sometime in November, about 325 days later. The family cow took about 280 days to bring a calf to delivery. Those are facts every farmer knew and needed to keep track of.

What farmers on the frontiers did not know was what to expect in the new geographies they were moving into. And that was true for the frontiersmen in Iowa as surely as it was for the pilgrims at Plimoth. So they kept journals, not to remember but to learn. Put yourself in the shoes of the Swede, Czech, Irishman or even New Yorker who came to Nebraska to homestead. Reports from early travelers were not only sparse and sketchy, they were often downright dishonest. “Boosters” eager to bring new settlers onto the Plains for whatever reasons, either out of ignorance or downright dishonesty, made preposterous claims for the idyllic

geography. You might look at a map or a schoolroom globe and see that Nebraska’s southern border is the 40th parallel. Why, that same line around the globe runs through mid-Spain and Italy, even Turkey! This Nebraska territory should therefore be prime agricultural ground for cotton, olives, sweet wine grapes, fine tobaccos and maybe even oranges! Then here you were, you farmed a season or two, and one winter in the old sod house put to rest those impossible notions!

So, when can we expect the latest spring frost and earliest autumn freeze? How much rain is “normal?” When do the wild plums bloom and what date was it last year when spawning carp could be harvested at the creek with a pitchfork? When do we start worrying about clouds of grasshoppers and how long are the potatoes in the cellar safe from freezing? The best source for such information for your specific location was yourself and a faithfully kept daybook. Thankfully, we still have some of those records from cautious and conscientious farmers who, like Linda, kept track of the world around them. Or more precisely, the acres between them and the horizon.

Linda’s weather journal reminds us of our own lives and past, and cautions us about the future. And, I would submit, would do the same for any Nebraskan even now in the 21st century. Because we are still on the frontier. We haven’t been here on the Plains all that long and the weather is in constant flux, so we need to keep track of what exactly it is doing in hopes of getting some idea of where it is going. Maybe I could ask a local weatherman, Travis Klenecky, Ken Siemek or Kent Boughton, the guys we watch, when we last had a month of weather reports without a new record being established. Most rainfall in one day, highest temp, lowest temp, highest low for the day, largest hail, most snow, driest month, most tornadoes, on and on. (Even as I write these very words we are in the middle of a record spell of April rain. Ho hum.)

What I hear when I see a report of another Nebraska record is that we still don’t know for sure what this “Sweet Nebraska Land” is all about. We haven’t even established the norms – there is no more ridiculous word to use in any Plains weather report than “average!” – and now we find that Plains weather makes not only wild daily, weekly, annual swings but seems to be shifting all around us.

About the time we feel sure about one set of parameters for our weather, all at once the wind shifts – a friend once scoffed at the wind vane I was mounting on our roof, saying, “It’s no good for Nebraska, Rog. It only points in one direction at a time!” – and whatever we thought we knew for sure about this geography’s weather or climate is gone like an April snow. If we get any snow this April. Or May.

No, Linda, please keep that weather journal going. If it speaks to us of what has been and cautions us about what might be, it also amuses us with the constant question that could be the Nebraska motto: What the heck is going on here?

Roger Welsch is a folklorist, humorist and author.

The Nebraska Trout Slam



Four species. One state.
Epic bragging rights.

Get the Details at
OutdoorNebraska.org/TroutSlam

Hunters Helping the Hungry



NEBRASKA
- GAME & PARKS -

Donate when you buy any permit
or online at OutdoorNebraska.org/HHH

PLAY HARLAN

Boating & watersports; marinas; great fishing & tournaments; well-maintained lakeside campgrounds; canoeing, kayaking and tubing on the river



In-town lodging, restaurants, shopping, museum, antique stores, farmers markets, golf courses, swimming pools, live summer theatre



Horse trail, prairie dog town, dam tours, nature trail, some of the state’s best birding areas, ATV trail, motocross track



Lakeside walking & biking trail, swimming beach, picnic shelters; state park permits not required; responsible consumption of alcohol allowed in parks



HUNT • FISH • PLAY
Harlan County Nebraska
www.harlantourism.org
800-762-5498

RESTORING ANTLERS

By Ryan Sparks

Have you ever left a deer mount outside for too long and now the antlers are chalky and bleached? All you need to restore them is dish soap, a paintbrush, wood stain and fine steel wool. If the antlers are chalky and porous you will also need two-part molding compound and fine sandpaper.

Start by cleaning the antlers with soap and water and allow them to dry. Wrap the skull in paper to protect it during restoration. When the skull is dry, use molding compound to lightly coat the antlers, filling in holes and crevices. Again, this step is only necessary on badly deteriorated antlers. Use as little compound as possible to preserve the antlers' character. Once you are finished, allow the compound to dry for at least 24 hours and sand it smooth.

Antlers are naturally white, but they pick up stains in late summer when rubbing on trees to remove velvet. One buck might have rubbed on cedar trees while another picked up dark blemishes from walnut trees. No two antlers are the same. If you have a photo of the buck, use it as a reference. For all but the darkest antlers, I use early American wood stain. It's light enough to match most bucks by varying the

number of coats. For darkly stained antlers, provincial wood stain is an excellent match.

Starting at the base of the antlers, brush on a light coat of stain, immediately wiping away any runs. Use as little stain as possible, brushing the excess up the antler until it's coated. Most antlers are darker near the base and gradually lighten toward the top. This method does a good job of imitating that color transition. When both antlers are dry, compare them to the photo of your buck and apply more stain as needed.

At this point, the antlers will be tacky with a slight sheen. Use fine steel wool and lightly brush the antlers to remove this gloss. Now the antler should have a natural matte appearance. Some bucks will have areas that are totally white, like around the antler tips. For this, use a wire brush to remove the stain. Then let the antlers dry for an additional 24 hours. Taking the time to breathe life into aging antlers allows you to remember the hunt for years to come.

Ryan Sparks is a writer and photographer originally from Cass County. To see more of his work visit sparksryan.com.



Left in the elements for two years, this skull mount was bleached white by the sun. To restore the antler coloration, Jillian Sparks applies wood stain, working from an original photo of the animal.

PHOTO BY RYAN SPARKS



Pond-Tini™

PONTOON BOATS

800-657-2184

pondtini.com

Like that 12-point buck, you don't want to let this offer get away.

Sidekick 40 MPH top speed

Kubota Together we do more.

Save now on the fast, durable Sidekick, featuring best-in-class acceleration and handling with cargo*. Stop in for a test drive today.

NOW AS LOW AS **\$10,649**** PLUS **\$0 DOWN 3.99% APR 60 MONTHS**

VISIT US TODAY FOR THIS LIMITED-TIME OFFER

Offering the area's most complete inventory of Kubota products since 1984.

9317 S. 144th St.
Omaha, NE
402-895-6661

KUBOTA OF OMAHA Ag Solutions Group

KubotaUSA.com

*Class is based on these models: Polaris Ranger XP 900, John Deere X300 and Kawasaki Mule PRO-FX. The handling comparison was performed on the FSAE SKEEPD course in gravel conditions. **Same price of \$10,649 after \$2,500 rebate is limited to 2018 in stock models with Minimum Advertised Price of \$14,149 (RTV-X2600MLN, RTV-X2600ZMLN, RTV-X2600ZMLN, \$0 Down, 3.99% APR. Financing for up to 60 months and rebate offers on purchases of select new Kubota RTV-X2600 equipment from participating dealers. In-stock inventory is available to qualified purchasers through Kubota Credit Corporation, U.S.A.; subject to credit approval. Some exceptions apply. Example: 60 monthly payments of \$18.61 per \$1,000 financed. Customer rebate rebate of \$2,500 are available on qualifying cash or standard rate finance purchases. Additional \$500 rebate is available on 2019 models, and \$1,000 additional rebate on purchases of 2018 models only. Rebate is not available with 0% APR promotional financing. Offers expire 6/30/20. Terms subject to change. © Kubota Tractor Corporation, 2020. This material is for descriptive purposes only. Kubota disclaims all representations and warranties, express or implied, or any liability from the use of this material. For complete warranty, disclaimer, safety, incentive offer and product information, see dealer or go to KubotaUSA.com.



Brown marmorated stink bug
(*Halyomorpha halys*). Gary Bernon,
USDA APHIS, Bugwood.org



INTRODUCING INVASIVES

By Julie Van Meter, State Entomologist
Nebraska Department of Agriculture

In 2019, much of Nebraska experienced flooding that devastated towns, agricultural fields and pastures, and displaced large numbers of livestock. The floodwaters also moved around large amounts of sediment, vegetation and other materials. This flood damage left agricultural and natural areas susceptible to attack by invasive species. Some invasive species may have been introduced or moved around by the floodwaters, but others could have arrived on donated goods.

For example, producers in other states sent much-needed donations of hay bales for livestock feed, which were stockpiled at several sites across Nebraska for distribution. While the donations were greatly appreciated, these bales could potentially have contained exotic insects and weeds not found in Nebraska. The Nebraska Department of Agriculture will be conducting surveys in 2020, focusing on these distribution locations, to identify whether any exotic pests were introduced. Early detection will allow for eradication and limit potential long-term environmental and economic damage. Examples of pests included in this survey are imported fire ant (IFA), brown marmorated stinkbug (BMSB) and various state and federal noxious weeds.

Imported fire ants are found throughout much of the southern and southeastern United States. Fire ants feed on new plant growth, including corn and soybeans, affecting yield. These ants have a venomous sting that is injurious to livestock and people. In rare cases, people can have severe, life-threatening reactions to IFA stings.

Brown marmorated stinkbugs are native to Asia and feed on a wide variety of host plants. Damage has occurred on fruit trees, ornamental plants, soybeans, corn and vegetable crops. BMSB have become established in most states east of Nebraska in the past 20 years. A small number have been reported in eastern Nebraska, though its distribution in the state is unknown.

Additionally, numerous state and federal noxious weeds could potentially have been moved in baled hay. Weeds of concern include thistles, lespedeza and other exotic grasses and forbs.

Producers who received donated hay, and suspect an invasive species may have inadvertently been introduced to their property, should contact NDA at 402-471-2351 or send an email to agr.plant@nebraska.gov.

N

SCHOOL OF NATURAL RESOURCES

STUDY
FISHERIES
& WILDLIFE

go.unl.edu/SeekKnowledge

Premier compact pontoon
manufacturers for over 30 years!

HOTWOODS

308-381-6275 Grand Island, Nebraska

www.hotwoods.com

FIVE
MODELS

Multiple Pontoon
design to assure
the ultimate in
stability.

ALL-ALUMINUM
DOCKS AND
WALKWAYS

DO IT ONCE, DO IT RIGHT

YOU NEVER
KNOW
WHAT IS
IN YOUR

LURKING
FIREWOOD

Tree-killing pests, like the emerald ash borer, hitchhike on firewood and spread insects and diseases that destroy our trees. Keep your backyard, campgrounds and favorite places safe from these pests.

PREVENTION IS KEY:

- Buy locally-harvested firewood.
- Ask a park ranger or campground host about where to get local firewood when you travel.
- If you brought firewood in from another area, BURN IT! Don't leave it, don't take it with you.

BUY LOCAL, BURN LOCAL.

To report potential emerald ash borer, contact the Nebraska Department of Agriculture at 402-471-2351.

NEBRASKA
Good Life. Great Roots.

NEBRASKA DEPARTMENT OF AGRICULTURE
ANIMAL & PLANT HEALTH PROTECTION

DONTMOVE
FIREWOOD.org

CHADRON
STATE COLLEGE

Chadron State College offers opportunities
for you to learn and grow as a person,
while meeting new friends.
Get started today at csc.edu

Succeed at CSC

With our reputation as an educational leader you'll have a solid foundation. As you plan your schedule and progress toward your goals, you will receive feedback and advice from caring faculty who want to see you succeed.

Affordability

We take pride in our affordability. We hear often from satisfied graduates who are amazed they were able to complete their degree at a fraction of the cost of other institutions.

CHADRON STATE COLLEGE

cscadmissions@csc.edu | csc.edu | 1-800-CHADRON | 1000 Main Street | Chadron, Nebraska



PRAIRIE GRASS • TURFGRASS
STOCK SEED FARMS
AND WILD FLOWER SEED

**A Leader in Native Grass
& Wildflower Production**

Visit www.stockseed.com to view our entire product line,
request a free catalog, or place an order!

28008 Mill Road Murdock, NE 68407
prairie@stockseed.com • 800-759-1520

Quality Seeds Since 1956

CONNECT WITH US



For outdoor news and events,
subscribe to our
weekly e-newsletter.

Text **“NGPC Newsletter”**
to **468 311**.

Or visit OutdoorNebraska.org
to sign up.



Follow us on your favorite social media



NEBRASKA BARN VENUE

sparksbarn.com



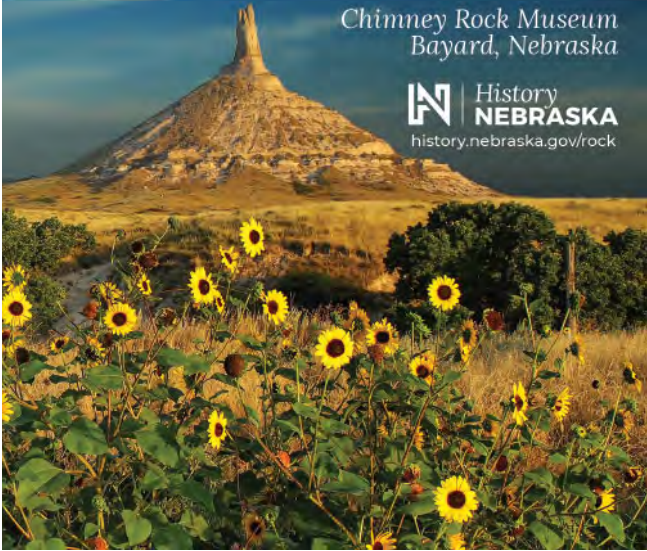

schedule your showing

Opening This Summer
-New interactive exhibits
-Newly remodeled museum

The Most
Famous
Landmark
on Your
Journey.

Chimney Rock Museum
Bayard, Nebraska

 History
NEBRASKA
history.nebraska.gov/rock





2020 NEBRASKA PASSPORT

YOUR GUIDE TO 70 SPECIAL ADVENTURES!
VISIT STOPS + COLLECT STAMPS + WIN PRIZES

Get your free Passport at nebraskapassport.com or any of the 70 Passport stops and download the Nebraska Passport App in your app store.



A NEBRASKA TOURISM PROGRAM



MORE THAN 1 MILLION CRANES IN NEBRASKA

By Eric Fowler

For years, it was advertised that there were about 500,000 sandhill crane on the Platte River in Nebraska during the peak of the spring migration. More recently, the estimate was bumped up to 650,000. New research has found the number to be considerably higher – more than one million in fact.

On the heels of another project that looked at the timing of the peak of the migration, Andrew Caven, director of research for the Crane Trust, started crunching the numbers provided by four different aerial surveys to find a better estimate.

The U.S. Fish and Wildlife Service has been conducting aerial surveys of sandhill cranes in Nebraska since 1957. Since 1982, it has counted cranes on the river and in fields and meadows within 6 miles of the river on the fourth Tuesday in March. The problem with that survey, however, was that it didn't always take place during the peak of the migration, and in recent years varied from 400,000 to nearly 1 million, a shift that is not biologically feasible.

The Crane Trust has been surveying cranes since 1982 on the Central Platte and in adjacent fields from mid-February to mid-April. That survey also has its faults, due to the number of birds that leave the river prior to the morning flight. It did, however, show that the migration peaked anywhere between March 8 and April 8, including 2019, when its peak found 660,000 cranes on the river.

A third study from 2000 to 2003 used thermal imaging surveys to count cranes roosting on the river at night in late

March, finding about 500,000 cranes on the Central Platte, believed to be the most accurate count for a given time.

In the fourth survey by the Rainwater Basin Joint Venture and Fish and Wildlife Service, researchers counted cranes on the North Platte River between North Platte and the Wyoming line and the South Platte River between North Platte and Hershey.

"We tried to use all of these different studies to correct the biases in each of them and increase the coverage and come up with an overall estimate of how many sandhill cranes there are in Nebraska at the peak of the migration," Caven said. "That led us to a center point estimate for 2018 of about 1.27 million birds, with 220,000 in the North Platte River Valley and 1.05 million in the Central Platte River Valley."

Doubling the estimate in the Central Platte in 20 years is feasible considering an accepted annual population growth rate of 3.7 percent. And considering that some cranes arrive in Nebraska and leave earlier than others, Caven's study estimates that on a given year, there may be a peak of between 1.1 and 1.4 million cranes in Nebraska at one time, and there are believed to be 1.5 million birds total in the mid-continent population.

Estimates won't be available for 2020: the Covid 19 pandemic grounded planes for the Fish and Wildlife Service surveys. Caven said based on his surveys, which counted both fewer cranes than last year and a prolonged peak, the overall peak would have been lower this year.



PHOTO BY ERIC FOWLER

GOLF GUIDE

2020



- Open to the Public
- Excellent Practice Facilities
- Bar and Grille to Serve Golfers
- Voted a Must-Play Golf Course in Western Nebraska
- 18-Hole Championship Rated Golf Course that Winds through Rugged Canyons and Plush Valleys



2616 Hillside Dr. • Sidney, NE 69162

(308) 254-2311



www.hillsidegolfcourse.com



308.532.6955

golf@indianmeadowsgolfcourse.com

2746 W. Walker Rd.

North Platte, NE 69101



www.indianmeadowsgolfcourse.com



9-Hole Public Course • 3,250 Yards

Trees, Pond, Creek & Sand Traps

Driving Range • Pro Shop • Snack Bar

INDIAN
M • E • A • D • O • W • S

Public Golf

Course



"Head for the Hills"
Stay & Play Package

Just \$85 for a 1 night stay*
and a day of UNLIMITED GOLF

308.345.5032 | golfmccook.com

info@golfmccook.com

*(dbl.occ.)



SKYVIEW GOLF COURSE
Gateway to the Sandhills

18-hole championship course
located southeast of Alliance in
the beautiful rolling Sandhills!

FAMILY AND WALKER FRIENDLY

308-762-1446 skyviewgc.com

2613 County Road 57

Alliance, NE 69301



Find us on
Facebook





Here is a deer bag shot photo for Portraits from the Past. This is from 1984. Pictured from left is Jerry Kastrap from Laurel, Chuck Hirschman (myself) from Laurel, Dale Hirschman from Omaha, and Ron Hirschman from Laurel.
 – Charles Hirschman, Coleridge



Solomon (Sam) Kufeldt, my dad’s brother, fishing in the late 1950s.
 He wrote on the back of the picture that the two catfish weighed 7½ pounds and 6½ pounds. The third is a carp. They were caught on set lines in the North Platte River near Bridgeport.
 A German from Russia, he immigrated to the U.S. as a 3-year-old in 1914. World War II veteran, awarded Purple Heart after his vehicle struck a mine in North Africa. He loved to fish!
 – Alex Kufeldt, Seward



This photo was taken in 1966, when pheasants were plentiful and hunting them was pleasurable. Pictured from left is Keith Keller, Cliff Keller (my dad’s uncle), Bud Wilson (my dad), and myself, Jim Wilson. We hunted north of Harvard. This was my last hunt for several years as I spent the next four in the United States Navy.
 – Jim Wilson, Grand Island

Send contributions to: Portraits from the Past, Nebraskaland Magazine, P.O. Box 30370, Lincoln, NE 68503-0370. Or e-mail to Tim.Reigert@Nebraska.gov. Photos should show people enjoying Nebraska outdoor activities, such as camping, boating, hunting or fishing, and must have been taken before 1990. We will give priority to unusual photos or activities. When possible, please include a story about the photograph and identify the people, places and approximate date it was taken. Text may be edited and photos adjusted for reproduction. All photos will be returned.



PHOTO BY JULIE GEISER

BLOWN FROM A TREE

By Julie Geiser

A few summers ago a thunderstorm with massive winds swept through North Platte. A friend of mine was in her front yard assessing the damage from downed branches from a tree in her yard when she came across an entangled mass lying on the ground that she couldn't identify. It looked like a cross between tree bark and some sort of mushy mushroom, and she wasn't about to touch it, so she texted a photo of it to me asking if I knew what this strange-looking thing was.

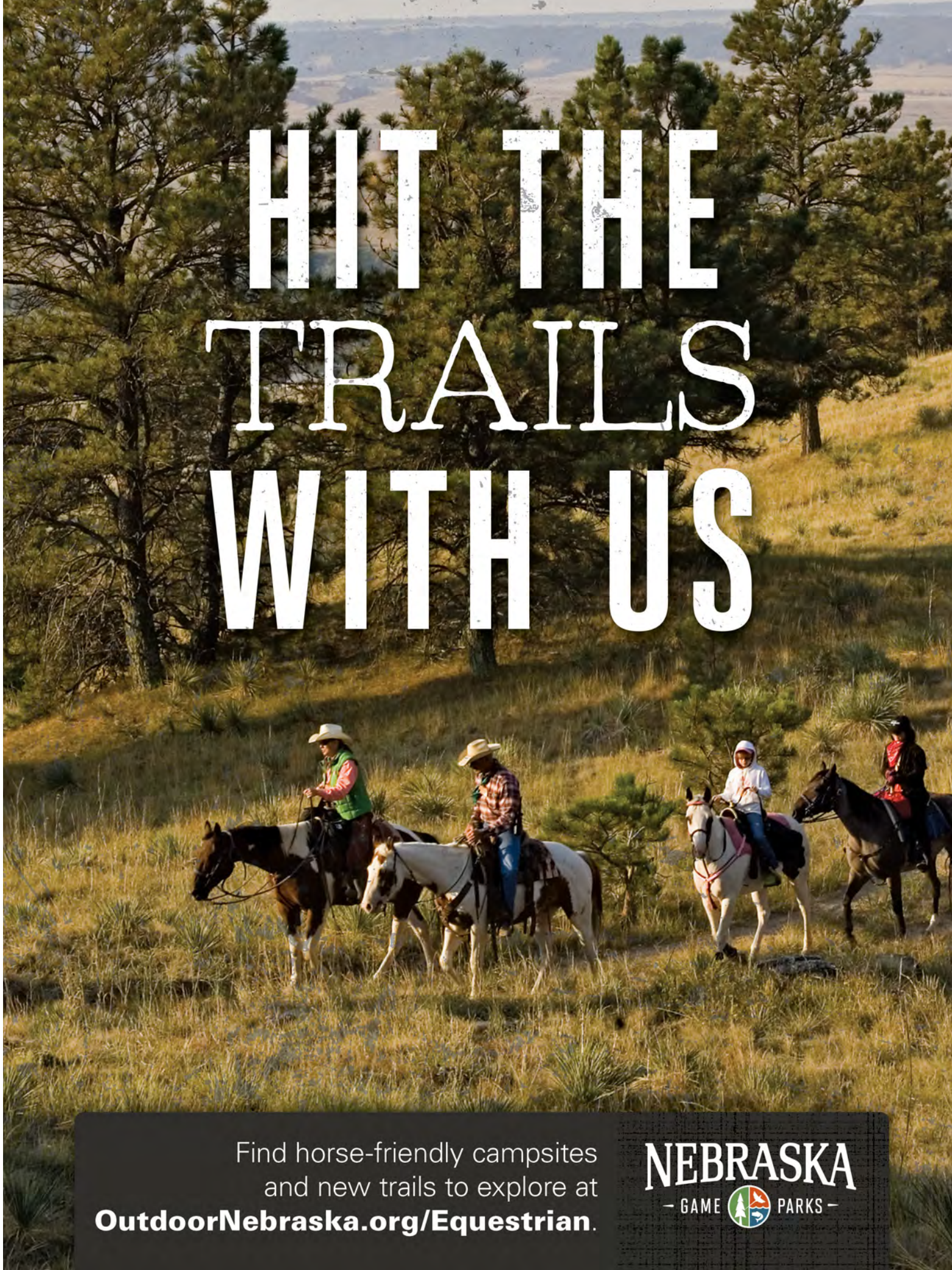
Excited, I knew it was a mother eastern red bat clinging desperately onto her babies or pups. They had blown out of the tree and were on the ground where, if not assisted, could be preyed upon by dogs or cats or stepped on by unknowing people while cleaning up debris.

The mother, eventually, could have gotten herself and her pups back to the tree by clawing her way through the grass with the thumbs on her wings, but it may have taken a while

as the family was blown a good distance from the tree.

Getting the family back to the tree was simple with some human intervention. I took a stick that had fallen out of the tree and gently nudged it next to the entangled mass. Within seconds, the mother's tiny feet and one of her pups latched onto the stick while still tightly clinging together. From there, I climbed a ladder and laid the stick into a crotch of the tree. I snapped a couple photos, turned to climb down the ladder, and when I looked back they were gone, vanished into the crevices of the tree and blending in so well I could not find them. I looked several times to see if I could detect any movement but there was none.

Isn't it amazing how in nature these animals are so adapted to their surroundings that sometimes we don't even know they are there? It was a great experience to get to help these little creatures survive another day and to get a glimpse of them in the wild.



Find horse-friendly campsites
and new trails to explore at
OutdoorNebraska.org/Equestrian.

