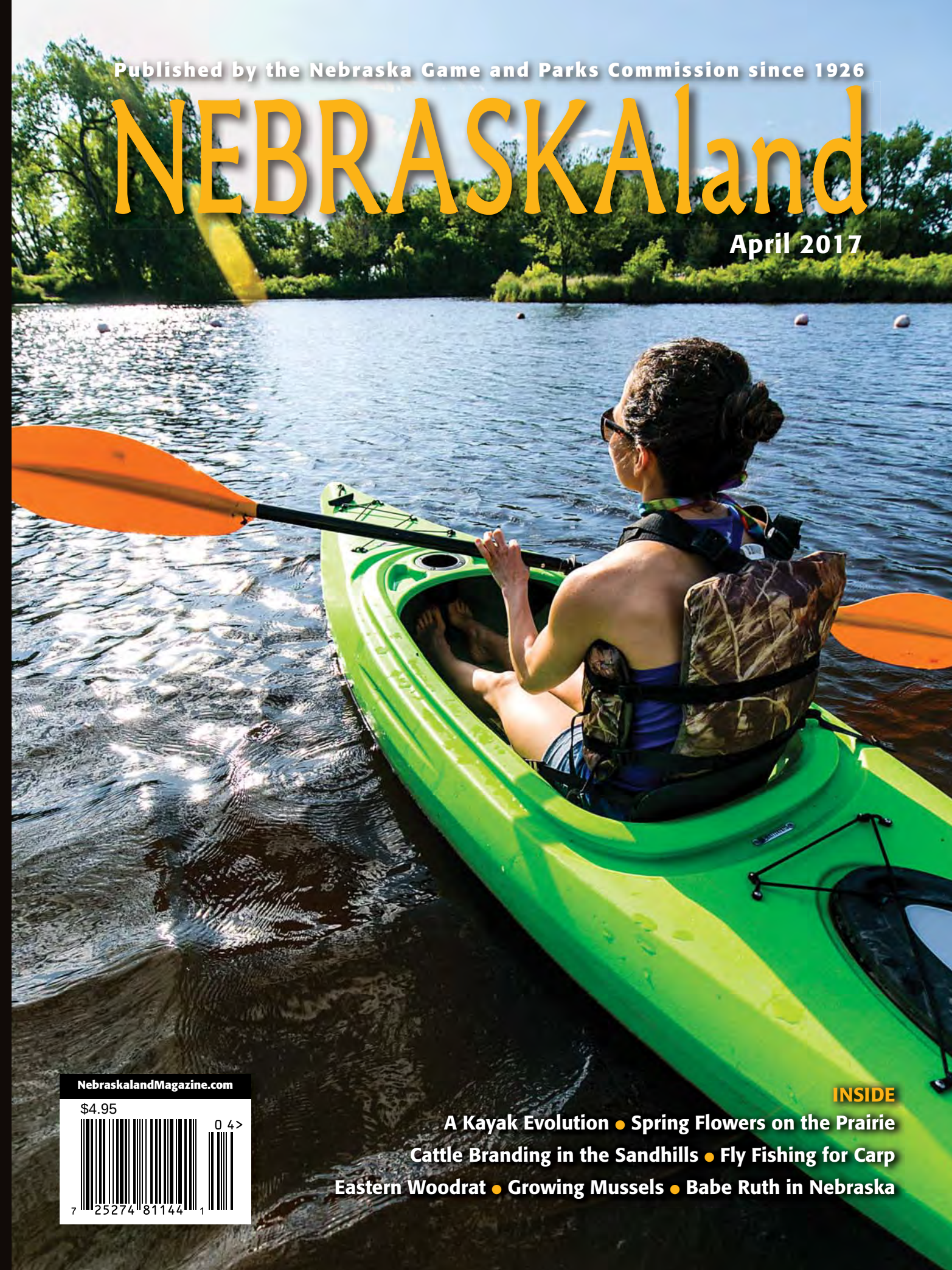




This barred tiger salamander photograph was taken by Eric Fowler.

Published by the
NEBRASKA
— GAME  PARKS —
NebraskalandMagazine.com
OutdoorNebraska.org



Published by the Nebraska Game and Parks Commission since 1926

NEBRASKAland

April 2017

NebraskalandMagazine.com

\$4.95



INSIDE

A Kayak Evolution • Spring Flowers on the Prairie
Cattle Branding in the Sandhills • Fly Fishing for Carp
Eastern Woodrat • Growing Mussels • Babe Ruth in Nebraska

SCHEELS®

**WHERE YOUR RETAIL
ADVENTURE BEGINS**
OMAHA, NE
17202 DAVENPORT ST

**OPEN DURING
CONSTRUCTION**
LINCOLN, NE
SOUTHPOINTE PAVILIONS

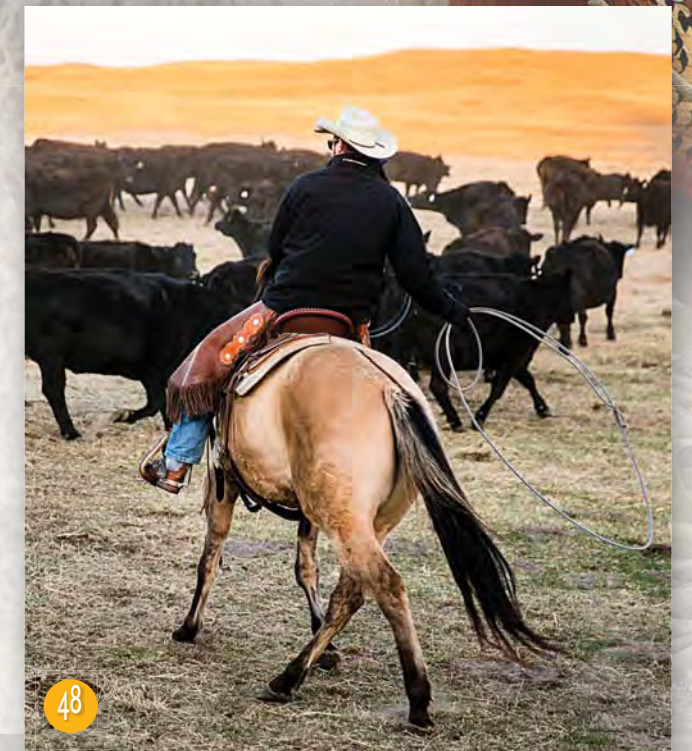
SCHEELS

NEBRASKAland Magazine

Volume 95 • No. 3 • April 2017

FEATURES...

- 24** Spring Wildflowers
PHOTOS AND STORY BY GERRY STEINAUER
- 32** Time Well Spent
What to do in April
BY RENAE BLUM
- 34** Kayak Evolution
Are you looking to go plastic?
BY JUSTIN HAAG
- 40** Mussels in Nebraska
STORY AND PHOTOS BY JULIE GEISER
- 48** The Beef State
STORY AND PHOTOS BY JENNY NGUYEN
- 56** Chasing Shadows
Fly fishing for carp in Nebraska
BY RYAN SPARKS



48

INSIDE THIS ISSUE...

- Mixed Bag – The Eastern Woodrat, Travel to Elkhorn, Roadway Cougars, Geocaching, and more..... 8
- Page 49 – The Two Faces of the Dandelion 63
- Nature Notes – Rattlesnake Bites for Dogs..... 65
- Wilderness Workshop – The 5-Yard Turkey 68
- In the Field – Spawn is in the Air 69
- Outdoor Update – Bighorn Sheep Transmitters..... 72
- Portraits from the Past – Reader's Photos 74
- In the Kitchen – Catfish with Bacon Cream Sauce... 77
- The Last Stop – How About the Time 78



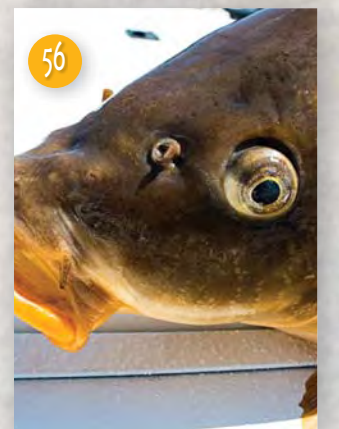
THROUGHOUT 2017, *NEBRASKAland MAGAZINE* WILL PUBLISH ARTICLES ASSOCIATED WITH THE STATE'S 150-YEAR CELEBRATION. LOOK FOR THIS LOGO TO READ ABOUT NEBRASKA'S RICH HISTORY AND VIEW OUR INTERACTIVE DIGITAL EDITION FOR MORE INFORMATION.

Cover: Jenny Feeken of Gretna kayaks at Lake No. 4 at Two Rivers State Recreation Area near Yutan. Photo by Jeff Kurrus.

NEBRASKAland (VOL. 95 / NO. 3 ISSN 0028-1964) is published monthly, except for the combined Jan./Feb. and Aug./Sept. issues, by the Nebraska Game and Parks Commission, 2200 N. 33rd St., Lincoln, NE. Periodicals postage paid at Lincoln, Nebraska, and additional mailing offices. POSTMASTER: Send address changes to NEBRASKAland, P.O. Box 30370, Lincoln, NE 68503-0370.



24



56



40

Follow us on Facebook @
facebook.com/omahascheels • facebook.com/lincolnscheels

SCHEELS.com f t i y



Dear NEBRASKAland,

Last week when I came home, I had an armadillo rooting around in my mulch. I had no idea there were armadillos anywhere close to here.

Daron Smith
Murray, Nebraska



Dusty Coulter of Gothenburg sent in these two images – one of a bobwhite quail near the Medicine Creek and the other of mule deer at sunrise during the firearm season in Frontier County.



March Visitor and Williams Art

You are one sneaky devil.

I spent over a half hour looking through butterfly identification guides looking for the name of the butterfly on the bottom of page 8. Then the next day reading the rest of the magazine I find the answer on page 57.

Guess I should read the magazine first then look for the visitor. This isn't the first time you pulled one on us. LOL.

Bill Bolte
Central City, Nebraska

I really loved the article on painting *The Spirit of Nebraska* with Todd A. Williams. It is wonderful how NEBRASKAland includes state-wide general interest stories and history as well as hunting, fishing and all things outdoors. Keep up the great work!

Eva Johanson
Omaha, Nebraska

It is a mourning cloak butterfly with its tail hiding the number on page 8.

My wife, Bente, is enthralled with the paintings by Todd A. Williams - they "say" so much!

G. E. Dave Fuller
Lincoln, Nebraska

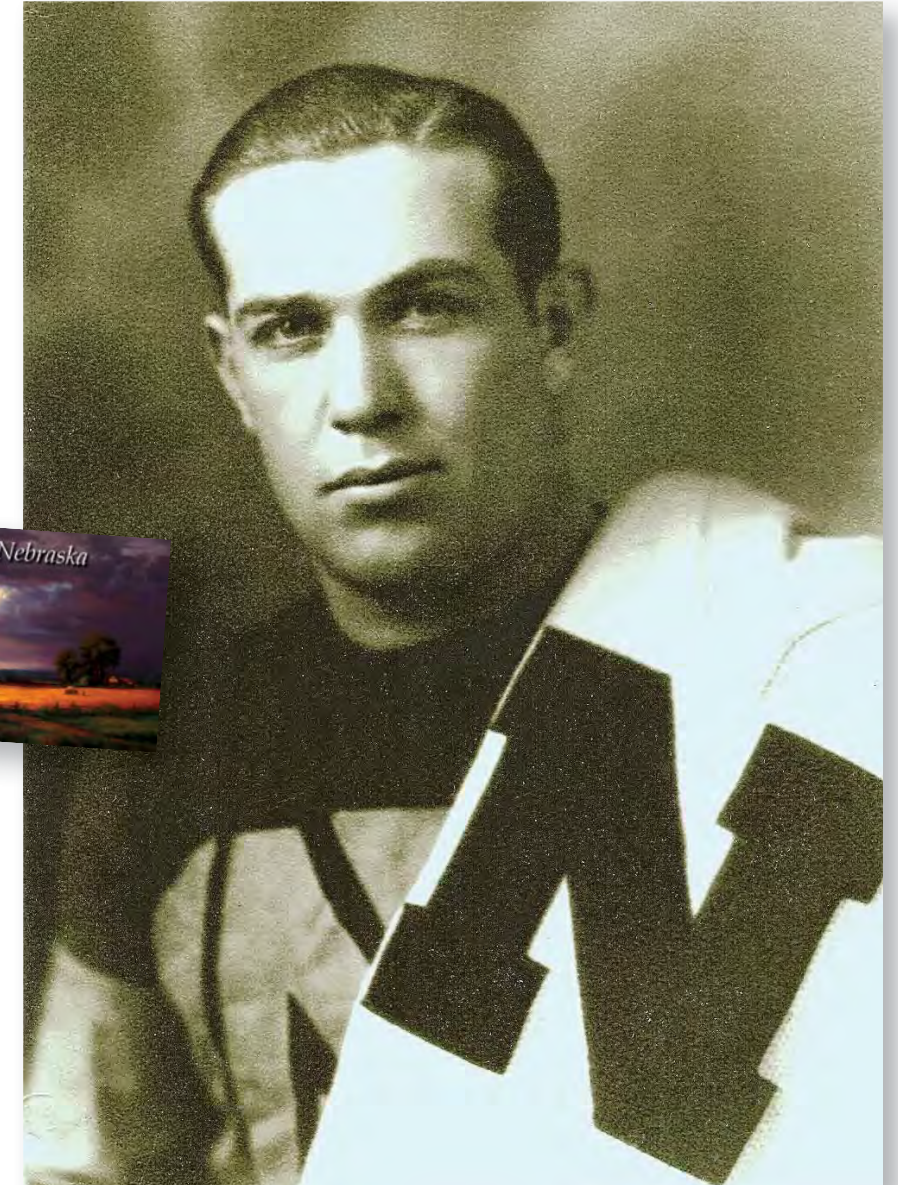
We found the "mourning cloak" butterfly on page 8 – was pretty sneaky by giving us the clue on page 57. Thanks to my husband who reads the magazine completely!

I really enjoyed Todd A. Williams's paintings, especially "Early Harvest."

Thanks again for a great issue.
Janelle Downing
Norfolk, Nebraska

Noticed the mourning cloak butterfly covering up the corner of page 8. I have raised many of them from caterpillars.

Jim Brooke
Durango, Colorado



More on Brief History's Nebraska vs. Notre Dame Game of 1922

Dear NEBRASKAland:

My uncle, William Clayton "Bill" Gallaway, was one of the football players on the field that day when Nebraska defeated Notre Dame. He played guard. Attached is one of the few pictures we have of him – with his football letter jersey.

He didn't return to the University after that year. With the onset of the Depression, he and several friends from Crawford went to Alaska to earn money fishing for salmon. He was murdered there on Sept. 16, 1935 and is buried in Ketchikan.

Lela Louise Kennedy Criswell

Daughter of Bill's youngest sister, Josephine Louise Gallaway Kennedy, of Estes Park, Colorado

Editor's Note: See NEBRASKAland's November 2016 issue pages 14-15.



Or see the article "Game Day 1922" on NEBRASKAland's Digital Edition by clicking here.



Aaron Beckman of Madison County took this photo of an opossum near the Elkhorn River last January.



Chris Haynes of Louisville sent us this photo of Marissa, Kelsey and Whitney Haynes photographing snow geese on private land in Cass County.



Outdoor Plates

Lyle Reising of Ralston tells people when it’s time to fish on his plate. He’s on the water at least two days a week in search of catfish and released at least 400 pounds of fish last year. If you have a unique outdoor message plate you would like to share, or know someone who does, e-mail a photo (high-resolution, JPEG format only, please) along with your hometown and a brief description of the interests expressed on your license plate to Eric.Fowler@Nebraska.gov.



Andrew Bebout of Lemoyne shared this sunset photo of Lake McConaughy.

Send your comments to:
Jeff Kurrus, Editor
NEBRASKAland Magazine
P.O. Box 30370
Lincoln, NE 68503
or e-mail Jeff.Kurrus@Nebraska.gov
Please include your postal address and telephone number. Letters may be condensed and edited. Photographs are also welcome.

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

NEBRASKAland Magazine



COMMISSIONERS

Director Jim Douglas
Commissioners
Chairman - Mark Spurgin, Paxton
Vice Chairman - Rex Fisher, Omaha
2nd Vice Chairman - Dick Bell, Omaha
Rick Brandt, Roca
Robert Allen, Eustis
Pat Berggren, Broken Bow
Jim Ernst, Columbus
Norris Marshall, Kearney
Dan Kreitman, Wahoo

MAGAZINE STAFF

Communications Director Christy Rasmussen
Editor Jeff Kurrus
Art Director Tim Reigert
Associate Editor Jenny Nguyen
Regional Editors Eric Fowler, Julie Geiser, Justin Haag
Contributing Editor Michael Forsberg
Regular Contributors Chris Helzer, Gerry Steinauer
Photo Librarian Jaclyn Cruikshank Vogt
Circulation Donna Robinson
For address changes and questions about your subscription, e-mail donna.robinson@nebraska.gov or call 800-632-5263
Advertising Sales Manager
For advertising information contact
Shane G. Gilster, 402-742-0125
Email: shanegilster@gmail.com

CONSERVATION OFFICERS

ADMINISTRATION (Lincoln)
Craig Stover (Administrator) 402-471-5531
Duane Arp (Asst. Administrator) 402-471-5531
Jeff Clauson (Asst. Administrator) 402-471-5531

NORTHWEST (Includes counties covered)
Jim Zimmerman (District Supt.) 308-641-6138
Sean McKeehan (Cheyenne, Morrill, Box Butte) 308-279-9133
Scott Brandt (Kimball, Banner, Scotts Bluff) 308-631-0663
Greg Hesse (Sheridan, Dawes) 308-760-3647
Dan Kling (Sioux, Dawes) 308-430-0572
Terry Brentzel (Deuel, Garden, Grant) 308-458-7650
Frank Miller (Cherry, Hooker) 402-389-0444
Andrew Heyer (Dawson, Gosper, Phelps) 402-613-2241

NORTHEAST (Includes counties covered)
Tom Zimmer (District Supt.) 402-649-8053
Dale Davis (Keya Paha, Brown, Rock) 402-760-0712
Jonathan Andreassen (Holt, Boyd) 402-340-3981
Mitch Johnson (Knox, Antelope, Pierce) 402-613-8612
Jeff Jones (Knox, Cedar) 402-762-5022
Owen Johnson (Dixon, Dakota, N 1/2 Thurston) 402-266-1759
Jon Reeves (S 1/2 Thurston, Burt, Washington) 402-889-8508
Dan Roberts (Dodge, Colfax) 402-719-1108
Cory Krause (Cumming, Wayne, Stanton, Dodge) 402-380-6410
Steve Oberg (Colfax, Platte, Madison, Stanton) 402-910-3366
Doug Pollard (Loup, Garfield, Valley) 308-730-7050

SOUTHWEST (Includes counties covered)
Roger Thompson (District Supt.) 308-530-3097
Matt Brandt (Sherman, Howard) 308-202-0819
Tim Williams (Hall, Hamilton, Merrick) 308-380-7331
Pat George (Harlan, Franklin, Phelps) 402-705-9989
Matt Andrews (Gosper, Furnas, Frontier, Red Willow) 308-746-2418
Brian Piernicky (Red Willow, Frontier, Hayes, Hitchcock) 308-340-6627
Nicholas Fix (Keith, Perkins) 308-289-0427
Bryce Streger (Keith, Arthur) 308-289-1169
Brandon O'Neal (Lincoln, McPherson, Logan) 308-530-3157
Alex Hasenauer (Lincoln, McPherson, Logan) 308-660-4671
Dale Johnson (Kearney, Buffalo) 308-440-3847
Mike Thome (Dawson) 308-529-8146
Ray Dierking (Custer, Thomas, Blaine) 308-870-0322
John Lee (Hitchcock, Dundy, Chase, Hayes) 308-414-1432

SOUTHEAST (Includes counties covered)
Levi Krause (District Supt.) 402-949-0593
Rich Berggren (Douglas) 402-619-1355
Dan Evasco (Sarpy) 402-616-5961
Heath Packett (Cass) 402-210-0888
Russell Mort (Otoe, Johnson) 402-209-1506
William Krause (Nemaha, Richardson, Pawnee) 402-274-8063
Dan Zuehlke (Gage, Saline) 402-806-9084
Dina Barta (Lancaster) 402-890-6463
Doug Kramer (Lancaster) 402-890-6465
Dudley Sorensen (Lancaster, York) 402-937-3422
Travis Shepler (Lancaster) 402-613-2312
Stacey Lewton (Lancaster, Seward) 402-890-7140
Mike Luben (Saunders, Butler, Polk) 402-443-6392
Matt Taylor (Thayer, Fillmore, Jefferson) 402-200-9597



Nebraska Wildlife Crimestoppers
1-800-742-7627

A Mammal Brief

Eastern Woodrat

By Lindsay Rogers

Primarily found in the southeastern United States, the range of the eastern woodrat (*Neotoma floridana*) extends into the southern half of Nebraska. This large woodrat species builds large nests of sticks to protect itself from rain and cold temperatures. Typically associated with eastern woodlands, the eastern woodrat can also be found in prairie and grassland areas. Its nests are often found near rocky outcrops or under large logs.

Eastern woodrats breed multiple times per year but the average litter contains only two young. The helpless, blind young immediately fasten themselves to the mother's teats where they remain firmly attached for three to four weeks. When the mother leaves the nest, young are often dragged unharmed along the ground while still attached to the teat.

As herbivores, they eat nuts, berries, seeds, stems, roots, and buds. They will occasionally eat insects. Starting in the fall, they will store or cache food in their large nest for the winter months. They will also cache random found objects including jewelry, bottle caps, bones, and broken glass. This hoarding behavior has earned them the nickname of "pack rat." ■

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

PHOTO BY JONI FARRAR



Explore the Outdoors

Saturday, May 13

11th Anniversary

9 a.m. - 4 p.m.

Celebrating 150 Years of Nebraska's Great Outdoors

Free for the whole family

- Crossfit challenge and golfing
- Fishing
- Kayaking
- Shooting
- Outdoor cooking
- 6,000-gallon aquarium on wheels
- Elk calling contest

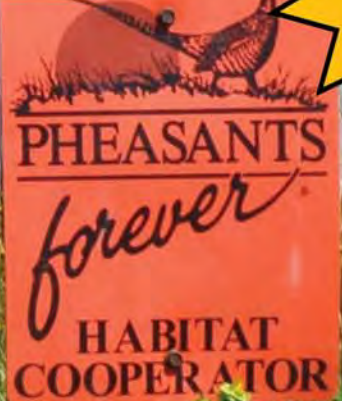
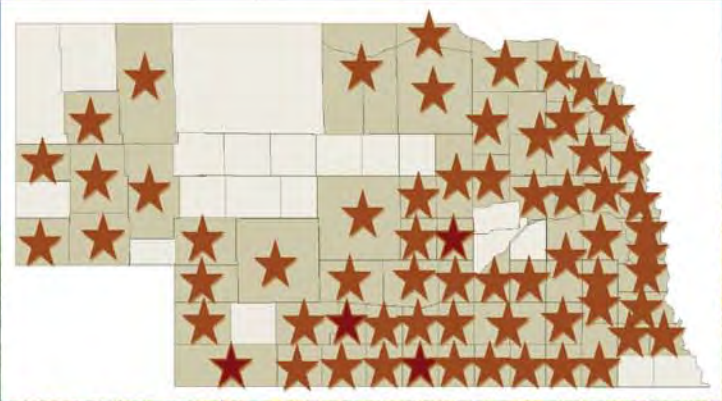
- Fast draw competition
- Hunting and fishing demos
- Kids turkey gobbling contest
- Dog Show
- Archery
- Bowfishing
- Camping skills
- Climbing wall
- S'mores

Park Permit Required

Find out more at FortKearnyExpo.com

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

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



Custom Mixes



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



Honey Bee and Monarch Mixes



For more information about grass drills or to place a seed order visit www.NebraskaPF.com or call 844-SEED-NOW.

Travelogue

By Hannah Hundley, Nebraska Tourism Commission

Elkhorn

All aboard! This month, travelers looking for an outdoor adventure are making their way to **Two Rivers State Recreation Area**. Two Rivers is one of the most popular recreation areas in the state. Located in eastern Nebraska, only 20 miles west of **Omaha's metropolitan area**, the park is the perfect day-use spot for a picnic or an afternoon of grilling. But what really draws people in is its unique overnight lodging options.

The park has 10 **Union Pacific cabooses** that have been refurbished into cabins. These train carts offer a one-of-a-kind experience for park-goers. They sleep six people, with two bunk beds in the rear and two mattresses in the cupola. The cabooses have been modernized; they are air-conditioned for hot summer use and each is equipped with a fully functional bathroom. For those who enjoy outdoor dining, each cabin has a deck with a picnic table and grill. In addition to its exclusive sleeping quarters, this beautiful 622-acre area also has RV and tent camping grounds with a variety of fishing opportunities, hiking trails and a swimming beach.

For the artsy souls, the charming town of **Elkhorn** is only 10 miles away from Two Rivers, and it has many lovable arts and craft shops. **Kimba's Touch Pottery** is one of these shops. Their slogan says it all... "Come Clay With Me!" Kimba's has loads of tools, stamps, cut outs, leather craft tools, slab rollers, wheels and so much more. Visitors can enjoy the old market atmosphere in **Olde Towne Elkhorn** while putting their imagination to the test as they experiment with clay creations. Elkhorn's **Main Street Studios & Gallery** is another hidden gem within the town. They have two large gallery spaces filled with a heartwarming collection of paintings and sculptures. They also have in-house art studios that include a glass worker, a bronze sculptor, a silversmith and an acrylic painter. The possibilities are endless.

At night, travelers can grab dinner at one of the nearby, small-town food joints. **Farmer Brown's Steak House** in Waterloo specializes in steaks, seafood and chicken, and just down the street from it is **El Bees**, a local Tex-Mex restaurant. There is a place to satisfy everyone's taste buds!

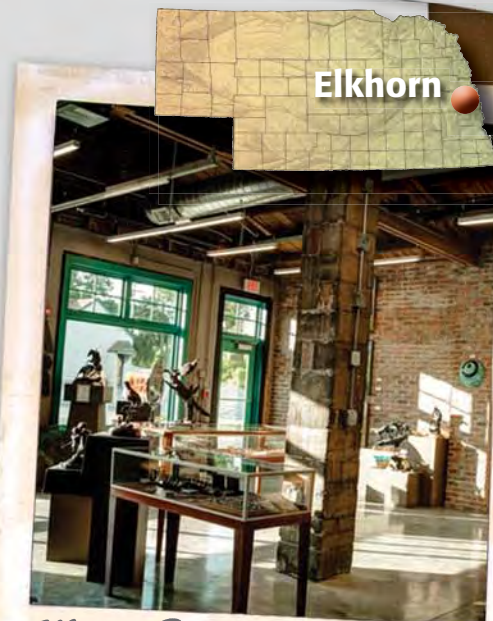
And for those looking for a real good time, live music and cold drinks can be found at **Buck's Bar and Grill**, the only bar in Venice, Nebraska. This local dive bar boasts about having the best original touring bands folks will see anywhere. ■



Two Rivers' caboose cabins



Kimba's Touch Pottery



Main Street Gallery

Elkhorn



Live music at Buck's

Save the Date

Nebraska 150th Signature Event

July 21-23, 2017

Convergence on Sacred Ground



Ash Hollow State Historical Park
Lewellen, NE

Plan to come experience history in Ash Hollow, refuge to the Native Americans, Nebraska cowboys and farmsteaders, fur traders, military and pioneers during the 1860's.

- Lively Discussions by Historians
- Trail and wagon rides
- River rides
- Petting zoo
- Exhibits
- Food
- Music
- Living Histories
- Interactive activities

Friends of Ash Hollow **NEBRASKA**
- GAME PARKS -

Check out our website:
www.Ash-Hollow150th.com

Multi-Species Lottery Opportunities

For residents and nonresidents



Resident Super Tag

Includes tags for elk, deer, antelope and turkey

\$25

single entry

Nebraska residents only

Multiple Entry Super Tag

Includes tags for elk, deer, antelope and turkey

\$10

per entry

Nonresidents are eligible

Application period for all lotteries
Now - July 7, 2017

NEBRASKA
- GAME PARKS -

Combo Multi-Species Lottery also offered

Learn more at OutdoorNebraska.org/SuperTag

A Brief History

The "Babe" of Baseball Meets the "Babe" of Hens

By the Nebraska State Historical Society

When New York Yankee sluggers Babe Ruth and Lou Gehrig came to Omaha for an exhibition game in October 1927 following the Yankees' victory in the World Series, the "Bambino" met the "Babe Ruth" of the poultry world. The chicken, officially named "Lady Norfolk" and belonging to A. R. Lander of Norfolk, Nebraska, had just set a world record with 166 days of continuous egg-laying. The hen had been fed on "Amco Egg Mash" produced by Omaha's American Milling Company, which sponsored the egg-laying contest. Company Superintendent George Danforth had the record-setting egg No. 166 carefully wrapped in a jewel case and airmailed to President Calvin Coolidge at the White House to be served for breakfast.

After establishing the record, more eggs were forthcoming from Lady Norfolk, whose prowess had earned her the nickname "Babe Ruth." Eggs No. 170 and 171 coincided with the real Babe Ruth's visit to Omaha. Naturally the

American Milling Company could not pass up an opportunity to gain even more publicity for the chicken and the feed supposedly responsible for her prolific output. The *Omaha Bee-News* of October 17, 1927, gave the meeting of the two "Babes" front page coverage.

"It was a sight for sore eyes when Babe Ruth, king of the bat, and Babe Ruth, queen of nonstop egg-laying hens of the entire world, shook hands, exchanged compliments, and smiled at each other in the backyard of the American Milling Company at 11 a.m. Sunday ... When the Babe arrived at the roosts, a crowd of several hundred persons gathered around the milling company grounds to see the world champs.

"The first item of this formal affair, at which Ruth and Gehrig were bedecked in their ball togs, was the introduction of the latest egg to both players by E. L. Altrick and Frank Robinson, managers of the company. But this was all routine to the Babe – he wanted to meet the little hen herself. 'The chick! The chick!' Babe exclaimed when he spotted Superintendent George Danforth with the 'Babe' in his arms. At this point the crowd was tense.

"May I introduce Babe Ruth (the hen), champion of the world as far as eggs are concerned,' said Mr. Robinson to 'Mr. Babe Ruth, famous home run king.' 'Howdy chick,' said the Babe with one of his largest and most inviting smiles. 'Cut, cut, cut, cut' clucked 'Babe Ruth,' flapping her wings wildly. The hen was excited and the crowd was cheering. 'I'll bet this chicken won't lay any more eggs after this, and I sure want her to,' said the Babe, with the smile now changed to a worried expression. But Mr. Robinson assured the Babe that it was all right for she had already established a record for the world and that was enough."

After the exhibition baseball game held that afternoon, egg No. 170 was presented to Babe Ruth in front of a crowd of 4,500 fans. It was in a jewel box inscribed, "From the Queen of Eggs to the King of Hitters." The article noted that the egg would be sent to New York and there drained and preserved so Ruth "can keep a souvenir of his namesake."

Visit the Nebraska State Historical Society's website at nebraskahistory.org.



An unidentified man holding Lady AMCO of Norfolk, April 10, 1927.



Lou Gehrig and "Babe" Ruth flank an unidentified man in this photo by Omaha photographer Nathaniel Dewell, which may have been taken during the Ruth-Gehrig visit in October 1927.

Nielsen Tree Farms



Specializing in windbreak development and acreage trees.

Evergreens, shade and ornamental trees.

Volume discounts and delivery available.

Seedlings and small potted trees available from our Minnesota location, Itasca Greenhouse
1-800-538-8733, or
itascagreenhouse.com

Call or email us to visit or order your trees for this season.

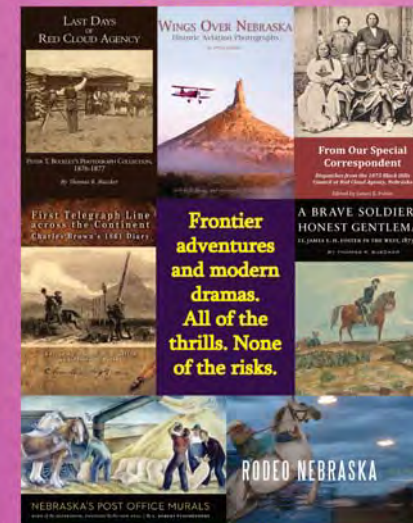


Nielsen Tree Farms
210 County Road 2
Dodge, NE 68633
1-866-353-8733
nielsenree@gpcom.net
nielsenreefarms.com



Growing for the Future

REAL LIFE NEBRASKA STORIES



Buy your copies at one of our Landmark Stores, at your local bookseller, or online.

Nebraska State Historical Society
www.nebraskahistory.org/books
402-471-3447

BUILD YOUR LEGACY

POST & BEAM BARN, HOMES, CABINS, AND VENUES



VISIT OUR WEBSITE TO RECEIVE A FREE CATALOG

WWW.LEGACYPOSTANDBEAM.COM



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.



Roadway Cougars

A new Nebraska license plate that supports conservation education is proving popular.

By Justin Haag

Cougar sightings are becoming more common on Nebraska's roads these days; at least they are for people observing vehicle license plates.

In October 2016, the Nebraska Department of Motor Vehicles added to its offerings a license plate featuring an image of the big predator. The design of the plate, which was created by the Nebraska Department of Motor Vehicles using *NEBRASKAland*



photos, features a reposed cougar with the scenic backdrop of the Wildcat Hills near Gering. Each sale of the new plate is helping foster the next generation of naturalists as, by statute, the Game and Parks Commission receives the extra proceeds from the plates for conservation education.

The plates are proving to be popular. In the opening four months of their offering, drivers bought more than 3,200 of them. Rhonda Lahm, director of the Department of Motor Vehicles, said it is the second most popular of the four most recent specialty plates. A plate honoring the military is the most chosen one by a sizable margin, but the cougar design is outpacing selections for the sesquicentennial and breast cancer awareness.

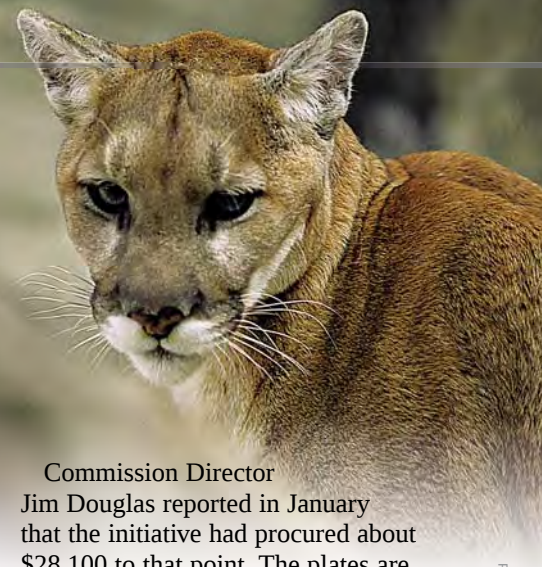


PHOTO BY JUSTIN WAMBOLD

Commission Director Jim Douglas reported in January that the initiative had procured about \$28,100 to that point. The plates are available for an extra \$5 for standard numbering or \$40 for those wanting a personalized plate.

Cougars, also commonly referred to as mountain lions or pumas, have had a confirmed presence in Nebraska since the early 1990s. Sen. Ernie Chambers of Omaha, an outspoken supporter of the species, sponsored the 2015 legislative bill that created the license plates following a suggestion by Sen. Charlie Janssen the previous year. ■

STOCK SEED FARMS
PRAIRIE GRASS • TURFGRASS
AND WILD FLOWER SEED

Quality Seeds Since 1956

A Leader in Native Grass & Wildflower Production

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

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

DISCOVER NORTHWEST **NEBRASKA**

HIKING • BIKING • CAMPING
FISHING • HORSEBACK RIDING • HUNTING

CHADRON & CRAWFORD

ExperienceNWNebraska.com #DiscoverNWNebraska

Find your next ADVENTURE.

GO EXPLORE.

Journey to Western Nebraska

ExploreWestNebraska.com

Ponca BBQ Challenge

By Lynn Mellick, Ponca State Park

Mark your calendar! Ponca State Park is hosting its second "Smoke on the River, BBQ Challenge," Saturday, Sept. 16, 2017, at the Missouri River Outdoor Expo. There will be three main categories: pork, poultry and beef. An "other" category of wild game will be judged separately.

No registration fee is required. Prizes will be awarded in each division for first, second and third places. First place in each category earns a one-night stay in a Ponca State Park mini lodge. The grand champion prize will be announced at a later date.

The BBQ challenge is open to 12 teams. Charcoal, stick burners and pellet grills are allowed. No electric or gas grills.



PHOTO COURTESY OF PONCA STATE PARK

BBQ pork ribs was one of the dishes entered in the "Smoke on the River, BBQ Challenge" last year at Ponca State Park's Missouri River Outdoor Expo.

We are looking for certified judges. If interested in judging or competing, please contact Tyler Uthof at 402-369-2530 or uthof_13@hotmail.com. For general Expo questions, contact Ponca State Park at 402-755-2284. ■



Exploring Nebraska One Post at a Time

By Renae Blum

Consider this your invitation to hit the road this summer and get lost in some of Nebraska's most interesting places: The Great Park Pursuit is just around the bend.

The premise is simple. Each summer, organizers select 20 sites around the state – usually state parks and recreation areas, national monuments and trails – and place an engraved post there. Participants can visit as many of these sites as they wish between May 1 and Sept. 16, locating the posts and making an etching with pencil and paper to prove they were there. You then mail in these sheets of paper to enter a drawing for dozens of prizes, including free cabin stays, an iPad, gift cards, magazine subscriptions and an outdoor recreation package worth \$1,500. The more pieces of rubbings you submit, the more chances you have to win. The Great Park Pursuit is free and easy to sign up for.

More than 16,000 Nebraskans have participated in the Great Park Pursuit since 2008, forming teams of friends and family members to go on adventures with. Participants often comment that it's a great way to find out about places in the state that they didn't know were there, and to learn



Kyle Petersen of Malcolm makes an etching at a Great Park Pursuit post. Participants in the summer program can win prizes for making etchings at posts and mailing them in.

PHOTO BY ELISHA PETERSEN

more about what Nebraska has to offer. You're encouraged to take your time at each site, enjoying whatever you find there – horseback riding trails, campgrounds, swimming areas, playgrounds, historical exhibits and more. Negpp.org has ideas for more than a dozen activities you can do with your kids at a location, including making leaf and flower pressings and identifying different kinds of animal tracks. Teams can be made up of individuals, families, friends, coworkers, youth organizers or any other group you belong to.

Register your team and get started at negpp.org. Watch the Great Park Pursuit Facebook page for clues on where to find the traveling "bonus" post, Parker the Frog. ■

Anchoring the Right Way

By Brian Robinson

Anchoring your boat is not only conducive to catching fish, but it is also a good skill to master for boat control and safety reasons. Here are a few ways to improve your anchoring technique.

First, let's get to the equipment. I use a 20- to 25-pound Navy anchor for my 21-foot walleye boat and it works well in most applications. The metal fluke style anchors also work well. I like to have 100 feet of rope because the general rule is to use enough rope to cover three times your depth. If you are in 20 feet of water, you will need about 60 feet of rope.

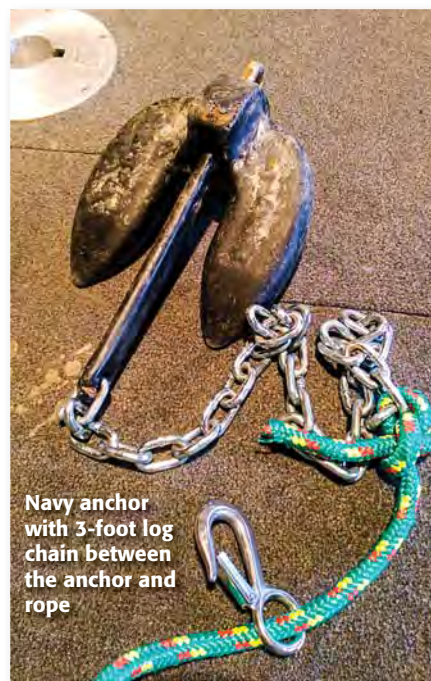
The most important part of this setup is a 3-foot piece of log chain between your anchor and main rope. This essential piece keeps the anchor weighted down at an angle that will cause it to catch on the bottom.

The next important consideration is where you attach the rope to your boat. Attaching at the lowest part possible is the best place, which is usually the bow eye, where you connect it to the trailer. I use a heavy carabiner on my main rope that will easily attach to the

bow eye.

Then I tie off using a cleat up on top of the gunwale. It is an easy tie-off point to manage, but my contact point is still low to the water, preventing excess movement in the wind.

If you use these tips for strategic anchoring, you will be amazed at how much better your boat control can be during a variety of weather conditions and maybe how many more fish you put in the boat. ■



Navy anchor with 3-foot log chain between the anchor and rope



The metal fluke style anchor

PHOTOS BY BRIAN ROBINSON

Join the Pursuit

May 1 - September 18, 2017



Learn more at NEGPP.org

NEBRASKA
— GAME PARKS —



A NEBRASKA OUTDOOR ADVENTURE
10th year

A Wild Event

By Amy Rummel, Joslyn Art Museum

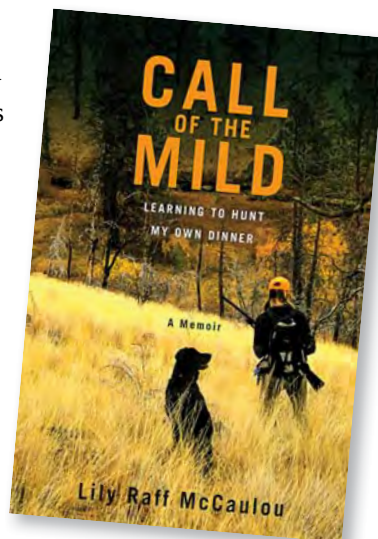
To celebrate its *Wild Spaces, Open Seasons* exhibition, the Joslyn Art Museum will host a public lecture event by Lily Raff McCaulou, author of *Call of the Mild: Learning to Hunt My Own Dinner*, on Friday, April 7, at 7 p.m. An urban environmentalist who moved west and became a hunter, McCaulou learned to hunt the food she loves in a sustainable way. *Call of the Mild* records her story, and her lecture will reflect on the complex issues that surround ethical hunting in America today. Following McCaulou's presentation, guests will enjoy gallery viewing, a book-signing, and an hors d'oeuvres reception with a cash bar.

Advance reservations are required for this public lecture event: \$10 for Joslyn members or \$20 for the general public. Fee includes exhibition admission, hors d'oeuvres and one free cocktail ticket (cash bar thereafter). Reservations may be made online at joslyn.org or by contacting Susie Severson, director of adult programs, at 402-661-3862 or sseverson@joslyn.org.

If you cannot attend the event, the *Wild Spaces, Open Seasons: Hunting and Fishing in American Art* exhibit is open to the public Feb. 12 through May 7, 2017. It is a ticketed exhibition: \$10 for general public adults; members, youth ages 17 and younger, and college students with ID enter free. The museum offers special Thursday pricing (4-8 p.m.): \$5 for general public adults.

Docent-guided tours of the exhibition are offered weekly – view the calendar of events at joslyn.org for tour offerings. Free Wi-Fi is available in all Joslyn galleries. Guests may use their own web-enabled mobile device or borrow one of Joslyn's to access the dual language mobile tour.

The *Wild Spaces, Open Season* collection encompasses a wide variety of portraits, landscapes, still lifes and genre scenes that reveal the connection of these outdoor activities to all aspects of American history. The collection includes iconic works by Thomas Cole, Thomas Eakins, Paul Manship, and John Singer Sargent, as well as pictures by artists who specialized "in the field," such as Charles Deas, Alfred Jacob Miller, William T. Ranney, and Arthur Fitzwilliam Tait. The exhibition also sheds new light on modernist studies of sporting subjects by Arthur Dove, Marsden Hartley, and Max Weber. Together, the 64 works in the exhibition illuminate changing ideas about community, environment, national identity, landscape, and wildlife, offering compelling insights into one of our most familiar shared adventures. ■



JOSLYN
NOW AT

WILD SPACES, OPEN SEASONS

Hunting and Fishing in American Art

Through May 7, 2017



Presenting Sponsors:
The Hawks Foundation

Major Sponsor:
Douglas County

Contributing Sponsor:
Kiewit

Supporting Sponsors:
Robert H. Storz Foundation
valmont

Additional support provided by:
Fran and Rich Juro

100 Years of
Douglas County

WoodmenLife

JOSLYN
Art Museum

2200 Dodge Street • Omaha, NE
(402) 342-3300 • www.joslyn.org

IMAGE: William Sidney Mount (American, 1807-1868), *Catching Rabbits*, 1839, oil on panel, The Long Island Museum of American Art, History & Carriages, Stony Brook, New York. Gift of Mr. and Mrs. Ward Melville, 1954

Pond-Tini

A Revolution in Pond Recreation

You Tube Find us on **f**




ADS

800-657-2184 • www.pondtini.com
234 N. Tyler | P.O. Box 450 | Elm Creek, NE 68836



VISIT

Cheyenne County

Sidney Dalton Gurley Lodgepole Potter

ANGEL OF HOPE

For more information on all that Cheyenne County has to offer, contact the Cheyenne County Visitors Center
658 Glover Rd., Sidney, NE (308) 254-4030 / (866) 545-4030
www.sidneycheyennecountytourism.com














Mixed Bag

Virtual Treasure Hunting

Uncover clues to Nebraska's past using your GPS.

By Renae Blum

You may have heard of geocaching (pronounced GEO-caching) – the popular outdoor game of hunting down hidden treasures, called caches, using Global Positioning System (GPS) devices or smartphones. Players follow GPS coordinates to locate the caches, containers which hold a logbook for players to sign and usually small trinkets of some kind for trade. The player then puts the geocache back for the next person to find and logs his or her successful find online. Caches can range in size from buckets, bins and even railroad cars to nano caches, which are $\frac{3}{8}$ " by $\frac{3}{8}$ " in size and contain nothing more than a tiny rolled-up slip of paper for logging purposes. Caches also range in difficulty; some are easily visible, while more challenging caches may be tucked inside bolts or compartments in logs and rocks, or require you to figure out a lock combination. More than 2.8 million geocaches have been placed by geocachers in over 180 countries; most people in North America and Europe live within a short walk of at least one.

Not all caches are physical. Players looking for EarthCaches are searching for answers to questions laid



Finding an EarthCache requires you to explore a place that is geologically interesting and to answer questions about it. Looking for an EarthCache can be a fun, interesting outdoor activity.



out by that EarthCache's creator, rather than for physical containers. The questions have to do with the landscape surrounding the GPS coordinates, a site that is geologically interesting in some way. After exploring the site, reading its online notes and determining answers, you email them in to the EarthCache's owner and log your visit online to get credit for your visit. Inevitably the player walks away knowing more about the Earth, Nebraska's ancient history and the story of the land in a unique area. Because they are non-physical, EarthCaches may be located at sites where typical geocaches are not legally allowed, such as national parks and geological monuments.

Nebraska holds more than 60 EarthCaches. Six of Nebraska's eight state parks have EarthCaches, as well as one state historical park (Ashfall Fossil Beds State Historical Park). Some Nebraska EarthCaches focus on the state's ancient animal and plant life. At Toadstool Geologic Park, visitors are encouraged to examine fossilized footprints; the questions for Ashfall Fossil Beds State Historical Park focus on the stunningly well-preserved species of rhinos and camels at the site. Several EarthCaches highlight Nebraska's rivers and waterfalls, such as Smith Falls, the Missouri River and Stone Creek Falls at Platte River State Park. Other Nebraska EarthCache adventures include exploring the Sandhills, the Platte Valley Rainwater Basin in York and the Heron Haven Wetland in Omaha. You do not need advanced scientific knowledge to complete an EarthCache; both kids and adults can enjoy the activity. Some EarthCaches require a bit of walking; at an EarthCache situated in Lincoln's saline wetlands, you'll need to make a trip of about 1.5 miles through the wetland to answer questions. Educators can download an extensive guide to using EarthCaches in the classroom, including lesson plans, online – it is available on Google as a PDF under its title, "EarthCaching – an Educator's Guide."

To start geocaching, register for a free basic account at geocaching.com and click "Play" to find caches near you. To narrow your search to EarthCaches, click "View Geocache Maps" under "Play" and deselect the other icons until only the EarthCache icon remains, a globe with a piece cut out of it. To make your search even easier, download the free geocaching app. EarthCaches are just one of several different types of geocaches; read more about other types under the "Learn" tab. ■



EarthCache

BX Series



B Series



M Series



L Series



**ORANGE
OPPORTUNITY
SALES EVENT**

0% FOR 84 MONTHS
ON SELECT NEW KUBOTA TRACTORS*

Promotional Finance Offer Ends 3/31/17.

**6
YEAR**
LIMITED POWERTRAIN
WARRANTY

On Select New Kubota
BX, B, L and MX Tractors**

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

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



*20% down, 0% A.P.R. financing for up to 84 months on purchases of new Kubota BX, B (excluding B26), L (excluding L39/L45/L47), MX, M-SU, M6060/M7060, M4 (excluding M4N) and M5 (excluding M5N/L) Series equipment is available to qualified purchasers from participating dealers' in-stock inventory through 3/31/2017. Example: An 84-month monthly installment repayment term at 0% A.P.R. requires 84 payments of \$11.90 per \$1,000 financed. 0% A.P.R. interest is available to customers if no dealer documentation preparation fee is charged. Dealer charge for document preparation fee shall be in accordance with state laws. Inclusion of ineligible equipment may result in a higher blended A.P.R. 0% A.P.R. and low-rate financing may not be available with customer instant rebate offers. Financing is available through Kubota Credit Corporation, U.S.A., 3401 Del Amo Blvd., Torrance, CA 90503; subject to credit approval. Some exceptions apply. Offer expires 3/31/2017. See us for details on these and other low-rate options or go to www.kubota.com for more information. **Only terms and conditions of Kubota's standard Limited Warranty apply. For warranty terms, see Kubota's Limited Warranty at www.kubota.com or authorized Kubota Dealers. Optional equipment may be shown. © Kubota Tractor Corporation, 2017.

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.

April 1
Youth Fishing Instructor Certification Class
Nebraska Game and Parks Outdoor Education Center, Lincoln

April 1-9
Sandhill Crane Migration Viewing
Fort Kearny State Historical Park (SHP), Kearney

April 5
Light Goose Conservation Order closes in Rainwater Basin and West zones

April 5
Spring Turkey Hunting Workshop
Game and Parks Southwest District Office, North Platte

April 6
Crow Hunting
Statewide crow hunting season closes

April 6
Spring Turkey Hunting Workshop
Ak-Sar-Ben Aquarium, Gretna

April 6
Growing Up WILD Workshop
for after-school providers, Florence Community Center, Omaha

April 8
Spring Youth Shotgun Turkey
Spring youth shotgun turkey season opens

April 8
Happy Birthday, Nebraska!
Wildcat Hills State Recreation Area, Gering

April 8
Nebraska State Conventional Pistol Championship
Nebraska Game and Parks Outdoor Education Center, Lincoln

April 11
Linking Literature and Science workshop for after-school providers, Florence Community Center, Omaha

April 15
Spring Shotgun Turkey
Spring shotgun turkey season opens

April 15
Light Goose Conservation Order closes in East Zone

April 15
Project Appleseed .22 Competition
Platte River State Park (SP), Louisville

April 17
Bighorn Sheep Lottery
Application period begins for bighorn sheep lottery permit

April 21
Meeting
Nebraska Game and Parks Commission meeting, Norfolk

April 22
Republican Valley Archery 3-D Shoot
Red Willow Reservoir SRA, McCook

April 28
Arbor Day
Game and Parks offices closed

April 29
Roger G. Sykes Outdoor Heritage Education Complex
opens on weekends, Platte River SP, Louisville

April 29-30
Beyond Becoming an Outdoors-Woman
Experience Platte River SP, Louisville

Stick Bait Success

By Brian Robinson

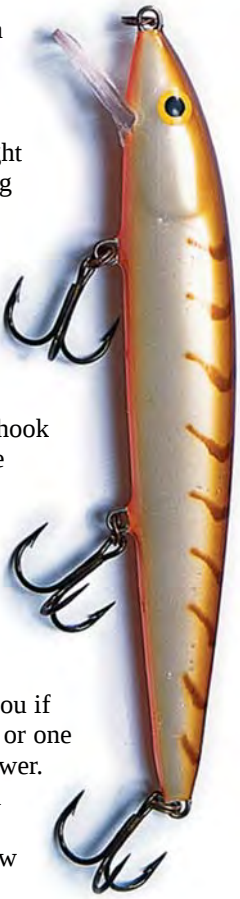
Traditionally, stick baits like Husky Jerks and Rogues are deadly when used early and late in the season. I have found this to be particularly true in some areas and have found a few tips that really help catch fish.

For the most part, I lean toward sticks that suspend, like the above mentioned weapons. I've found that having a variety on hand will help you dial in what the fish want. Some days they want 3" baits, some days 4½". Every bait has a different wobble, roll and appearance at rest while suspending. Pay attention to these aspects and let the fish tell you what they want.

Finding the right cadence is also important when using sticks. I will usually cast out, rip them down a few cranks then completely stop them. Then I try to figure out if I should reel slowly, twitch the bait or reel a couple times and stop it again. Pay attention to when the fish strike; is it on the pause or right when you start cranking again? Once you find the right cadence, you will stay busy.

I recently read an article about a bass pro who said he never uses a stick bait without a dressed hook on it. A few lures come with this style hook, but for the ones that don't, I have tied a few hooks with mylar and feathers, adding flash to the presentation. Once again, let the fish tell you if they want a flashy bait or one that's a bit dull and slower.

Use these tips, find a pattern that works and you'll be amazed at how many different species of fish will strike a well presented stick bait. ■



Monarch Count from Mexico

By Kristal Stoner, Wildlife Diversity Program Manager

Although the monarch butterfly appears small and delicate, it maintains one of the last great animal migrations. Every year milkweed-fed monarchs born in the United States and Canada undergo a 3,400 mile journey to the Sierra Madre Mountains of Mexico. Monarchs fly about 100 miles each day, so their migration can take two months each fall.

Monarchs spend the winter roosting in oyamel fir forests that typically have cool temperatures and ideal humidity that allows them to conserve their energy. They cluster together to stay warm. Tens of thousands of monarchs can cluster on a single tree, so the trees appear to be orange.

Since 1994, scientists have been measuring the area of forest covered with monarchs as a way to estimate the monarch population east of the Rocky Mountains. The monarch population peak was in 1996, when butterflies covered 18 hectares. This year's official population estimate is 146 million monarchs, covering an area of just 2.91 hectares (7 acres).

Unfortunately, this is down 27 percent from last year's area of 4.01 hectares. In early 2016, just when the monarchs were preparing to begin their migration north, storms blew down over 100 acres of forest. The storms happened after the official monarch survey, but scientists speculated that those storms killed over 6 million butterflies.

Unfortunately, this means the monarch still faces possible extinction for the entire eastern half of the United States. The current population is only half of the necessary 6 hectares necessary for monarch recovery. With such low population numbers, winter storms and summer droughts could have devastating effects.

There is still hope for monarchs. While it faces many challenges across its migration, it has tremendous potential for recovery. In early June, Nebraska usually sees the first migrants north. You can help monarchs by planting milkweed, a variety of flowers that will bloom from June until fall and avoid using pesticides. For more information, visit: monarchwatch.org/blog. ■



Migrating monarch butterflies are pictured on a fir tree branch in Michoacan, Mexico.

NEBRASKA Visitor

Last issue's winner of the Visitor drawing was Cindy Fankhauser of Kearney, Nebraska, who found the **mourning cloak butterfly** on page 8.

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 5, 15, 17, 23, or 63.

*The **mourning cloak** is a large butterfly, with a wingspan of 2-4 inches. These butterflies can be found throughout much of the U.S., including Nebraska. Their wings are deep maroon to black, with a thick yellow band along the edge. This insect overwinters in the adult stage, with adults seeking shelter in cracks and under bark. They may become active on warm, sunny winter days. Mating occurs in the spring, and females lay eggs on host plants, which include willows, hackberry, birch, elm and cottonwood. Caterpillars hatch and begin to feed, staying together on the plant. In mid- to late-spring, the caterpillars will pupate. Adults emerge in June and July and feed for a short time on tree sap and fermented fruit before becoming inactive. This summer inactive period is termed aestivation. They will resume feeding in the fall before finding a spot to overwinter.*

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



Spring Wildflowers

of the Tallgrass Prairie

Photos and story by Gerry Steinauer, Botanist



The first tallgrass wildflower to emerge from its winter slumber is the prairie fawn lily (Erythronium mesochoreum). As early as late March, when snow and cold still threaten, fully-formed, bell-shaped flowers push through the soil, followed by two fleshy leaves. This increasingly uncommon wildflower is found only in our southeastern counties.



The pink to dark purple flowers of ground-plum (Astragalus crassicaupus) mature into clumps of plum-shaped pods that sprawl on the ground. Late in summer, nests of the withered, leathery pods mark where plants once bloomed. Rodents gather and cache the dried pods.

Spring arrives to the tallgrass prairie with a splash of wildflowers – whites, yellows, pinks and purples. The first to emerge from thawing soils are only a few inches tall, a stature well-suited to weak sunlight and lingering cold. These diminutive plants will bloom but briefly then rush to set seed before the prairie comes fully to life.

As spring progresses, longer days and a stronger sun bring a greater diversity of wildflowers and revives prairie grasses turning the land from winter brown to green.



Prairie violet (Viola pedatifida) flowers fade after a hard April frost. The most common and widespread violet in our eastern prairies, this species is vital to the survival of the rare regal fritillary butterfly whose larvae feed exclusively on violets.



In mid-spring, the leaf rosettes of field pussytoes (Antennaria neglecta) send forth a stem crowned by the plant's namesake, fuzzy flower heads. This colonial plant secretes chemicals into the soil that stunt the growth of other wildflowers and grasses, allowing the ground-hugging pussytoes to compete for sunlight.



A delicate perennial growing from a shallow, scaly bulb, all parts of the violet wood sorrel (Oxalis violacea) are edible, raw or cooked. The Omaha and Ponca tribes called the plant "hade-sathe," meaning sour herb. The plant contains oxalic acid, imparting a tart taste.

To compete against the prolific grasses, wildflowers now are taller, some reaching a foot or more in height. These species will have their day in the sun, but in time, they too will be supplanted by a new parade of blooms: those with a constitution to withstand the heat and aridity of summer.



ABOVE: The early morning dew settles on the flowers of the prairie ragwort (*Packera plattensis*). This plant grows statewide in prairies and is the most common of our nine ragwort species. Their flowers can be boiled to make a yellow dye for wool.

OPPOSITE: The beautiful, sculpted flowers of the prairie larkspur (*Delphinium virescens*) mask a hidden danger for this late spring-blooming perennial – toxic alkaloids to dissuade grazers. Cattle are acutely susceptible to the poisons if plants are consumed in quantity. Several species of *Delphinium* were used as a folk remedy to kill lice. A tincture, made of the seeds and flowers, was mixed with soap and used as a shampoo.



Tallgrass prairies are now rare in eastern Nebraska, but for those who seek, native wildflowers can be found and enjoyed. ■

In this recently burned prairie with scant plant litter, ample sunlight reaches and warms the soil, encouraging the growth of the long-bracted spiderwort (Tradescantia bracteata) and other wildflowers. The frail and succulent petals of spiderworts last but a day before dissolving into a mucilaginous mass. Their persistently fresh, showy flowers with large yellow stamens set against complementary purple petals make them a focus of nature photographers.



The pleated and funnel-shaped flowers of Macoun's bindweed (Calystegia macounii) are characteristic of the morning-glory family to which this plant belongs. An uncommon and little-known wildflower of loamy prairies in eastern Nebraska, its close relatives include the more twining and weedy hedge bindweed (C. sepium) and the dreaded field bindweed (Convolvulus arvensis) that invades lawns, gardens and croplands.



Red-tinged in bud, the lemon yellow flowers of plains evening primrose (Oenothera serrulata) unfurl in May and bloom into July as new buds form on elongating stems. Unusual among primroses, its flowers remain open throughout the day.

Time Well Spent

What to do in April

By Renae Blum

Fields and forests are perking up with fresh signs of life; make sure you don't miss any of it, from spring turkey hunting to white bass fishing to morel mushroom hunting. For a complete list of upcoming events across the state or for more information on any of the activities listed here, visit Calendar.OutdoorNebraska.org. ■



PHOTO BY JENNY NGUYEN

White Bass Fishing Late April

Statewide

This open-water predator is spawning at reservoirs across the state. According to the 2017 Nebraska Game and Parks Fishing Forecast, the top reservoirs for white bass fishing are Swanson and Harlan County. Sherman, Maloney, McConaughy and Calamus are also good bets. If you're in search of the largest white bass – perhaps exceeding 15 inches – visit Minatare, Elwood and Lewis & Clark.

Junior Olympic Archery Development and Adult Archery Program

April 3 – June 27

Nebraska Game and Parks Outdoor Education Center in Lincoln

If you'd like to develop your archery skills, consider joining this 10-week program for adults and kids ages 8 and up. With the help of expert instructors, students work at their own pace while striving to develop their form and meet their archery goals, whether that is recreational enjoyment or competition. Four programs are available at different times; two begin Monday, April 3, and two begin the following day. Call the center at 402-471-6141 to learn more and sign up.

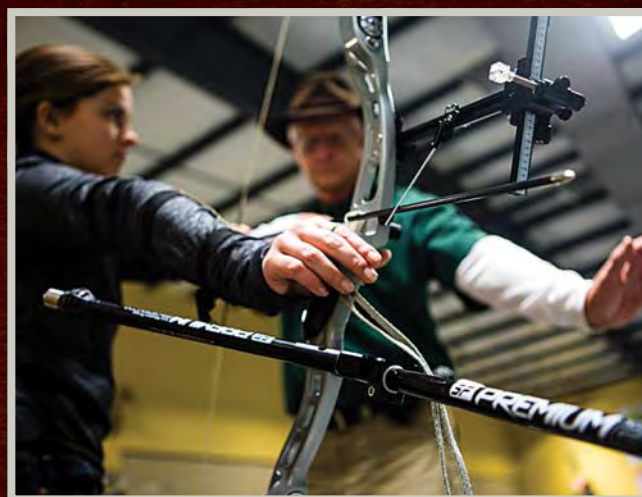


PHOTO BY AMY KUCERA

PHOTO BY JEFF KURRUS



Spring Turkey Hunting

Shotgun season starts April 15

Statewide

Nebraska boasts not only the best turkey hunting in the country, but also one of the longest seasons in the nation, with archery and shotgun seasons closing May 31. Turkeys can be found in every county of the state, and hunters will find good turkey opportunities on more than 500,000 acres of public and public-access land in Nebraska. To learn more, visit OutdoorNebraska.org/wildturkey.

Nebraska Sesquicentennial Events

Throughout the month

Statewide

Nebraska turned 150 in March, and celebrations are ongoing throughout the year. This month, head to Tekamah on April 15 for the Spring Fling, the largest Easter egg hunt in Nebraska. If you enjoy art, visit the Art of the American West and the Wild Spaces exhibits at the Joslyn Art Museum in Omaha, and check out the Nebraska State Quilt Guild's NE150 Quilt Competition display in Seward. Other events include Nebraska City's 146th Annual Arbor Day Celebration and a youth poetry festival. For details and more events, visit ne150.org.



PHOTO BY JEFF KURRUS

Morel Mushroom Hunting

Late April

Statewide

It's time once again for that most treasured of scavenger hunts: morel mushroom season. Good locations include recently burned woods, moist wooded areas near dying or dead elm or ash trees, old apple orchards, timbered areas along rivers and streams, and sunny, south-facing slopes.

Kayak Evolution

By Justin Haag

It has taken a few thousand years, but adaptations have made kayaks one of the most popular vessels afloat. Are you looking to go plastic?

Look up the word “kayak” in the dictionary and the first words you see might describe a small, light canoe-like vessel, made watertight with coverings of animal skins, developed by the Inuit long ago to fish and hunt. That definition,

especially the part about the animal skins, is poles apart from what you are likely to see floating the surface of your local lake or gleaming on the floor of your nearest outdoor retailer. Without doubt, though, the Inuit were on to something when they first began using this innovative watercraft



Pictured is a vintage 1873 engraving showing Inuits seal hunting.



PHOTO BY JEFF KURRUS

Marty Hughes of Lincoln fishes from a kayak at Wanahoo State Recreation Area in Wahoo in Saunders County.

in Greenland thousands of years ago for hunting and fishing to feed their families and communities, and they would love to see how far their innovations have come.

During the past decade or so, kayaks of the plastic variety have progressed from being something of a novelty in Nebraska to a common sight at lakes and rivers of all sizes. Once people climb aboard these modern vessels, they come to understand the magnetism of this national trend.

Users love that modern kayaks are lightweight and provide freedom for the independent-minded floater. Even

in waters choked by vegetation, kayaks smoothly glide over the surface and get users to places inaccessible by other vessels. Whether for fishing, hunting or just splashing around the beach, kayaks appeal to a wide variety of users at an attractive price range beginning at just a few hundred bucks.

As time goes on, manufacturers have continued to improve on the pioneering vessel first used by the Inuit. With each passing year, kayaks get a little better and some of the newest designs are sure to make converts of any doubters.

This article is intended to help readers make the right choices as they seek to

join the nation’s ever-growing plastic navy.

Where’s Your Water? What’s Your Purpose?

The greatest advantage to the kayak, perhaps, is its versatility. A floater assumes a great deal of freedom when not having to worry about finding a boat ramp and dock for launching and retrieval.

Among the most important questions to ask when choosing a kayak is

where will you use it and for what purpose? With so many kayaks on the market, making a choice can be an overwhelming task. The choice can become much easier by considering a few points. It is a lot like choosing a vehicle, with choices akin to the little shiny sports car, the big hardy four-wheeled drive truck and points in between. From small, brightly-colored recreational kayaks to big, camouflage fishing and hunting models loaded with features, today’s consumers have many options to suit their style.

One attribute to consider is length and width. Most consumer grade

kayaks range from nine to 15 feet long at various widths. Do you want a boat that is small and light for lugging through a mile of backwoods before getting to water? Shorter kayaks excel on a wide variety of waters, providing the capability to make short turns and maneuver along small streams and flooded timber – not to mention taking up less space for storage and transportation. However, a longer, narrower kayak tracks better, staying on course and making easier work over long distances.

A bigger vessel also provides ample room for storage and often enough stability to stand upon for a casting platform or to carry your trusty waterfowl-retrieving canine. A wider kayak will excel in stability but it is not going to get high marks for speed.

If possible, those purchasing a kayak would be wise to sit in it, or even better, take it for a float, before taking it home. Each model handles a little differently, not to mention provides different features in varying arrangements.

Sit-on-top vs. Sit-in

Just like their caribou-skinned predecessors, sit-in kayakers, in which users are seated in a cockpit, provide a heightened barrier for those battling heavy surf, whitewater and big waves. While Nebraska may not have much of the first two, many of its reservoirs often feature big waves and wakes where some extra protection from the water is desirable – especially in colder temperatures.

Regardless, the virtually unsinkable hollow-bodied sit-on-top kayak, with its molded ergonomic deck, has become the chosen option for many floaters for a variety of reasons. For one, this style is much easier to get in and out of, especially for larger users. Once aboard, operators are freer to move about. Many larger kayakers even have big enough platforms for users to stand, especially true of newer models that even have seats that will transform to leaning bars. Most also have hatches to access storage space below the deck.



Modern sit-on-top kayakers such as the Lifetime Tamarack Angler often come from the manufacturer with amenities popular for anglers, including rod holders, padded seating and hatches for storage.



Sit-in kayakers such as the Sun Dolphin Aruba 10 have basic features, but give users an inexpensive way to get on the water.

The “Propeller”

Once aboard any vessel, the captain needs a way to propel his or her ship. The most common form of power for the kayak, of course, has long been the humble paddle. Paddles remain the lightest of the options and popular for people who got into the sport for its minimalistic attributes. Not only is a paddle low maintenance but it also provides great exercise. No winterizing, recharges or oil changes needed.

Perhaps the one item that most distinctly separates a kayak from a canoe is the style of paddle. Kayakers use a double-bladed set-up that allows for quickly moving through the water with less time between strokes as the single-bladed variety.

Many of today’s kayakers come with apt paddles, but not all are created equal. Considering kayakers rely so heavily on this piece of equipment, they are wise to choose a good

one. Length is critical, with taller paddlers ensured a better experience with a longer paddle and vice versa. Boat width is also an important consideration. Paddles generally range from 78 to 98 inches.

Blades are most commonly constructed of nylon, aluminum and plastic, but higher performance models of fiberglass and carbon fiber are available. Regardless of the design, it is important the paddle has drip rings to keep the water from running down the shaft and into your lap.

Unlike days of yesteryear, paddles are not the only way to move a kayak across the water. Some kayak users have found ways to mount an electric trolling motor and some let their feet do the work. Hobby, for instance, has distinguished itself for years by providing a hands-free pedal-powered kayak, especially popular for anglers, and other manufacturers are now following suit.

Another of the nation’s foremost manufacturers, Wilderness Systems, has created “tri-powered” vessels that give users the option of what type of power to use on each trip. They can opt to paddle or make use of the vertical chute through the middle of the kayak, which provides space for a specially designed electric motor or a pedal unit.

Regardless, it is always a good idea to have a back-up method of power available. We all know the term about being up a certain creek without a paddle. This can take on a literal meaning for the careless or unlucky kayaker. Regardless of the vessel’s power source, it is a good idea to stow away an emergency paddle. Even a small one-bladed paddle is certainly better than nothing during emergencies.

Anchors Aweigh

Kayakers, especially those who hunt and fish, often need a way to keep the kayak stationary. Just as kayakers

glide with ease across the water, they also move easily with the slightest of breezes or wakes. This is where anchors become critical. Small anchors of two pounds or less are ideal for kayakers and other small watercraft.

An anchor trolley, such as a kit marketed by Seattle Sports, allows the drop point of the anchor to be adjusted for the conditions. Adding a hand reel can make quick work of raising and lowering the anchor. Whether using a trolley or not, users will most likely want to drop anchor below either the stern or the bow. Anglers often prefer dropping the anchor at the back of the boat in order to cast toward the bank with the wind at their backs – both more enjoyable and often more successful as certain fish species are known to gather to forage on whatever the wind is carrying to those locations.

The riskiest drop point, which also happens to be the most convenient, is at center of either side of the boat. Under

high winds, wake or strong current, this location puts the kayak in danger of capsizing or becoming submerged when water meets the broadsided vessel.

Group Considerations

Many lovers of the outdoors are attracted to the peaceful solitude and freedom of a day afloat in a personal watercraft. As with most outdoor ventures, though, kayaking can be best enjoyed with family and friends.

Paddlers who know they will need a place for children are often attracted to tandem kayakers, which provide comfortable seating for two. These models provide a fun way for two people to spend time afloat. Tandems often lose their popularity, however, when a user is required to paddle one alone.

Malibu Kayaks has produced the Gator Hatch, a large hatch cover for



PHOTO BY JENNY NGUYEN

Kayakers can be best enjoyed with friends and family, as seen on a trip down the Missouri River.



PHOTO BY JEFFE KURRUS

Jenny Feeken of Gretna kayaks on Lake No. 4 at Two Rivers State Recreation Area near Yutan.

the vessel's bow that features a molded rear-facing seat for children – perfect for the primary paddler to help young anglers remove fish and remedy tangled line. Couple that with one of their larger models, and a paddler can carry two children – one at the bow and one in the area behind the driver. These kayaks not only work well with children aboard but also navigate easily for the solo floater.

Once children get larger, however, one will be forced to either expand the fleet or take turns. By equipping each paddler with his or her own watercraft, family and friends are able to both enjoy the freedom of setting their own course and the satisfaction of spending time together.

Transportation and Storage

Depending on the number of kayaks one must transport and the type of vehicle, a variety of methods exist for transportation.

One or two kayaks fit well within the bed of a regular full-sized pick-up truck, and a bed extender that mounts in a standard hitch receiver helps

secure longer vessels. It is common to see kayaks tied to the top of cars, vans and truck toppers, either with specially designed racks or just foam blocks and rope.

As the plastic fleet grows, transportation pull-type utility trailers modified with racks for two-to-eight kayaks are becoming increasingly common, and manufacturers have begun producing trailers to suit a variety of situations.

While kayak users are often able to drive close to the water for launching, there will be times when a trek is necessary. Despite some kayaks being small and light enough to carry short distances, long hauls are a chore. Two-wheeled carts which strap to the kayak's rear help a single user pull a kayak to the water. With the right tires, it can handle various terrain.

Once at home, wall racks or specially designed hoists provide a way of efficiently storing kayaks in the garage or shed.

Other Modifications

Do not be fooled by the kayak's small package. Many paddlers have found ways to bring the advantages of

big boats to the smaller variety.

Perhaps the area that has advanced the most for kayaks is fishing. Even the most basic of fishing kayaks now come from the store with both flush mount and removable rod holders – pretty much a necessity, especially for kayaks that require paddling.

One must keep in mind that whatever is not tied down and does not float could end up at the bottom of the lake. One can opt for commercial leashes or build their own, but it is always a good idea to keep valuables tied to the kayak in one way or another.

The well-designed kayak has a variety of hatches available for storage below the deck and strategically placed bungee straps allow users to secure a wide variety of items atop it. With an array of accessories available, kayak users who are handy with a hand drill and rivet gun are limited only by their imagination.

Fishing kayak users are an especially innovative bunch, and countless hacks have made their way to Internet message boards. Such sites are ripe with homemade designs for items created with inexpensive materials such as PVC pipe and plastic cutting boards.

Long before the popularity of mobile

phone photography, for instance, kayak users were creating “selfie sticks” to take photos of themselves with their big catches. Some equip their vessels with an array of battery-powered accessories, including fish-finders, live-wells and communications equipment. As time goes on, manufacturers are taking note and offering such amenities as options from the factory.

The most used tackle and gear storage item has been the milk crate, modified with rod holders. Now, tackle storage equipment that looks much similar to those crates is available from retailers.

Safety and Special Regulations

Even above the importance of carrying an extra paddle is the personal flotation device, more commonly known as the life jacket. Law requires each person aboard to have a life jacket.

Many of today's manufacturers are designing life vests with kayak users in mind. The average kayaker spends a lot of time rowing from a seated position, so anything bulky in the back or under the arms may become uncomfortable after long periods on the water. Because of these considerations,

modern inflatable life jackets are among the favorable options available for kayakers.

Another safety consideration is visibility. If one is floating in waters frequented by motorized boats and other watercraft, it is imperative to be seen. Some buy brightly colored kayaks and clothing just for this reason.

While Nebraska does not require kayaks and other non-motorized watercraft to be registered, some states do. Be sure to keep that in mind when crossing the border. Likewise, the new Aquatic Invasive Species stamp is not required for non-motorized kayaks, but other laws regarding the effort to prevent the spread of unwelcome species do apply. For instance, it is unlawful for a boat to leave a Nebraska body of water with any of that water or its aquatic vegetation.

Join the Navy

Whether you are planning to follow the lead of the Inuit by pursuing fish and game, or you just want to splash around the nearby pond with friends and family, today's kayak manufacturers surely have a model to suit your needs. With the utility, convenience and fun provided by this modest vessel, it is sure to be on the water for hundreds of years to come. ■



Top of the line kayaks such as this Malibu Kayaks Stealth 14 are loaded with features: an internal livewell/bait tank, a large hatch with an additional seat, casting platform with convertible seating, and a deck that is designed for fishing. But the cost can set you back – retail price is \$1,299.



PHOTO BY JUSTIN HAAG

A kayak angler releases a largemouth bass at Smith Lake Wildlife Management Area south of Rushville.

Raising Freshwater Mussels in Nebraska

Little known species in need of conservation

Story and photos by Julie Geiser

If you've ever waded into one of Nebraska's rivers or streams and found a shell, you may have wondered where it came from and questioned what was inside it. Those curious enough will find it came from a mussel, a creature that lives and survives in its own secluded and complex world.

Freshwater mussels have evolved in free-flowing river systems for centuries. They play a key role in aquatic environments as they transform the habitat and purify the water. As filter feeders, they process organic matter from the water, which is used to grow their bodies and shells. In return, they excrete nutrients that are used by plant life, invertebrates and fish, providing benefits that extend beyond the water to mammals, birds, and humans.

These long-lived species are sensitive to changes in water quality. If mussels disappear, as they have from some Nebraska waters, it is often an indication that something is wrong in their environment. Once gone, so are the benefits they provide.

Life History

Part of the Unionoidae family, freshwater mollusks – more commonly known as mussels – live in a two-part, hinged shell that grows with the mussel. Shell colors range from yellow-green to black and are sometimes covered in algae, making them hard to spot under water as they blend into their surroundings. They are found in Nebraska's rivers, streams and canals and in some reservoirs.

The difference between marine or saltwater mussels and clams is that marine mussels attach to surfaces whereas clams do not. Freshwater mussels are distantly related to marine mussels and clams but they are their own "group" as their reproduction is entirely different from the marine versions. Often called clams, mussels are not clams.

Mussels are filter feeders, sucking in water through an incurrent siphon, which is then pumped over the mussel's gills where microorganisms, phytoplankton

and bacteria are filtered out for food. Mussels can selectively sort and eject indigestible matter such as small grains of sand and other debris. Water and waste are expelled through an excurrent siphon into the water, where it becomes food for macroinvertebrates that fish feed upon. Large, dense matter accumulates in the mantle cavity as a mass of mucous called psuedofeces, which is periodically ejected by the mussel with a quick contraction of its shell. This filtering ability helps maintain good water quality and supports life in a healthy waterway.

Mussels have various muscles that open and close their shell. They also have a muscular foot that they extend from their shell; it is used to slowly pull themselves along the sand, gravel and muddy bottoms of the water in which they live, or to bury and hold themselves in place. This burrowing movement is significant, as it mixes and stabilizes substrates and releases organic matter to the water column.

Studies have shown that once an individual mussel has settled into an ideal substrate, it might only travel 50 feet in its lifetime. Others may be forced to move longer distances as habitat conditions change. Some species, in the right

The Major Parts

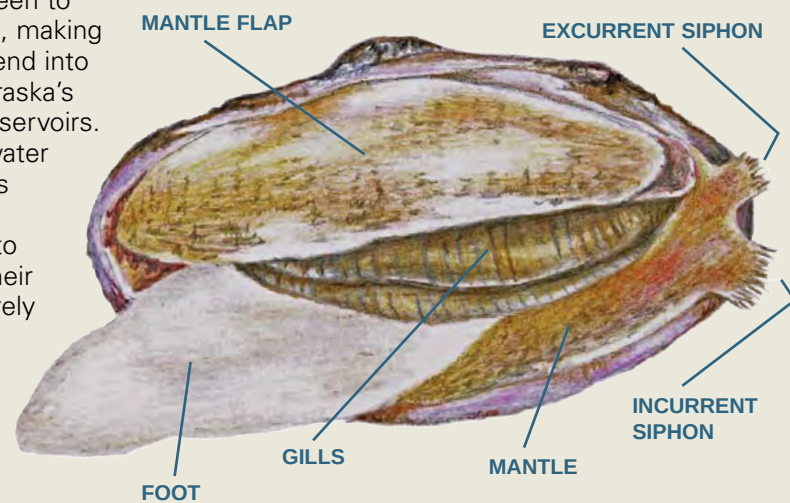


ILLUSTRATION BY JULIE GEISER

A female plain pocketbook mussel displays her "lure" to attract a host fish. Once the mussel's gills are bitten by a fish, the glochidia are released and attach to the fish's red gills.





Joe Cassidy (left) and Bryan Sweet use a telemetry device on tagged mussels before releasing them into Cache Creek in Holt County. Josh Cloeter (right) releases tagged mussels into the creek bed.



This is an old mussel shell used to make clothing buttons from the mother-of-pearl (also known as nacre). Mother-of-pearl is the iridescent inner layer of the mussel shell that would be the front of the button.

environment, can live for more than 100 years.

While many mussel populations may look healthy and diverse, some are actually aging, non-reproducing populations in severe decline. As sedentary organisms, they can't simply pack up and move like birds or mammals if their habitat undergoes major changes. This immobility and the changes that have occurred in the state's waterways may explain why only 12 of the 30 species of freshwater mussels native to Nebraska have sustainable populations, leaving the other species endangered, threatened or extirpated. Of the 297 mussel species found in the United States, 70 percent are listed as endangered by federal or state agencies, threatened or of special concern, making them one of the most imperiled animal groups in the country.

Threats

Real threats for freshwater mussels include habitat alteration caused by impoundments, river and stream channelization, siltation, chemical runoff, pollution, drought and dewatering, overharvest, physical damage and the invasion of exotic species such as zebra mussels.

Historically, the first threats came in the late 1800s during the "pearl rush," where millions of mussels were harvested in search of freshwater pearls. The

beautiful mother-of-pearl nacre on the inside of a mussel shell was popular for button making in the early 1900s. That industry overharvested mussels to the brink of depletion in some parts of the country.

In addition, many mussels are only found in flowing waters of streams and rivers. When dams are built, the resulting reservoirs are often too deep, contain too much silt, and provide too little flow to make them habitable for most species of mussels. Dams are barriers to fish that are a crucial component of mussel reproduction and survival.

The conversion of grasslands to cropland has led to an influx of silt and chemical-laden runoff from cultivated farm fields into rivers and streams, also affecting mussels. Freshwater mussels are especially sensitive to low concentrations of chemical compounds such as ammonia, phosphate and pesticides. Siltation can cover and destroy mussel habitat or cover and smother the mussels. Livestock can also pose a threat, either directly by stepping on mussels while drinking from streams or indirectly when their waste increases nutrient levels in the water.

A single catastrophic event, such as a severe drought, flood or a chemical spill, can wipe out small populations of mussels.

Recovery and Reintroduction

Hatchery production of mussels in the U.S. began in 1914 with the establishment of the Fairport Fish Hatchery on the Mississippi River in Muscatine, Iowa, an effort by the U.S. Bureau of Fisheries to bolster the button industry. Today, many Eastern states, especially in the southeastern U.S., are heavily involved in propagating mussels. Since 2014, Commission biologists have been working with some of these states and developing their own program to rear and reintroduce mussels to their historic range in Nebraska waters.

Recovery and reintroduction efforts intend to restore a species to a portion of its native range where it is extirpated or severely reduced. Recovery programs can include collecting mussels and moving them to a new location in hopes that they will establish populations on their own, as well as propagating species in a hatchery and stocking juveniles to reestablish populations.

Since 1997, Steve Schainost, rivers and streams program manager with the Nebraska Game and Parks Commission, has collected over 1,000 relic shells and some live mussels from many Nebraska waterways. Schainost has created range maps using data from his collections, other published literature and museum records. Comparing current and past populations has helped identify which species are in serious trouble and candidates for recovery efforts.

Mussel Habitat

Many actions can improve mussel habitat, including improving water quality and reducing sediment build-up. Creating buffer strips of grasses or trees between water and land helps keep chemicals and pollutants from reaching the water. Practicing good soil conservation techniques, such as installing terraces and using contour farming practices, will reduce sediment run-off.

After boating, always clean, drain, and dry all boats, motors, and equipment to keep exotic species from spreading.

Mussel Tagging

Tagging is the primary means to track released mussels, allowing researchers to evaluate growth, survival, longevity and mussel movements in the future.

Hallprint tags are miniscule, alpha-numeric tags that are glued on one side of the mussel shell. These tags come in different colors allowing biologists to differentiate the year, class, species, location and individual growth of hatchery-raised mussels.

PIT (passive integrated transponder) tags are battery-free radio frequency identification tags. These inert, glass-encased microchips are encoded with alphanumeric labels that identify specific mussels. The tags are located and read with a hand reader that looks much like a metal detector.

Dots of glue are placed on both sides of every mussel shell, so even if the tags or telemetry devices fall off, hopefully the glue dot will remain as an identifying feature. The color of the glue dots can be changed to record the year, class and species of mussels released.



Mussel Propagation

One Nebraska species in danger is the plain pocketbook (*Lampsilis cardium*). Its population is deemed imperiled by rarity and vulnerability to extirpation because of its decreased distribution in the 20th century.

Work with the plain pocketbook started in 2014 in Nebraska by Dean Rosenthal, a veteran biologist who was recently named the Commission's division administrator for fisheries. Rosenthal attended a presentation on mussel propagation at a national workshop and he wanted to see if it would work to help declining populations in Nebraska.

"It is our responsibility to manage the entire ecosystem of our aquatic habitats, not just the sport fish," said Rosenthal. "Mussels serve as an indicator species to indicate the health of our aquatic environments. They cannot just swim away when there is poor water quality. We have seen a decline in the mussel populations across the state, not only in numbers of individuals but in species diversity. We have reached a point in many of our streams that if we don't step in and attempt to help these species recover and re-establish themselves we will continue to lose these species from our environment."

Rosenthal took the mussel rearing program to the North Platte State Fish Hatchery, where Bryan Sweet, fish and wildlife program manager, and Ted Bartels, fish culturist/supervisor, along with other Commission biologists, started to learn about mussel propagation. Mussels collected from the Mississippi River by staff of the Genoa National Fish Hatchery in Genoa, Wisconsin, were used to get the team accustomed to the process, during which they developed new techniques that had not been considered by leading mussel researchers.

In 2015, seven fertilized female plain pocketbooks were collected from the Elkhorn River by Joe Cassidy, fish culturist/supervisor, and brought to North Platte where the mussel rearing project moved into full gear.

In the wild, a plain pocketbook male will release a structure called a spermatzeugmata, which resembles a bubble of sperm, into the water. This bubble aids in the survival of the sperm. As it floats downstream, the female will siphon the sperm from the water, flushing it over her eggs to fertilize them. These eggs develop into parasitic larvae called glochidia that are housed within the gills of the female. To survive, these larvae need a host fish to continue their life cycle.

In the genus *Lampsilis*, female mussels have a mantle flap that extends beyond their shell and looks



Juvenile plain pocketbook mussels are displayed next to a dime to show their small size. These juvenile mussels have recently dropped off of a host fish's gills.

remarkably like a small fish, complete with fins, a tail and an eye spot. It sits next to the gill brooding pouches and when the glochidia are mature this "lure" is displayed and is twitched back and forth in an attempt to attract a fish that may try to eat it. The instant the lure is bitten the female will expel the glochidia, some of which will go into the fish's mouth. As they pass over the gills of the fish, the glochidia quickly attach to the fish's gill tissue. The glochidia will feed on the fish's blood and tissues, doing no harm to the fish, until they grow larger, are able to survive on their own and fall off.

In a lab setting, the process begins by taking a healthy, fertilized female mussel, propping its shell open and rupturing the marsupial gill, simulating the bite from a host fish. The glochidia are flushed out of the mussel's shell into a glass container. Samples are examined under a microscope to ensure they are viable and the number of glochidia is estimated.

Young largemouth bass raised at the Valentine State Fish Hatchery are used as the host fish. Bass are put in a vessel containing enough glochidia for 4,000 to 10,000 per bass. The opaque-looking glochidia clamp down on the gill filaments of the fish with their shell and can be seen with the naked eye.

Within two hours of inoculation, tissue from the gill area will grow over the attached glochidia

to form a cyst. The cyst protects the fish from infection and aids in keeping the glochidia attached. The glochidium will then mature into juveniles, looking like miniature versions of their parents. After about two weeks, they begin to open and close their shell and extend their foot, which ruptures the cyst, and allows them to fall off the gills.

Once inoculated, some of the bass are transferred into large hatchery tanks and kept inside under an intensive rearing program. In the tanks, it is easy for staff to collect juvenile mussels that drop from the host fish. Half of the juveniles are placed in buckets and fed circulated pond water with little intervention from biologists. The other half are transferred to beakers, which use a heated water bath that feeds mussels micro algae concentrates. The goal of the intensive systems is two-fold: to increase survival rates above what is found with extensive culture, which is rearing done in more natural environments; and to house the juveniles until they are large enough to be enumerated and placed in outside rearing containers. A survival rate of one-third in each of these systems is considered good and higher than what can be expected in the wild.

The rest of the inoculated bass are placed in wire cages in hatchery ponds. At three weeks bass are checked to make sure all juvenile



Ted Bartels (left) and Bryan Sweet count and measure juvenile mussels before placing them in baskets that will be submerged into hatchery ponds. The mussels will be over-wintered in the ponds before they are tagged and released.



Glochidia can be seen on a host fish's gills shortly after they attach. The glochidia are the small, opaque-looking dots.

mussels have dropped off. The bass and cages are removed from the pond with the juveniles remaining. These mussels are cultured in the same ponds as fish raised to stock in Nebraska waters. The fish are fed a daily diet of dry, pelletized feed, which fertilizes the ponds and produces algae, phytoplankton, bacteria and other microorganisms that the mussels feed upon. In the fall the ponds are drained, the fish removed and the tedious task of collecting mussels from the pond's mud bottom is completed. While rearing mussels in hatchery ponds is less labor intensive, it doesn't allow biologists as much control or the ability to judge results.

Mussels are gathered from all the different rearing systems and placed in submerged baskets containing 500 mussels each. These baskets are stocked in ponds for over-wintering at both the North Platte and Valentine hatcheries to lessen the odds that a catastrophic event could kill the entire cultured population.

In 2015, more than 11,400 plain pocketbook mussels were raised. Of these, 6,540 were tagged and in August of 2016, released into rivers where they were historically found: Cache Creek in Holt County, the Elkhorn River in Holt County, Rose Creek in Jefferson County and Shell Creek in Platte County. State-owned areas were used whenever possible, but some stocking was done on private property where landowners were receptive to the program.

In 2016, 3,600 plain pocketbooks were raised, using four adults from the Elkhorn River. These mussels, along with over 4,000 left from the 2015 broodstock that have been kept at the hatcheries, are awaiting tagging and release in 2017 and 2018. After working prolonged hours with the mussel project, Sweet has

found an admiration and connection toward these organisms: "Their entire life is pretty complex for a simple organism with no real brain, no eyes, one foot and a shell."

Looking Ahead

After two successful years of rearing the plain pocketbook, another mussel species, the fatmucket (*Lampsilis siliquoidea*), was added to the propagation program in 2016. The species was once found in the Big Blue, Big Nemaha, Little Nemaha, Lower Platte and Elkhorn Rivers as well as Medicine Creek in the Republican River basin and Logan Creek in the Elkhorn River basin. Biologists have not collected this species since 1981 and believe it may have been extirpated from Nebraska.

With no native fatmuckets available in Nebraska, several were obtained from Kansas for broodstock. That was the closest population with the Missouri River drainage that would have the same makeup as fatmuckets native to Nebraska. Releases of 4,000 fatmuckets are scheduled for this summer and fall in the same waters as the pocketbooks so that continued research can be done on both species.

Several grants have funded the mussel projects. A Competitive State Wildlife Grant was procured from the U.S. Fish and Wildlife Service last summer. This grant is a collaborative effort to conserve at-risk mussels across state borders and is a partnership with Iowa. The states work on propagation techniques, share broodstock when needed and work together on stream inventory and restoration. The grant will be

matched with funds from the Nebraska Wildlife Conservation Fund and a Nebraska Environmental Trust grant to construct a building at the North Platte Hatchery to raise at-risk species.

"Fish culture and propagation has been around in Nebraska for the last 150 years," said Rosenthal. "Mussel culture is relatively new and it is very exciting to be in on the cutting edge of some of the methods that are being used to culture mussels for restoration projects across the country. We have been assisting malacologists [those who study mussels] from other states by providing unique host fish, and as a result we have established working relationships, which has helped to provide avenues of information exchanged in culture techniques."

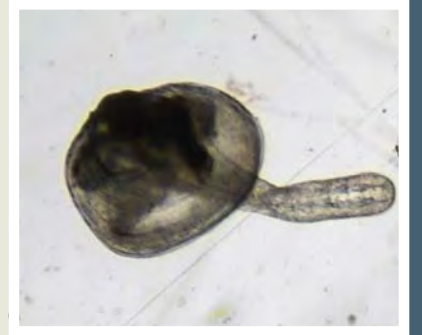
Graduate students in the School of Natural Resources at the University of Nebraska-Lincoln will be conducting surveys that will help measure the success of the work, including locating, monitoring and recording how mussels are adapting, growing and, hopefully, thriving and reproducing.

No one really knows what the future has in store for many mussel species in Nebraska and across the U.S., but by combining century-old fish culturing techniques with new mussel rearing capabilities, biologists are striving to increase

mussel populations, while working with other states and local organizations to keep an important part of our natural fauna where it belongs: in our streams and rivers.

As Sweet put it, "Mussels are the heart of our native landscape. For those concerned enough with Nebraska's fauna, mussels should be a part of the landscape now and for years to come. After all, we are primarily to blame for their demise." ■

A glochidia's see-through shell shows inner body parts and an extended foot.



The author would like to thank Bryan Sweet, Ted Bartels, Dean Rosenthal, Steve Schainost, and Keith Koupal for their contributions to this article. Thanks to Joe Cassidy and Josh Cloeter, Commission biologists, who worked on the propagation project and Dr. Mark Pegg at the University of Nebraska-Lincoln along with graduate student Lindsay Ohlman who will be doing studies on released mussels. Thanks also to Kristal Stoner with the Commission for her work on the grant funding to make this project possible.



After collecting glochidia from a female mussel, fisheries biologists Dean Rosenthal, Bryan Sweet, Josh Cloeter and Ted Bartels (left to right) count them and check their viability under a microscope.

The Beef State

Story and photos by Jenny Nguyen

Long gone are the pioneers, the milkmen and the lamplighters of yesteryear. Enter Wi-Fi refrigerators, horsepower hemi and Super Targets. As we look back on Nebraska's 150-year history, there's no mistaking that life has greatly changed. Yet despite all the changes, some aspects of "the good life" have not.

In Nebraska cattle country, the cowboy still lives for one purpose: his herd. Open plains as far as the eyes can see, and fresh, clean groundwater pulled from iconic windmills that dot the landscape have allowed cattle to flourish in the Sandhills of Nebraska, just as they did 100 years ago. It is an industry so deeply tied to history. Epic cattle drives, the railroad and the opening and closing of the frontier – the romance and drama of the American Wild West lingers here.

But romance doesn't repay the bank loans.

Nor does it stop weather that can wipe out a whole herd, or stay up late to nurse a sick or injured calf. Some aspects of cattle ranching have changed, but many have also stayed the same: The fences continue to need mending. The cows still need checking. And in winter, all that ice in the water tanks doesn't break up on its own.

In 2017, it's not hard to forget the traditions that have made the "Omaha steak" famous. And it's all too easy to dismiss with a chuckle that in some places, such as Nebraska, cattle still outnumber people by nearly four to one. While beef production is an industry – a business – caring for livestock remains an important way of life in these corners of the world. Hard work, animal welfare, family, community and a strong sense of self-reliance remain hallmarks of successful ranching.

The Mundorf Ranch south of Wood Lake is one example.

The Mundorf Ranch branding is one of the first to happen in the Cherry County area. One hundred fifty family members, friends, neighbors and some strangers came to the branding in April 2016.

At the Mundorf branding in April last year, one spectator commented that it was the most amazing branding he's ever seen. What seemed like a flurry of horses and bodies turned into an astounding effort by over 150 family members, friends and neighbors who came together to process 850 young Angus cattle within just four hours.

Seasoned old timers, wiry high school students, young riders learning the ropes alongside their mothers and

fathers, and parents with wide-eyed toddlers were all there to round up, wrestle, rope, brand, castrate and vaccinate calves. It was as though the whole of Cherry County was out to kick off the season. Many of these families go to as many as 15 brandings per year, and the Mundorf branding is one of the first.

"There are about 30 people here that I don't even know," said Joe Mundorf with a gentle laugh. "I couldn't tell



Left: Born in late February, the calves are about two months old at the branding.

Top: A small group of riders is always a step ahead to separate the calves from their mothers before the second group, responsible for roping, branding, castrating and vaccinating, arrive.



you how many families are here, but it's good to see everybody and find out what's been going on."

Mundorf is a third generation rancher, and his grown sons, Mark and Matt, are the fourth. His daughter, Molly, is married to a local rancher, and they run their own operation. With a toddler granddaughter in his arms, Mundorf hopes the tradition will continue.

"I grew up right here. I learned just like you're seeing these kids learning today."

At the Mundorf Ranch, cowboys still rely on horses to work cattle.

"It's old school," Mundorf said, but

with a lot of help, the use of horses is more efficient. "Others run them through chutes, so they don't need horses. But it's more stress on the calves when you have to wrestle with them too much."

At the branding, a calf spent no more than 60 seconds on the ground. And like a well-oiled machine, the branding was over before you could say "oysters!" – which were plentiful and briefly cooked over the same fire that heated the irons. Although, on that nippy morning, they hardly tasted much warmer than when they left their owners.

After wresting three calves, with a

lot of help she might add, this writer decided that she had her fill. Cattle branding is tough, repetitive work. Some calves were compliant, while others were much more spirited.

Then with a slightly awkward – though temporary – step, the calves jumped up to rejoin their mothers. These cattle will then live out the rest of their days roaming the Sandhills and getting fat for sale. They feed on nutrient-rich prairie grass through the warmer months, and in winter, as late as May, hay is provided to get them through the colder, more barren parts of the year.

As one of the first brandings of the



A rider attempts to rope and pull a calf from the group. A good cow horse has to have great "cow sense." Riding young horses during calving and branding time gets them used to all aspects of ranching.

year, the Mundorfs have made it a custom to thank family and neighbors by hosting a large feast in their barn. It was complete with all the smoked meats, pies and sweet tea a person could eat and drink.

“We’ve all been real busy calving over these last few months, but we do like to put together these social events. It’s good food. It’s good people – even strangers who wander in from the Cowboy Trail,” Mundorf said in jest.

But the work doesn’t stop there. While idyllic, ranching is no distraction. Country life is no utopia.

Life and death, profit and loss, consumption and provision – ranching is instead a reminder of older realities deeply rooted in human experience.

Animal husbandry is a job that calls 24/7. Nursing, land management, plumbing, fixing machinery, carpentry,

business management and knowledge of farming are just some general skills that a rancher must know. All the while, disease, bad weather and the daily events of living on the prairie are as fickle today as they have ever been.

Yet despite the early mornings, the long days, the wear and tear on bodies that don’t get any younger, and at times, heartache, there is joy in the devotion to raising and nurturing animals. There is pride in producing the best product possible.

In Nebraska’s 150th year, the cowboy is still very much alive. ■

The author thanks Mark and Dedra Stoner of Wood Lake for their direction. Thank you to Joe Mundorf, his family and neighbors for their hospitality, awesome smoked brisket and peach pie.



After a calf is roped and separated from the others, two helpers hold it into position, called calf wrestling, to make quick, safe work of branding. Calves are usually on the ground for no more than one minute. Branding allows ranchers to identify cattle during transportation and sale, as well as lost or stolen animals, which still happens.

Chasing Shadows

Fly Fishing for Carp in Nebraska

By Ryan Sparks

The air was uncharacteristically still, allowing the water to settle into a tranquil glass sheet pierced only now and again by the tails of feeding fish. With near perfect conditions, I spotted a group of fish from nearly 100 yards away and began my careful approach. Crouching as I went, I made sure to stay below the brush at the edge of the bank to hide my movement and keep my shadow off the water. When I came within 30 feet, I slowed my stalk and managed to close another 10 feet without spooking



Ryan Sparks, formerly of Louisville, fly fishes for carp in a creek connected to the Platte River in Sarpy County.



Ryan Sparks uses an assortment of flies when fishing for carp throughout the country.

the fish. I knew I might only get one shot so I paused, kneeling in the reeds, and waited for the perfect opportunity. When the largest fish tipped to feed, I made a cast three feet in front of it and watched my fly slowly sink and come to rest on the bottom. With one lethargic swipe of its tail, the fish moved towards my fly, leaving a wake in the shallow water behind it. Time slowed and my heart raced as the fish inspected and then inhaled my fly. I made a hard strip on the fly line and came solid on what would be one of the most memorable fish of my life – a 37-inch common carp.

Most people scoff at the idea of fishing for carp. Tell them about fly fishing for carp and they laugh and ask if you're kidding. However, their reputation as a trash fish is slowly being challenged as more people come to the realization that carp are



COMMON CARP (*Cyprinus carpio*) are found statewide.



SILVER CARP (*Hypophthalmichthys molitrix*) have a smaller head and mouth than the bighead.



GRASS CARP (*Ctenopharyngodon idella*) are Missouri River residents and are found in some reservoirs statewide.

“In fact, carp might be the only freshwater fish that presents the average angler with a consistent shot of catching a fish over 10 pounds.”

a plentiful and challenging gamefish. While carp do not jump like a bass and cannot be caught in numbers like bluegill or crappie, they are the only freshwater fish that will put a fly angler into their backing on nearly every hookup. The 37-inch carp fought nearly 20 minutes and took me into my backing four times before I brought it to the net. Fighting it was like trying to slow down a bulldozer in low gear. In fact, carp might be the only freshwater fish that presents the average angler with a consistent shot of catching a fish over 10 pounds.

Many anglers that discover fly fishing for carp compare it to saltwater flats fishing, arguing the carp’s skittish nature and shallow-water habitat are not far removed from pursuing tropical

species such as permit, bonefish and tarpon. Unlike those species though, an angler does not have to spend a fortune on plane tickets and destination lodges. Chances are your local farm pond, golf course water hazard or municipal reservoir has a healthy population of carp.

Besides your local waters, Nebraska has a wide array of carp fishing destinations such as Branched Oak Lake, the Fremont State Lakes Recreation Area, Glenn Cunningham Reservoir, and Wehrspann Lake, not to mention the Missouri and Platte rivers. The beauty of fly fishing for carp is they are everywhere, making carp fishing accessible to anyone who has the ambition to start. The Nebraska Game and Parks Commission also

holds an annual Carp-O-Rama for like-minded carp-oholics to get together and celebrate their favorite species while introducing beginners to the sport.

Stealthy Hunting

Carp fishing begins either early in the morning or towards the end of the day at dusk. Low light conditions make carp feel comfortable feeding in shallow water where they will root and wallow in mud bottoms to unearth their next meal. Carp feeding in groups often create a muddy cloud in the water, which is a great way to locate active fish. Find feeding fish in shallow water and its game on. In shallow water, carp will often “tail” or expose their tail above the water as they tip to feed. In bodies of water that are dark or stained, mud slicks, small air bubbles, and tailing fish are often the only indications that carp are present. Don’t be discouraged if your local waters are



“Head down, tail up” is a sure sign of a feeding fish.

PHOTO BY RYAN SPARKS



PHOTO BY JEFF KURRUS

Sparks rubs mud into his fly to help eliminate human scent.

murky. Some of the best carp fishing I have ever experienced was in water with six inches of visibility on the very best days.

A major difference between carp and other warm water species is that a day fly fishing for carp may go without a single cast. Fly fishing for carp is a sight fishing game, and it’s the visual aspect of catching them that makes it so challenging and exciting. Blind fishing for carp is a poor strategy for two reasons. First, the splashing and other water disturbances made by frequent casting spooks fish. Second, the way a carp takes a fly is so subtle that unless you can see the fish eat your fly you will never know it was there. Polarized sunglasses are a key piece of equipment to cut the glare from the sun and allow you to see into the water. Not only do they help you see more clearly, but they also protect your eyes from the occasional wild cast.

Carp will begin moving shallow in spring as the water begins to warm, making May and June prime time for carp fishing. Look for shallow bays with dark mud bottoms as these areas will warm more quickly. As the water warms, carp feed aggressively to make

up for the rigors of winter and to prepare for the upcoming spawn. The spawn receives mixed reviews from the few people I know that fly fish for carp. Many anglers get frustrated because spawning carp have other things on their mind besides eating. However, much like a white-tailed buck during the rut, larger fish let their guard down and cruise the shallows with abandon. When else can you see the biggest fish in a lake torpedoing themselves through inches of water and leaping several feet into the air?

Some of my best days fly fishing for carp have been during the spawn because it concentrates a high number of fish in a small area. Once, I waded into ankle deep water in heavy vegetation and simply waited for carp to cruise by. The entire morning I never made a full cast, instead dapping the fly a foot in front of fish as they passed. Many of them spooked if I moved too quickly, and many more simply shunned the fly. However, I realistically had over 100 shots at carp that day and managed to hook and land just shy of 30. There is nothing like being in the right place at the right time.



CARP MERKIN Based off a saltwater crab pattern, it's deadly on carp in deep stained water.



DELEKTABLE STONER Dan Delekta designed this fly for trout in Montana, but it's just as effective for carp.



RESERVOIR DOG This is Sparks' most productive fly over the past five years. He alters the weight depending on water depth.



CLOUSER CRAYFISH The fly is designed for fishing in current behind a split shot.



SPARKS' SAN JUAN WORM This fly is an excellent option for spooky carp in shallow water.

FLY PHOTOS BY JEFF KURRUS



Locating mulberry trees near carp-holding waters is an excellent way to get started catching carp on the fly.

Flooding

Carp present anglers with a couple of unique and extremely fun opportunities that any fly angler will not want to miss. One of these occurs during instances of high water or flooding when carp push into newly submerged areas looking for exposed food sources. Carp love to dine on drowned insects and the tender roots of flooded plants. In these situations, fly anglers can find themselves in some bizarre locations. One memorable instance occurred when the flooding of 2010 allowed Missouri River carp to push into city parks and wooded lots near Plattsmouth. I found myself hiding behind trees and making close quarters bow and arrow casts or simply setting the fly in front of feeding fish. When I actually hooked a carp, I had to chase it through the maze of trees to keep my line from tangling and losing the fish.

Mulberries

While flooding and high water happen infrequently, one remarkable event happens annually – the mulberry drop. Early in spring, scout out areas where mulberry bushes extend over the water and make a note of their locations. I have found places where creeks drain into the Platte and Missouri rivers very productive. Not only do creeks provide warmer water early in the year, but they also function as a conveyor belt of food,

dumping aquatic insects and uprooted vegetation into the river. In mid-summer when mulberries ripen, they will drop into the water, and it won't be long until carp find them. I have often come upon a mulberry bush to find the water beneath it boiling with feeding fish. Don't be surprised if you hook a catfish using this method – they enjoy mulberries just as much as carp! However, you will have to get creative with your flies. If you tie your own, packing peanuts trimmed to shape and colored with markers work well. Without fly tying equipment, simply



This grass carp was caught with a mulberry imitation fly on a creek connected to the Platte River in Sarpy County.

attach the foam to your hook with small diameter fishing line. Just be sure to add enough weight so your fly sinks like a real mulberry when it hits the water.



The Backstabber

Fly Selection and Presentation

Fly fishing for carp is a recent phenomenon and chances are you won't find bins stuffed with carp flies at your local sporting goods store. Not to worry, most crayfish imitations work well and even woolly buggers will do the trick. For the angler who wants specialized flies, I have caught the majority of my carp on a variation of the "backstabber" created by Jay Zimmerman. The backstabber is weighted so that it swims hook point up. Carp usually eat flies off the bottom, and with the hook pointing up anglers get less snags and better hookups. The best carp flies do not imitate one specific thing, but contain characteristics suggestive of a variety of food sources.

For tackle, don't worry about purchasing a new rod and reel. Five or six weight rods work well because

they allow you to present the fly at close range with accuracy and finesse. However, make sure your reel is equipped with a drag that can hold up to the stresses of carp. I introduced a friend to fly fishing for carp and when he hooked one, the plastic washers in his drag warped from the heat produced trying to slow the fish. When the carp made its second run, the drag locked up and the fish instantly broke loose. While you don't need an expensive reel, make sure you have one with plenty of backing that will hold up under pressure.

Ordinary floating line and nine-foot leaders work well in ranges 3x to 0x. If you play fish with care, it's no problem landing even large carp with this setup. It's also helpful to add a couple feet of fluorocarbon tippet for extra insurance against spooking fish.

Proper Technique

As with all fishing, the correct presentation is essential. Lead the fish

three feet with your cast. This is the sweet spot – close enough they will see the fly, but not too close to spook them. In murky water, it takes practice to pick up the subtle clues that tell you which way a carp is facing. Take your time and remember that as long as nothing spooks the fish, it will continue to feed until you figure out your presentation. I like to use a technique employed by saltwater flats fishermen and look for the pushed water created by a fish as it swims. This "nervous" water looks like a miniature version of the wake created by an outboard boat engine. You can cast directly in front of the fish or use the "drag and drop" method where you cast beyond the fish and pull your fly along the surface until it is in position and drop it in front of the carp. This method not only gives you a very accurate presentation, but also allows you to present the fly with minimal disturbance.

The occurrence of carp in almost every body of water in Nebraska

makes them available to anyone with the ambition to pursue them. The fact that even a small carp is larger than most trophy-sized game fish should be reason enough for anglers to take notice. Moreover, the thrill of seeing a carp take your fly is similar to that of seeing a bass explode on a top water lure. Fly fishing for carp is a humbling endeavor for even the most advanced fly anglers. Persistence and a short memory go a long way because it takes time to hone your skills. Catching carp on the fly requires a combination of stealthy hunting, proper technique, fly selection and presentation. They are a tough fish to fool, but that challenge makes it enormously rewarding when you catch one. ■

Ryan Sparks is a freelance writer and photographer who can be found trying to catch anything that swims with a fly rod or chasing after his pointer, Tippet. His writing and photography can be found at flywatermedley.com.



The upper end of Lake McConaughy in Keith County is a hotspot for carp anglers because of its water clarity.



NEBRASKA
ASSOCIATION OF
BED & BREAKFAST

*Nebraska Association of Bed and Breakfasts
are the Better Way to Stay*
1-877-223-NABB (6222)
www.nebraskabb.com



BAKERS BED & BREAKFAST
Blair, Nebraska
402-426-8909
bakersbedandbreakfast.com



BARN ANEW BED & BREAKFAST
Scottsbluff, Nebraska
308-632-8647
barnanew.com



OFT'S BED & BREAKFAST
Bennington, Nebraska
402-614-7509
oftsbb.com



PRAIRIE CREEK INN
Walton / Lincoln, Nebraska
402-488-8822
pcibnb.com



**RICE LODGE &
CONFERENCE CENTER**
Odell, Nebraska
402-806-2174
ricelodge.odell-nebraska.us



WEST FORK ACRES
Milford, Nebraska
402-761-2727
westforkacres.com



CATHER SECOND HOME GUEST HOUSE
Red Cloud, Nebraska
402-746-2653
willacather.org



WUNDER ROOST BED & BREAKFAST
Roca, Nebraska
402-430-9130
wunderroost.com



GEORGE SPENCER TASTING ROOM
Gibbon, Nebraska
308-455-0717
georgespencerwine.com



RIVER INN RESORT
Brownville, Nebraska
402-825-6441
river-inn-resort.com



**THE RED CLOUD B&B
AT THE KALEY HOUSE**
Red Cloud, Nebraska
402-746-3989
redcloudbb.com



CONVENT HOUSE BED & BREAKFAST
Steinauer, Nebraska
402-869-2230
conventhouse.com

The Two Faces of the Dandelion

A love-hate relationship.

By Chris Helzer

Let me tell you about the most annoying, arrogant weed on the face of the earth. If there is even the tiniest gap in my otherwise perfect bluegrass-carpeted lawn, this ugly non-native plant will fill it. Then, not being satisfied with simple victory, it flags its presence with round brilliantly-yellow flowers that can be seen from space. No matter how many times I mow them off, the flowers come back. If I let them bloom for just a day or two, those flowers turn into evil balls of seed that send clouds of future weeds into the air like soil-seeking smart bombs. The plant's giant elongated carrot-like roots make pulling it out of the ground nearly impossible, and getting enough herbicide onto its skinny leaves to kill that massive root isn't easy either. In short, dandelions are pretty much a perfect weed. They take advantage of any weakness in my carefully cultivated yard and gardens, make themselves as conspicuous as



Pictured is a sweat bee on a dandelion.

possible, and then toss confetti-like seeds into the air to celebrate their success and ensure their future triumphs as well.

Let me tell you about a little hero of mine. This yellow-flowered plant blooms prolifically during an early spring period when very few other flowers are blooming. Not only does this bring welcome color to mostly-still-dormant landscape, it also provides a bonanza of food resources to pollinating insects when little else is available. Its leaves are nutritious and tasty both for wildlife and humans – a rarity

among wildflowers. This short-lived plant appears when other plants are weakened, filling otherwise barren spaces with color and food, and then gracefully fades away as neighboring plants gain enough vigor to cover that bare ground. As its farewell gesture, it produces beautiful round fluffy seed heads that have long been favorites of seed-blowing children and fodder for poets and photographers everywhere. In short, dandelions are pretty much a perfect plant. When surrounding plants are weakened by drought, repeated



Dandelion seed head at the Helzer Family Prairie near Stockham, Nebraska.

mowing or grazing, or other anything else, dandelions step up to provide food, beauty, and entertainment for kids until neighboring plants regain their vigor.

Let me tell you about the much maligned dandelion, a pretty little flower that pollinators love but gardeners hate. It has many qualities we admire; it is opportunistic, successful, attractive, and tough. It also has qualities we despise: it is opportunistic, successful, attractive, and tough. You get the idea. Cut the poor plant a break, huh? ■

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



This dandelion image is from The Nature Conservancy's Platte River Prairies shop yard.

PHOTOS BY CHRIS HELZER

WHERE WILL YOUR PASSION TAKE YOU?



SCHOOL OF NATURAL RESOURCES
Institute of Agriculture and Natural Resources

Schedule a visit today!

Applied Climate Environmental Restoration Water Science
Fisheries & Wildlife Science Grassland Ecology

snr.unl.edu | 402.472.7471 | snr@unl.edu

Southeast community college

Register for a Spring Discovery Day at SCC!

BEATRICE CAMPUS
April 10

LINCOLN CAMPUS
March 8 & April 7

MILFORD CAMPUS
April 12

Register at:
www.southeast.edu/DiscoverSCC



CHADRON STATE COLLEGE

GIVES YOU THE FREEDOM TO FIND YOUR FRONTIER

Explore	Potential	Involved	Possibilities	Affordable
				
A place to explore and surpass boundaries.	A place where you can be yourself and discover your potential.	A place where the class size allows you to be engaged and involved.	A place where you can rise above to see the possibilities in what lies ahead.	A place that is affordable. CSC graduates are well below the national average for student loan debt.

 **1-800-CHADRON**
cscadmissions@csc.edu

FOLLOW YOUR FRONTIER

GET STARTED TODAY AT CSC.EDU



Rattlesnake Bites

How to keep your four-legged friend safe.

By Julie Geiser

Living or hunting in rattlesnake country can pose a threat to dogs in particular; they can stumble across a snake by accident and their curiosity and/or active behavior may stimulate a snake to bite.

Bites can be dry or venomous and many times occur on the head and neck areas. Around 25 percent of bites are dry; the fangs penetrate skin but do not inject venom. Young rattlesnakes are venomous but due to lack of control, they are more likely to inject venom.

Effects from a venomous bite depend on the species of snake, its size, volume of venom injected, depth of the bite and size of the victim. These bites are hemotoxic, which means toxins disrupt blood vessels in the body causing swelling and tissue damage, uncontrolled bleeding, shock and in many instances death. Facial bites are often more lethal as swelling impairs the ability to breathe, with signs occurring within 30 to 60 minutes.

The Vaccine

To reduce venomous effects, vaccinations can be given to pets that live or hunt in areas of question. In case of a bite, the vaccination gives pet owners more time to get to veterinary care and provides the vet more time to evaluate and start treatment. Veterinarian Amanda Korkow at Tender Hearts Veterinarian Clinic in North Platte said, "The vaccine is controversial as some dismiss the effectiveness of it; however, I've seen that it does buy some time for pet owners to get to care and that's one goal of the vaccine."

The vaccine became available in 2003 by Red Rock Biologics using venom components from western diamondback rattlesnakes. The vaccine was developed to provide protection from the western diamondback rattlesnake and should provide protection against the prairie, great basin, sidewinder, timber and massasauga rattlesnakes, copperheads and gives partial protection against the eastern diamondback. However, the vaccine does not provide protection against Mojave rattlesnakes, water moccasins or coral snakes.

The vaccine decreases the severity of bites by stimulating the dog's immune system to produce antibodies against rattlesnake toxin. A dog should get two doses about 30 days apart followed by a booster 30 days before possible exposure to rattlesnakes. Protection peaks around four to six weeks after boosters are administered and last about six months. A booster shot is necessary once a year one month before hunting seasons or twice a year in areas where rattlesnakes are year-round risks. Korkow said, "Vaccines on average cost \$25 per dose, which is much less than antivenom that starts around \$800. Many vet clinics don't keep a supply on hand because of cost and short expiration dates."

Protection will vary in each dog as some dogs produce more antibodies than others. Vaccines are not a sole means of protection but can delay bite symptoms, cause fewer and less

severe symptoms like lethargy, swelling and pain, decrease mortality rate, and provide faster recovery times and little to no tissue necrosis.

Even if a dog is vaccinated, get the pet to a veterinarian as soon as possible following a bite, keep exercise to a minimum, don't touch or manipulate the area around the bite or attempt to suck out the venom. Snakebites are painful and even mild-mannered dogs may bite, so use caution.

Rattlesnakes

Rattlesnakes can be found in many environments, but they commonly find shelter under clumps of high grass, yucca plants, shrubs, down timber and rocks. In the spring and fall, snakes are more active during the warmest time of day, venturing into open areas such as dirt roads, pavement or rocks to absorb sunlight. During periods of very high daytime temperatures, snakes will seek shade during the hottest portion of the day and become active at dusk.

Apart from the rattle, the most distinctive identifying characteristic of the rattlesnake is a wide, flat triangular head that is much broader in the back than front and wider than the neck. Rattlesnakes have heat-sensing pits between the nostrils and eyes, and their vertical pupils are elliptical in shape. A series of dark and light bands near the tail above the rattles will differ from the markings on the rest of the body.

A rattlesnake's strike distance can be up to one-third to one-half of its overall length and is faster than the human eye can follow, so trying to outwit the snake could prove deadly. Plus, rattlesnakes do not always rattle to warn of an attack. There must be at least two segments of a rattle to be capable of making sound so young rattlesnakes may not make the rattle sound while others may have lost rattles due to injury.

If you plan to take your dog dove, grouse or pheasant hunting later this fall in rattlesnake country, you may want to consider getting started with the vaccine soon. ■

Precautions

- **Vaccinate your dog.**
- **Take snake aversion training or train your dogs to "come" commands. Shock collars can be a tool to call dogs off as well.**
- **Use a six-foot leash or less. If you see or hear a rattlesnake, having your dog on a leash will help avoid a snake bite. Most bites occur when a dog is not on a leash.**
- **Snake-proof your yard by cutting grass short and eliminate brush and piles**

of rocks where snakes sun themselves and hide.

- **Avoid rocky or dense brush or grassy areas. Stay on wide trails, if possible, when walking a dog.**
- **Slowly back away from a snake until you are out of striking distance, about the snake's length, and then leave the area.**
- **Know snake bite symptoms: puncture wounds, bleeding, severe pain, swelling, restlessness, panting or drooling, lethargy, weakness, diarrhea, seizures, and depressed respiration.**

Vintage Village Antique Mall

2425 O St. Lincoln, NE 68510

Open 7 days 10am-7pm

402.742.0063

VintageVillage@windstream.net

www.VintageVillageAntiqueMall.com

Antiques & Collectibles
Jewelry & Coins
Old Furniture
Records & Books
Unique & Unusual Items
Husker & Beer Memorabilia



"Unlock The Past"
At Vintage Village

TOYS FROM THE PAST



BUY / SELL / TRADE

(Indian Village Center) 3219 South 13th St.

Lincoln, NE | 402.440.5901

Specializing in old toys and games

Platte Valley Antique Mall

Open 7 Days
9am - 8pm

Midway Lincoln & Omaha, NE

I-80 Exit 420 - Visible from the Interstate

402.944.2949

www.PlatteValleyAntiqueMall.com

HEARTLAND ANTIQUE MALL

216 W 3rd, Grand Island, Nebraska
308-384-6018 www.heartlandantiques.com

10,000 Square Feet with over
30 Dealers offering Mid-
Nebraska's Finest Antiques from
Primitive to Victorian.

Mon.-Sat.: 10 a.m. to 5 p.m. & Sun.: 1 p.m. to 5 p.m.

ANTIQUES PARADISE

Antiques and Collectibles

5500 Sq. Ft. & Large Parking Area

402.223.0121

Open 7 Days a Week

827 W. Court (West Hwy. 136 & Hwy 4)
Beatrice, NE 68310

— www.antiquesparadise.com —



"A Treasure-Hunting Experience"

www.aardvarkantiquemall.com



*25,000 Square Feet
*Over 250 Dealers

Open Daily
9 am to 9 pm
Call for Holiday Hours

5800 Arbor Road
Lincoln, NE 68517
402/464-5100

Lincoln's largest antiques
and collectibles mall.

Park Avenue Antiques
&
COUNTRY CHOICE

Two great stores in 1 location!
A gift shop and antique store
Something for everyone!

5th & Park

Fremont, NE

402.721.1157

parkaveantiques@neb.rr.com



BRICK STREET MALL

ANTIQUE & COLLECTIBLES

611 Howard Ave.

St. Paul, NE 68873

(308) 754-5853

Crafts, Balloons & Party Supplies, Husker Items
All conveniently located in a multi-dealer mall

Norma's Antique Mall
fine antiques & collectibles

1715 Stone St.
Falls City, Nebraska

One-of-a-kind items, kitchenware, vintage
clothing, crocks, tools, primitives,
glassware, furniture, advertising, books,
linens and toys. We have it all!



Find us on:
facebook. 402.245.4338

Grain Bin Antique Town

North Platte, NE 10641 S. Old Hwy 83



Something for
Everyone!

From
Primitives to
High-End
Antiques

308.539.7401 • 308.532.2745

www.grainbinantiquetown.com



Thompson's Treasures
Wagons, Antiques & Unique Treasures

May the Lord open unto you
his good treasure and bless
all the works of your hands.

NEBRASKA JUNKATHON

FLEA MARKET/ANTIQUE SHOW

SARGENT, NEBRASKA

MAY 26, 27, 28, 2017

www.ThompsonsTreasuresInc.com



For more
information:
308-750-9435



Great Plains Art & Antiques

Kearney, Nebraska

General Line of Antiques & Collectibles
Tues - Sat. 10:30 am to 5 pm & Sun. 1 pm to 5 pm

308-234-5250

North Side of I-80, Exit 272 and 3 Block East
625 E. 1st Street

Doggone Good ANTIQUES & MORE

Furniture, Glassware,
Pottery, Cupboards,
Primitives and Smalls,

Watkins Products, Candles & Soaps, Bakers
Candies, Braided Rugs, Cards & Gifts,
Specialty Baskets and Doggone Good Gifts-
To-Go with our own food line!

402.482.5550 • 402.336.7135

winingsranch@juno.com

101 East 1st Street • Chambers, NE 68725

Blue Heron Antiques

"Like a museum, and it's all for sale"

Native American & Asian artifacts
Botanical and Zoological prints
19th C. Audubon & Gould birds
French travel posters
Early Maps and Guides

Jim Rosowski



11am - 5pm or by Appt. 402.310.5749

123 So. 6th St. | Seward, NE

Let us light up your life

The Rusty Lamp Antiques, LLC

Come in and see our
fresh new look!

322 West 3rd St.

Grand Island, NE 68801

(308) 382-2868 & (402) 613-2828

therustylampantiques@gmail.com



RAILROAD TOWNE Antique Mall



Experience a nostalgic adventure
as you stroll through our
beautiful displays and attractive
booths full of unique antiques
and collectibles on three levels.

Corner of 3rd & Walnut St. | Grand Island, NE

308.398.2222

See Them Blink

Tips for the 5-yard turkey.

By Jake Jadowski

As winter loosens its grip this time of year, it's time to grab the bow, reunite with the crew and head to the turkey woods. It's the perfect remedy for post-duck depression and just what we need to hold us over until the walleyes start biting. Like every turkey camp, we anxiously anticipate the opportunity to call in and harvest a mature tom. The only difference – we don't let the arrow fly until we can see them blink.

It seems like everything I read lately is about how to pull off a long range kill. Guys are interested in the right gauge of shotgun paired with the best load to knock down a tom at

Magnus recommends full length Victory arrows when using their Bullhead to keep the blades from contacting the shooter's hand.

60 yards. They want to know what arrow, bow and broadhead combo can most consistently knock down birds at 40 yards. To each their own, but we chase the rush of having birds in the decoys at 5 yards.

First, in order to fool a wise long beard into head shot range, decoy placement is critical. We typically use a half strut jake and a submissive hen, as full strut decoys can intimidate birds and prevent them from getting close. Set the decoys 4-6 yards out in front of the blind. In order to get toms close, the decoys have to be close.

It's also important to set the blind strategically. Intentionally leave it visible. The more that toms can see the blind and identify it as a non-threat, the more likely they are to ignore it and focus on the decoys. Keep the sun in mind as well. It's important that the inside of blind remains "blackened out." Always set the blind with the sun at your back; it's better for video footage, too. Wear black – including facemask, stocking hat, sweatshirt and a black glove on the bow hand. Disappear in the backdrop of the blind.

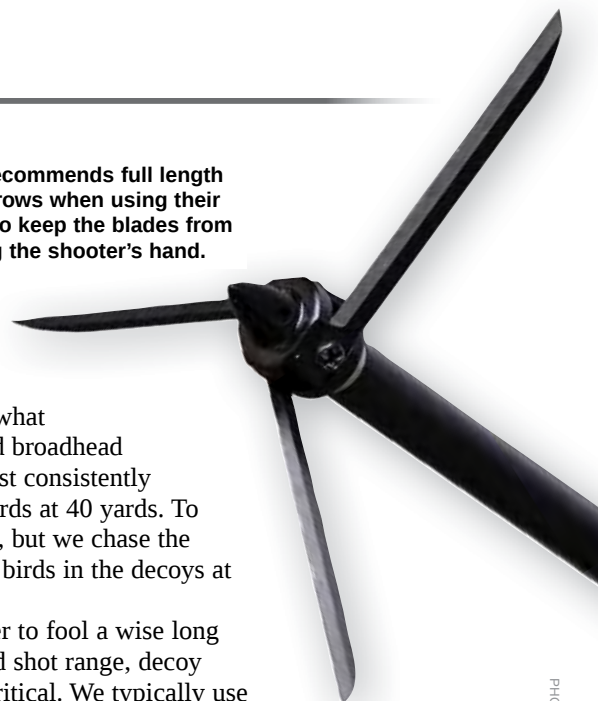
When the tom is in range, focus on a slow, smooth draw. Dial down your draw weight if necessary and fight the urge to rush. Oftentimes, as the bird struts among the decoys, they will turn away and allow you to draw undetected. Don't shoot until the GoPro is running and you have a clear view of their head. Hold your pin steady and leave no doubt.

An important part of our equipment is the cut on contact broadheads that we use at this 5-yard range. Mike Sohm at Magnus Outdoor Products sells the best product on the market. With the Magnus Bullhead birds go down in the decoys and blood trailing is never an issue. Try one. Save the regular broadheads for an October buck, put the shotgun back in the safe until teal season, set your decoys at 5 yards and talk them in close. Good luck holding steady at full draw! The thrill is addicting. Heck, you might even forget the walleye are spawning. ■

Jake Jadowski is a high school history teacher and freelance writer in Gretna who loves to hunt and fish. This is his first article in NEBRASKAland Magazine.



PHOTO BY JEFF KURRUS



Spawn is in the Air

Every Nebraska fish species spawns a little different.

By Daryl Bauer

You will hear a lot of talk among anglers about spawning activities of a variety of fish this time of year. Some of that talk will be right, but there are a lot of misconceptions, too. Let me see if I can cast some light on the spawning activities of some of our Nebraska fish.

First of all, understand that fish invest a lot of energy into the production of "gametes" – a term that means sex products, eggs and milt in fish. The development of eggs and milt in our Nebraska fish takes weeks, months even. As a matter of fact, many of our species begin developing gametes in late summer through fall of the year before. Some folks clean a fish they caught in the fall, see eggs and assume those fish are going to spawn in the fall. But they do not. Those are eggs developing for the spawn the following spring, when they will rapidly mature and be deposited depending on the species of fish.

Rainbow trout are a coldwater species, and most rainbows are winter/late winter/early spring spawners. We do not depend on natural reproduction of rainbow trout in any Nebraska fisheries, but you may see some rainbows in spawning colors and exhibiting some spawning behavior in the winter and early spring.

Northern pike spawn right after ice-out and in years when we may have a late ice-out, spawning will start under the ice. Walleye and sauger then spawn, followed by yellow perch and then muskies. Next, white bass spawn and are followed shortly by crappies, smallmouth bass, largemouth bass and then common carp. Sunfish species spawn next, including bluegill, rock bass, green sunfish and redear sunfish.

Our catfish species spawn each summer, with blues, channels and then flatheads occupying their spawning territories into July. Lastly, in the fall Nebraska has two spawning fish species – brown and brook trout.

Regarding what triggers spawning,

there can be several variables that influence the timing of spawning. Those "cues" even can vary from one habitat to another even for the same species of fish. For example, fish living in moving waters, such as large rivers, can be triggered to spawn by rising water in the spring, while the spawning of the same species of fish living in standing water, a reservoir, may not be influenced by water levels at all. Water temperature and weather patterns can also influence the timing of spawning, but those "magic" temperatures that are often quoted, for example "largemouth bass spawn when the water is 62 degrees F," are inaccurate. If absolute water temperatures were the cue to spawning, there would be a lot of spawns ruined by spring warming trends followed by strong cold fronts and dropping temperatures.

Photoperiod or the amount of daylight is another cue that triggers reproductive behavior in Nebraska's fish. Therefore, spawning will tend to occur at about the same time every year. I have seen walleye spawning April 1 the day after the ice went out, and I have seen walleyes spawning April 1 when we have had very warm weather for most of the month of March. Yes, weather patterns may influence spawning activity but it only "modifies" that activity, making it vary a bit from year to year but not changing spawning times by weeks.

Also keep in mind that Nebraska is a large state with a great deal of variability in habitat, weather and climate. For example, you may see largemouth bass spawning behavior as early as late April in southeastern ponds, while that same species will still be spawning into June in northern and western parts of the state.

Also, not all fish spawn at the same time; in any population there will be individual fish that tend to spawn early and there will be individual fish that tend to spawn late. If all the fish in a population spawned at the same time,



PHOTO BY DARYL BAUER

Pictured is a redear sunfish close to spawning.

one ill-timed cold snap could eliminate an entire year's reproduction.

And what does all this do for catching fish? During the spawn fish will concentrate and feeding activity may occur right up until the fish are ready to spawn. But, once spawning begins, fishing actually slows. In fact, if you fish for a variety of species, and fish different waters, you can "ride waves" of good pre-spawn and post-spawn fishing for several different species of fish.

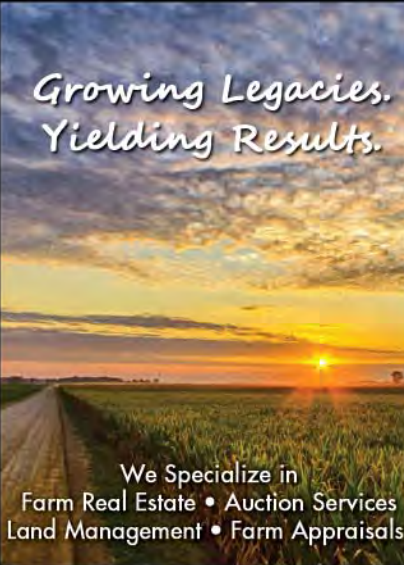
Having said all of this, it is important to protect big fish because those fish are likely some of the best broodstock in a population. The fact that an individual fish reached exceptional size suggests that fish has been one of the most successful at surviving, is one of the fastest-growing, and likely has traits, genetics, that would be desirable in a population. If at all possible, turn the big ones loose, regardless of species and regardless of when they are caught. ■

Daryl Bauer is a fisheries biologist with the Commission, as well as fish and wildlife program manager. He holds over 70 Nebraska Master Angler Awards for 13 different species. Read his Barbs and Backlashes blog at Outdoornebraska.org to learn even more about fishing.



When the tom is in the 5-yard range, focus on a slow, smooth draw with your bow.

*Growing Legacies.
Yielding Results.*



We Specialize in
Farm Real Estate • Auction Services
Land Management • Farm Appraisals

Nebraska • Iowa • Kansas • South Dakota • Colorado

mp Mid-Continent
Properties, Inc.
Farm Real Estate, Management & Appraisals

402.334.0256
www.Mid-ContinentProperties.com
www.facebook.com/midcontinentproperties

Antelope Creek
Wildlife & Ponds

605.660.6566
antelopecreekwp.com

Wildlife, Habitat,
Pond, Fishery & Land
Management



Expert Service from Brett Kleinschmit

**HUNT WHERE SUCCESS
IS EXPECTED!**



- World Class Turkey
- Trophy Whitetail Deer
- Quality Upland Game Birds

GOBBLE-N-GRUNT
Outfitters
www.gobblengrunt.com

402.459.5823
gobblengrunt.com

THE BEST PIT BLINDS FOR SALE



402.450.5658
www.Kohlerblinds.com

Legendary
**KOHLER
BLINDS**
— LINCOLN, NEBRASKA —

**HUNTING
BLINDS**

BUCKSHOT ADVENTURES
712-898-0878
712-898-0878

COUNCIL BLUFFS, IOWA

We offer both
the Muddy and
Redneck blinds
providing
hunters with
options within
their price
range.

**REDNECK
BLINDS**
MUDY

DakotaPrairieGuide.com

DAKOTA PRAIRIE GUIDE SERVICE
605-680-1910

The fishing in March / April is done
primarily on Lake Francis Case below the
Big Bend Dam near Chamberlain, SD.

I am one of the most affordable fishing
guides on the Missouri River in South
Dakota. My goal is to educate, have fun,
catch fish, and have the customer wanting
to come back to fish with me again.




LAND FOR SALE

**\$2.3
BILLION
& 615,000
ACRES**
sold company
wide in the last
5 years



LANCASTER CO, NE - 313.71 AC.
PRICE REDUCED!, Excellent county road access across
the front of the property, 15 GPM Well (G-117086)
with spigots in multiple locations throughout the prop-
erty, Electric available with lines running through the
property, Terraced and tiled tillable acres with mainly
Class III soils, Very clean pasture/hay ground, Timbered
draw with 65 +/- CRP acre borders (Exp 2022), Above
average internal and perimeter fences, Two ponds,
Centrally located cattle working area, Located 40 min-
utes from Lincoln and 1 hour 20 minutes from Omaha,
Only 3 miles north of Branched Oak SRA and 1.5 miles
west of Wildwood Lake SRA - **\$1,286,211**

BURT CO, NE - 295 AC.
Great access with white rock driveway to
the property and an additional access from
the west, Extensive amount of timber edge,
Potential for future timber harvest, 80 acres of
tillable, 2 established food plots in ideal loca-
tions, Stocked spring fed fishing pond, More
than abundant deer sign throughout, Great
numbers of turkeys, Incredible deer sanctuary
set up in center of property, Very isolated from
any main roads, 1 Hour from Omaha, 5 minutes
from Decatur - **\$1,239,000**



CONTACT JASON OR LUKE TO LEARN MORE ABOUT THESE AMAZING PROPERTIES



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



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



WHITETAIL TROPHY PROPERTIES REAL ESTATE

HUNTING | RANCH | FARM | TIMBER

WHITETAILPROPERTIES.COM



Whitetail Properties Real Estate, LLC (dba Whitetail Properties) | Nebraska & North Dakota DBA Whitetail Trophy Properties Real Estate LLC | Lic. in IL, MO, IA, KS, KY, NE & OK - Dan Perez, Broker | Lic. in AR, CO, GA, MN, ND, TN & WI - Jeff Evans, Broker | Lic. in OH & PA - Kirk Gilbert, Broker | Lic. in TX - Joey Bellington, Broker | Lic. in IN - John Boyker, Broker | Lic. in LA, MS & AL - Sybil Stewart, Broker | Lic. in TN - Chris Wakefield, Broker | Lic. in TN - Bobby Powers, Broker | Lic. in AR - Johnny Ball, Broker | Lic. in SD - Rick Elliot, Broker | Lic. in NC - Rich Baugh, Broker | Lic. in MI - Brandon Cropsey, Broker



Bighorn Sheep Get Implant Transmitters

Biologists are able to tell when lambs are born due to new technology.

Story and photos by Justin Haag

The Nebraska Game and Parks Commission got up-close and personal with 20 bighorn sheep ewes this winter in an effort to track their future offspring. The goal is to get a handle on the species' population struggles in the Pine Ridge area of northwestern Nebraska.

With the help of a helicopter wildlife capturing crew and others, Commission staff on Feb. 14-16 equipped 20 pregnant female sheep with a device to help immediately detect when lambs are born. The Commission has staged numerous bighorn sheep captures in past years involving the installation of telemetry collars, but this is its first bighorn-monitoring project using this type of transmitter.

The vaginal implant transmitter, often referred to by its acronym VIT, is a three-inch long tube designed to be inserted behind the fetus in the birthing canal. About the same diameter as a roll of dimes, it has an antenna and features two plastic wings to help it stay in place until a lamb is born.

Upon birth, a change in the transmitter's temperature will trigger a frequency that indicates a lamb was born. Shortly after, Commission staff will race to the lamb in an attempt to equip it with a temporary tracking collar. By tracking the lambs, biologists hope to get a better idea of what is causing so many of them to die in the Pine Ridge area of Dawes and Sioux counties. Populations have struggled in that region in recent years and biologists believe no lambs survived the 2016 birthing season. Most have died within a couple of months of being born.

Veterinarians from the Alliance Animal Clinic and Crawford Companion Animal Clinic, staff members of the Henry Doorly Zoo and the U.S. Department of Agriculture Animal and Plant Health Inspection Service, along with students from the Chadron State College's wildlife management program and other volunteers, joined Commission employees during the processing. The team, consisting of as many as 50 people at times, worked Ponderosa Wildlife Management Area and Fort Robinson State Park near Crawford on the first day, private property south of Whitney on the second, and U.S. Forest Service property near Chadron State Park on the third and final day. The group had intended to finish the project Wednesday, but were sidelined most of that day by helicopter mechanical problems.

In addition to the 20 bighorns that were fitted with VITs, the effort netted another six ewes and five rams.

The sheep were captured using a net fired from a gun, then hobbled and carried to the processing station hanging on a tether below the helicopter. Sedatives eased stress and intravenous fluids and ice lowered their high body temperatures. A mobile ultrasound machine helped determine if the ewes were pregnant. Each sheep's nose and



The vaginal implant transmitter is designed to be ejected from a ewe upon the birth of a lamb. A change in its temperature triggers a signal to researchers using telemetry equipment.

throat were swabbed for bacteria testing, and blood samples were taken to determine DNA. The crew also administered antibiotics to combat any illnesses they might have. And, each sheep was equipped with telemetry collars and ear tags. The collars aid Commission wildlife technicians in their goal of locating each collared sheep at least once a week and the ear tags help with identification.

Not only do biologists look forward to learning more from tracking the lambs, they hope to gain insights from test results from this week's captures, said Todd Nordeen, Commission big game research and disease program manager.

The Pine Ridge herds have disease issues, and biologists hope to determine the exact pathogens to blame. Pasteurella pneumonia has been linked to bighorn sheep deaths throughout their ranges in North America, but other bacteria also cause problems.

"We'll see when we get the test results back how many test positive for mycoplasma ovipneumoniae, in particular," Nordeen said. "That's another bacteria that sheep have been dealing with throughout the West and research is increasingly showing that it's one of the primary bacterium leading to die-offs and mortalities."

Soon, bighorn sheep monitoring efforts will ramp up considerably in the Pine Ridge.

"When spring comes, we're going to be out there every day tracking these collared ewes, especially when they isolate themselves and look like they're going to give birth," he said. "Then we'll be listening for the frequency of the

VIT that is in that particular sheep. We will be prepared with equipment to go in and collar those lambs. Then, we'll follow them for the next two or three months to identify cause-specific mortality."

The monitoring will require checks nearly every day, and the Commission will be looking to volunteers, such as college students studying to be wildlife managers, to lessen the burden of its staff. Nordeen said it is almost imperative to find the lambs less than a day after birth and death. Any later than that after birth and catching the lambs becomes much more difficult. The longer one waits after death the more chance predators and scavengers will capitalize on their find.

The capturing project was funded largely by conservation organizations, including the Nebraska Big Game Society, Wild Sheep Foundation and the Iowa Chapter of the Foundation for North American Sheep.

Nebraska now has a population of about 320 bighorns, 140 of which are in the Pine Ridge.

The Audubon's subspecies of bighorn sheep was native to the butte country of the Nebraska Panhandle but was extirpated from the state because of disease, unregulated hunting and habitat loss in the early 1900s. The subspecies became extinct in 1925.

Rocky Mountain bighorn sheep from Custer State Park in

The helicopter delivers a ewe for processing at Fort Robinson State Park.

South Dakota were reintroduced to Nebraska in an enclosure at Fort Robinson State Park in 1981. Those sheep were released to the wild in 1988 and 1993 and additional release efforts of sheep from Montana, Canada and Colorado in 2001, 2005, 2007 and 2012 have resulted in herds that reside in areas of the Pine Ridge between Harrison and Chadron, and the Wildcat Hills south of Gering and east to McGrew. ■



A ewe is released following processing. Handling the wild sheep are, from left, Justin Powell, Brandon Tritsch, Greg Schenbeck and Adam Bahl.



▲ I am an avid deer hunter and I have several photos from deer that we've shot from over the years, but I have to say this one is my favorite. Ironically, one of the individuals who helped shoot some of the bucks is not present in the picture, that man is Alan Birkel, my father. However, two of the individuals are relatives. My uncle, Dan Birkel and my grandfather, Harold Birkel are in the picture. My love and passion for the outdoors has been passed down to me, and now I am sharing my passion of the outdoors with my children. Pictures and hunting stories like this are priceless, and we never get tired of telling these stories as they help preserve that past for generations to come!

The picture was taken in November 1968 on Roy Walker's farmstead in between Genoa and St. Ed, Nebraska.

Front Row: Tim Bosak, Gary Keeshan, Roy Walker, Bill Badje, and Dan Birkel

Back Row: Jim Weldon, Dale Pearson, Neva and Harold Hoffman, Donald "Stetz" Dreifurst and Harold Birkel

— Heath Birkel, Callaway, Nebraska



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, photos adjusted for reproduction. All photos will be returned.

6th Annual NBGS Dinner Meeting

Your Hosts: Dan Kreitman • Rick Brandt • Tam Allan
Craig Hundt • Jim King • Mark Wolf • Doug Zingula
Justin Hertzell • Steve Hornady



nebraska big game society

Thursday April 13, 2017
Wilderness Ridge
1800 Wilderness Woods Place
Lincoln, Nebraska

2016 Tag Buyer: Mike Raymer of Hays springs, NE

Cocktails – 5:00 pm Dinner – 6:30 pm

Cost to attend is \$60 per person, Corporate Tables for \$500. New York Strip Steak & Trimmings.

Featured: Auction Item: **The 2017 Nebraska Statewide Resident Bull Elk Tag**

Please RSVP by April 7, 2017 to: NBGS11@gmail.com or Jon Thomas (402) 430-9191

See our Website at: www.nebiggame.org



The Nebraska Lottery has distributed more than \$627 million to its beneficiaries since 1993.



nelottery.com

Must be 19. Please play responsibly. Problem Gambling Help Line: 800-522-4700.

Catfish with Lemon and Bacon Cream Sauce

For when you're tired of tartar sauce, though I know that's impossible – but bacon!

By Jenny Nguyen

A greasy fish fry and beer is awesome, but it's not always appropriate for a first date or anniversary dinner. Looking to impress a special someone with your catch through the water? Dress up your catfish, or any white fish, with this simple, yet eye-catching meal: a fillet of catfish gently browned in butter and served with a cream sauce of bacon, chives and lemon zest.

Servings: 4

Prep Time: 15 minutes

Cooking Time: 20 minutes

Ingredients:

- 4 catfish fillets
- Milk for soaking fish
- ¼ cup of all-purpose flour
- Salt and pepper
- 2 cloves of garlic, minced (or

shallots)

- 2 slices of bacon, chopped
- 2 teaspoons of chopped chives
- 1 cup of heavy whipping cream
- Zest of 1 lemon, grated
- 2 tablespoons of butter

1. Heat 2 tablespoons of butter in a large non-stick pan over medium heat. Place catfish fillets in a wide dish or bowl and pour milk over fish to wet. Remove fish and sprinkle salt and pepper on both sides. Dust with flour and shake off excess. Cook catfish in hot butter for 2 minutes on each side, or until browned and cooked through. Do not crowd fish in the pan. Keep cooked catfish warm.

2. In the same pan, render chopped bacon over medium heat. Remove bacon and drain on a paper towel. Pour out most of the grease and

discard (or keep for another use). Return the bacon bits to the pan and add garlic. Stir for 30 seconds to allow garlic to become aromatic, but do not allow garlic to brown. Add heavy whipping cream. Bring to a simmer and allow sauce to thicken, about 2-4 minutes. Stir in chopped chives and lemon zest. Add salt and pepper to taste.

3. Serve fillets with bacon and chive sauce drizzled on top. Serve leftover sauce on the side, along with a light salad and rice. ■

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



PHOTO BY JENNY NGUYEN

See our website at: www.fromne.com

From Nebraska Gift Shop

Located in the
Historic Haymarket District
803 Q Street
Lincoln, Nebraska 68508
402-476-2455

*Offering the best gourmet
Nebraska food baskets, gifts,
and souvenirs.*

Also featuring:
**James Arthur Vineyards
Tasting Room**

**Straight from the
HEARTLAND**

James Arthur
VINEYARDS

Wine As Beautiful As
The Place It Comes From

Nebraska's Largest Winery,
Just Minutes From Lincoln

Open 7 days a week, year round

Find Us On Facebook! [f](#) [t](#)

www.jamesarthurvineyards.com
2001 W. Raymond Rd • 402-783-5255

**THE LODGE
RESTAURANT**
AT EUGENE T. MAHONEY STATE PARK

**Featuring breakfast,
lunch and dinner buffets.**
(call for hours and availability)

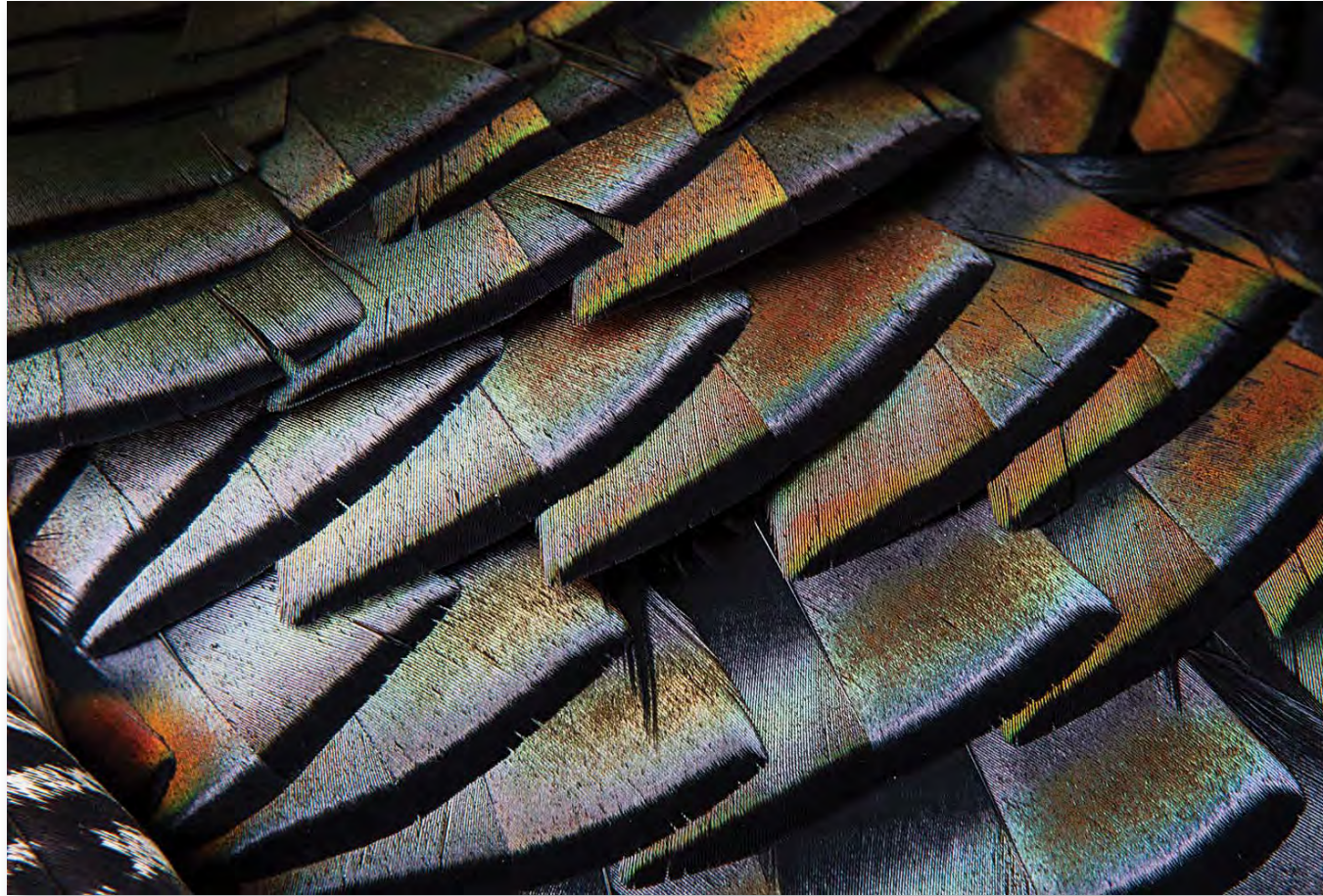
The Lodge at Mahoney State Park
28500 W Park Hwy, Ashland, NE
402-944-2523

SIP
nebraska

**MAHONEY STATE PARK
PREMIER WINE
EXPERIENCE**

MAY 5 & 6, 2017

SipNebraska.com



How About the Time...

I watched 63-year-old Lloyd Warren stalk turkeys through the woods like he was in high school.

...I didn't see a turkey all day, but stumbled upon my first patch of morel mushrooms.

...that one tom hung up on that logging road just out of sight, gobbling his head off but unwilling to move any closer.

...that one tom didn't hang up on the other logging road, walking right into shotgun range as his gobbles echoed into the trees around us.

...my wife leaned out of the truck window and gobbled at the roadside tom, who immediately gobbled back, making our young children laugh hysterically.

...I scratched my nose, while in full camouflage, with a turkey more than 300 yards away – only to watch him and his flock of hens run as fast as they could in the opposite direction.

...I was told by a hunting partner that it wasn't worth crawling a quarter of a mile to get a shot at a tom.

...I found me a new hunting partner.

...the sun hit my hen decoy at just the right angle in the woods, starting a race between two toms to see who could run into gun range faster.

...I slowed down just long enough to see how beautiful a turkey truly is, causing me to repeat this ritual every time I have a successful hunt.

Cheers to the start of another year of frustration, elation, heartache, and perhaps even a tear or two shed in the woods to all you hunters this spring in the best turkey hunting state in the nation. I just hope those tears are from joy.

Jeff Kurrus
February 1, 2017



This spring, answer them. Because few places offer the three permits, large bird population, thousands of acres of public land and high hunter success rates that make Nebraska one of the top turkey hunting states in the country.

Plan your hunt at OutdoorNebraska.org.

NEBRASKA
— GAME  PARKS —