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NEBRASKAland

March 2018



Nick Soper of Lincoln scans the sky for geese during a hunt in the Rainwater Basin near Shickley. Photo by Zach Cunningham.

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Nebraska Through the Lens • A Crane Book For Everyone
Roger Welsch's Fire • Travel to Central City • Time Well Spent

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NEBRASKAland Magazine

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ON THE WEB...



WHEN YOU SEE THIS SYMBOL IN THE PAGES OF NEBRASKALAND MAGAZINE, VISIT NEBRASKALANDMAGAZINE.COM AND VIEW OUR INTERACTIVE DIGITAL EDITION FOR MORE INFORMATION.

Cover: Shot toward the end of March, these sandhill cranes were on the south shore of Rowe Sanctuary south of Gibbon. Some early clouds softened the shadows, making it easier to see the feather detail. Photo by Chris Masada.

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Russ Coffey from York checked his trail cameras and caught this interesting picture of deer.



Jerry Kostal of Papillion photographed this muskrat at Walnut Creek Recreation Area.

Visitor Letters

I found the cocoon to the right of the features column on page 3 of my recent *NEBRASKAland Magazine*. I think the cocoon is probably either a butterfly or most likely a locust cocoon (early life feature). I have found several when we plow our garden, but I really did not know for sure which as we often see the shells only on trees after emerging from the cocoon.

Do enjoy the magazine, but Roger Welsh's articles are a favorite. So often he tells of things that I encountered as a youngster growing up in central Nebraska.

Leo Turner
Lisco, Nebraska

Amazing! Outstanding! Absolutely gorgeous photography!!! No wonder the visiting bug didn't want to be seen in this latest issue.

G. E. Dave Fuller
Lincoln, Nebraska

We found the critter on page 35 in the water – a little black bear!
Brenda and Roger
Sent via e-mail



Brenda Creigh saw this fat squirrel at Pier Park in Grand Island.



Star motion by Kyle Styskal.



Kelly Keough of Springview took this sunset photo before a winter storm in Keya Paha County.

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

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Mixed Bag

A Mammal Brief

Southern Bog Lemming

By Lindsay Rogers

Although found throughout eastern Nebraska, the southern bog lemming is rarely talked about. This is due to two factors: 1) They are not terribly common within their range; and 2) They are easily misidentified as voles. Smaller than a prairie vole, the southern bog lemming's total length is between 4-6 inches and weighs 21-50 grams (about the weight of a golf ball).

As their name suggests, southern bog lemmings are often found in moist habitats; in Nebraska this includes wetlands, wet meadows and marshes. They can also be found in grasslands and deciduous forests. They feed mainly on grasses and clover but will also eat fruit, fungi, bark, snails, slugs and beetles. As with other small mammals, they have numerous predators, including domestic dogs and cats, raptors, badgers, weasels and snakes. They are active throughout the day, but are most active from dusk to dawn. ■

Lindsay Rogers is an outdoor education specialist with the Nebraska Game and Parks Commission.



PHOTO BY PHIL MYERS, HTTP://ANIMALDIVERSITY.ORG

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2/3/2018	Great Plains PF	Holdrege
2/3/2018	Webster County	Blue Hill
2/10/2018	Prairie Hills PF	Kearney
2/17/2018	Little Blue River PF	Hastings
2/17/2018	Pheasant Fest	Sioux Falls, SD
2/17/2018	Custer County PF	Broken Bow
2/23/2018	Cornhusker PF	Lincoln
2/23/2018	Franklin County Covey QF	Franklin
2/24/2018	Cedar River Ringnecks PF	Greeley
2/24/2018	Maple Creek PF	Howells
2/24/2018	Seward County PF	Seward
2/24/2018	Ponca Creek Ringnecks PF	Spencer
2/24/2018	Plains Sportsman PF	McCook
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3/1/2018	Douglas County West PF	Elkhorn
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3/3/2018	Lincoln Creek PF	Aurora

Date	Chapter	City
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3/10/2018	Loup River PF	Ord
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4/14/2018	Antelope Valley PF	Oshkosh



For more information visit www.NebraskaPF.com

Visit Central City

By Brenna McFadden, Nebraska Tourism Commission

Central City is a small town with rich, beautiful views of the Nebraska countryside. If you are looking for a relaxing getaway that offers a wide variety of activities, from biking, shopping at local boutiques or spending time at a vineyard, then this is the place for you.

For bikers, Central City features a rail-trail of crushed stone more than 8 miles long. The Dark Island Trail is open year round and travelers are welcome to ride horses, mountain bike, walk, run and cross country ski. One of the most memorable features of this trail is its 1,072-foot long bridge that spans the Platte River just south of Central City. Take a nice walk and enjoy a beautiful sunset over the water from a bridge view.

If you are looking to spend more time in town then plan to visit Positively You Boutique. Located in an old Tasty Sweet Shop, they offer special gift items and home décor with a personal touch. While you are browsing you can sip on some coffee and sample some of their hand-dipped chocolate truffles.

After spending a day outside or



Positively You Boutique is located on 16th Street in Central City.

strolling through the city you can make your way over to Prairie Creek Vineyard & Winery for an appetizer, dinner and a glass of wine. This family-run business has been in operation for 12 years, and they offer a welcoming and comfortable atmosphere for all who visit.

Central City invites you to create your next vacation memories with extraordinary views and exceptional service from local businesses. Pack up the car and get ready for a weekend

well-spent of admiring what this small town in Nebraska has to offer. ■



The Prairie Creek Vineyard & Winery features a host of white and red wines that can be tried in their tasting room.



Opened in 2007, the Dark Island Trail is an 8-mile long hike/bike trail that extends from just south of Central City to Marquette along a former railroad. The trail passes through farmland, densely wooded areas and over a long wooden bridge with spectacular views of the Platte River.



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A Brief History

Country Editors Can't Stomach Corn Bread Day

By James E. Potter, Nebraska State Historical Society

In 1899 the *Omaha World-Herald* floated the idea of setting aside a special day to honor corn bread, which it called "the Yellow King in food form." After all, corn bread had been a staple for many of the early pioneers, who ate it for breakfast, dinner and supper, and in many instances it probably staved off starvation.

The idea fell flat with Editor A. H. Holmes of the *Wilcox Herald*, who had grown up in the corn bread era. He thought the idea might be all right for those who were unacquainted with corn bread, "but for us old timers who in bygone years had our intestines rifled out with the rasping roughness because we couldn't get anything else, it is entirely unnecessary. We know all about it ... we are acquainted with it in all its forms: baked, boiled, fried and fricasseed we have eaten it until for years afterwards the sight of a corn field would give us the diarrhea. Yes, it is all right to bring the smooth bore bowels of anterior easterlings in touch with the rough edges of the rasping corn dodger but us old fellows have been there, thank you."

Holmes's views resonated with Cash Martin, editor of the *Alma Journal*: "Colonel Holmes ... kicks on having to put any more baked, boiled, fried, or fricasseed cracked corn into the interior of his corporeal system and we see where the colonel is right. We remember in the days of our childhood we had fried mush for breakfast, boiled mush for dinner, milk and mush for supper, and for dessert, it was milk de mush, mush on de milk, and on

Andy Howland, south West Union, Custer County, 1886. NSHS RG2608-1093

rare occasions, corn pone on the side. Oh, it was tough on the intestinal part of our anatomy and we think it would be detrimental to the best interests of Nebraskans to have a Corn Bread Day, except perhaps, for the few citizens of our fair state who fail to swallow their per capita of Early Risers." ■



These cowboys are better fed at their chuck wagon in 1898 than were many newly arrived homesteaders. NSHS RG2575-48

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Turkey Call Trifecta

By Jarrod Spilger

There are three main types of turkey calls: **box**, **pan**, and **diaphragm**. Turkey hunters should be proficient with all three to maximize their chances of success. Let's take a look at each type.

Boxes are the easiest to master. Simply run the paddle-like lid across the lip of the box's rectangular sound chamber. Traditionally, chalk is applied to the lid's underside to create the friction that produces turkey sounds, although some newer models use a synthetic, waterproof coating instead. Typically very loud, boxes are ideal for windy days.

Pans are another friction-type call. They consist of a round pan, or pot, which houses a slate, glass or aluminum surface, and a striker made of wood, plastic or carbon. Volume and tone varies based on surface type, with slate being the softest. Cup the pan lightly around its rim with your weak-side thumb and index finger and hold the striker in your strong-side hand like you would a pencil. Turkey sounds are made by scratching the striker across the pan's surface. Small, half circles make yelps, long, straight lines produce purrs, and short, sharp strokes create clucks. Pans can't be beat for making realistic purrs.

Diaphragm, or mouth, calls consist of varying layers of latex "reeds" stretched across a horseshoe-shaped aluminum



PHOTO BY JEFF KURRUS

frame covered in surgical tape or foam. The more reeds the more difficult the call is to operate. Turkey sounds are made by placing the call against the roof of the mouth and "huffing" air up from the diaphragm to vibrate the latex. The tongue controls cadence. Volume can be loud, but usually not as loud as a box. While some people find them difficult to master, a mouth call's main benefit is its hands-free operation, making it the go-to call for sealing the deal when gobblers get close. ■



PHOTO BY JARROD SPILGER

Learning how to use each of the three main types of turkey calls – box (top), pan (middle) and diaphragm (bottom) – gives hunters a variety of methods to lure in a turkey.



Come Share "The Good Life" in Central Nebraska at Jeffrey Lake near Brady. The Central Nebraska Public Power and Irrigation District (Central) is seeking an individual or couple to perform house-keeping, lawn and cabin upkeep, and general grounds maintenance at the historic Jeffrey Lodge.

Recreation is a secondary benefit of Central's hydro-irrigation project. Nebraskans and visiting vacationers enjoy the excellent fishing, boating, swimming, camping and other recreational opportunities provided at Jeffrey Lake and along the Supply Canal. A full hookup RV site is offered in exchange for approx. 20 hours of work per week. Visit us online at www.cnppid.com for more info about Central or contact us at: lritz@cnppid.com or 308-529-0009 with questions.



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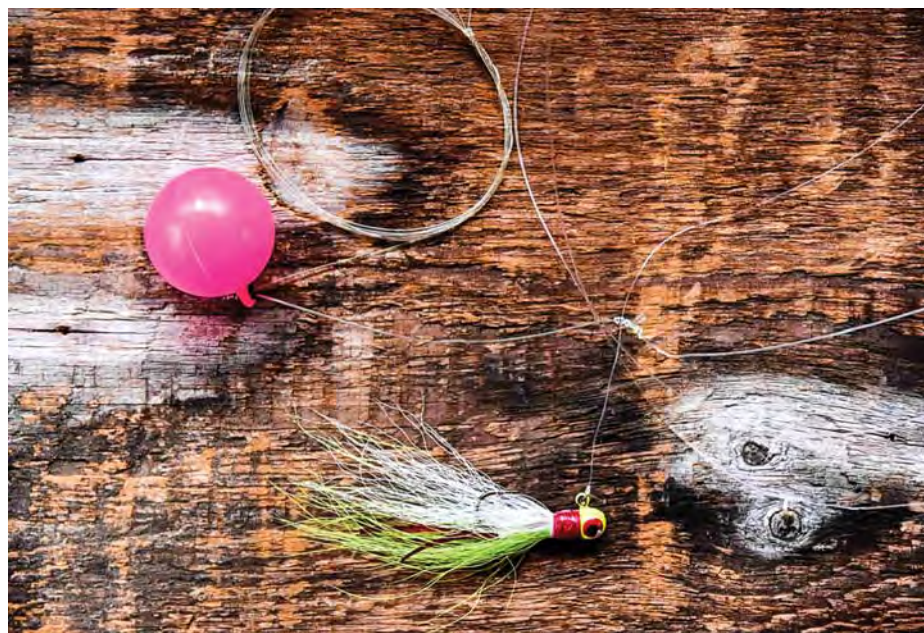


Float 'n' Fly

By Ryan Sparks

Dealing with the wind is one of the biggest challenges in fly fishing. Large lakes frequently deliver powerful gales that make casting difficult if not impossible, and Nebraska's spring wind causes fly anglers to check the forecast compulsively, waiting for a break when they can fish again. However, one technique turns the wind to the angler's advantage – the float 'n' fly.

I serendipitously discovered the float 'n' fly out of necessity. The farm pond I fished growing up sits on a high hill. Consequently, it's windy more days than not. I stumbled into the float 'n' fly by combining small crappie jigs with bobbers (sometimes called indicators) traditionally used for nymphing trout. After catching numerous crappie, bluegill and largemouth bass, I realized how well the system works. After doing some research, I found out I wasn't the first one to use the technique. In fact, Tennessee anglers invented the rig years before to catch lethargic winter bass.



The float 'n' fly consists of a jig style fly attached below a lightweight bobber.

The float 'n' fly consists of a jig style fly attached below a lightweight bobber. The best aspect of the rig is its minimalism. Simply adjust the depth of your jig below the bobber and lob the rig into the water. At that point, the wind moves the float 'n' fly across the water and the chop imparts action to the fly. For fly-fishing, I use 1/16th and 1/32nd-ounce jig heads tied with craft fur, buck tail or marabou. These materials undulate and breathe in the water, adding even more movement. I have also used the rig with spinning gear, but upsize the jig to a 1/8th ounce. Using light line, like 3- to 5-pound test, lets the jig move freely as it bounces under the bobber. Different size floats affect how your fly rides in the water. Large floats create a tight up and down jigging, while small bobbers give the fly a wide arching path. The jig head keeps the hook point up, suspending the fly in front of fish while avoiding snags on the bottom. Keep a close eye on the bobber; sometimes fish will take it from below and lift the fly. This lift causes the bobber to lay over on its side or spin, but it won't be pulled under. If the bobber does anything but bounce in the chop, set the hook.

The float 'n' fly is also an excellent option when the weather turns cold. Winter temperatures make fish sluggish, and require a presentation for inactive, suspended fish. The float 'n' fly does just this, offering the bait in a slow, subtle manner that even slothful fish can't resist. On still days, fish the rig by casting it out and working it back with a series of short twitches. Pop the rod five or six times and then let the fly sit for a few seconds. This presentation mimics the dying minnows that are common in fall and winter.

The float 'n' fly is a simple and effective technique for a number of species, yet many fly anglers are unaware of it and head home when the wind picks up. While it is laughably simple, it will surprise you with its effectiveness and extend your fishing season to include windy and cold days. Try it the next time the wind is giving you fits. The float 'n' fly will turn your frustration into excitement. ■

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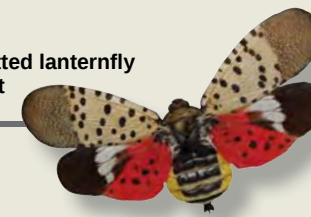
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Spotted lanternfly adult



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Bug Banter

By Julie Van Meter
State Entomologist, Nebraska
Department of Agriculture

The spotted lanternfly (*Lycorma delicatula*) is an exotic, invasive insect which recently has been found in the United States. Its native range includes China and India, and it likely was introduced to the U.S. via trade. It was first discovered in Pennsylvania in 2014, and has recently also been found in New York, Delaware and Virginia. It has not been found in Nebraska.

The adult spotted lanternfly (SLF) is about one inch long with gray forewings. These wings have black spots at the upper half and narrow black rectangles on the lower half. The underwings are red with black wingtips. Early instar nymphs are black with white spots, but later instars are red

with black patches and white spots.

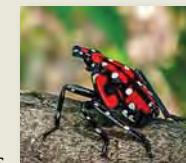
The females lay egg masses on trunks of trees, or any smooth surface, in the fall. Egg masses initially look gray and mud-like, but as they age, turn brown and individual eggs laid in rows within the mass become visible. Eggs hatch in the spring, with nymphs seeking out new hosts on which to feed.

The SLF's preferred host is the tree-of-heaven (*Ailanthus altissima*), and if it only fed on this weedy, invasive tree, it would not be a significant problem in Nebraska. However, SLF will feed on more than 65 different plants, including grapes, fruit trees, oak, walnut and even pines, making it a pest of concern to Nebraska.

Both nymphs and adults feed on plant sap, and similar to other leafhoppers,

have piercing-sucking mouthparts. The SLF does not feed on foliage or flowers, but on the woody parts of plants – the trunk or branches. Their feeding may cause weeping wounds on trunks, and the insects secrete honeydew, which can accumulate on and around the host plants. Infested plants experience reduced vigor, and fruit trees and grapes fed on by the SLF will often produce lower yields. The insects may also vector other diseases as they feed.

As with any exotic, invasive pest, early detection is key to effective control. Be vigilant in keeping an eye open for invaders such as SLF. If you think you've seen a SLF, take pictures or collect a specimen, and report your suspicions to the Nebraska Department of Agriculture at 402-471-2351. ■



Later instar.

PHOTO COURTESY OF LAWRENCE BARRINGER, PENNSYLVANIA DEPARTMENT OF AGRICULTURE, BUGWOOD.ORG.



Early instars.

PHOTO COURTESY OF LAWRENCE BARRINGER, PENNSYLVANIA DEPARTMENT OF AGRICULTURE, BUGWOOD.ORG.



Adults.

PHOTO COURTESY OF LAWRENCE BARRINGER, PENNSYLVANIA DEPARTMENT OF AGRICULTURE, BUGWOOD.ORG.

YOU NEVER KNOW WHAT IS LURKING IN YOUR 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

Upcoming Events

by Jerry Kane

Contact the Nebraska Game and Parks Commission at 402-471-0641 or visit OutdoorNebraska.org for more information. Visit huntsafenebraska.org for a list of hunter education classes and boatsafenebraska.org for a list of boating safety classes.

Learn how to hunt spring turkey by attending a workshop this month. Dates are listed below.

March 3
Volunteer Youth Fishing Instructor Training
St. Mary's Parish Center, Bellevue

March 10
Wildlife and Watercolors
Wildcat Hills Nature Center, Gering

March 10, 17
Marsh Madness
Ponca State Park, Ponca

March 16
Nebraska Game and Parks Commission Meeting
Columbus

March 17
Learn to Hunt Spring Turkey Workshop
Mid-Plains Community College, McCook

March 24
National Archery in the Schools Program State Tournament
Speedway Sporting Village, Lincoln

March 25
Spring Turkey Hunting Archery season opens

March 27
Learn to Hunt Spring Turkey Workshop
Nebraska Game and Parks Outdoor Education Center, Lincoln

March 29
Learn to Hunt Spring Turkey Workshop
Platte River State Park, Louisville

March 31
Muskrat and Beaver Trapping seasons close for muskrat and beaver

March 31
Spring Eggstravaganza
Ponca State Park, Ponca

March 31
Becoming and Outdoors-Woman Catching Up with the Cranes, Fort Kearny State Recreation Area, Kearney

The 2018 NASP Tournament will be held on March 24 at Speedway Sporting Village in Lincoln.

Junior Duck Stamp

By Justin Haag

Students in kindergarten through 12th grade will once again show off their skills as waterfowl artists during the Federal Junior Duck Stamp Competition.

Each year, hundreds of entries from students throughout Nebraska are judged at a public event in the Panhandle. This year's entries, which are due March 15, will be judged at the Educational Service Unit 13 center in Scottsbluff on March 23.

Promise Raumaker, a 13-year-old student of the Debbie Plog Art Studio in Omaha, won last year's Nebraska competition. Raumaker used colored pencil, oil pastel and acrylic paint to create an image of a king eider in flight – a large sea duck that spends most of the year in coastal marine environments and breeds on the Arctic tundra in June and July.



ARTWORK BY PROMISE RAUMAKER

The Junior Duck Stamp Conservation Program, administered by the U.S. Fish and Wildlife Service, provides students throughout the United States a learning opportunity that combines both art and science. Every year, artists and wildlife educators visit schools to introduce the competition and assist the students.

Each year's winning entry is placed on the next year's Nebraska's waterfowl stamp. It also moves on to compete against other states' winners and a chance to be chosen for the national junior duck stamp – a collector's item that is available for \$5.

For details about the competition, contact Lydia Patrick, Nebraska's contest coordinator, at lydia_patrick@fws.gov. More information and contest guidelines may be found at fws.gov/juniorduck. ■



Wayne Stang and his daughter, Darian, of Wahoo archery hunt for turkeys during the spring.

Turkey Hunting: Take a Youth

By Julie Geiser

March is the start of the spring turkey season, and if you go hunting consider taking a child with you. Whether it is your own child, grandchild or the neighbor kid, get them in the field to experience the same love you have for the outdoors.

First, visit OutdoorNebraska.org/wildturkey for youth season dates and complete rules and regulations. Then start by taking the child shooting to teach them safety and shooting skills, whether with a bow or shotgun.

When taking kids into the field, keep the following tips in mind:

- Some kids usually can't sit still for too long, so keep them occupied with a simple push button yelper that anyone can use to call in birds.
- Let them look for birds with binoculars. If you both have binoculars, try finding different animals or landmarks and make a quiet but fun game out of it.
- Bring a digital camera and let the child take photos of the outing, and print them out later as a keepsake.
- You'll need snacks and drinks for the day. To keep the crackling noises of most packaged foods down to a low roar, repackage them in quieter zip-close bags.
- Blinds make hunting much more kid-friendly and enjoyable. Movements can be concealed more easily in a blind than sitting in the open. Taking photos, looking through binoculars or napping works better inside a blind as well.
- Small heaters in a blind make a chilly morning more comfortable, and you'll have another set of hands to haul gear.

Get a kid in the field. You'll pass on a hunting tradition, making great memories and new experiences. ■

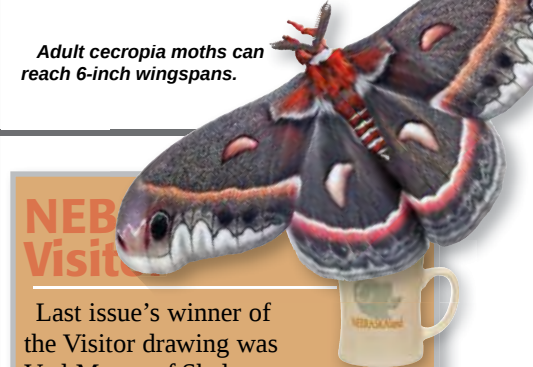
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Adult cecropia moths can reach 6-inch wingspans.

NEB Visitor

Last issue's winner of the Visitor drawing was Verl Morey of Shelton, Nebraska, who found the **cecropia moth pupae** on page 3.

Readers are encouraged to contact **NEBRASKAland** within 10 days after this issue's publication with the correct page number and name of this issue's "Visitor" – a critter found in Nebraska. We will then gather the correct entries and draw one to win a **NEBRASKAland** mug.

To enter each month, write:

NEBRASKAland Visitor
2200 North 33rd Street
Lincoln, NE 68503

Or e-mail: Tim.Reigert@Nebraska.gov with "Visitor" in the subject line of the message.

HINT: This issue's visitor is not on page 3, 15, 17, or 18-25.

The cecropia moth (Hyalophora cecropia) is the largest moth in North America and is found throughout Nebraska. The caterpillar has five instars – a phase between two periods of molting in the development of an insect larva – before pupating in a protective silk cocoon, and ultimately emerging as an adult the next spring. Look for their cocoons after leaf drop occurs, attached to branches or twigs. Cecropia moth caterpillars are small and black when they first hatch, and over time become large and green, with colorful protuberances in red, yellow and blue. They feed on a wide range of plants, including cherry, plum, willow, maples and elm. Adult moths are brown to gray with reddish and white markings and reddish legs, and a wingspan of up to 6 inches. While the caterpillars are large and their host range extensive, they do little damage and are not considered plant pests.

Special thanks to Julie Van Meter, State Entomologist, Nebraska Department of Agriculture.



Nebraska's Moth Diversity

Hidden by the Night

By Gerry Steinauer, Botanist

As a kid I would get excited at the sight of a huge cecropia moth fluttering about the street light while we played kick the can at night or a hummingbird-like sphinx moth hovering about my mom's petunias. But for the most part, I never gave much thought to moths. They were mostly small, dull creatures of the night, the ugly cousins of the beautiful, day-flying butterflies.

My short-sighted view of moths recently changed. An intriguing night of mothing last August with Mark Brogie in the backyard of his Creighton home enlightened me to the diversity and splendor of Nebraska's moths, a diversity that presently is largely undocumented and awaiting discovery.

A Night of Mothing

On that August evening, as I drove eastward on Highway 59 toward the small town of Creighton in Knox County, the landscape conveyed predictable eastern Nebraska: corn and soybean fields dominated, woodlots sheltered farmsteads and a few surviving prairie pastures and hay meadows were scattered among the rolling hills and valleys. Arriving at Brogie's house on the edge of town, his yard also was typical: a bluegrass lawn with basswood trees in front, while a few pines, lilac hedge, black walnut and white mulberry graced the back. I was baffled that Brogie was capturing such an abundance of moth species in this rural setting with

few native habitats.

I have known Brogie, who recently retired after 34 years as a high school science teacher in Creighton, since the late 1970s, when we were both biology majors at Wayne State College. He was known then as a serious birder and still is, having observed more bird species in Nebraska (418) than anyone else. When a waif bean goose or Harris's hawk wanders into our state, he will drive miles to see it.

Brogie added mothing as a hobby in 2014. "I was practicing with the macro lens on my new camera taking photos of moths attracted to our porch light," said Brogie. "Out of interest, I looked up and identified some on websites." When Brogie learned that many of these moths had never been reported for our state he was hooked. "I discovered that Nebraska was delinquent in moth records, and I would help us catch up with other states," he said. On most summer nights, he now stays up into the wee hours capturing and photographing moths attracted to an array of lights set up in his backyard.

On our night of mothing, as darkness descended and the sounds of crickets chirping replaced that of children playing, Brogie put the final touches on his mothing stations. He hung a white sheet below a low, sprawling mulberry branch with a fluorescent light wired above it. Moths attracted to the light would land on the sheet. Another light hung from a branch of the walnut tree, one by the lilacs and yet another below the back deck, all with sheets spread on the ground below or hung nearby. The glowing sheets below the

ABOVE: Mark Brogie checks for moths on a sheet illuminated by a fluorescent light.

OPPOSITE: A white-lined sphinx moth hovers while feeding on a tall thistle flower. It is one of 32 species of sphinx moths known in Nebraska.

illuminated trees cast a Halloween eeriness over the yard.

Brogie has experimented with a variety of lights – from black, mercury halide, incandescent, and soft white to color-enhanced bulbs – because various moth species are attracted to different wavelengths of light. While scientists are not entirely sure why moths are attracted to light, they have theories. "My sets are Mothing 101 and not very complicated," said Brogie. "Some people use various moth traps and baits to attract them [some moth species will come only to bait and not lights]. I haven't had time to build sophisticated sets, but I hope to someday." Brogie has mothed at other sites, such as campgrounds at Indian Cave and Ponca state parks with electrical outlets. But without a mobile power source to run lights, his mothing is mainly restricted to his backyard.

Soon moths began drifting in, circling the lights before settling on the sheets. Brogie moved between stations checking for moths with the anticipation of a catfisherman running his set lines. When a moth sparked his interest he placed a clear plastic cup over the moth and then slid a thin piece of cardboard along the sheet, trapping the moth between it and the cup. He transported the captured moths to



PHOTO BY CHRIS HELZER

PHOTO BY GERRY STEINAUER





Brogie transports captured moths to the railing on his deck where he lets them settle before uncovering and photographing them. The moths are released and the photos used for identification purposes.

the railing below the deck light, left them to settle down, and would return later to uncover and photograph them.

The night was calm, but cool for August and the mothing was slow compared to warmer nights. Also, a week earlier the city had sprayed the neighborhood for mosquitos and “knocked the moths back some.” On good nights, over a hundred moth species are attracted to Brogie’s lights.

About 11 p.m., the grass now wet with dew, the action picked up. “Different species come to the lights at different times of night, and some say 2 a.m. is the best time for mothing,” said Brogie. He also sees a progression through the season as different moth species emerge, the lifespan of many being only a few short weeks. He starts mothing on warm nights in March and April and continues until the first autumn frost. Peak mothing is during the heat of summer.

Brogie knew most moths, at least to family, coming to the lights and often called out their intriguing names: “chickweed geometer ... a cottonwood dagger ... a dart ... an owlet.” The largest moth caught that night was a waved sphinx. We saw no large and spectacular giant silkworm moths – cecropia, luna or polyphemus. Upon close inspection, all of the captured moths were interesting. The bodies and wings of most were intricately patterned or stunningly colored, their antennae often bizarrely-shaped. A few moths were shaped like military jets; others were camouflaged to look like leaves or bark. Brogie has caught

moths that mimic bird droppings, a protective measure against predators.

At one point, I went into the house and talked with Ellen, Brogie’s wife and also a retired science teacher. “He says he moths to document new species, but for him it is a whole



During our night of mothing, Brogie captured the first pondside pyralid recorded for Nebraska. Its caterpillars are aquatic, feeding on duckweeds, pondweeds, sedges and other wetland plants.

Lepidoptera Natural History

Moths and butterflies belong to the order of insects known as *Lepidoptera*. With about 180,000 known species worldwide, it is the fourth largest insect order. Roughly 10 percent of *Lepidoptera* are butterflies and the remainder are moths.

A key characteristic distinguishing *Lepidoptera* from other insect orders are the scales, which are actually modified, flattened hairs that cover their bodies and wings (*lepid* means scale and *ptera* means wings). The dust-like scales form

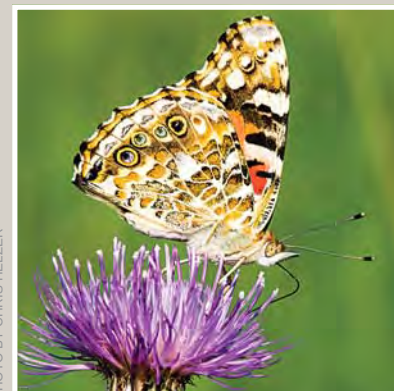


PHOTO BY CHRIS HELZER

Unlike moths, butterflies have slender antennae with club-shaped ends. This painted lady butterfly is using its proboscis to draw nectar from a flower.

the dazzling variety of patterns and colors found among species. They also leave the smudge of color on your fingers when you touch a moth or butterfly. Also characteristic of *Lepidoptera* is the coiled proboscis under their heads which, when uncoiled,

functions as a straw to draw nectar from flowers. Except for one primitive group of moths, adult moths and butterflies lack chewing mouth parts.

Having occupied the Earth for at least 190 million years, *Lepidoptera* have evolved into



PHOTO BY CHRIS HELZER

Now fairly uncommon in Nebraska, the cecropia moth inhabits our eastern woodlands. Belonging to the giant silkworm moth family, the wing-span of adult females can reach six inches.

a variety of forms. “The popular division of *Lepidoptera* into the familiar butterflies on the one hand and the moths on the other [is an] artificial classification, with butterflies ... making up a small, easily recognized group of brightly colored, day-flying insects with clubbed antennae. Moths, then, are simply all *Lepidoptera* other than butterflies,” wrote Stephen A. Marshall in his fascinating book, *Insects – Their Natural History and Diversity*. The moths include a variety of sub-groups, some fairly distantly related, with an array of forms and habits (see sidebar on pages 24-25).

Several characteristics distinguish moths from butterflies. While butterflies have slender antennae with clubbed-shaped ends, moth antennae vary in shape from comb-like or feathery to slender, but always un-clubbed. Moths also generally have stout and hairy bodies and perch with their wings spread, whereas butterflies have more slender, smoother bodies and when perched many fold their wings above their backs. While butterflies are day flyers, moths generally fly at dusk, night or dawn, though a few are day flyers.

With their great abundance and diversity in native ecosystems, moths and butterflies perform a vital role as pollinators and are a critical food source for other species. Although some *Lepidoptera* species, especially moth caterpillars such as cornborers, bollworms and gypsy moths, are crop or forest pests, the benefits most provide to humans and the health of our planet far outweigh the negatives. In Nebraska, the primary threats to moths and butterflies are the loss of native habitats, pesticides and climate change. ■



Similar to all moth caterpillars, the salt marsh moth caterpillar has chewing mouth parts which it uses to feed on the foliage of a variety of plants, including apples, cabbage and potatoes.

new arena, and he enjoys the challenge of identifying the moths,” said Ellen. “Everybody in town knows him and they know he’s mothing because our backyard is so lit up they could see it from the International Space Station. The teenage lifeguards at the pool bring moths over for him to identify and some nights neighborhood kids help with the mothing. They get pretty excited. When you can get kids interested in nature that’s always pretty cool.”

We shut down our mothing about 1 a.m. and hit the sack. When I awoke the next morning, Brogie was already sitting at the kitchen table examining photos and identifying unknown moths from the night before. Since there are no practical written keys for moths, he identifies most species by comparing his photos to those in field guides. For difficult specimens, he posts photos on the websites *BugGuide* and *Moth Photographers Group* where experts from around the country help with identification.

Among the previous night’s moths was the pondside pryalid, a new species for his yard and one not recorded for the state on *BugGuide* or *Moth Photographers Group*. Its closest known populations are in Minnesota and Oklahoma. In just three summers of mothing, Brogie has identified nearly 500 moth species in his backyard. If such diversity



PHOTO BY CHRIS HELZER

During pollination visits, the female yucca moth lays its eggs in the flowers of yucca plants. The caterpillars develop in the seed pods, feeding on seeds but leaving enough uneaten that the plant is still able to reproduce. The yucca moth is the yucca plant’s sole pollinator and, in this extreme case of evolutionary specialization, the two species are dependent on each other for survival.

can be found in a typical small town, it raises the question of how many species reside throughout Nebraska in native landscapes – our prairies, woodlands and wetlands?

Nebraska’s Moth Diversity

About 11,000 moth species are known in North America north of Mexico, but “we really do not know how many of

those occur in Nebraska,” said Neil Dankert, an expert on Nebraska butterflies who lives in Kearney. “Nebraska is 10th in the nation in butterfly diversity, and if moth diversity correlates with butterfly diversity we could also be in the top 10 in moth diversity.”

Dankert explained that mountainous states generally have the greatest *Lepidoptera* (the order including moths and butterflies) diversity. Mountains have wider gradients of elevation, precipitation and soils which in turn support more diverse plant communities. “Generally higher plant diversity supports higher moth diversity,” said Dankert. He said that for an area to support a varied moth fauna it must provide food for both caterpillars (leaves and other plant parts) and adults (nectar). In addition, the caterpillars of most moth species usually feed solely on a single or closely related group of plants, their host plant(s). There are countless moth “specialist feeders” found in Nebraska, including the leadplant flower moth, Virginia creeper sphinx, phragmites wainscot and yucca moth. These moths survive only in habitats sustaining their host plants. For example, the yucca moth lives only in dry, sandy or silty prairies with yucca. The caterpillars of “generalist moths” feed on a larger variety of plants, and these species are normally more common and have wider distributions.

Nebraska’s potential for high moth diversity stems from the variety and relative intactness of our native plant communities, ranging from deciduous woodlands in the east to pine woodlands in the west to prairies statewide. Dankert believes one potential hotspot for moth diversity is the deeply-incised Niobrara Valley east of Valentine. Here, on the river bluffs, western outliers of deciduous woodlands intermingle with western pine woodlands and remnant birch forests from glacial times. Also, Sandhills prairie and mixed-grass prairie cover the south and north bluff tops, respectively, and wetlands and riparian woodlands occur along the river and feeder streams. The area is home to nearly 600 plant species, with most found on The Nature Conservancy’s 56,000-acre Niobrara Valley Preserve. On the preserve, Dankert has collected 86 butterfly species. That is nearly half of the 206 species recorded in the state, including some that have not been seen in more than 50 years and are likely extirpated, and others that are rare waifs or migrants.

Panhandle escarpments, primarily the Wildcat Hills and Pine Ridge that include pine woodlands, several prairie types, badlands and deciduous trees in seepy draws, may also support a rich moth fauna. Because the caterpillars of many moths feed on deciduous trees, especially oaks, another hotspot might be the 3,000-acre, richly-wooded Indian Cave State Park located on the Missouri River bluffs in Nemaha and Richardson counties.

In similar woodlands at Hitchcock Nature Center in the Loess Hills above the Missouri River in Pottawattamie County, Iowa, Loren and Babs Padelford of Bellevue caught 122 species in a single night of mothing this past July. The Padelfords, like Brogie, were avid birders before they delved into moths in 2010. Much of their mothing has been at Fontenelle Forest and Neale Woods nature centers near

Omaha. In 2017, they caught and photographed 362 moth species in Nebraska.

In 2013, the Padelfords attended the first Mothapalooza conference, “a celebration of the rich and stunningly beautiful world of moths,” at Shawnee State Park in Ohio. The annual event attracts 250 participants for presentations on moths and other pollinators, nights of mothing, and field trips. “If we held a similar event in Nebraska we might attract 10 people,” said Babs. “Some states have more moth enthusiasts and therefore a more thoroughly documented moth fauna.”

In Iowa, for example, two dedicated self-taught lepidopterists, Frank Olsen of Cedar Rapids and Jim Durbin of Marion, have collected and identified nearly 1,800 moth species during the past 15 years. At present, roughly 2,200 species are known from the state. “Each year we still identify about 100 new state records,” said Durbin. “Occasionally we find a moth never before reported anywhere, a species new to science.”

“A reasonable guess is that Iowa is home to about 2,500 moth species,” said Durbin. Most of the larger species have been identified and Durbin believes that many of the new finds will be small, nondescript “micromoths,” some of which can be less than an eighth of an inch in length. Durbin can identify many micromoths, but some he must send to experts for identification.

Olsen and Durbin are considered Iowa’s authorities on moths. “We became the experts because until recently we were the only ones collecting and identifying moths in the state,” said Durbin. “In the last 10 years, more Iowans have become interested in moths and are collecting and documenting species.”

Unlike Iowa, most regions of Nebraska have never been surveyed for moths, and there is no formal list of species found in the state. If tallied, the moths identified by Brogie, the Padelfords and a few others may total about a thousand species.

“I would expect Nebraska to at least equal and likely well exceed Iowa in moth numbers,” said Dankert. “We have more butterfly species than Iowa and our landscape is more diverse.”

In other words, there are well over a thousand moth species in Nebraska waiting to be documented. A few will likely be species new to science. What the state needs is more people like Brogie and the Padelfords who are interested in moths and willing to search for the undiscovered. Without this citizen interest, our moth diversity will remain hidden by the night. ■

The best moth guide for Nebraska is the Peterson Field Guide to Moths of Northeastern North America. The website Butterflies and Moths of North America (butterfliesandmoths.org) contains photographs, range maps and natural history information for many Nebraska moth species.



PHOTO BY GERRY STEINAUER

Wildflower-rich prairies, such as this Sandhills prairie in Brown County, provide a variety of nectar sources for moths, as well as other insects, and are vital to their survival.

A Selection of Nebraska Moths

NEBRASKAland photographer Eric Fowler accompanied me last August on the night of mothing with Mark Brogie. Using a Nikon D810 or D4 DSLR, a 105mm Micro-Nikkor macro lens and a Nikon Speedlight in a softbox, Fowler photographed a selection of the moths captured that evening. Some of the smaller species, which measured as little as 3/16th of an inch in length, required the use of an extension tube. ■



PHOTO LEFT BY GERRY STEINAUER. ALL MOTH PHOTOS BY ERIC FOWLER



The colors and pattern of the Hulst's flower moth camouflage it against the flowers of white sage, a native prairie plant, on which it feeds and lays its eggs.



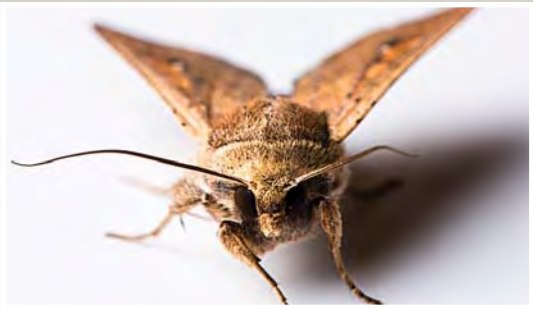
The caterpillars of the Montana six-plume moth feed solely on snowberries, native shrubs, probably as leaf or flower miners. The moth's wings are deeply cleft to the basal forks of the veins forming six plume-like segments.



The pepper-and-salt geometer has light and dark forms. The dark forms predominate in areas where industrial air pollution has darkened trees. The caterpillars of geometer moths, also called loopers, are inchworms that loop along by drawing the hind end up to the front, then extending the front and repeating the process.



Common pinkbands fly from May through September with at least three generations per year.



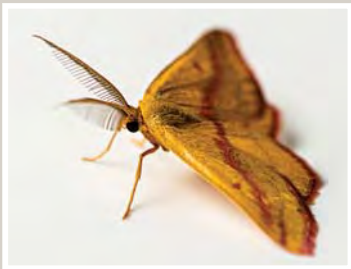
The white-speck moth has a single white dot (not clearly visible in the photo) toward the rear of each wing. They are also called armyworm moths because their caterpillars move in lines as a massive group similar to an army on the march.



Caterpillars of the pink-washed aristotelia feed on native legumes including prairie-clovers, prairie bush-clover and tick-clovers. The moth was the smallest captured by Brogie on this night last August, measuring just 3/16th of an inch in length.



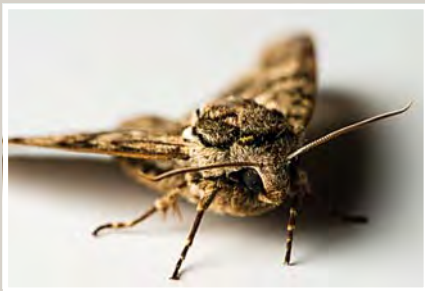
The dark-spotted palthis moth has tufted, up-turned labial palps – the hairy or scaly moustache-like projections on each side of the proboscis that have a sensory function.



The plumose antennae of the male chickweed geometer are used to detect female pheromones. This species is widespread in the eastern United States with its peak flight period in August.



The elegant grass-veneer belongs to a family known as "snout moths" whose caterpillars have elongated, snout-like mouth parts.



Waved sphinx moths are found statewide in Nebraska. Their caterpillars feed mainly on ash trees and pupate underground in chambers.



The oblique-banded leafroller belongs to a family known as "tortrix moths" which includes more than 9,400 known species world-wide.



The caterpillars of the clover hayworm moth infest hay stacks, covering the hay with white silk, eating dry clover leaves, and causing damage.



The cottonwood dagger inhabits wooded floodplains where its caterpillars feed on members of the poplar family, including cottonwoods, willows and aspen.

Time Well Spent

What to Do in March

By Renae Blum

With warmer months approaching, there's plenty to look forward to on the horizon, but don't forget to take advantage of outdoor opportunities now. The following are a few ideas to get you started. For more information on outdoor events across the state, visit Calendar.OutdoorNebraska.gov. ■



PHOTO BY JEFF KURRUS

Fishing for Northern Pike

Throughout the month

Statewide

Early spring is a great time to fish for northern pike. Spawning is currently underway, which means pike are coming into the rooted vegetation of the shallows. During and immediately after spawning, pike can be caught by working the shallows with various baits. That is the time when a pike's metabolism rate is ready for it to start feeding.

Marsh Madness

Saturdays Feb. 24-March 17

Ponca State Park

Enjoy the wonders of spring migration at scenic Ponca State Park during Marsh Madness, which offers the opportunity to see large numbers of birds, including species not regularly found in Nebraska. See it for yourself on a guided sunrise or sunset bird tour, and enjoy educational sessions and crafts during the day. For more information, contact Ponca State Park at 402-755-2284 or visit the Game and Parks calendar.



PHOTO BY JENNY NEUVEN-WHEATLEY



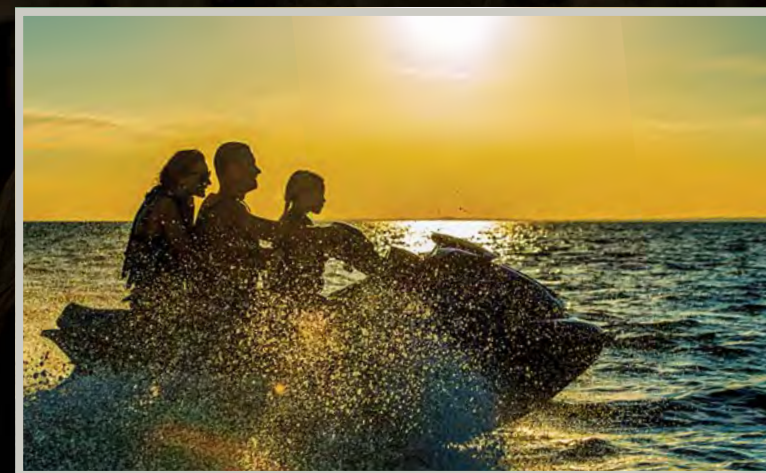
PHOTO BY ERIC FOWLER

Catching Up with the Cranes

March 31

Fort Kearny State Recreation Area

Part of the Becoming an Outdoors-Woman program, this women's-only event brings together photography, local experts, waterfowl, wildlife, coffee, chili and cranes for an enjoyable day learning about these majestic birds. Learn more and register at OutdoorNebraska.org/BOW.



Take a Boater Safety Course

Throughout the month

Statewide

Before you know it, it'll be time to get out on the water. Make sure you're ready to go by fulfilling boater safety requirements – if you were born after Dec. 31, 1985, you need to complete a safety course. Learn more and pick a format that's right for you at boatsafenebraska.org.



PHOTO BY JUSTIN HAAG

Prepare for Turkey Hunting

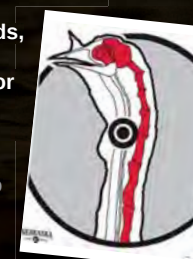
Throughout the month

Statewide

Spring shotgun season is just weeks away. To prepare, Game and Parks Big Game Program Manager Kit Hams has a few recommendations: Pattern your shotgun, buy a box call and practice, and listen to turkey calls online. He also advises scouting for places to hunt within 100 miles of your home. Arrive at first light, listen for gobbles, use binoculars to search for birds, and take a walk to locate likely roosting, feeding and display areas by searching for birds, tracks or droppings.



Print out this turkey target to pattern your shotgun.



Discovering the Outdoors Through Nature Journaling

By Renae Blum

For Holly Green, her peace of mind during finals in college could reliably be found in one place: between the pages of a black composition notebook.

The formula was pretty straightforward: head to one of the bridges at Fort Kearny State Recreation Area, notebook in hand, and just observe: the morning fog over the water, chunks of ice floating down the river, brown bats silhouetted against the moon, the croaking of the bullfrog she dubbed “Romeo” for his incessant singing. Then she would write.

“I’m not a person who writes down personal thoughts, but I like to capture a moment outside,” she commented. She still does – during the summer, nearly every day.

She’s not alone. People across the world, and throughout human history, have used nature journaling as a way to reconnect with nature, explore the outdoors more deeply and to make

more lasting memories. The calm it often brings is a plus, too.

Nature journaling is a deeply personal endeavor, and looks slightly different for each person. But a helpful working definition can be found in the book *Keeping a Nature Journal* by Clare Walker Leslie and Charles E. Roth: “Simply put, nature journaling is the regular recording of observations, perceptions and feelings about the natural world around you. ... Whereas a diary or personal journal records your feelings toward yourself and others, a nature journal primarily records your responses to and reflections about the world of nature around you.”

It sounds simple, but people have built careers out of writing about the process and teaching others how it works. One such person is environmental educator John Muir Laws, whose lectures and writings have inspired naturalists across the United States to start teaching the practice



The journals of Meriwether Lewis and William Clark can be considered nature journaling. Pictured is a coho salmon.

LEWIS AND CLARK JOURNALS

themselves.

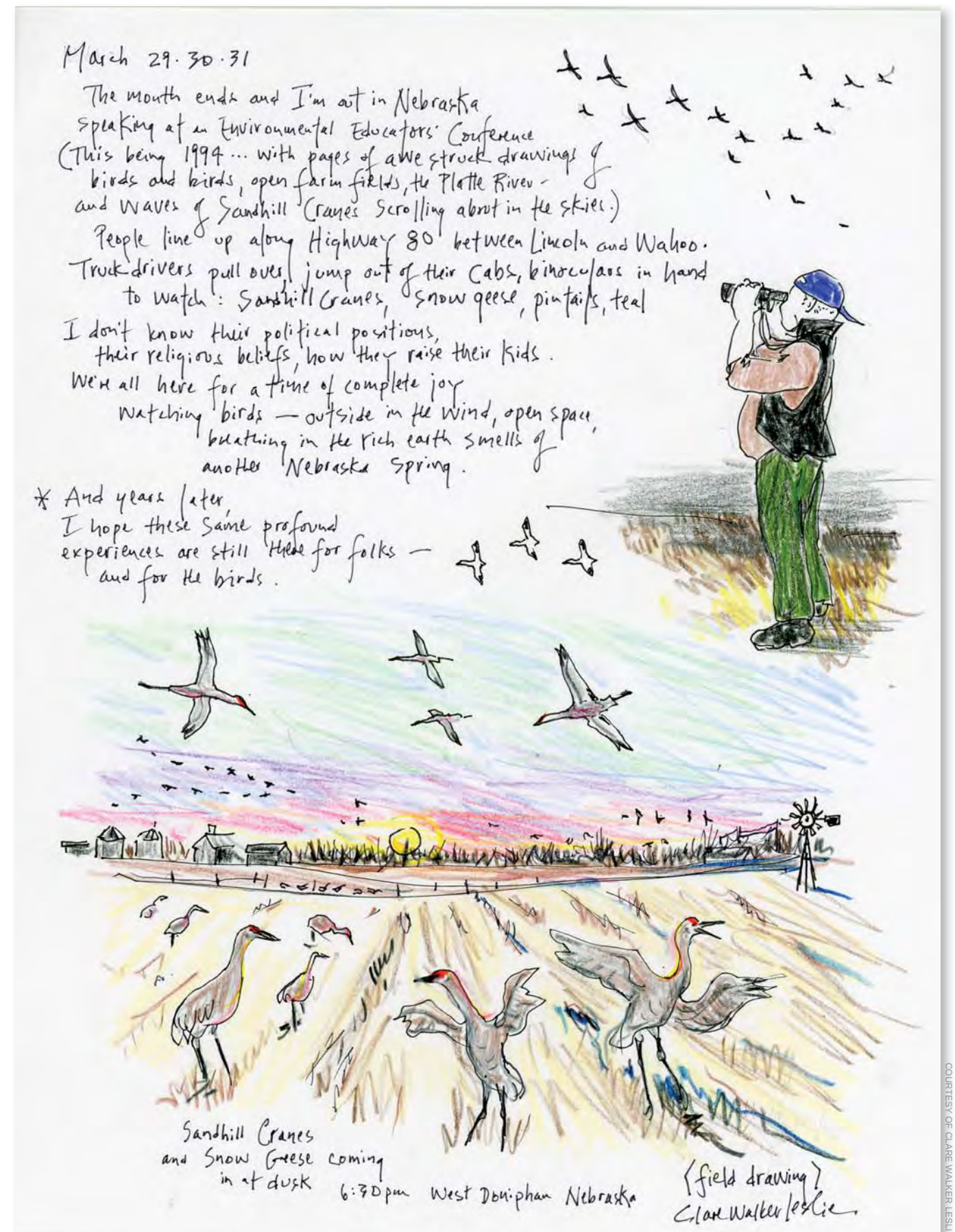
“I started thinking about, what is the best way to help someone fall in love with nature? Well, in order to do that you first need to come up with a good working definition of love,” he said. “And that can be kind of elusive. But I think I’ve got a definition that really, really works.”

For Laws, love is sustained compassionate attention – the kind that asks you to invest time, energy and effort in deeply knowing something or someone. “It takes work, it takes effort, and it fundamentally changes the relationship between the person who’s paying attention and the other. I think this is one reason why people fall in love with their therapists – because someone’s actually paying attention and listening to them. So if you want to strengthen your relationships at home? Try actively paying attention,” he



Naturalist Alison Bleich keeps track of the cycle of the seasons in her nature journal. Here, she discovers a flower she journaled about at the same time the previous year.

PHOTO BY RENAE BLUM



Clare Walker Leslie, author of the book *Keeping a Nature Journal*, journaled about sandhill cranes during a 1994 trip to Nebraska.

COURTESY OF CLARE WALKER LESLIE



Journal page by Jan Blencowe of Clinton, Connecticut. See more of Jan's work, as well as nature journaling tips, on her Facebook page, "Jan Blencowe The Nature Journal Place."

said. "The same thing happens in nature. The more that you stop and listen and observe, the more you forge a deep personal connection to nature."

What It Looks Like

Nature journaling has existed in its essence since the dawn of human history, ever since the first human took a rock to a cave wall to draw a buffalo, or made a notch in an antler to mark the passage of time. It has also been the bedrock of scientific inquiry and world exploration. Darwin's journals and Leonardo da Vinci's drawings can both be considered nature journaling, as can the writings of Meriwether Lewis and William Clark. "It is as useful now as it was then," Laws said. "And now, in this fast-paced digital world, this intentionally slow, deeply analog system seems to have even greater appeal."

There is no right way or wrong way to do nature journaling. You can draw, write poetry, compose music, tape in leaves and photographs, make leaf rubbings, press flowers. The subject of your journal can be as



Fiona Gillogly, 14, of Auburn, California, journals nearly every day. "For me, nature journaling is not about pretty pictures, it is about observations, and so my self-critic doesn't harass me when I'm journaling," she said.

broad or as narrowly focused as you like. Perhaps you want to sketch the places you see when you travel, or record the growth of a plant, or detail experiences in the field as an angler, birder or hunter for future reference. Author Doreen Pfost used brief factual observations about the Platte River she'd written in 3-by-5 notebooks to write a book.

"I couldn't have captured a lot of detail for my book without it," she said. "There were times when there was something that ended up being key to the point I wanted to make in an essay, but it was an event I might have completely forgotten if I hadn't written it down. When I sit and read the notes, it puts me back there in that place."

Alison Bleich of Lewellen uses her nature journal, in part, to record changes in the environment over time, noting when certain plants flower, or when different species of birds show up, and looks back at her notes throughout the year to learn more about where she lives. "That's why you record the time of day and year, so you can see how things correlate," she said.

The potential uses for a nature journal are endless – to learn more about plants, to jump-start an interest



Visual artist and graphic designer Lisa Cheney of Boise, Idaho, is intrigued by "the luscious details of tiny, often overlooked forms."



"Keeping a sketchbook journal has become an incredibly fulfilling and happy experience for me," wrote Jan Blencowe of Clinton, Connecticut.

Leena Saoji of Sunnyvale, California, journaled about this dark-eyed junco. "A very common bird, but there is so much to observe," she commented.

in nature for kids, to become more observant, to relieve stress. You can also use nature journaling to make better memories, Laws said, as the part of your brain that handles attention also handles memory. You'll notice this if you've ever taken a sketchbook with you on a trip – looking back at the drawing later, you can often recall the place, object and experience in vivid detail.

Laws' Tips for Beginners

Over years of teaching nature journaling to newcomers, Laws has developed a set of suggestions to help encourage success and make the process richer. While nature journaling can look however you want it to, his recommendations work well for many people.

To get started, all you really need is a blank notebook and something to write with. Laws recommends as large of a notebook as you are willing to carry, to give ample room for drawing, and stowing it in a shoulder bag for easy access in

good idea to record what Laws calls metadata: date, time, place, and as many other data points as you find interesting, such as cloud cover, wind speed, humidity, temperature, weather conditions, etc. Another helpful technique at the start of an entry is to make what Laws calls an anchor drawing – a quick preliminary sketch of something simple to help warm up the connection between your hand and your brain.

This done, you can begin thinking about what you want to put in your journal. Laws advises his students to chase after two things: beauty and wonder. Often, these things will not announce themselves immediately. With careful observation and attention, they will come into focus, and you'll discover that even familiar objects like a pinecone are infinitely complex and beautiful, filled with small mysteries worth thinking and writing about.

In translating this to the pages of your journal, Laws advises using what he calls the three languages of nature journaling: writing, drawing and quantification (measuring, estimating, timing, or counting). Using these languages in tandem reveals new patterns, spurs new connections between ideas and stimulates different parts of the brain.

"Drawing can be anything from maps to diagrams to cross-sections; it doesn't have to be a portrait or likeness of something," Laws said. "The writing can be lists, bullet points, narrative paragraphs, or short sentences or labels connected to a drawing."

If you haven't drawn anything in a while, this part will probably be a bit scary. But the point isn't to make a pretty picture, Laws said. The point is to get your brain down on paper, to use drawing as a tool to investigate the world. It doesn't matter how good the drawing is, though if you keep at it, your work will inevitably improve. Similarly, when writing, don't worry about spelling or grammar. Nobody is grading this; this is a space to play.

The three languages – drawing, writing and quantifying – will help you describe what you're seeing. The second step is to ask questions, and through pondering them, you can begin to explain, for yourself, the small mysteries you are seeing. Use a journalist's toolkit of questions to get started: who, what, when, where and why.

Laws' third step is to intentionally draw connections between what you see and other things you have observed, experienced or already

know, adding a rich personal dimension to the experience and bringing your observations to the next level.

These three steps boil down to a series of easily remembered prompts: "I notice," "I wonder," and "it reminds me of."

Because of the discipline and effort nature journaling takes, it can be discouraging for a beginner. But Laws recommends reframing the way you think about the experience. "If you go out and journal, and you notice something you otherwise would not have noticed, or you

remember it more vividly, or you were able to come up with some questions about what you were looking at, or were more curious about something you saw, then that journaling experience was successful."

A First-hand Account

As part of research for this article, I began nature journaling myself. I quickly encountered the truth of what I'd been told: this does take discipline. I resisted making time to do it. Committing to go out with a notebook and doing something that I wasn't used to felt like a waste of time.

The first time I journaled, I felt like a fool. I can't tell an oak tree from an elm, but I wanted to emulate the other journals I'd seen in which every plant drawing was confidently labeled. Luckily, I work on the University of Nebraska-Lincoln's East Campus, where the gardeners have seen fit to plant numerous signs in their gardens. I plopped myself on a sidewalk next to a crimson lily and went to work. (Addendum: I told Laws about my strategy later, and he encouraged me to observe things I don't know the names of, as the point of this is seeing what you can learn and observe yourself, not through others.)

It was rough. I hadn't drawn in a long time, and I quickly became frustrated. But as I stared at the dying plant, I decided to try Laws' "it reminds me of" tactic, and something lit up in the dark recesses of my brain, the part that spent hours reading English literature for college. I wrote about the lily's "long cane-like stalks standing proudly," with "pale green and grey leaves strewn at its feet like discarded laundry." Discarded laundry. That was interesting, I thought. It felt like writing poetry – something that is terrifying to me – but in that moment, it came perfectly naturally. I didn't know that part of me was still there.

The second time I went out, I was more detailed in my journaling, and ended up making a memory. Looking at the page now, the day comes back to me in vivid detail: the lawns of East Campus painted with long shadow and golden light, the wind sighing through the leaves, boys chasing each other between the trees. I visited a bright yellow shantung maple, one of the few trees still holding color on that mid-November day, and studied it, drawing its pointed leaves and admiring an expertly constructed nest. I went back to my desk and Googled shantung maples, spending a good half hour reading about their characteristics and why the leaves look the way they do. I can't say that the structure of maple leaves was something I ever thought I'd find interesting, but it happened. It was definitely a new experience.

The third time I went out, I noticed a change in my body. "I feel my heartbeat slow. Stress dissolving," I wrote. It was a good feeling, worth going after again.

I'm going to try to keep journaling. It's not a habit, not yet, so I expect to still feel some discomfort. But I want to see that shantung maple's yellow flowers in the spring. I want to learn the difference between an oak and an elm. I want to pick up on the nuances of the seasons as they cycle through and really see what's going on around me. Most importantly, I want to reconnect with the 8-year-old me who



This page from the author's nature journal demonstrates a surprising effect: leaves that you tape in will not necessarily retain their color.

couldn't go a day without playing outside, who lost that love for the outdoors as she grew up. I know it's still there. In the pages of this journal, I see it slowly coming back. ■



RENAE BLUM

Helpful books on nature journaling include *Keeping a Nature Journal* by Clare Walker Leslie and Charles E. Roth, and *The Laws Guide to Nature Drawing and Journaling* by John Muir Laws. *Educators interested in using nature journaling in the classroom can find a comprehensive curriculum, "Opening the World through Journaling: Integrating art, science, and language arts," at johnmuirlaws.com.*

Naturalists at the Nebraska Game and Parks Commission periodically hold nature journaling workshops. Contact Alison Bleich of Lake McConaughy State Recreation Area (alison.bleich@nebraska.gov), Bobbi Holm of Fremont Lakes State Recreation Area (bobbi.holm@nebraska.gov), or Holly Green of Fort Kearny State Recreation Area (holly.green@nebraska.gov) to find out about upcoming workshops in your area.

the field. For safekeeping, put your contact information on the front inside cover along with a note asking for the finder to return it if lost.

As you figure out what you want your journal to be, you'll probably come up with additional items that you want to have along in the field; keep them together in a streamlined kit that you can grab quickly as you're heading out the door.

That first blank page can be intimidating, so Laws recommends starting on page two, and taking the pressure off with a quick scribble. To begin the entry proper, it's a

"Keeping a journal has made me more observant and curious about everything, even when I'm not journaling," said 14-year-old Fiona Gillogly.

A Crane Book For All Ages

By Jenny Nguyen-Wheatley

An Interview with Jeff Kurrus, author of *Can You Dance Like John?*

What was the inspiration behind the “crane books?” How did these stories develop?

The first time I saw the sandhill cranes, there were a couple of things that stuck out. One was that there are 500,000 to 1 million of them on the Platte River each spring. Two, they all look alike. After doing a bit of research and finding out that they mate for life – if possible – it became a natural fit for the first book *Have You Seen Mary?* to see what happens when two become separated. Then during a book signing at Rowe Sanctuary for *Mary*, I started

sketching notes about what happens when one of these cranes permanently becomes separated, and then it became a story about love and trying to cope with loss.

Have you always been interested in writing children’s books?

I became interested in children’s books when my daughter, Madeline, was a baby. As a parent, you read a bunch of books to your kid. The more I read, the more I thought that there just weren’t many fiction books about nature. And there weren’t many fiction

books that used photography at all. But when I would read nature magazines with Maddie, and then look at these same publications with my younger son, Eli, they were immediately drawn to pictures.

I just thought young readers could find a nature story interesting and the photos that accompany the story beautiful.

How does the experience of reading a book through photographs differ from drawings? Why have you chosen to forego traditional illustrations for your books?

I wanted to show how pretty and beautiful these birds are, and there was no better way to do that than working with world-class photographer and Lincoln native Michael Forsberg. Nebraska is still, to many people, a

flyover state. There are no beaches and no mountains, and if you want to see what most people think as gorgeous Nebraska, you get off of Interstate 80. But if you want to see one of the most beautiful, magical spectacles in the world, you stay right on Interstate 80. The state has such a nice mix. I really thought by working with Mike we could show how beautiful the birds are and hopefully get people to care about the species.

There are little messages throughout both books as well: how hard migration is for these birds throughout the middle of the continent – the Central Flyway, and with that, being able to weave a story with some natural history of these birds as well. After reading these books, kids who have never seen a sandhill crane should be able to pass a basic test about them. Where are they

roosting? What do they eat? Are they a communal bird or are they isolated?

Did you do the kid-review process this time like you did with your other two books?

Yes, I asked a bunch of questions to teachers and students in the Conestoga, Papillion and Gretna public school districts. Then I worked with my own kids as well. The kid process is huge because they are so honest with their opinions.

What was the most difficult part of writing and how long did it take you to write “John”?

I started writing the book in March of 2012 while visiting Rowe Sanctuary. Then, over the next few years, I continued to work on it to make sure that every scene – because you don’t

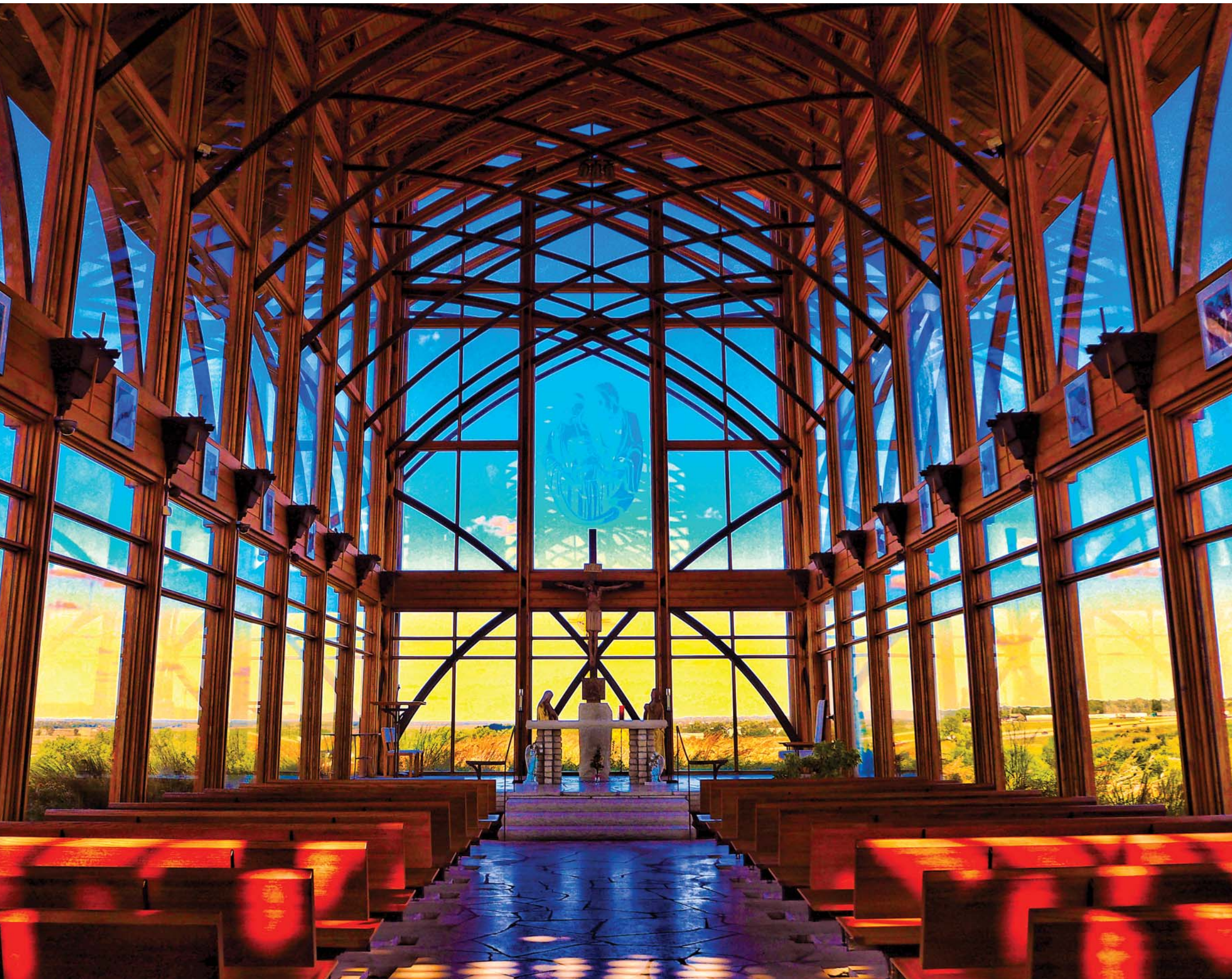
have a lot of them – was important and concise, which is always the most difficult part for me. ■

To order, visit haveyouseenmary.com, nebraskapress.unl.edu/books or your local bookstore.



PHOTOS BY MICHAEL FORSBERG





Nebraska Through the Lens

By Jeff Kurrus

Nebraska Through The Lens, an online community of photographers started by Steve Evans and Jonathan Wagner Jr., was formed in 2016 and has become *the* go-to for Nebraska-based photographers showcasing their work.

The Facebook group, who can be found by searching “Nebraska through the lens,” features thousands of images of Nebraska and has more than 132,000 members.

Images range from landscapes and wildlife to trail cam images and Americana. As long as the photograph was taken in Nebraska, it can find a home on their page.

To post your own images, visit this group on Facebook. Until then, enjoy a small collection of the beautiful Nebraska images they have produced.

Julie Hudson of Omaha shot this image of the Holy Family Shrine south of Gretna in Sarpy County.



Bill Garbez of Crescent, Iowa, shot this image the day after M's Pub burned in downtown Omaha.



Krista Skarin photographed this Star of Siam tropical water lily at Sunken Gardens in Lincoln.



Allen Olson of Holdrege photographed this flock of turkeys in Franklin County.



Yankee Hill Lake in Lancaster County was the subject for Lincoln photographer Casey Mitchell's "Summer Dreams" image.



Casey Mitchell shared this five-shot, bracketed photo of a crib in southwestern Lancaster County.



Derrill Grabenstein of Lincoln shared this image of a sunset center pivot near Cortland in Gage County.



Casey Mitchell also submitted this image entitled "The Lonely Bobber" on a private lake near Bennet in Lancaster County.

Nebraska's Trout Slam

New challenge aimed at anglers.

By NEBRASKAland Staff

The Nebraska Game and Parks Commission recently sent a challenge to anglers: catch all four species of Nebraska trout – **rainbow**, **brown**, **brook** and **cutthroat** – to earn recognition for doing so through the new Nebraska Trout Slam.

Starting now, anglers who catch all four of these species of trout can earn a certificate, pin and bragging rights. “Nebraska’s cool-water streams and the great trout fishing opportunities they provide are one of the state’s best-kept secrets,” said Commission Fisheries Outreach Manager Daryl Bauer. “We hope the Trout Slam encourages anglers to take advantage of this tremendous resource.”

Bauer admits that it might take a day for those who live in the Pine Ridge to accomplish this feat, and folks who live in other parts of the state will have to travel to the northwest to have the chance to catch a brook trout. The main idea is for anglers to see all the resources available throughout the state.

“This is part of the reason for offering an angler recognition program like this – folks may have to travel to some parts of the state they have not seen before and see resources they may not have known even existed in Nebraska.”

The first place to start would be out west, where trout can be found in numerous public water streams, including Soldier Creek at Fort Robinson State Park, the White River and Nine Mile Creek.

Popular trout streams are also in other parts of the state, notably the North Platte River below Lake Ogallala in Keith County; Schlager Creek in Cherry County; Long Pine, Plum and Bone creeks in Brown County; and the east branch of Verdigre Creek in Antelope County.

Additionally, Game and Parks stocks catchable-size rainbow trout at dozens of locations across the state each year. However, because the tiger trout is a hybrid species, it will not be considered for Trout Slam recognition.

“It may take an angler a week, several weeks, months, or maybe more than a year to complete the Nebraska Trout Slam,” said Bauer. “No matter, take as long as needed. When it is accomplished your award will be coming your way.”

Complete contest rules and regulations, as well as a link to the entry form, is available at OutdoorNebraska.gov/troutslam. The web page also provides links to resources for identifying trout and an interactive map showing where various species of trout may be found across the state. ■



Rainbow trout (*Oncorhynchus mykiss*)

PHOTO BY JEFF KURRUS



Brown trout (*Salmo trutta*)

PHOTO BY BOB GRIER



Brook trout (*Salvelinus fontinalis*)

PHOTO BY JEFF KURRUS



Cutthroat trout (*Oncorhynchus clarkii*)

PHOTO BY JENNY NGUYEN-WHEATLEY

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Snake Venom: Friend or Foe?

A chemical cocktail of many uses.

By Dan Fogell, Herpetologist

Toxic, poisonous or venomous? Which word best describes those snakes which pass a nasty cocktail through hollow fangs?

Toxins are substances produced by one organism that have deleterious effects on other organisms, so I guess snakes can be toxic. But nobody uses that word to describe snakes, so let's move on. Poisons are substances that can cause death or serious organ and tissue damage. Some snakes are definitely deadly, so poisonous is probably an acceptable word. But the question asked which word *best* describes those snakes. Venom is a toxin delivered by way of a biting or stinging apparatus. Fangs are biting tools for delivering a toxin. So if you chose venomous, you chose correctly.

Honestly I've grown tired over the years of correcting people when they call snakes poisonous but they really mean venomous, so I no longer correct them (unless they are herpetologists who should know better). I can live with calling them poisonous, but if you really want to understand



Venom from this timber rattlesnake can be deadly if you are bitten, but it may also one day be used in medicine to treat human diseases and disorders.

the difference, here's an easy way: poisons are ingested, venoms are injected. Mushrooms are poisonous. Bees and spiders are venomous ... and snakes ... well, some snakes are. So technically you'd have to eat a snake and experience harmful effects for that snake to be poisonous.

Now that the terminology is out

of the way, let's take a closer look at venom. Venom is a complex cocktail of chemicals, not all of which are toxins. Most of the chemicals are proteins, specifically enzymes. Many people classify venoms as either **hemotoxic** or **neurotoxic**. In general, hemotoxic venoms work by destroying blood cells and upsetting blood's ability to clot, and neurotoxic venoms negatively affect nervous system function in some way. There are also two other types of venom toxins: **cytotoxins**, which damage cellular structures, and **cardiotoxins**, which disrupt heart function. Any given venom can have one or all of these chemicals in varying proportions, but in most cases one toxin is dominant.

Contrary to what you might think, venomous snakes do not produce venom just to kill humans. For the snake it has three potential functions, though not all venomous snakes take advantage of all three. First, it is a successful way to immobilize prey. This is the job of the toxins. Prey items differ depending on the snake species, so a snake's venom will contain the proper toxins for immobilizing its preferred prey. In fact, venoms can differ within the same species from different geographic areas, and even in

the same snake during different times in its life ... all depending on prey type.

Snakes that eat mammals, such as rattlesnakes and other vipers, generally produce a blend of hemotoxins, cytotoxins and cardiotoxins. Mammals have warm bodies and high metabolic rates with high blood pressures. Toxins entering the blood stream will rapidly be delivered throughout the body and upset organ function, which will quickly stop the prey from moving. And the panic caused by being struck will increase blood pressure and make it happen even faster.

Snakes that eat lizards and other snakes, such as cobras and coral snakes, have venoms in which neurotoxins predominate. Because they are ectotherms ("cold-blooded"), lizards and snakes have low metabolic rates and blood pressures. Venom isn't going to move as quickly through the blood, and a lizard struck by a hemotoxic snake can travel a long distance before it finally stops. This makes it hard for the snake to catch up with and find its prey. But neurotoxins directly affect the nervous system and can immobilize prey quite rapidly – regardless of their body temperature or blood pressure.

While venom is an effective tool for killing or at least immobilizing prey, it also has an equally important second function: digestion. Everyone knows snakes can swallow enormous prey, sometimes equal to half of their own weight. When they do, they get a great big lump in their bellies. Imagine that you weigh 150 pounds and you just ate 30 pounds of food, which is fairly equivalent to a snake's body mass to prey ratio. How easy would it be to move afterward? Consider that snakes crawl around on their bellies. Having that big food lump makes them quite vulnerable and makes locomotion difficult. Escaping predators, evading uncomfortable environmental conditions, even just finding a place to rest is cumbersome.

Venomous snakes have an advantage. Besides having toxins, their venom yields a cocktail of digestive enzymes similar to those used by our own digestive system. When injected, the venom not only immobilizes prey, but it also begins digesting it from



Venomous snakes usually cause fear when encountered, but many – like this copperhead – produce venoms that may save more human lives than they take.

the inside. By the time the snake completely devours its food digestion is well underway, and once in the digestive tract prey will start being digested from the outside as well. The increased digestion rate reduces the vulnerability period after a large meal and hastens their return to mobility.

The third function of venom is the one everyone assumes is its primary function: defense. All snakes tend to bite when defending themselves. Honestly, though, what else can they do? Their teeth are their only real weapons. Venomous snakes just happen to have a refined set of teeth with a built-in venom delivery system. Snakes can control venom delivery during a bite. But manufacturing venom is expensive, energetically speaking, so they generally choose not to use it on a defensive bite unless they are strongly provoked. But the point is that they have it. And they know it. And they will use it if they have to.

In the U.S., about 8,000 people annually – mostly males aged 18-35 – are bitten by venomous snakes. Only five or so are fatal cases (low, compared to bee stings at more than 100 per year), resulting in a 0.06 percent death rate. So, there is no doubt that snake venom *can* be deadly. But researchers are finding that many chemical components of venoms can also be beneficial to humans. Chemicals like **procoagulants**

(which encourage blood clotting) and **anticoagulants** (which inhibit blood clotting) have been isolated from venoms and are being used to treat patients with blood clotting disorders. But the most promising medicinal uses of venom may help treat and even cure cancer patients. Venom from the copperhead – a Nebraska native species – yields a unique chemical known as **contortrostatin** (named after the scientific name of the copperhead, *Agkistrodon contortrix*). This protein interacts with cancer cells and prevents them from attaching to other cells and tissues. It also hinders their formation of new blood vessels (called angiogenesis) which would help them leave their "home" tissue. The result: an inability to spread. And experimental trials have shown a significantly lower risk of metastasis in the presence of contortrostatin. Venom from at least three other snakes is also being tested for potential cancer treatment.

We have traditionally looked at snake venom as a deadly threat. And venomous snakes *are* still dangerous and should be respected as well as avoided whenever possible. But just as plant toxins have been studied, tested, and incorporated into human medicine, snake toxins will likely be used in future medicinal treatments. In fact, there may soon come a time when snake venom *saves* more lives than it takes. ■



This drop of venom from a copperhead contains the enzyme contortrostatin, which can help prevent cancer cells from spreading throughout the body.



DEC • 64

◀ The attached photo shows Hastings residents Charlie Jenkins (left with light coat), Bob Butz (center – my father), and Vernon Burt (camo coat) with a limit of mallards and Canada geese taken from their Platte River blind located on the Cottonwood Range owned by the Dr. Ted Peterson family of Holdrege. Their land was between Elm Creek and Overton. The birds were probably shot around middle to late November. While it was common to get your limit of greenheads it was something special to get the geese in those days. It was legal to shoot hens, but we always tried to only get drakes. We had a \$10 fine payable to Ducks Unlimited for those who accidentally shot a hen.

– Bob Butz, Holdrege



▼ This is a photo of me and my first deer taken in November of 1965. I was 17.

We were hunting in the hills southwest of Scotia. The photo was taken by my friend John Steffen at his grandfather John Burton's farm south of Scotia.

I have enjoyed hunting here in Nebraska every year since.

– Leon A. Bresley, Omaha



▲ From left to right are my uncle Johnny Johnsen (founder of Nebraska Bookstore and Johnsen Publishing), Folmer Lerager (his brother-in-law), Glen Mooberry (employee and CPA at NE Book) and Jim Reinkardt (the criminologist who wrote a book about Charlie Starkweather's killings). Pheasant and quail hunting was a great sport in the 50s and 60s near Cordova!

One more note: Johnny's (and my dad's) grandfather, Johannes Johnsen, immigrated to America from Denmark to avoid being drafted into Kaiser Wilhelm's army. Johannes got off a train near Beaver Crossing. He was hungry but had only a quarter to his name. Years of hard work allowed him to give each of his eight children a quarter section of land near Cordova.

– Sara Johnsen Freeouf, Crete

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 1980. 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.

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2017 Tag Buyer
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Lincoln, NE

Blue Cheese-Herb Stuffed Venison Loin

Don't have time to age your meat? Try this.

By Jenny Nguyen-Wheatley

I had more than half a wedge of blue cheese sitting in my refrigerator, and I racked my brain hard on what I should do with it. Cheese is not cheap, and unfortunately, blue cheese is one of those items that I'd buy just to make one dish – usually salad – and the rest ends up in the trash because a little goes a long way. As far as stinky cheeses go, I draw a hard line in the sand. I can't help that the aroma makes me think of old gym socks.

Maybe my palate will grow up one day, but until then, I was still stuck with a lot of blue cheese – leftover after Christmas Eve dinner because no one else was interested in it. Feeling bad about wasting this pungent delicacy, I began nibbling some blue cheese with leftover prime rib steak and to my delight, it tasted really good. It gave the meat just enough funk to make it taste interesting, but it didn't overpower.

Blue cheese and steak go a long way back, so I'm not introducing anything new here. But what it did for this venison loin made me do a double take. I really enjoy dry-aged meat, but sometimes this is not possible with wild game due to weather, location or storage space. On the flip side, meat that is too fresh off the carcass lacks character. This blue cheese and butter mixture will help. If you'd rather not stuff the loin, roll the butter and cheese mixture into a log and wrap with plastic wrap. Refrigerate it and use as compound butter over your steaks instead.

Prep Time: 10 minutes

Cooking Time: 25 minutes

Servings: 2

Ingredients:

- 1 pound of venison loin
- Kosher salt, to taste
- Freshly cracked pepper, to taste

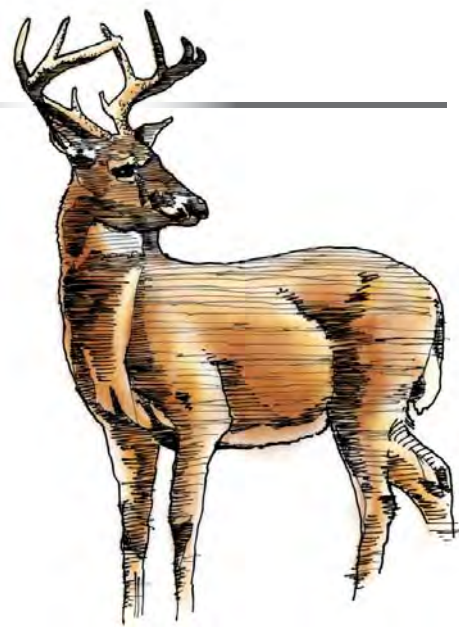
- 2 tablespoons of butter, softened
- 2 ounces of blue cheese, crumbled
- 1 shallot, minced
- 1 to 2 teaspoons of fresh chives, chopped
- 3 cloves of garlic, minced
- 1 teaspoon of fresh thyme, chopped
- 1 tablespoon of olive oil

1. Preheat oven to 350 degrees. Combine softened butter, blue cheese, shallot, chives, garlic and thyme. Remove all silver skin from loin and butterfly lengthwise, and then season the inside with salt and pepper. Fill with the blue cheese mixture, roll into a log and secure snugly with cooking twine. Season the outside of the loin with salt and pepper.

2. Heat olive oil in a large skillet over medium-high heat. When oil is hot and slightly smoking, quickly sear the

loin for a nice crust all around. Transfer browned loin to a rimmed cookie sheet and bake in the oven for about 15 minutes or until internal temperature reaches 130 degrees for medium rare. Allow loin to rest for 5 minutes tented in foil. Remove cooking twine and slice to serve. ■

This recipe and photograph originally appeared on Jenny's Food for Hunters blog at foodforhunters.com.



Flame, Smoke, and Stories

Our primal connection with fire.

By Roger Welsch

When my family moved this old 1890s house onto its new foundation here on the north bank of the Middle Loup River and set about rehabilitating it to our lives and needs, at the top of the list of features I insisted on was a fireplace. Oh, I know fireplaces are inefficient, even counter to my tendencies toward the eco-friendly. They are dirty, dangerous, unnecessary polluters. We did what we could to mitigate these issues by building our fireplace around an “insert,” which makes it a little more efficient as a heat generator, but the fact remains, any fireplace is a totally unnecessary anachronism.

But a fireplace is in fact only one manifestation of our primal connection with fire. Something more is going on with man and fire than any rationalization about “what happens when the power goes out in the middle of a blizzard.” When my buddy Mick comes out to visit, even during the warmest evenings of summer, we sit around the fire pit in front of the cabin, wasting wood, sucking in smoke, staring at the flame, sometimes in dead silence. There has to be an etymological connection somewhere along the line between “heat,” “hearth” and “heart” because there does seem to be a deep, social and psychological relationship. In some Native religious ceremonies a pipe of sacred tobacco is lit with a coal from the fire in the middle of the worshipful circle and passed around to everyone, thus uniting the congregants with each other and, more importantly, with the fire.

I am writing a book about a British artist who visited this area in January 1870, and I am especially drawn to his etching titled “A Smoke With Friendlies,” an image from an evening he spent in Pawnee Chief Crooked Hand's earth lodge. That's him (see photo) leaning on a lodge pole, his back to us, as the pipe comes his way from the hands of his traveling companion Lord Flynn (the dude with the fancy hat!). When I fantasize about where I would like to have been at some point in history, it's here, in this circle gathered around the fire, celebrating a new friendship, soaking up what warmth they could from a Nebraska deep winter fire. And – I put good money on this – telling stories.

My theory is that our usual form of conversation is person to person. That is, we talk, often as not, to – someone. But around a fire we talk to – the fire, just as mankind has done for tens of thousands of years. Look again at the people in

A. B. Houghton's etching. See? They are looking into the fire and almost certainly someone is telling stories.

In my long life I have enjoyed more campfires than I can count – along Nebraska rivers, in Pawnee, Omaha, and Lakota circles, with old friends and new, summer and winter. It has become clear to me over the years that one of the most distinctive features of a fire, in a fireplace or in a camp, is the evocative nature of the flame and smoke. It never fails: give me a fire, a cup of good coffee or tin cup of whiskey (good or not!), and we'll have stories. In Crooked

Hand's lodge, Houghton and Flynn were perhaps telling about the wonders of London or New York, while Crooked Hand and his kin recited old legends of battles against the Lakota or maybe the origins of humans when the moon and sun consorted and gave us – us – we human beings. As the Pawnee have it, chaticks si chaticks – we “men among men!” And fire, because it, too, is a divine gift.

All around us animals are born with innate vestiges of ancient abilities, fears, history, knowledge and memories. Why

not us? According to recent theory, we partnered with fire almost two million years ago. Surely that's long enough a time for us to have developed something more than a naked utilitarian relationship with this most primary of tools. I can't be the only one who stares into a fire and realizes that this heat and this light are nothing more than the liberation of energy stored in a tree for years, perhaps decades, in some cases generations, and now called on to release once again that energy for another turn in the cycle of life, not just warmth and light but also the renewal of ancient memories and tribal narratives: “Okay, Mick, I've probably told you this before, but I was once camped on an island in the Platte River somewhere downstream from Grand Island when I heard, for the only time in my life, the insane cry of a loon. I said to Dave, ‘Did you hear that?’ and he said ...” ■

Roger Welsch is an author, humorist, folklorist and a former essayist for CBS News Sunday Morning. He is the author of more than 40 books, including his most recent Why I'm an Only Child and Other Slightly Naughty Plains Folktales available from University of Nebraska Press.





A-OK with Silence

NEBRASKAland Magazine publishes, on average, more than 640 pages of content per year. From hunting, fishing, nighttime photography, conservation, visiting small towns and even nature journaling, we hope to hook you into an outdoor activity of some sort.

The responses we receive from these efforts are quiet, yet we're a-OK with that. But, I have to be honest, it is refreshing to come across someone who is in the outdoors because of something you've written. I can remember the time I went to small, quiet Verdon Lake State Recreation Area in southeastern Nebraska after I had reported about it, and it wasn't so quiet anymore. It was the first time I thought my words mattered to someone.

Then, just last March I was at Two Rivers State Recreation Area with my dad and another friend of mine, Matt Marx, and we were trout fishing. As we fished, a man our group had never met – Dennis Ahl of Fairbury – started casting with his own fly rod nearby.

Watching him cast and seeing that he was just starting out, my dad went up to him to offer a couple of suggestions. A little while later, Dad came back and said that Dennis had come to Two Rivers that day because he had read a story of mine in *NEBRASKAland* saying how much fun trout fishing on the fly at Two Rivers could be. So he decided to try it out for himself.

As we left later that day, Dennis was still casting for trout. He didn't look over his shoulder as we walked away – just gave a simple wave goodbye before turning his attention back to the water.

And I, once again, found myself totally a-OK with that silence.

Jeff Kurrus
Feb. 1, 2018



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