



A sandstone spire rises from a ridgetop in the Pine Ridge near Crawford. Photo by Eric Fowler.

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NEBRASKAland

January-February 2015

Mountain Lions in Nebraska

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INSIDE

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A Watershed in Motion • Tomorrow's Land Stewards

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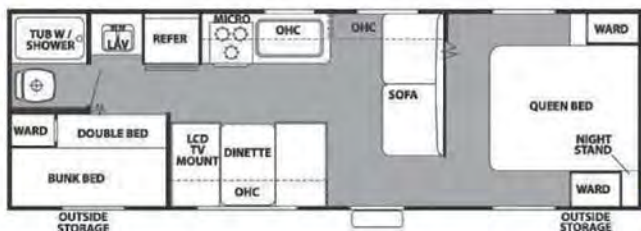
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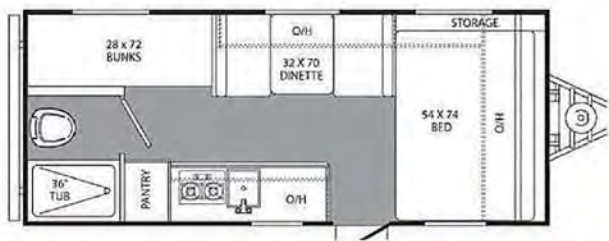


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NEBRASKAland Magazine

Volume 93 • No. 1 • January-February 2015

FEATURES...

- 16 Nebraska's Historic Neligh Mill
By THOMAS R. BUECKER
- 22 Farmers for Conservation
STORY AND PHOTOS BY JEFF KURRUS
- 24 Seeing a Watershed in Motion
Time-lapse Project Enters Its Fourth Year
STORY AND PHOTOS BY MICHAEL FORSBERG
- 30 Demystifying Mountain Lions
AN INTERVIEW WITH SAM WILSON
- 38 That Lap Dog Can Hunt
STORY AND PHOTOS BY ERIC FOWLER
- 42 Fish Here Now
The 2015 Nebraska Fishing Calendar
By DARYL BAUER AND JEFF KURRUS

DEPARTMENTS...

- Comment.....4
- Mixed Bag.....6
- Page 49.....53
- Wilderness Workshop54
- Portraits from the Past56
- Junior Journal.....58
- In the Kitchen60
- Wine & Dine Guide61
- The Last Stop.....62

ON THE WEB...

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

Cover: Mountain lions are one of Nebraska's most fascinating animals. See story on page 30. Photo by Joel Sartore.

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38



42



24



16



Kevin Fortina sent us this photo of a family of woodchucks near his home in Valley.



Photographer Jon Cockerham, of Lincoln, sent this night photo of Bowling Lake in the fog.



ABOVE: My grandson, Brady Chilewski, of Arcadia took this picture while helping to fight a fire near the Arcadia Diversion Dam. Approximately 2,000 acres were burned during the two-day fire last March. BELOW: Sisters Jordan (left) and Taylor Hopp hunt with Citori (middle) on Mark and Bridget Vaughn's Farm west of Alliance in Box Butte County.



Outdoor Message Plates



Dan Eby of Lexington displays his love for walleye fishing on his vehicle.

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) of it to Eric.Fowler@Nebraska.gov, along with your name, hometown and a brief description of the interests expressed on your license plate.

Correction: In the December 2014 Portraits of the Past photo, Hank Lokke was misidentified as Terry Rasmussen. The corrected version is on page 56 of this issue.

-Editor

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 for clarity. Photographs are welcome and will be returned.

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NEBRASKA

GAME PARKS

Wild Focus – The Red Fox

By Lindsay Rogers

Red foxes are found across North America. In Nebraska, they occupy a wide range of habitats including forest, prairie, farms and urban areas.

Contrary to popular belief, red foxes are omnivores. They eat primarily mice, rabbits, insects and fruit. They often have two dens – a main den used for birthing and rearing young, and an emergency den reserved if the primary den is compromised.

Adult foxes can be killed by coyotes, but this is more often for territory than food. Territory marking is evident through their scent which is similar to a skunk, but sweeter.

Young are preyed upon by hawks and larger mammals. Mating season varies widely based on geographic location – January-February in the southern range and February-April in the north. A classic red fox sign is scat in the middle of a trail. ■



PHOTO BY JUSTIN HAAG

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*GRAND ISLAND
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photo by Rick Rasmussen, PlatteRiverPhotography.com



Mixed Bag

Bailey Yard's Golden Spike Tower and Visitor Center

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Travelogue

By Julie Geiser

North Platte

Located in west-central Nebraska, **North Platte** offers plenty of activities for travelers on Interstate 80 and Highways 30 and 83. Whether you're a hunter, angler, camper, boater or history buff, North Platte has entertainment for all.

Lake Maloney State Recreation Area (SRA), just south of North Platte, offers camping, fishing and more. Kansas Point near the inlet area of the lake offers RV hookups and tent camping. The main camping area near the outlet offers RV and tent camping with no amenities, but great access to boat ramps, swimming, boating, kayaking and a playground for the kids. Anglers will find walleye, bass, catfish, wipers, bluegill, crappie and white bass for fishing all year.

For a Wild West treat visit **Buffalo Bill's Ranch State Historical Park and SRA**. The ranch preserved by the Nebraska Game and Parks Commission shows the home and history of William Cody and his Scout's Rest Ranch Barn. Cody's Victorian home takes sightseers back in time as they view classic photos and possessions of the Cody family. The Barn features Wild West Show posters, historical relics, horse tack and more. The tucked away SRA has RV hookups and tent camping along the North Platte River, with hiking trails, horse-back riding and access to fishing, paddling or tubing.

The **Lincoln County Historical Museum** tells the historical significance of west-central Nebraska and the Platte River Valley. The Pawnee, Arapaho, and Sioux all lived in this area and the Oregon, Mormon and California trails all ran through it. The North Platte Canteen, which served 6 million troops during World War II, is one of the best legacies of North Platte.

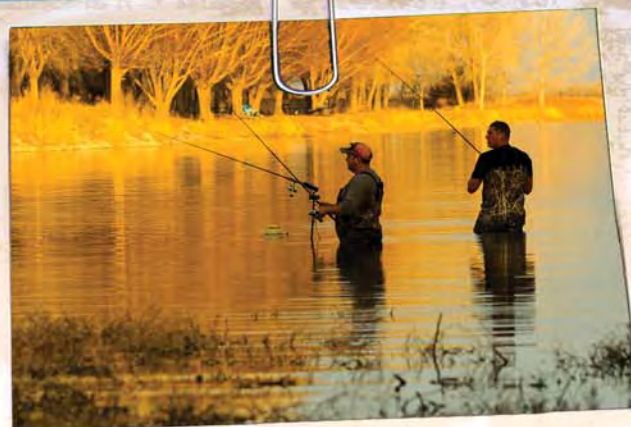
Hunting can be done at eight **Wildlife Management Areas** and Open Fields and Waters lands within 30 minutes from North Platte providing hunters with waterfowl, upland game, turkey and deer hunting.

June is the prestigious **NEBRASKAland DAYS** celebration. The week-long event has everything from the PRCA Rodeo, parade, antique cars, food, concerts a carnival and much more.

North Platte is also home to the largest railroad classification yard in the world. **Union Pacific's Bailey yards** covers 2,850 acres for a total length of eight miles. Bailey Yard handles 10,000 railroad cars a day.

For a birds-eye view of the yards head to **The Golden Spike Tower and Visitor Center** and view the action from the tower platforms. The Visitor Center includes Union Pacific Railroad and Nebraska memorabilia, educational displays and a gift shop.

Lastly, downtown North Platte has shops with one-of-a-kind gifts and décor. Take a break with a favorite coffee or latte at the **Espresso Shop**, then finish the day at **Grain Bin Antique town** and enjoy wine from **Feather River Vineyard** located in the Loess Hills south of North Platte. Feather River Vineyard introduces visitors to award-winning wines and the antique town made from wooden grain bins is packed full of antique deals. ■



Fishing at Lake Maloney

North Platte



Buffalo Bill's Ranch State Historical Park and SRA



The Espresso Shop in downtown North Platte



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A Brief History Monarch's Sad Fate

By Patricia C. Gaster, Nebraska
State Historical Society

The sad end of a retired member of Buffalo Bill Cody's Wild West was announced by the *Omaha Daily Bee* on December 5, 1906. However, the article, headlined "Death Warrant for Monarch," referred not to a human, but to an animal. Monarch, "the finest specimen of buffalo ever in captivity," was considered too dangerous for Riverview Park, his home in Omaha since leaving the Wild West, and he was soon to be slaughtered.

The *Bee* said: "Monarch was raised by Buffalo Bill and carried with him through all the countries of Europe, but he became unmanageable and as it took a large part of the gate receipts of the Wild West show to square away the depredations which were occasioned by this immense buffalo, Colonel Cody decided to sell him. He was sold to the city of Omaha for \$300 and was placed



This detail from a poster for Buffalo Bill's Wild West depicts men on horseback and running buffalo.

in Riverview park."

However, Monarch behaved so badly there, rushing at the fences and threatening to trample spectators, that he was reportedly sold back to Wild West agent William McCune. By December 13 the *Bee* reported that Monarch had been purchased by William Buthorn, owner of the Heidelberg Cafe, who planned to slaughter the animal, and gave Omaha's mayor, "Cowboy Jim" Dahlman, the dubious honor of shooting him. The *Bee* noted:

"The mayor did not fail. He planted himself some thirty feet from the animal, leveled his big rifle and fired. Monarch turned to look for a second at his slayer, then walked around in a circle just once, dropped to the ground and died within ten minutes without writhing. Mr. Buthorn will have the head mounted and placed in the Heidelberg and the meat he will sell."

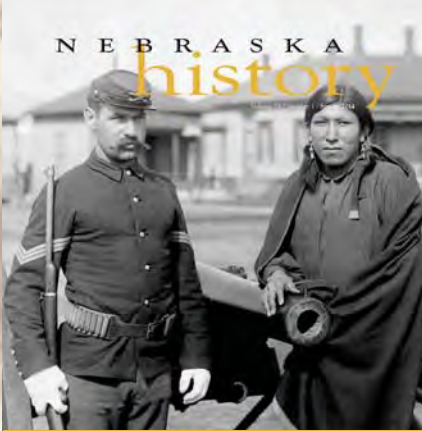
Monarch may have passed from the scene, but stories of his exploits during his Wild West days appeared in the press. In a particularly memorable incident in Germany, according to the *Bee*, Monarch "got loose, and, rushing through a small general store, scattered the china and other things exhibited for sale. He went right through the store and was cornered in a lot at the rear,

with no way of escape except to go back through the store. When the little German storekeeper was asked what the damage was he bobbed his head up from behind the counter, where he had dodged for safety, and shouted, 'Nothing, nothing, if you will only take the brute away!'" ■

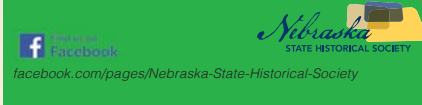


Omaha mayor Jim Dahlman in cowboy garb. NSHS RG2990.PH0-1

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Trophy Hunting for Shed Antlers

By Dylan Tegtmeier

Buck season is closed, but you've still got buck fever? Shed hunting is a great way to get back out into the woods.

Deer and elk grow and shed their antlers every year. Often times, when antlers are left in the woods over the summer, factors such as time, mice, squirrels and other rodents will eat them for their valuable calcium content.

Studies have shown that each deer sheds its antlers at about the same time it did the previous year, and this antler drop is the result of declining testosterone levels which weaken the base of the antler. This timing varies from geographic location, and usually starts in late December in the north and March or April in the southern end of the deer's range. A deer will also generally drop both

antlers within 3 days of each other.

Here are some helpful tips to get some bones in your hands:

- After the rut, the only thing a big buck will care about is food and sleep, so target those food hot spots and well secluded south-facing beds.

- As a hunter, you already understand that deer will not frequent an area if you keep spooking them away from it. Glass your feeding areas and bedding spots from a good distance and check to see if any deer have antlers. If there are still antlers up, wait for another day to check the spot.

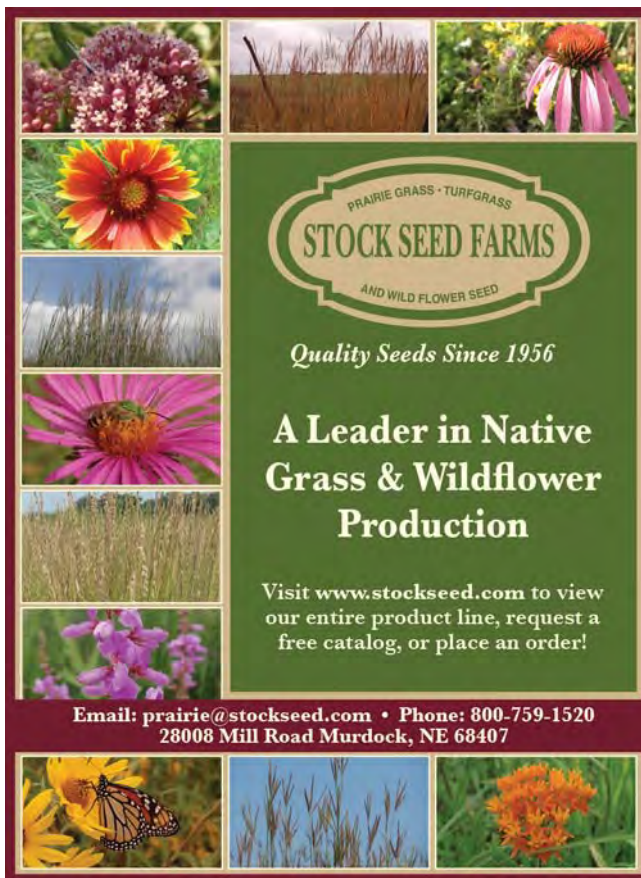
- Travel corridors and obstacles are great places to find antlers. Remember, if the antlers are loose and the buck is moving around, a little jostling could easily knock an antler loose. So check fence crossings and ditches.

- Go shed hunting after a fresh dusting of snow. A small flurry is even enough to show new tracks, and following these will generally lead you to freshly dropped antlers.

- Bring your family, friends and favorite four-legged companion. These extra eyes will help, but sharing your appreciation for the outdoors is much more valuable than a few bones you might find. ■

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American Goldfinch

Song or calls: Song is prolonged jumble of short trills and thin twitters. "Per-chic-oree" flight notes.

Description: Breeding adult male is bright yellow overall with a black cap, black wings and black tail; white wing bars, with upper bar being the widest; and yellow shoulder patch. It has a white rump and undertail coverts. Female is duller overall; olive above; lacks black cap and yellow shoulder patch with white undertail coverts. Winter adults are even duller; either brownish or grayish above; male may show some black on forehead; and white wing bars are more prominent. Immatures are similar to winter adults but wing bars are buffier.

Behavior: Has erratic, "roller coaster" flight pattern.

Habitat: During the fall and winter birds are often found foraging in fields of tall weeds. Breeding usually occurs in rather open grassy areas, farmsteads, swamps and other areas where thistles and cattails are abundant.

Where in Nebraska: Common permanent resident across the state. Winter populations vary from year to year.

Fun Facts: Sometimes known as the "wild canary." American goldfinches are the only bird in the finch family that molts twice a year including the breeding season. ■

To learn about more birds visit
NebraskaBirdLibrary.org.



PHOTO BY JON FARRAR

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Wingtips by Wild Bird Habitat

Many northern goldfinch join up with our resident finch in the Central Great Plains during the winter where there is less snow cover making food more accessible.

Goldfinch are easily attracted to backyards with Nyjer thistle seed feeders. Nyjer seed is imported and treated to prevent germination. It must be fresh or the goldfinch will reject it.

Goldfinch are also attracted to: black oil sunflower seed, hulled sunflower seed, and nutra-safflower seed.

The winter plumage of males is an olive drab not the canary yellow of their spring breeding plumage.



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.

January 1 First Day Hike, Ponca State Park (SP), Ponca, 8 a.m., 402-755-2284

January 2 Indoor 3-D Archery Target Showcase, Nebraska Game and Parks Outdoor Education Center, 4703 N. 44th St., Lincoln, noon-8 p.m., 402-471-6141

January 2-3 Roger G. Sykes Outdoor Heritage Education Complex open, Platte River SP, Louisville, 10 a.m.-4 p.m., 402-234-2217

January 2, 9, 16, 30 Handgun Workshop, Nebraska Game and Parks Outdoor Education Center, 4703 N. 44th St., Lincoln, 6-7:30 p.m., 402-471-6141

January 3 Duck and coot hunting seasons close in Zone 3, Low Plains Unit

January 3 Yule Log Quest, Platte River SP, Louisville, 3 p.m., 402-234-2217

January 4 Youth Basic Rifle Introduction, Nebraska Game and Parks Outdoor Education Center, 4703 N. 44th St., Lincoln, 1-2:30 p.m., 402-471-6141

January 4-25 Duck and coot hunting seasons in Zone 2, High Plains Unit

January 8 Green Scoring Your Trophy, Nebraska Game and Parks Outdoor Education Center, 4703 N. 44th St., Lincoln, 6:30-8:30 p.m., 402-471-6141

January 10 Ice Bowl disc golf tournament, Eugene T. Mahoney SP, Ashland, 1-4 p.m., 402-944-2523

January 10 Discover Ice Fishing Clinic, CenturyLink Lake, Eugene T. Mahoney SP, Ashland, 1-4 p.m., 402-471-5447

January 12 First day of spring turkey hunting permit sales

January 15 Youth, Landowner, Season Choice and River Antlerless, and Gifford Point WMA deer hunting seasons close

January 15 Nebraska Game and Parks Commission board meeting, Lincoln

January 16 Dark goose hunting season closes in North Central Unit

January 16 Discover Ice Fishing Clinic, Environmental Resource Center, Yanney Heritage Park, Kearney, 6-9 p.m., 402-471-5447

January 16-18 Women's Wellness Weekend, Ponca SP, Ponca, 402-755-2284

January 17 Discover Ice Fishing Clinic, Yanney Lake, Yanney Heritage Park, Kearney, 1-4 p.m., 402-471-5447

January 19 Special Public Health Hazard Order crow hunting closes

January 20 Crow hunting season opens statewide

January 22 Novice Predator Hunting Workshop, Nebraska Game and Parks Outdoor Education Center, 4703 N. 44th St., Lincoln, 7:30-9 p.m., 402-471-6141

January 24 Cold Day, Warm Hearts and Family Fun, Eugene T. Mahoney SP, Ashland, 3-6 p.m., 402-944-2523

January 24-February 8 Light goose regular hunting season

January 25 Duck and coot hunting seasons close in Zone 3, High Plains Unit

January 25 Cowboy Poetry/Music Jam, Arthur Bowring Sandhills Ranch State Historical Park, Merriman, 2-7 p.m., 308-684-3428

January 29 River Otters in Nebraska: A Success Story, Nebraska Game and Parks Outdoor Education Center, 4703 N. 44th St., Lincoln, 7-8:30 p.m., 402-471-6141

January 31 November Late Doe/Fawn antelope hunting season closes

January 31 Pheasant, quail and partridge hunting seasons close

January 31 Fall turkey hunting season closes

January 31 Grouse hunting season closes

January 31 Squirrel hunting season closes

January 31 Scoring Workshop for Boone and Crockett, Pope and Young, Muzzleloader, State Citation, Nebraska Game and Parks Outdoor Education Center, 4703 N. 44th St., Lincoln, 8 a.m.-8 p.m., 402-471-6141

January 31-February 1 White-fronted goose hunting season

February 1 Super Bowl Sunday Mini-Lodge Package, Ponca State Park (SP), Ponca, 402-755-2284

February 8 Dark goose hunting season closes in East, Platte River, Panhandle and Niobrara units

February 9 Light Goose Conservation Order hunting begins

February 11-14 Valentine's Special, Eugene T. Mahoney SP, Ashland, 402-944-2523

February 12 Introduction to Trapping, Nebraska Game and Parks Outdoor Education Center, 4703 N. 44th St., Lincoln, 6-8 p.m., 402-471-6141

February 14-15 Birds and Breakfast hike and identification workshop, Ponca SP, Ponca, 402-755-2284

February 28 Cottontail and jackrabbit hunting seasons close

February 28 Bobcat, raccoon, Virginia opossum, long-tailed weasel, mink, red fox, gray fox and badger hunting and trapping seasons close



First Day Hike

By Amy Kucera

Creating a New Year's resolution can be a walk in the park, particularly if you to kick it off with the annual tradition of a First Day Hike.

Hosted by America's State Parks in celebration of the New Year, the organization encourages a walk in the park in a national initiative to connect people to the outdoors through a winter walk in the wild.

Though most First Day Hike treks throughout parks are unguided, there are more than 600 events organized across the country, including one scheduled at Ponca State Park near Ponca.

The benefits of a hike outdoors are both instantaneous and long-term, and exercise has been proven to improve and maintain overall health and can lead to a longer life.

With more than 41,725 miles of trails existing in America's State Parks, you don't need to go far to make stepping through a scenic state park part of your new year. Be creative. Combine it with snowshoes or cross-country skis for an adventure, or invite a two- or four-legged friend and ensure your First Day Hike won't be the last.

Find a hike near you at Firstdayhike.com. ■



On January 1, Ponca State Park (pictured) will be hosting a First Day Hike event.

N Explore the trails at Nebraska State Parks.

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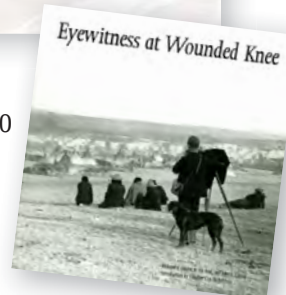
By Amy Kucera

Nebraska State Historical Society's *Eyewitness at Wounded Knee* (Richard E. Jensen, R. Eli Paul and John E. Carter) is an extensive compilation of historic photographs paired with modern essays that investigate the December 1890 massacre of the Lakota people by the 7th Cavalry of

the U.S. Army at Wounded Knee Creek.

The collection, featuring more than 130 images by photographers George Trager and Clarence Grant Morelodge, leaves one stunned with emotions as silent and raw as the snow that appeared on the cold ground where so many were slain.

Learn more at Nebraskahistory.org. ■



NEBRASKAland Visitor



October's winner of the Visitor drawing was Bella Poppe of Hastings, Nebraska, who found the **apple maggot fly** on page 55. 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 Magazine* 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 12, 15, 58 or 63.

The apple maggot fly is a fruit fly, less than 1/4" in length, and native to North America. As the name suggests, this insect is a pest of apples, but also infests other fruits including hawthorns, cherries and plums. Adult flies have a black body, dark red eyes, and white stripes on the abdomen. Their wings are transparent, with distinct black bands that aid in identification.

Adults emerge from the soil in summer, and begin to feed and mate. Females cut a slit into fruit with their ovipositor and lay a single egg per slit. Fly larvae, or maggots, are white, legless creatures that feed inside the fruit, causing the infested part to become brown and mushy. The larvae eventually exit the fruit, drop to the ground, and pupate, before emerging as adults the next summer.

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

Bugguide.net is a good site for identification.

Nebraska's Historic Neligh Mill

By Thomas R. Buecker

Flour milling was one of the earliest and most important industries to develop in Nebraska. Early settlers needed mills to grind their wheat and corn into flour and cornmeal, and also create a market for local cereal grains. Early mills were often operated in conjunction with a sawmill to cut timber into dimensional lumber. By providing needed services,



JOHN D. NELIGH

mills began community centers in newly settled areas, and were a necessity for any fledgling townsite.

During the first years of settlement, most Nebraska mills used water for motive power. Settlers naturally followed the water courses inland and mill building followed. Additionally, early developers and town boosters touted the available water power

NEBRASKA STATE HISTORICAL SOCIETY, N418.9-5



The Neligh Mill, brush dam, flume and penstock are all visible in this 1884 photograph.



NEBRASKA STATE HISTORICAL SOCIETY, N418.9-112

This early view shows the mill penstock with its 10-foot fly wheel that turned a 1-inch wire cable drive to power mill machinery.

of Nebraska's rivers that could power numerous mills, factories, and other industrial enterprises. The Elkhorn River, flowing some 200 miles through northeastern Nebraska, was believed by some promoters to be a source of unlimited water power.

In 1872, a small party of men from West Point in Cuming County traveled up the Elkhorn to see the country above Norfolk. One of the sightseers was John D. Neligh, a manufacturing entrepreneur and founder of West Point, Nebraska. The party stopped at a promising townsite in central Antelope County and noted its water power potential. In October Neligh went to Omaha and bought the land from the Omaha and Northwestern Railroad Company.

By early 1873 Neligh had his new townsite surveyed and platted, and built a dam on the river to power a saw mill. William B. Lambert, an associate

of Neligh's from West Point, arrived and opened the first store. Lambert is credited with naming the new town "Neligh." Realizing the importance of having a flouring mill, John D. arranged for the burning of brick to build a substantial two-story mill building, 38 by 45 feet in size with full basement.

Unfortunately, Neligh's involvement with his town was short-lived. Due to financial reverses, he was forced to suspend work on the mill. In April of 1874 he sold most of the townsite and unfinished mill building to William Lambert and his partner William C. Gallaway for \$13,000. Gallaway, a native of Virginia, was a mover and shaker. He finished the mill, which restored local confidence that had been shaken by Neligh's departure. With improvements to the water power and milling machinery all installed, the Neligh Mill began full operation on September 10, 1874. Although the

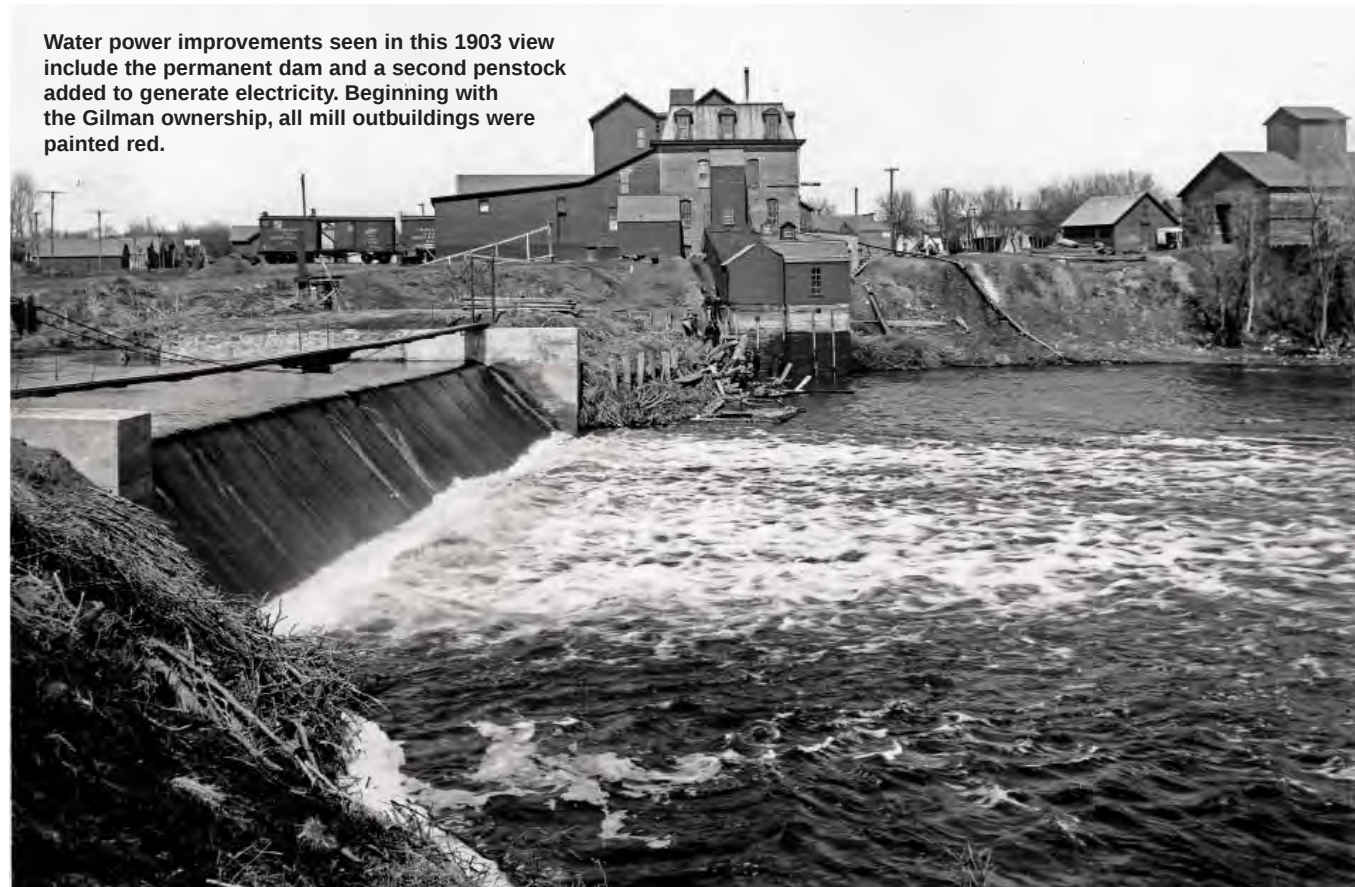
building was large enough to hold six sets of stone buhrs, the mill at first only had two runs of stone buhrs, later increased to four.

Neligh intended his mill to do both custom or "exchange" work and merchant work. At custom mills, the farmer traded or exchanged his wheat for an established amount of flour, or he could have his grain milled, with the miller charging a certain amount of wheat for his fee. On the other hand, merchant mills were bigger operations, where owners or proprietors openly purchased wheat to produce larger amounts of flour for commercial sale. Merchant mills sold flour by the wagonload to distant customers and filled government contract orders.

Successful mill operations depended on a reliable, steady power source. The key to water power use was to maintain an adequate water head, or the height of water backed up by a dam. The



Neligh Mill is located on N Street at Wylie Drive in Neligh. Open Memorial Day through Labor Day (Tuesday through Saturday – 10 a.m. to 5 p.m., Sundays – 1 p.m. to 5 p.m.) Closed all state holidays in the off-season. Admission: \$3 for adults. Children with adults are free. Fees are waived for Nebraska State Historical Society members. For more information, contact: Neligh Mill State Historic Site PO Box 271 Neligh, NE 68756-0271 402-887-4303; harv.ofe@nebraska.gov



NEBRASKA STATE HISTORICAL SOCIETY, N418.9-17

higher the dam, the more power created. “Fall” is the change in vertical elevation over the course of a stream or river. Because Nebraska is relatively flat with low stream fall, dams backed up water farther upstream, creating larger mill ponds. In locations where water courses provided lower fall, horizontal water turbines were used to generate mill power. Turbines were made of iron, with gates around the turbine to control the amount of water passing through.

In addition to the turbine, the main components of water power were the head-gate, flume and penstock. A head-gate at the upper end of the mill race governed the amount of water that entered the race (flume) from the mill pond. The flume, built of strong planking, was the conduit to carry water to a penstock at the end of the flume, which housed the turbine. To escape the penstock, the water passed down through the submerged turbine and turned its impellor to create motive power, before discharging back to the river or stream.

The Neligh Mill was powered by a 64-inch Leffel water turbine, which

was geared to a 10-foot flywheel mounted above the back wall of the penstock. The flywheel transmitted power to the shafting in the mill basement via a one-inch Roebling steel wire cable. The mill dam initially created a four-foot fall, which was gradually raised as more machinery was added that required additional horsepower. By 1880 the dam’s eight foot height created 66 horsepower. Because the mill was on the higher north bank of the river it never suffered flood damage, although the dam, flume and penstock were washed out or damaged many times.

The mill enjoyed immediate success from local and distant patrons. Because there were no mills to the west or south, customers came 50 miles or more from those directions. The mill also did large business with the cattle ranchers along the upper Elkhorn and on the Niobrara, shipping hundreds of loads of flour and feed to those points. By October 1875 Gallaway and Lambert shipped flour to merchants at Columbus, Yankton in Dakota Territory, and other points up the Missouri River. In 1878 the mill landed

a contract with the Indian Department for 12,000 sacks of flour for the Dakota reservations. According to one newspaper, “between 350 and 400 wagon loads” were needed to deliver the contract.

To fill large contracts, the mill was run day and night. The Fremont, Elkhorn & Missouri Valley Railroad arrived in Neligh in 1880, opening new markets in eastern Nebraska, Lincoln and Omaha. April 1885 brought a government contract for 343,000 pounds of flour for the Pine Ridge Indian Reservation. Contract work was done in addition to filling orders for their regular customers in local trade areas.

During the 1880s the new steel roller process began to replace stone buhrs to grind wheat into flour. With the new method and improved sifting machinery, the amount of flour made from a bushel of wheat was increased 20 to 30 percent. In 1886 Gallaway and Lambert had the Neligh Mill converted to the new process and installed seven stands of double rollers. They also built a warehouse addition to the mill and a 25,000 bushel storage elevator

for wheat on its north side. The new machinery increased their daily flour production to 140 barrels (at the time a barrel equaled 196 pounds and was the standard measure unit of flour). Apparently a new era of mill success loomed ahead.

Regardless of machinery, mills had to be kept running to make a profit. The prosperity of a water-powered mill depended on the operator’s ability to keep the water source in harness. Year after year, high rises of the Elkhorn River brought Gallaway and Lambert heavy expenditures to maintain brush dams, settled flumes and flood damage to the levees that were necessary to enclose the mill pond. Unfortunately, weeks of labor and hundreds of dollars of expensive repairs could be washed out in a day.

During periods when the mill was shut down, Neligh merchants noted a decline in business. Two months after the mill’s flume washed out in October 1881, the local paper noted, “Stoppage of the mill has had a depressing effect on the business of Neligh.” For many farmers, with no mill to visit, there was no reason to come into town.

W. C. Gallaway was an ambitious businessman and sought other opportunities. In addition to building

lumber yards in Neligh and Ewing, he also owned elevators and mills in Elgin and Oakdale. In 1891 he added a mansard-type roof to create a third story on the Neligh Mill to hold more sifting machinery. But for Gallaway, the road ahead was rocky. The next year Lambert left the firm, and Gallaway bought out his holdings. However, it soon became evident he was financially over-extended, and one by one his other businesses were disposed of.

The hard times of the 1890s took its toll on the Neligh Mill’s fortunes. In 1894 Gallaway sold the mill to Henry Griffith, who apparently had no experience in operating a roller mill business; three years later the mill was sold at a sheriff’s sale. It was purchased by Gallaway’s two sons, which essentially returned control of the mill, for a brief time, back to their father.

In December 1898 the mill was again put in the sheriff’s hands. Several days later it was reported that Stephen F. Gilman of Davenport, Iowa, had bought the Neligh Mill. Gilman, a capitalist and successful mill proprietor who owned flour mills at Pierce and Valentine, intended to make Neligh Mill the central unit of

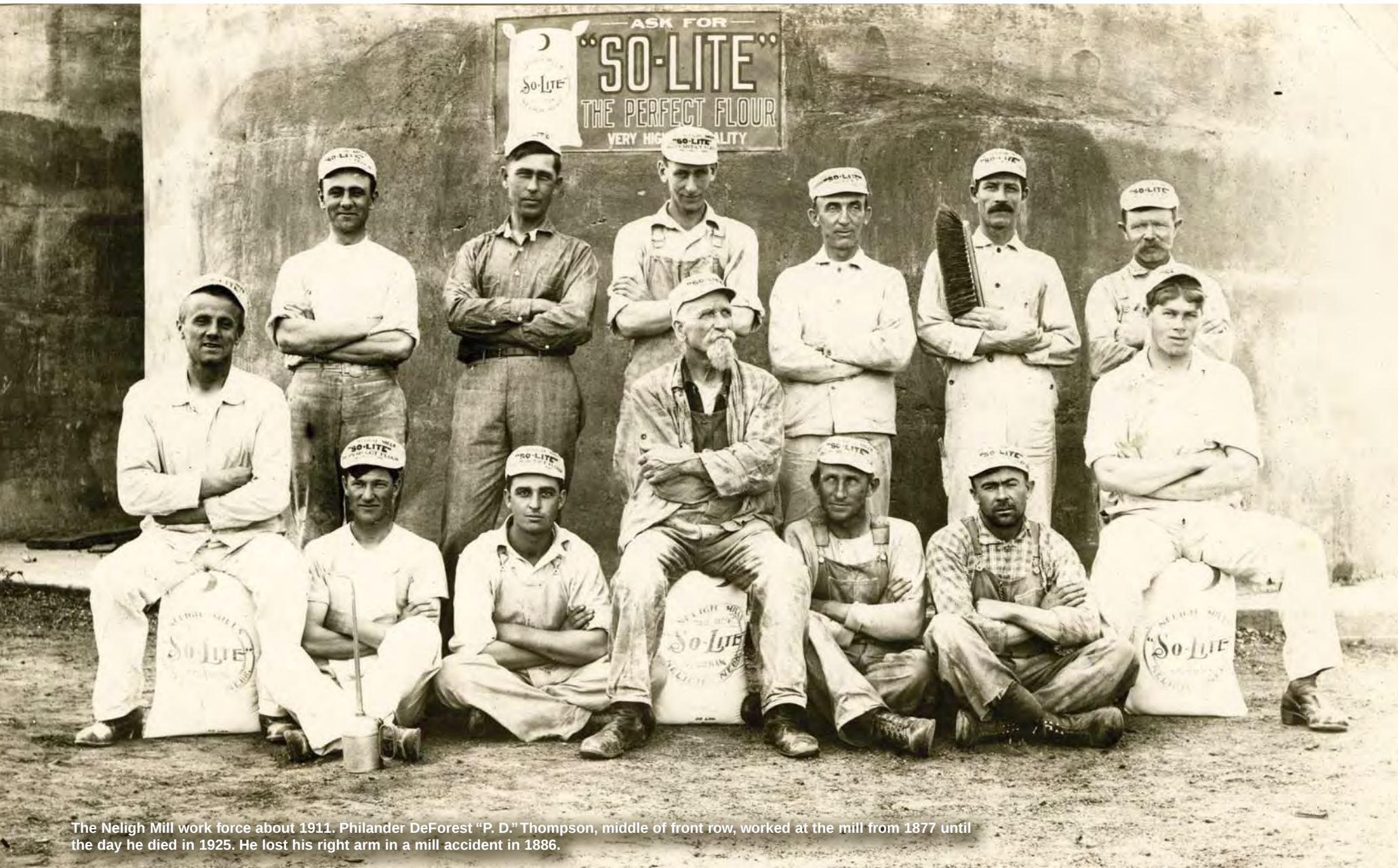
his milling operation. Always boosting local business enterprise, the Neligh paper assured confidence in the new ownership, and reminded its readers: “The property has been in such [poor] condition, and the uncertainty hanging over it has been such, for some years, that it has not been so helpful in drawing trade.” S. F. Gilman’s purchase brought new prosperity and growth to a major component of the town’s economy.

To oversee the Neligh operation, Gilman brought in Joseph W. Spirk, his efficient manager of the Pierce Mill. Spirk quickly refurbished the mill, and built an additional warehouse and 10,000 bushel elevator for corn storage. Over the next 10 years he continued to improve the Neligh plant, constructing a permanent dam and improved flume, as well as installing a larger turbine. Building improvements included expanded warehouse and elevator storage.

Under Gilman’s ownership merchant sales and contract work dominated production, with the mill running 24 hours a day, six days a week. Large contracts were received from the Indian Department for flour and bran for reservation use. Military contracts sent Neligh flour and cornmeal to



NEBRASKA STATE HISTORICAL SOCIETY, N418.9-4



The Neligh Mill work force about 1911. Philander DeForest "P. D." Thompson, middle of front row, worked at the mill from 1877 until the day he died in 1925. He lost his right arm in a mill accident in 1886.

army posts in Alaska, Hawaii and the Philippines; stateside installations included places such as Fort Washakie in Wyoming, Fort Crook (today's Offutt Air Force Base) and Fort Robinson.

At the same time commercial flour was sent to domestic locations from Wyoming to Pennsylvania and south to Atlanta and into Florida. Also, for several years overseas commercial shipments were made to agents in Hull, England. Success followed success: the amount of flour shipped out of Neligh rose from 700 railcars in 1908 to 875 in 1911. By 1915 the mill's flour capacity was rated at 500 barrels per

day, making it one of the eight largest flour mills in the state.

By the turn of the century, some mill companies used their water power to generate electricity for commercial sale. In 1900 the Neligh Mill built a small light plant to provide local customers with electric light service, and also pump water for city use. Several years later, Elkhorn water power was replaced by gasoline, then diesel engines, to produce electricity, alternate power sources that could also be used to power the mill in times of water power loss. With the growing demand for municipal light and power, in 1915 a larger brick power house

was built on the east side of the mill building to house a 225 horsepower diesel engine and plant. Just before it was completed, S. F. Gilman died, leaving the capable J. W. Spirk as the proprietor.

World War I kept the mill bustling, with military orders amounting to 30 percent of its flour production. Due to government control, flour substitutes such as cornmeal had to be manufactured, and the mill was crowded with orders from other mills which lacked the machinery to produce such substitutes. Throughout the war years the mill was powered entirely by the light plant engine.

In 1919 a last attempt was made to harness water power. A new flume and penstock were built and the river restored to its main channel. However the flood of 1920 again diverted the river and the mill abandoned water power, relying thereafter on diesel and later electrical power. Finding it increasingly difficult to operate two separate businesses, the mill company sold the light plant and electrical operation to a power company.

Under Spirk's management the Neligh mill survived the hard times of the 1920s and the Great Depression of the 1930s, both of which forced many Nebraska mills out of business.



High water in 1914, during the last years of water power use.

In 1930 the mill was granted state and federal licenses to become a terminal warehouse grain storage facility. In September of 1938 the S. F. Gilman Mill Company came to an end, and the Neligh Mill was incorporated with J. W. Spirk as president.

World War II brought an increase in flour production, but never again to the 1900-1915 levels. With an antiquated milling plant and rising competition from larger milling companies, the mill ceased to grind flour in the 1950s. Although the Neligh Mill stopped producing wheat flour, none of the flour grinding and processing machinery was removed. The mill remained in business as a grain storage facility. It also continued to mix pancake flour and grind, mix and sell livestock feeds. In 1954 a plant was installed to mix molasses with feed for local cattle producers. But the glory days of the old mill were over.

As time passed, the mill declined as a functioning business. During the early 1960s the grain elevators were sold off; all that remained of the Neligh Mill Company was the small office building and a silent milling plant.

But local interest grew to preserve what was an important part of the town's prosperity and pride. In 1970 long-time employees Jay Ames and Adina Vidstedt, who purchased the mill company after Spirk's death in 1947, sold the property to the Nebraska State Historical Society. In 1975 the Society

opened the renovated mill to the public as one of its historic sites.

Visitors to the mill can visit the office building and view displays in the 1886 warehouse and 1915 light plant. But when they enter the mill proper, they will see the milling plant looking the same as it did to William Gallaway, P. D. Thompson and Joe Spirk well over a century earlier, with roller stands, flour packers and elevators to move grain and flour to shifters on the second and third floors. In the basement, huge drive shafts with pulleys and leather belts powered all the machinery above. On the outside a 1922 boxcar stands on the railroad siding below the towering wheat and corn elevators. Toward the river below the reconstructed flume and penstock housing a 64-inch turbine can be seen.

The Neligh Mill is the best example of a 19th century roller flour mill remaining in the state. It also symbolizes an industry that once brought prosperity to a developing Nebraska. ■

Tom Buecker was curator at the Fort Robinson Museum for 26 years. Prior to that he spent eight years at the Neligh Mill State Historical Site. He now lives in Lincoln and works at the Nebraska History Museum.



Farmers for Conservation

Story and photos Jeff Kurrus

Todd and Kristen Eggerling of Crete demonstrate on a daily basis that smart farming and ranching can lead to increased wildlife.

A 2009 Leopold Conservation Award sign is displayed proudly near the road in front of Todd and Kristen Eggerling's house near Crete. The award, given to the couple after an application process detailing every aspect of the Eggerling's conservation practices, seems only like a beginning when speaking with this conservation-passionate family.

"This land has been in our family since 1873," said Kristen. "It was homesteaded to my family, and every generation – my parents, grandparents, and great-grandparents – all had the same idea of conservation. All of us want to make the land better than when we got it so it will be here for generations, be productive and people can make a living on it."

The "making a living" aspect is what truly makes the Eggerling's work so innovative. Too often nowadays there seems to be two separate camps: those who farm or ranch and those who conserve. With this point of view, there is no middle ground. However, the Eggerlings have found a way to do both.

Smart Farming

The Eggerlings farm about 1,200 acres, usually rotating between soybeans and corn, and manage about 1,000 acres of pasture ground and 500 more acres of meadow and grasslands. Their positive land practices start with many techniques typically used throughout the farming community. They terrace their fields for erosion control, including field borders and filter strips as a way to prevent end rows.

But that's just the beginning.

"My dad was the first in Lancaster County to no-till farm," Kristen proudly said, "and also one of the first to use biosolids from the waste treatment plant for fertilizer. He was doing controlled burns way before people even knew what they were. Before it became cool to be an environmentalist, it's just what we did. Then Todd wanted to make it even better than it was before."

Todd grew up near Milford, and his family farm was more of a conventional row crop operation, but his mindset clearly matched with practices already in place by Kristen's family. "There is

a huge philosophy in agriculture that you have to make as much as you can make now," Todd said. "But if you push your land to make more money this year, then you're planning on that same money next year and relying on it the following year. Once you get into that mindset, you become reliant on that money to survive. Then you can't make any positive changes to the land."

Positive changes on the Eggerling's land come from constant observation of what is working and what is not. An agronomist helps them monitor soil nutrients so they know how much and when to apply fertilizer. The Eggerlings monitor their water usage just as stringently. "We use irrigation as an aide to get us to the rainfall," said Kristen, "not as a replacement for rainfall."

"What we do is not more physical work," Todd said. "It's more keeping track of things." Both Todd and Kristen contend that it's not a lot of work to make a field border or put a moisture sensor in the ground, but the management aspect is. And it costs money – at least in the short-term.

"When you create that field border, you take land out of production," said Kristen. She added that many people farm ditch to ditch, and cut down trees and farm that. These farmers also apply anhydrous ammonia, used to supply nitrogen as a fertilizer, without a thought to what the ground needs.

"It costs on the front-end to do what we do," said Todd, "but if you can prevent an environmental disaster, then you're money ahead."

They also end up money ahead with their no-till practices. "When Dad stopped conventional tillage practices, he did so because it was less time he had to spend in the field with much less equipment," said Kristen. "You don't burn diesel fuel and you're not compacting the soil with all those trips across the field. You're also conserving



The Eggerlings' tallgrass prairie, which just had cattle grazing on it last summer, was filled with pheasants during a recent winter walk, displaying that ranching, farming and wildlife can co-exist.

moisture, for every time you work the soil you lose an inch of rainfall."

But their farming practices are by no means perfect. "We had a 7-inch rain a month ago, and no matter what we do with terraces and no-till, we have soil movement," said Todd. "It's not good. We have to think what we could have done better. We can't do everything, but we can try to recognize our mistakes so we don't make them again."

The Award

The Eggerlings learned about the Leopold Conservation Award through their membership in Nebraska Cattlemen. They had to answer five open-ended questions about their farming and ranching practices, and had to pull references from everything they had done through the years.

The Eggerlings have worked on research projects with the University of Nebraska Extension to see what no-till does to the soil; the Extension, Department of Environmental Quality and Environmental Protection Agency with the planning, development and implementation of their vegetative treatment systems; and the Environmental Trust, U.S. Fish and Wildlife Service and others on

a myriad of conservation-related projects on their land. "It goes back to the Leopold conservation ethic," said Kristen, "that conservation is part of everything we do."

Plus, the award is a record of the work they have done. "Whether we won or not, it was really cool to put that information together," said Kristen. "We want our kids, and their kids, and their kids to have this land, and we want people to know that agriculture and wildlife can co-exist."

This last wish was quite evident when walking with the Eggerlings through their virgin prairie. Pheasant after pheasant rose from the tallgrass, grass that had just been grazed by cattle throughout the entire summer. They have also placed land in a conservation easement, preventing any development to it in perpetuity.

"You'll also see someone else making more money down the road," added Todd, "so it becomes competitive in nature. There are people who think you can't afford to let financial opportunities go, and we think that more opportunities will come if you handle yourself appropriately. I work and let everything flow rather than chase something."

By using this mindset, the Eggerlings

remain adaptive with their land practices. How they grazed last year may not work this year, and there may be a more effective way to farm now than yesterday. "But if you have a narrow focus," said Todd, "you lose the idea that agriculture, wildlife and grasslands can co-exist."

By keeping an open mind, the Eggerlings are accomplishing this goal every single day. ■



Todd and Kristen Eggerling pictured on their land near Crete.

The Leopold Conservation Award, presented by the Sand County Foundation, honors outstanding private landowners, including farmers, ranchers, and foresters, who have enhanced the natural resources on their lands through science and ethics. Those interested in applying should contact the Foundation at Sandcounty.net.

Nebraska's Leopold Award winners are as follows: 2014 – Pelster Family; 2013 – Beel Family; 2012 – Buell Family; 2011 – Mathewson Family; 2010 – Kalkowski Family; 2009 – Bluestem Valley Farms; 2008 – A.B. Cox; 2007 – Rod & Amy Christen; 2006 – Wilson Ranch.

Seeing a Watershed in Motion

Timelapse Project Enters Its Fourth Year

Story and photos by Michael Forsberg

After three years and nearly one million images, the Platte Basin Timelapse project is leveraging the power of photography and storytelling to share stories of the river and build community around a watershed.

Platte Basin Timelapse project co-founders Michael Farrell and Michael Forsberg (2nd and 3rd from left) were among many presenters at the Water for Food 2014 Global Conference in Seattle, Washington.



PHOTO BY CRAIG CHANDLER/UNIVERSITY OF NEBRASKA-LINCOLN

Last winter, the Platte Basin Timelapse team snowshoed in to replace camera parts at a time-lapse camera and film Lake Agnes in winter. Lake Agnes is a headwaters for the North Platte River along the Continental Divide in northern Colorado.



Nebraska Game and Parks biologist Lauren Dinan and field technician Lindsay Green monitor a nesting colony of least terns and piping plovers at a Western Sand and Gravel Company location near Ashland, Nebraska, near the Platte River.

On a frigid late winter day in 2011 along the Platte River at Audubon's Rowe Sanctuary, a single switch was flipped to "on" inside a waterproof camera housing, and the Platte Basin Timelapse (PBT) project officially began. The idea, to place a small army of digital 35mm cameras throughout the Platte Basin which stretches roughly 900 river miles from mountains to plains in parts of three states, would try to tell the journey of where our water comes from and document this watershed in motion for several years.

Now, nearly four years later and, with a tremendous network of support, the project continues to chronicle the river in photographs, and has captured and archived almost one million images. There have been some failures and successes. It hasn't been easy, and we are far from being done.

The cameras have captured amazing single images all by themselves: beautiful sunsets and lightning strikes, winter storms and torrential rainfall, herds of cattle and blizzards

of geese. They have captured sequences of both natural and human engineered processes unfolding on the land over months and years at a time: floods and historic drought, sandbar movements and eroding banks, crop rotations of irrigated corn and soybeans, massive roosts of migrating cranes, and no doubt many other moments we have yet to discover, or have the eyes or knowledge to see.

Over its course, the project has solved large technical issues, built a wireframe behind the scenes to direct, store and manage the images which also serve as visual data, and has collaborated with the Raikes School of Computer Science at the University of Nebraska to create a software program that helps search and sort the massive collection of images.

If the first three years were dedicated to placing cameras, building partnerships, and refining technologies, the next years are focused on building content around these cameras to add context and answer what we call the "so what?" What can we do with these images to help forward appreciation



Top: Since reintroduction efforts by the Nebraska Game and Parks Commission in the 1980s, river otters have made a significant comeback to the rivers and streams of the Platte Basin in Nebraska, especially along the central Platte.

Middle: Native cutthroat trout in the uppermost reaches of the Platte Basin in Colorado find refuge in high alpine lakes and streams, above physical barriers such as waterfalls where other trout species such as brooks, rainbows and browns cannot reach.

Bottom: Biologists working with the Tern and Plover Conservation Partnership in the Lower Platte River Valley hold a day-old least tern in their hand that they have just banded for future identification.





PHOTO BY CRAIG CHANDLER/UNIVERSITY OF NEBRASKA-LINCOLN

PBT web producer Steven Speicher describes the project's new web-based multimedia storytelling platform to a group of participants at the Water for Food 2014 Global Conference in Seattle, Washington.

and understanding of the Platte River and its immense 90,000 square mile basin moving forward? Can we leverage the tremendous power of photography and storytelling to

chronicle a river and build community around a watershed? To that end, a growing PBT team has created a web-based platform to deliver in-depth multimedia journalism exploring

the stories of water through the lens of science, agriculture, wildlife, recreation, urban and industrial use. We are working with educational experts to bring the project into the classroom by creating content that will be used in lesson plans that can be folded into educational curriculum with a grant from the Nebraska Environmental Trust. And we are beginning fieldwork to create a feature documentary film with Nebraska Educational Television about the Platte Basin that synthesizes wildlife and people with ecology and economy, and is intended for a national public television audience.

By 2050, the world will need to feed its estimated 9 billion people with less water and fewer resources. In Nebraska, we will need to practice and continue to evolve precision-based agriculture. We will need to be vigilant and effective at keeping grass in grasslands and protecting both our soils and our biodiversity. We will need to pay attention not only to the quantity of water in our rivers, but the quality and timing of river flows, and understand the precious groundwater connections that sits quietly beneath our feet. And all these



In late summer 2013, this view from a PBT camera at Audubon's Rowe Sanctuary in central Nebraska shows a dry river bed. A few weeks later, the same camera captures the Platte swelling out of its banks after major rains and flash floods in the South Platte watershed along the Colorado Front Range eventually made its way downstream and through the state of Nebraska.

challenges will exist underneath the growing specter of climate change.

Here in Nebraska, the story of all living things starts and stops with water, and those stories are almost always personal. The Platte is our river and it is part of a shared watershed. In a sense, water is our never-ending story here in the Plains, and we must appreciate, understand and protect it for our sake and for our children's future. ■

To learn more about the project, visit Plattebasintimelapse.com. Michael Forsberg, a Lincoln native, is a longtime contributing editor to NEBRASKAland Magazine.



The project's time-lapse cameras are Nikon DSLRs tethered to custom designed technologies in waterproof housings. The first generation (left) images were downloaded by hand and solar power was stored in batteries. Several generations later (right), capacitors are used to store power rather than batteries, and about half the camera systems are delivering images daily to servers by cellular modem.

Demystifying Mountain Lions

Sam Wilson, the state's program manager for furbearers and carnivores, answers the questions everyone wants to know about mountain lions in Nebraska.

Mountain lion photographed by Robin Poluch along the Dismal River in Nebraska in 2009.



When delivering presentations about mountain lions, the Nebraska Game and Parks Commission's Sam Wilson begins by saying he has a four-pronged explanation about how the state's most controversial cat arrived in the state in the 1990s. Then, laughs ensue when he shows a photo of a mountain lion with arrows pointing to each of its four feet.



SAM WILSON

Beyond the humor, Wilson discusses the science behind the Commission's efforts to manage this species. It's an area where he has much experience. Wilson has fulfilled the role of furbearer and carnivore specialist at Game and Parks for more than a decade. During that time, he has worked extensively with Nebraska's mountain lion population, heading up innovative population studies, verifying sightings and educating the public about the species. He's participated in conferences and workshops on mountain lion science and management across the western and midwestern United States, and he's worked with biologists from neighboring states to better manage regional lion populations.

A lifelong hunter and trapper, Wilson received his bachelor's degree from the University of Nebraska-Lincoln, where he studied fisheries and wildlife. He received his Masters of Science through the University of Nebraska while working with scientists from the Nebraska Cooperative Fish and Wildlife Research Unit.

NEBRASKAland recently sat down with Wilson to answer some commonly asked questions about this elusive and at times controversial carnivore.



PHOTO BY JUSTIN WAMBOLD

A male mountain lion cub in captivity.

Q: What is the history and present status of mountain lions in Nebraska?

Mountain lions are native to Nebraska but were eliminated from the state by the end of the 1800s. Mountain lion populations in neighboring mountain states increased as prey species recovered, bounties for killing mountain lions ended and states started managing mountain lions as game animals during the 1960s-1970s. This management as a game animal with limited harvest allowed mountain lion populations to increase and expand out to nearby habitat in Nebraska, South Dakota and North Dakota. In Nebraska, the first modern mountain lion confirmations occurred in 1991, when tracks were found and a female was shot in the Pine Ridge. In 1995, the Nebraska Legislature classified mountain lions as a game animal, which means the species can only be hunted under rules prescribed by the Commission. Year-round protection under game law allowed the recolonization of suitable habitat in Nebraska over the last two decades. We now have breeding populations in three areas: the Pine Ridge, Niobrara River Valley and Wildcat Hills, and we typically have a few mountain lions roaming other parts of the state as well.

Q: Public perception ranges from "the Game and Parks Commission stocked mountain lions" to "the Game and Parks Commission wants to eliminate them." What is the Commission's goal in mountain lion management?

Well, we didn't stock them and the agency does not intend to eliminate them. The Commission's goal is to maintain mountain lion populations in Nebraska over the long-term as we do with all game animals.

Mountain lions are a native species and part of the heritage of our state, so we want to ensure they are around for generations to come; however, our challenge is to manage the biological and social aspects of having mountain lions in Nebraska. We manage populations of game animals such as mountain lions through harvest seasons. Deer, elk and turkeys are just a few examples of game animals thriving with careful management that includes hunting. Game populations are evaluated annually to determine what, if any, harvest should be allowed. The basic premise is that when populations increase, harvest levels can increase, and when populations decrease, harvest can be reduced or stopped. This careful management is what has allowed many of these game species to be so successful over the long-term.

Q: The female mountain lion harvested in the Pine Ridge was wearing an ear-tag placed by researchers in the Black Hills. Is it common to find a female mountain lion so far from where it was born?

Females obviously must have dispersed to create the three populations we have now. It really just shows that our mountain lion populations are part of a larger regional population where animals are continually mixing. We are on the eastern edge of a population of thousands of mountain

Nebraska's Mountain Lion Scat Survey

One of the fundamental questions in managing a species is "How many are there?" Given that wild animals often try hard not to be seen or heard, wildlife scientists have spent decades developing survey methods that yield reliable results. The key to these state-of-the-art methods is to count the animals that are seen or heard and, using mathematical principles, also estimate those that were not detected. These sophisticated approaches are particularly needed to accurately count species such as mountain lions that are notoriously wide-ranging and elusive.

Nebraska's mountain lion scat survey uses one such modern approach. For several weeks in May and June, a specially trained dog is used to search as much potential habitat as possible for mountain lion droppings, or scats. The collected scats are sent to a genetics lab to confirm which are from mountain lions and, when possible, to identify individual mountain lions, their gender and in some cases, even their age. A reliable estimate of population size can then be calculated for the area searched that accounts for both those animals that were identified as well as additional animals that are likely present in the population.

Commission biologists conducted such surveys in the Pine Ridge of northwestern Nebraska in 2010, 2012 and 2014, and in the central Niobrara River Valley east of Valentine in 2014 only. This summer's survey resulted in the collection of 43 verified cougar scats, 38 of which were found in the Pine Ridge. The remaining five were found in the central Niobrara Valley.

In all, 278 miles were searched in 2014 during 40 days of hiking. The 2014 survey encompassed nine more days and 80 more miles in the Pine Ridge than the 2012 survey. Nine of the 40 days were spent in the Niobrara Valley, resulting in the first extensive survey of that area.

Lab results identified 12 individual mountain lions in



Karen DeMatteo works with Train, her scat-finding Chesapeake Bay retriever.



PHOTOS BY JUSTIN HAAG

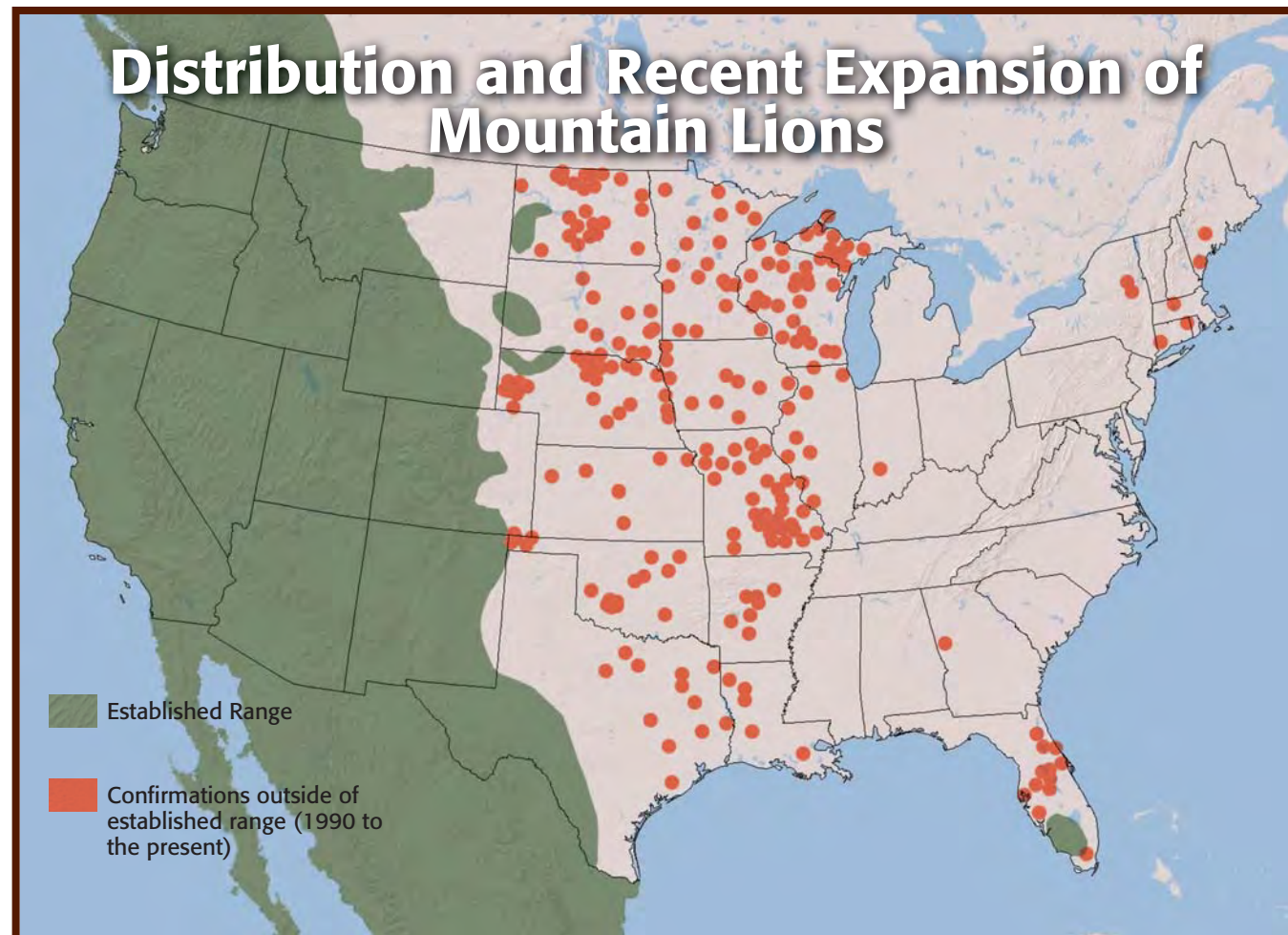
At Metcalf Wildlife Management Area north of Hay Springs, Nick Zaczek, a National Wild Turkey Federation cooperative forester for the Game and Parks Commission, places scat into a bag for future study.

the Pine Ridge during the survey, including seven females and five males. An additional 17 Pine Ridge scats were identified as mountain lion, but did not contain enough genetic material to identify a particular individual. The total Pine Ridge population, including those that were likely present but not identified, was estimated at 22 lions during May and June of 2014, including adults and mobile young. This is the same number estimated in 2012 for the Pine Ridge, though births, deaths and movements of animals in and out of the region undoubtedly resulted in a different mix of individuals between the two years.

Three individuals were detected from scats collected in the Niobrara Valley during 2014, including two females and one male. The data, however, were not extensive enough to estimate a total population size for the area.

Beyond the scat survey, a trail camera photo of a female with two kittens was verified this year from the Wildcat Hills south of Scottsbluff, the first confirmation of reproduction there. Additional mountain lions likely roam the remainder of the state, but numbers for them are difficult to estimate due to the elusive nature of young dispersing animals that are constantly on the move.

As with all wildlife, mountain lion populations are never static from one year to the next. The Commission will continue to use the best available science to monitor this challenging species. ■



Confirmations are made through physical evidence of mountain lions including tracks, a live captured or dead cougar, photographs and DNA evidence.

MAP DATA PROVIDED BY THE COUGAR NETWORK - COUGARNET.ORG

lions that stretches from the northern plains to the Pacific Ocean. There are a few hundred mountain lions in Wyoming and South Dakota within a hundred miles of the Pine Ridge, so females – which typically disperse shorter distances – can make it from those populations from time to time. The farther you get from established populations, the fewer female dispersers you’re likely to get, so we would expect females to reach the Niobrara and Wildcat Hills populations less often.

Q: The latest population estimate for the Pine Ridge Unit was unchanged from the 2012 estimate. Given that three mountain lions were harvested in that unit, and a number of mountain lions were killed by vehicles or other means, why didn’t the population estimate go down?

The simple answer is that populations of animals are always changing. Populations grow with each new birth and they decline with every death. There are some animals that leave populations and some that come in from other areas. It wouldn’t be very accurate only to subtract animals without also accounting for additions through births and

immigration.

The timeframe is also very important to consider. There were two years between the 2012 population estimate and the 2014 survey (see sidebar, page 33), so the population likely grew from births or immigration and then declined back down to 22 after mountain lions were harvested or killed by other means by the time we conducted our 2014 survey. It is important to make clear that our most recent population estimate only applies to the timeframe that the survey took place May and June 2014. The further away you get in time the more likely it is that the population has changed from births, deaths, immigration and/or emigration.

Q: Why did the Commission decide to hold a hunting season for mountain lions in Nebraska?

When the Nebraska Legislature classified the mountain lion as a game animal in 1995, it signaled to the Commission that hunting of the species should be allowed if the population was large enough to sustain a harvest. This is the same criteria we use for any other species on the state’s game animal list, from deer to bobcats to pheasants. State statutes also identify the Game and Parks Commission

Mountain Lion Mystery: The Population of Yesteryear

By Justin Haag

History tells us that the presence of mountain lions in Nebraska is nothing new. Just how many of them in past centuries roamed the land that has become the Cornhusker State remains much a mystery.

Cougars certainly were present in the region prior to settlers and market hunters extirpating various species of wildlife in the late 1800s and early 1900s. Historians and biologists expect they were likely restricted to steep or forested areas where they could escape from wolves – which were the dominant predator of the Great Plains. The big cats also prefer heavy cover for hiding and stalking their prey.

Even today, the elusive nature of the animal makes population estimates a challenge. Because Native Americans and European settlers certainly weren’t employing science such as DNA analysis from scat surveys, we’re left only to conjecture from writings and tales from the period.

Before and during European settlement of Nebraska, encounters were sometimes, albeit rarely, documented. Sam Wilson, manager of the Commission’s carnivore and furbearer program, has collected a number of historical accounts that point to the presence of cougars.

In the 1964 book *Mammals of Nebraska*, author Knox Jones Jr. identified a dozen locations from the Pine Ridge eastward to the Missouri River Valley, in which historical records of mountain lions existed.

For instance, his research shows that a female nursing two kittens was killed in the Pine Ridge north of Hay Springs in the winter of 1884.

News accounts from the period may have been prone to brevity and exaggeration, but stories of cougar encounters can be found in yellowed newspapers. A one-sentence description from the *Sioux County Herald* in 1886, for instance, tells of a 230-pound mountain lion (huge by any standards) being killed near O’Neill.

A one-paragraph story from the same publication a year later tells the following story of a cougar being killed in Sheridan County by Wm. Long, about two and a half miles south of Rushville along a road on a creek, noting “The beast measured about nine feet from nose to the tip of the tail.”

James Hanson of Chadron, a renowned historian of the fur trade, notes that records of commerce from St. Louis, “where almost all furs from the region passed,” have scant evidence of cougar pelts in the fur trade during the 1800s. However, the scarcity of cougars in those records might not be directly related to their abundance, particularly if they weren’t highly sought after by fur traders who spent their energies pursuing more plentiful and lucrative pelts such as that of the beaver.

How many cougars roamed the Plains of yesteryear will surely remain a mystery. What we do know is that the big cats have returned, making plenty of headlines and history these days, and will surely be studied by future generations. ■

as the appropriate agency to set hunting seasons, so it was our responsibility to weigh the evidence and make a decision. But we also understood that any decision we made about mountain lion hunting would be controversial, because people have a wide range of views about how large carnivores should be managed, and emotions can run high. Our job is to find the most reasonable middle ground to protect the species’ long-term persistence in the state while allowing some appropriate level of hunting opportunity along the way.

Q: How did the Commission decide what kind of hunting season was appropriate?

Mountain lions have been hunted in most western states for a long time, so we were able to examine a number of published studies about how populations respond to different levels of harvest. South Dakota had also amassed a lot of excellent data from hundreds of radio-collared lions in the Black Hills about harvest rates, as well as birth and death rates that was very useful. We know populations in

our Pine Ridge and the Black Hills are well-connected by immigrating individuals, so the South Dakota studies were particularly relevant. This, coupled with the population estimates from our Pine Ridge scat surveys (see sidebar, page 33), and other local data we collected, gave us enough information to make a solid, science-based recommendation.

We also listened to public input to help identify the appropriate middle ground for our specific objectives. When taking into account the proposed objectives as well as public input, the decision was made to maintain lion populations where they currently occurred, but to slightly reduce their numbers.

Given that this was our inaugural hunting season, we added several safeguards to minimize the chance of unexpected consequences. First, we closed the Wildcat Hills and central Niobrara River Valley to hunting, because it appeared breeding populations were emerging there, but we lacked the data to calculate an appropriate harvest. Next, we established a strict quota of no more than two females that could be harvested in the Pine Ridge. We know the harvest of adult females has more potential to affect short-term birth

rates in the population, so the regulations took that into account.

Lastly, the hunting season was set for only one year, 2014, so that following the initial season, we would have ample opportunity to adjust future regulations as necessary. To date, no decision has been made regarding mountain lion hunting seasons for 2015.

Q: In 2014, permits to hunt mountain lions in Nebraska were issued for the first time. What does the Commission do with that money?

All money received from the sale of mountain lion hunting permits has been invested right back into research and management of mountain lions. This funds a portion of our genetic and trail camera surveys as well as other work we do while managing mountain lions.

Q: What action is the Game and Parks Commission taking to keep its mountain lion management strategies current?

The Commission is working on a more geographically comprehensive approach for mountain lion management. As I mentioned, mountain lions move freely between Nebraska and neighboring western states, so I have worked closely with biologists from South Dakota and Wyoming to share information regarding mountain lion management and research. We will continue to work closely with biologists

from those areas to make sure our management decisions fit within what is happening in the larger region. We are also evaluating additional research that would add to our knowledge about mountain lions in Nebraska.

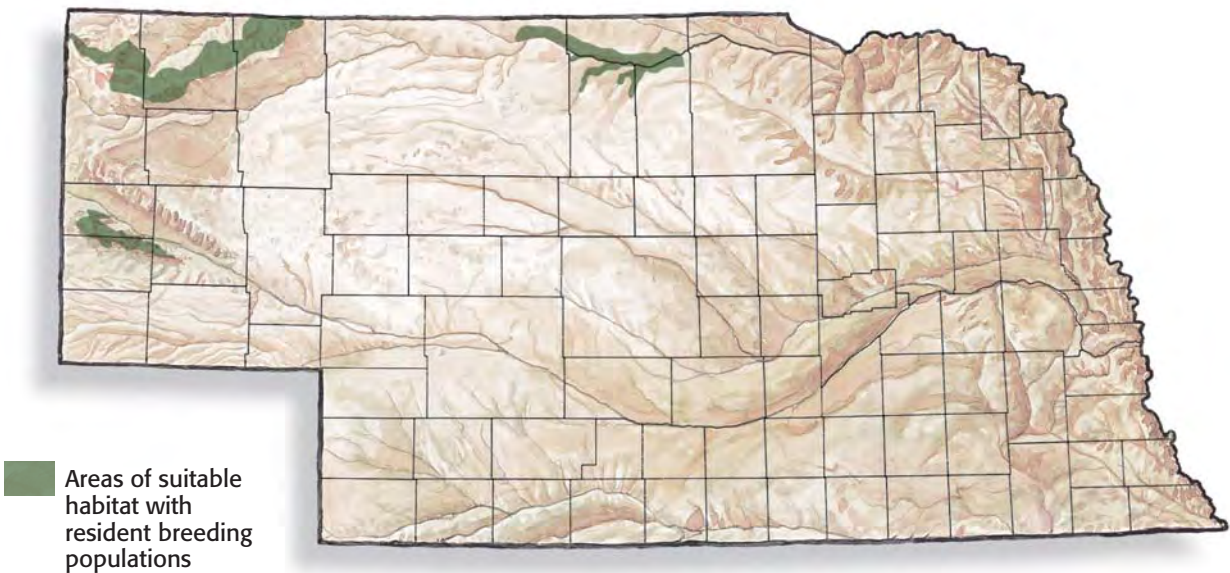
Q: You have gathered trail camera photographs from the public and Commission staff through the years. How many have you received and how have those been helpful?

We have been using trail cameras to document mountain lion presence for a number of years. We are presently working on large-scale, systematic trail camera surveys designed to detect changes in mountain lion distribution and document reproduction. The trail camera photos we receive from the public in particular are extremely helpful. We have more than 150 photos of mountain lions from trail cameras over the years. Some of the highlights have been the first photos of females with kittens since that's pretty much the ultimate proof of a resident population in each new area. I certainly want to encourage everyone out there to contact us if they get pictures of mountain lions. ■

Addition contributors to this story include Cara Pesek and Scott Taylor.

N Discover more about mountain lions.

Nebraska Distribution of Mountain Lions



MAP DATA PROVIDED BY NEBRASKA GAME AND PARKS COMMISSION

Cougar Life

By Justin Haag

Few animals spark debate like *Puma concolor*. People can't even agree on what to call it – monikers include cougar, mountain lion, puma and catamount. Most experts, including Nebraska Game and Parks furbearer and carnivore program manager Sam Wilson, agree on some basic attributes. Here's what the evidence shows on some widely discussed and often misunderstood topics concerning cougar behavior.

Cougars spend most of the day conserving energy at rest but by nature are wanderers, moving nocturnally and traveling most frequently at dusk and dawn. While females with kittens usually stay within a few miles of their young, other adults – especially males – have been known to relocate at a distance of 20 miles in one night. Home ranges vary from as little as 21 square miles among females to 350 square miles or more with males. In July 2011, officials confirmed that a mountain lion killed by automobile in Connecticut had trekked more than 1,500 miles from the Black Hills of South Dakota.

While most cougar litters are born in late spring or summer, a female cougar can go into estrus at any time of year and therefore will mate and give birth during any month. Cougars are least likely to have dependent young during winter and early spring according to research from South Dakota. Litters, which usually consist of 2-3 kittens, are born after a three-month gestation period. The kittens disperse between 1½ to 2 years of age. The dispersing "transients," as they're known, are the most likely cougars to have encounters with humans. These young cats are notorious for stumbling into danger, and are frequently killed by resident adult males of their own species in territorial quarrels.

Cougar populations are always in flux with births and deaths and lions moving in or out of a region. The population in the Pine Ridge and other parts of Nebraska is simply an extension on the eastern edges of a greater mountain lion population (of tens of thousands of animals) stretching from the northern Plains states of Nebraska, South Dakota and North Dakota to the Pacific Ocean. At any given time, there are several hundred lions in Wyoming and South Dakota that are within a normal dispersal distance of Nebraska's populations.

Cougars are considered to be hypercarnivores. While they will eat grass as a means to rid parasites and hair from their digestive tracts, they most frequently feed on animals, especially deer. They also eat elk, bighorn sheep and numerous smaller animals, a favorite being



An adult cougar takes its own picture walking through a camera trap at night in the Black Elk Wilderness in western South Dakota. Scientists have learned a single cat requires a home range of 50 to 100 square miles, and can eat up to one deer a week.

porcupine. The amount of prey they kill varies. Research with GPS tracking technology has shown that each female cougar without kittens require a deer or the equivalent every 16 days. A female cougar with three 15-month-old kittens may require a deer every three days. The standard estimate is about a deer (or deer-sized meal) a week per adult mountain lion. Cougars' effect on an ungulate herd, such as deer, is largely determined by the overall health of the potential prey's population and the availability of alternate prey.

Cougars are highly efficient predators and have become feared by many humans. Cougars present a very small threat to humans – smaller than most realize. There have been three human mortalities in North America as a result of interactions with mountain lions since 2000, fewer deaths than from any of the following causes: dog attacks, snakes bites, lightning strikes, and bee stings. Research has shown that cougars predominantly seek prey chosen from learned behavior and avoid others. ■

Sources: Nebraska Game and Parks Commission; *Behavior of North American Mammals*, a Peterson Reference Guide, authored by Mark Elbroch and Kurt Rinehart; and *Managing Cougars in North America*, edited by Jonathan Jenks.

That Lap Dog Can Hunt

Story and photos by Eric Fowler

Switch from springer spaniels to English cocker spaniels takes Crete man down different road in life.

Twenty years ago, after reading about English cocker spaniels and their prowess as bird dogs in an outdoor magazine, David Williams was intrigued enough to pay a visit to a breeder.

A springer man to that point, Williams didn't expect to leave with a puppy. But as luck would have it, that's exactly what happened. The decision would lead him down paths to new friends and Pearl, a dog that in 2013 became a national field trial champion.

Springers to Cockers

Williams got his first dog, a springer spaniel, in the early 1970s while he was living in Denver. He drove that dog and others back to his home town of Crete to hunt pheasants and quail on opening day and during the holidays, and chased them around fields in eastern Montana, Kansas and the Dakotas from October through January.

He had parlayed his philosophy degree from Doane into a career as a spray plane pilot, and his work kept him in Nebraska for part of the year.

But it was done by the time pheasant season opened and didn't start again until long after it ended, so he had plenty of time to hunt.

"You get spoiled that way," he said with a grin.

His last springer was too old to hunt in the

[fall of] 1989. At the time, he figured he'd change things up and get a pointing dog. But he spent that fall hunting with friends who had setters and pointers and decided it wasn't the same as hunting with a flushing dog. With a pointer, he said, you are just going for a walk while the dog is off doing its own thing. When the dog finds a bird, you hope it's still there by the time you find the dog.

"When you hunt with a flushing dog, you and the dog have to be connected all the time. It's just a much more intense experience, where you and the dog are working together and you're a team, and you're kind of guiding the dog where you want to go until the dog hits scent. And then the dog is in charge and away you go."

He had decided he'd get another springer when he read articles *Field and Stream* and *Outdoor Life* had done about Walt Cline, a preacher from Morrill, who was breeding cocker spaniels from imported English field lines. Williams was one of hundreds who called Cline to learn more. When they first talked, Cline didn't have any puppies for sale, but Williams was intrigued enough to hop in his Piper Pacer on New Year's Day in 1990 and fly up to check them out.

"He had dogs working and I was pretty taken with them," Williams said. "He had a little puppy there he thought he had sold and somebody backed out on it. So I'd gone up there with the idea I was going to just look at these things and I came home with a puppy."

"That was my first one, Zeke. He was smarter than I was."

David Williams' English cocker spaniel, Pearl, brings a rooster pheasant to hand on a hunt last winter.

English Cockers

Anyone who has the predisposed notion that cocker spaniels are just yippy couch dogs will learn otherwise soon after a hunt begins.

"They'll go," Williams said. "They really have incredible stamina and a lot of that comes from the fact that they're awful strong, but also they're just not moving around the mass. A lot of people look at those little dogs and think, 'Ah, that dog's going to be walking at heel after 20 minutes. But it's not that way."

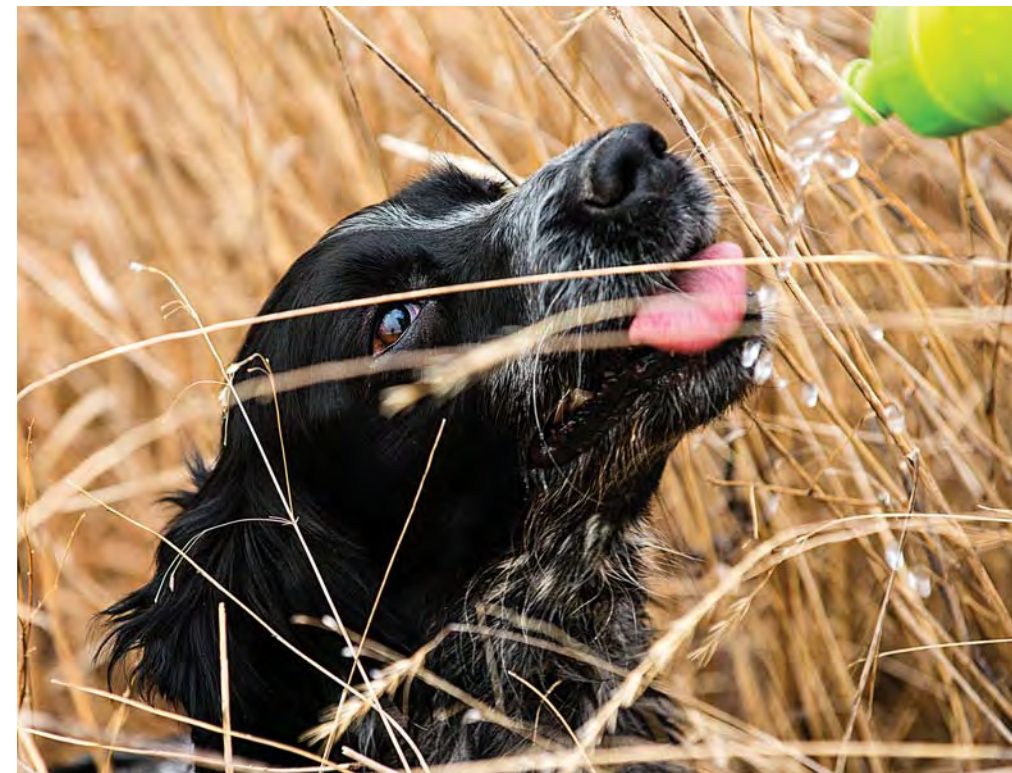
"They seem to be eternal optimists. They'll keep hunting even when you've got nothing and you haven't shown them any scent."

English cocker spaniels average 30 pounds and stand about 16 inches tall at the shoulder. They work through a field with endless energy, bounding or burrowing their way over or through the cover as necessary, their big floppy ears appearing to be wings at times. When a bird is down, they'll bring it to hand. Even a six-pound sage grouse.

Only in a few circumstances, such as a swampy cattail marsh with a mud bottom, does a cocker's size put it at a disadvantage to a larger breed like a Labrador retriever. "But you put it in a patch of thick woods with brambles and overgrown with vines and that kind of stuff, it's going to thrive because it's going to get in and under a lot of the stuff that a bigger dog would have to try to crash through," Williams said.

That's the type of cover woodcock live in, which is what these dogs were bred for. In the prairie, thicker cover might suit a bigger dog better, Williams said. But on the other hand, when the cover is so thick that any size dog will have to crash through it, a smaller dog has to crash through less. And put a cocker in that marsh when it's frozen over, and it can follow the tunnels beneath the cattails. "A smart dog will adapt itself to the cover it finds itself in," Williams said.

The same goes for a hunter working a flushing dog in thick cover. "If you can't see the dog, that's a problem," Williams said. But the problem applies to dogs big and small. "When you get in that stuff up over your head, I might lose my dog at 8 yards and you might not lose yours until 12 yards, but we



Pearl doesn't often slow down when in the field, but will stop for an occasional drink.

still both lost our dogs."

If his hearing wasn't so bad, Williams would use a beeper collar or bell to keep track of Pearl. Instead he just avoids tall, thick CRP fields, especially on windy days when he not only can't see the dog, he can't hear it or tell where it is by watching the grass move.

While the cocker spaniel's popularity as house pets resulted in the hunting ability being bred out of most dogs, the qualities that make the dog a good pet were not bred out of hunting lines. "There's a lot of time you spend with these dogs that you're not hunting or trialing or doing any of those things, you're just living with the dog, having it as a pet," Williams said. "And they just make wonderful pets."

"I hate to admit it but Pearl sleeps on the bed. And she lives in the house. Yet you can still take the dog out and hunt it in Montana for a week if that's what suits you. There are not a whole lot of breeds you can treat that way. The more human contact they have the better they seem to do."

"They're an upbeat kind of dog they kind of always seem to be happy about everything."

Williams said cockers have the reputation of being a little mischievous

and always up for a little trouble. That does make them a challenge to train compared to springer spaniels. "It's been said that springers are like the enlisted men of the spaniel world, Williams said. "You ask them to do something and they say 'Yes sir!' and go right about it. A cocker, you ask them to do something and they think they're officer material, so they might think they have a better idea than you."

But Williams said dog breeds are like religion and politics. "People get their preferences and that's it: 'This is the best dog that ever was,'" he said. "I don't pretend to be that way with these cockers, but they amuse me. I'm kind of partial to spaniels and a springer might serve me better, but I find cockers more amusing. They make me laugh a little more."

Field Trials

Williams never entered his springers in a field trial. He says he wasn't smart enough back then. "Basically, field trialing takes a real talented dog with that little extra bit of polish on it," he said.

But soon after he got Zeke, he discovered trials were a great way to extend the hunting season, and an even

better incentive to keep your dog well trained.

The problem was, there weren't any trials for English cockers. The breed lost favor in England for various reasons in the 1950s and by the 1960s, the decline in breeding stock there led to a shortage in the U.S. and the end of its field trial series. That was until 1993, when Williams and other "black sheep" in the Rocky Mountain Springer Spaniel Club who owned cockers decided that they wanted to do more than train their dogs at the club and help at the springer trials. So they put together a cocker trial that drew dogs from around the country. In the years that followed, more cocker trials sprung up, and a national trial returned in 1998 after a 35-year hiatus.

Williams took Zeke and the cockers that followed – Reba, Ace and Pearl, who he bought in 2004 from Paul McGach, a nationally-known breeder and trainer in North Dakota – to a few trials, but didn't get serious until he retired in 2010 and moved back home to Crete with his wife, Nancy, a Lincoln native. "Mostly through the years, I've trialed casually and hunted seriously," Williams said.

Part of the reason was there aren't enough English cockers in the country

to warrant the number of events the pointing breeds host. "You've got to be committed to putting in a lot of windshield time to go hit them," said Williams.

When he started out, he would hit a few trials in Texas, California, Colorado, Montana and North Dakota in the spring. Now he's added an Airstream trailer and has been to trials on both coasts and most in between. He's never gone to any of the trials held in the fall. "Then it's time to go chase wild birds," he said.

While Williams said Reba was the best cocker he's had (she started late and won a field championship at age 10), it was Pearl that benefitted from his experience and the extra time available to spend on the circuit that retirement offered.

Nationals

The National Cocker Championship field trial is open to any dog that places in a local trial within the previous three years. Pearl made her first appearance at the nationals in 2008 and was eliminated after the third round. She returned in 2011 and lasted one more round. In 2012, she received a certificate of merit, putting her in the

top eight.

Despite the improvement, Williams said he went to the 2013 national field trial near Bismarck, North Dakota, "with high aspirations but low expectations. Winning it would be great, but no one expects to. At least I didn't expect to. I just figured it's a long shot when you're running against that many dogs, all quality dogs. Everything in the trialing game has to fall just right to win something like that. You can have the best dog there and things don't work out for you quite right and you end up with nothing. I went there with the goal to just finish the trial."

In cocker field trials, handlers set out on foot to follow their dogs in search of two planted birds. Dogs that pass a bird, fail to sit or stand after a bird is flushed and shot, flush a bird off another course, retrieve another dog's bird or fail to retrieve, are out. Dogs that pass those tests are judged in how hard they work through the cover, their scenting ability and how they use the wind, how they handle and other attributes. Dogs run two at a time through two rounds, and the best advance to the final. In nationals, there are five rounds, followed by a water retrieve. Judges will start to weed out dogs they feel aren't qualified after the first two rounds. Of the 72 dogs entered in the 2013 championship, Pearl was one of only 10 that made it to the final round. One of those decided it didn't want to go in the water on that day, leaving nine.

When it was over, Williams knew Pearl did well but had no idea how well when the awards ceremony began. In the end, she left with the Guns Award, chosen by the gunners as the dog they'd most like to hunt over, and the national title.

"I was quite surprised," he said. "I was just amazed. It's like a lot of things. It would be great if it happened, but you never really think it will."

At age 9½, Williams thought that was Pearl's last chance. In human years, by popular theory, she was in her 60s. It speaks to her bloodlines, particularly Pearl's mother, which produced two other national champions, one of them in Canada, and a national point champion, he said.

It almost was her last chance. Last



While a rooster may seem larger than Pearl, she has no trouble retrieving them through the tall grass.

spring, when they were out for a walk in the country, Pearl ran in front of a vehicle and was hit, but escaped with only minor injuries. Williams guesses she took off chasing a turkey, the only thing she won't hold steady for.

But she came close to winning it all again last fall at the national trial in Pennsylvania. "I thought for a while we had chance of repeating, but in the fifth series things kind of fell apart," he said. "So it didn't come to pass, but we had fun."

It's About the Dogs

Williams has fun with all of his dogs. Two dogs already share time with Pearl in the field: Peddi, a 4-year-old female, and Ori, a 1½-year-old male whose bloodlines go back to Zeke and Pearl's father. Neither is ready for field trials,

but Peddi is close.

He figures having dogs is why he still hunts pheasants, quail and other upland birds. Growing up, he was one of about eight boys in Crete who hunted together, for whom opening day of pheasant season was like Christmas morning, maybe better. As far as he knows, Williams said he's the only one who still hunts. It could be family and other commitments and interests got in the way. But Williams wonders if it is because none of them ever had dogs.

"It's the dog that takes you hunting," Williams said. "Once you don't have one, you think, 'I don't know. It's cold out there. I don't think I'll go today.'"

And since he's begun field trialing, he's met a whole new set of friends that have afforded an assortment of travel opportunities for their Airstream. He and Nancy have made trips to

California and up the west coast to Oregon and Washington the last two years to visit friends and family and go to trials. Williams has hunted across the country with people he's met at trials, including a recent trip to chase Mearn's quail near the Mexican border in Arizona, and, on the way back from the 2013 national trial, a 400-mile detour to hunt woodcock in northern Michigan.

"It's funny how your life turns on these events," he said of the circumstances that sent him home with Zeke. "But I think that going up and getting that dog basically changed my whole life in terms of the fact that almost of the people I hang out with now stem from the fact that I got that dog."

A little dog. But one that could hunt. ■



The only disadvantage to hunting over a cocker is slight: the dogs are hard to keep track of in tall grass.

Fish Here Now

The 2015 Nebraska Fishing Calendar

By Daryl Bauer and Jeff Kurrus

When and where should I fish? These questions have been asked as long as anglers have been wetting hooks. While weather, wind and time of year factor into the first question, the simplest and most important answer is “when you have time to go.” Regarding where you should fish, we’ve given you a starting point with NEBRASKAland Magazine’s 2015 fishing calendar. Now it’s up to you to see if we’re right.

January

Start your fishing calendar big. Really big. Now that good ice can be found statewide, it’s time to tackle Nebraska’s biggest waters through the ice.

Merritt Reservoir

Mixed Bag

A perennial favorite, Merritt has pike, big bass, walleye, crappie, yellow perch and even an occasional trophy channel catfish. Therefore, you have several options. Jig deep-water timber in the old Snake River channel and Boardman Creek for crappies using your favorite $\frac{1}{16}$ to $\frac{1}{32}$ ounce jig or jigging spoon. Use tungsten jigs because they have a greater density than lead. Keep your sizes relatively large, $\frac{3}{8}$ to $\frac{1}{2}$ ounce, to get down to the desired depths, which could be up to 40 feet, for walleye and channel catfish trophies.

Look for bluegills and largemouth bass on one of the lake’s three arms with jigs tipped with waxworms and run tip-ups for pike using smelt or live chubs.



Swanson

White bass

Ice usually doesn’t last long at this southwestern reservoir, but when it’s there take advantage of it. It’s a numbers game at Swanson, with wipers, channel catfish and walleye being caught. Fish with the same jigging spoons and tailspinners you use during the summer, no more than $\frac{1}{2}$ ounce in size.

Sherman

Crappie

Use the same jigging strategies that you would at Merritt this month, but cover more water. With less underwater structure, fish at Sherman are much more nomadic. Be ready to move with them. Where should you start? Look for everyone else. If you’re the last person on earth, fish the brush piles in the arms, drop-offs and humps throughout the lake. Locate these areas with topographic maps that can be found at OutdoorNebraska.org/gisapps.

Sleeper

Mid-winter can be a lull on the ice-fishing calendar, even more so on smaller bodies of water. Look for big lakes, such as Branched Oak, which has good numbers of crappie more than 10 inches. Drill a lot of holes, for underwater structure is scarce, and concentrate along the dam when all else fails.



Sherman Reservoir is one of Nebraska’s top crappie fisheries, but anglers might need to cover a lot of water to find fish, making an ATV an asset when that water gets hard.

PHOTO BY ERIC FOWLER

February

You never know what the Nebraska winter is going to give you, especially this month. Be prepared to fish on ice or open water.

Summit Lake

Bluegill

This northeastern hotspot is perfect for the new or aged ice angler. Look for bluegills next to green vegetation or its myriad of brushpiles, many of which are located near the lake’s six larger breakwaters, using two-pound test line or less with ¼-ounce jigs.

Verdigre Creek

Rainbow Trout

For the fly-fishing purist, it’s a bead-head nymph bite. For the rest of us, put on a Berkley trout worm or half a nightcrawler and start drifting.

Valentine National Wildlife Refuge

Mixed Bag

First ice and last ice are the best times of year to fish hard water at the refuge. Start on Pelican, Dewey and Hackberry lakes for bluegills and yellow perch, but be prepared to see a northern pike or fat, beautiful largemouth as well. Because you’re able to use up to five lines per person, set up three or four tip-ups for pike with frozen smelt on a quickstrike rig with a steel leader and keep a jigging pole in one or both hands with a ½ ounce teardrop and a waxworm for panfish. One-pound plus bluegill are a possibility. Note: you may need to upsize with your lure choices due to the stain of Sandhills lakes.

Sleeper

Last year was a banner ice-fishing year at Lake Wanhoo. However, flooding in 2014 has some anglers curious if any

fish moved out of the lake and if production will lower due to poorer water quality. Take a look for yourself and hope the crappie fishing is anything close to how it was last winter.

March

Search for coldwater species this month when the ice is starting to disappear and warmwater fish are still inactive.

Ogallala

Rainbow Trout

Stay flexible when fishing Lake Ogallala during the late-winter warming trends that March always gives us. Start with hard lures – spoons, in-line spinners and small crankbaits – but be ready to downsize to other baits like nightcrawlers, salmon or trout eggs or PowerBait. For fly-anglers, try a white streamer, but also know that these trout are eating midge larvae year-round. It’s always a good go-to pattern.

Lake McConaughy

Northern Pike

Look for Lake Mac’s good population of big northern in bays on the lake’s upper end. Last year, Otter Creek was hot, but there are also other bays on the north side of the lake worth trying. Catch these fish on smelt or suspend crankbaits or even spinnerbaits on warm afternoons.

Tri-County Canal

Sauger

Above Johnson Lake, cast for sauger with a jig and a minnow, or Gulp minnows, near each of the canal’s check dams.

Sleeper

While at Lake Mac chasing trophy toothies, try for big channel catfish in those same areas by fishing smelt on the bottom. You can also use winter-killed gizzard shad on wind-blown shorelines. This can also work for pike.

April

Because the weather can be so inconsistent in the spring, think both warm and coldwater species this month.

I-80 Lakes

Largemouth Bass

Look for trophy, pre-spawn bass early in the year on the I-80 lakes, as well as private sandpits and even Open Fields and Waters lakes. Begin on the north shorelines and



PHOTO BY ERIC FOWLER

Lakes on the Valentine National Wildlife Refuge are perennial favorites for ice anglers searching for bluegills (above) and northern pike. In eastern Nebraska, small reservoirs such as Wildwood Lake (below) can be productive for bluegills, crappies and channel catfish.



PHOTO BY ERIC FOWLER

Lure Choices

By Jeff Kurrus

Match the hatch is another one of fishing’s most common tips. But it remains a steadfast technique, year after year. When you’re seeing two-inch alewives, find lure choices of similar size. When bullfrogs start croaking at dawn and dusk, imitations are great starting points. Crawfish should also be an angler favorite, especially when they can be found on nearly every water body in the state. Lastly, when cleaning fish spend a few moments to check stomach contents. This may help you land a few more fish the next day on the water when yesterday’s strategies aren’t working so well.



PHOTO BY JUSTIN HAAG



PHOTO BY ERIC FOWLER

Ogallala native Jamie Vasa has lived in three countries in the past 10 years, but has spent most of his spring and summer in recent years patterning walleye on Lake McConaughy.

northwest corners for these areas may warm up a bit quicker than the rest of the lake. Start slow and low with your presentations, whether using soft plastics, spinnerbaits or crankbaits, and make adjustments to your retrieve speed and depth as the fish dictate.

Box Butte

Northern Pike

Numbers are the name of the game this month at this northwestern reservoir. A simple spinnerbait presentation near flooded trees will draw constant strikes from small pike, with the possibility of a big fish also mixed in. Run your lures right beneath the surface to watch the action.

Whitney Lake

Crappie

Expect good numbers and nice-sized fish at Whitney this spring. They shouldn't be difficult to catch at this time of the year. Use a bobber and a minnow or your favorite jig and target any sort of shallow-water cover.

Sleeper

Papio D-4, in north Omaha, is a great largemouth bass and bluegill fishery. It's not accessible to big boats, but is a perfect place to drag your john boat, canoe, or belly boat if you don't mind the 250-yard walk.

May

In May, go fish somewhere. That's the most important thing to do. Where to go and what to catch is a matter of preference. Here are a few options.

Lake McConaughy and Merritt Reservoir

Walleye

Even we couldn't decide which one would be best this month. Expect big numbers and big fish on both. At Lake Mac, troll or drift to cover water, as spinners and nightcrawlers are traditional favorites. Also try 2- to 3-ounce spinnerbaits through the flooded timber or along the face of the dam in depths of 20 feet or more. At Merritt, the water will be near full pool, creating flooded willow trees and smartweed beds. Fish with slip bobbers and leeches or crawlers, or cast traditional largemouth bass and northern pike lures that imitate alewives in these same areas.

Goose Lake

Northern Pike

Fish for this Sandhills lake's high numbers of hammer handles and big northerns now before it becomes too weedy. Pike can be caught later in the summer, but it's much tougher to fish. Find open water pockets and you'll find fish.

Elwood Reservoir

Wipers

Look for feeding activity on the surface early and late in the day and cast topwater chugbugs and stickbaits. If the water isn't boiling, cast jigs, swimbaits and crankbaits on windy shorelines.



PHOTO BY ERIC FOWLER

Anglers can get lost searching for bass, bluegills and crappies in a forest of dead, standing trees that cover about 90 acres of 662-acre Lake Wanahoo, one of Nebraska's newest reservoirs, near Wahoo.

Sleeper

Davis Creek has a large amount of crappies more than 10 inches. Fish brushpiles with a bobber and minnow or jig.

June

The year's best open water fishing continues, both on big and small waters. Fish your favorite lake this month, and also consider these below.

Merritt Reservoir

Muskie

Mark June 16 on your calendar this year, when the new moon awakens the state's best muskie fishing. Water is high in June, and many species of fish will be in weedbeds and flooded willows feeding on alewives. And muskies will be feeding on them. Upsize your tackle to target these monsters.

Mid-sized Reservoirs

Bluegill

Look for bluegill beds by walking shorelines at a number of smaller reservoirs, including Maskenthine, Maple Creek and Summit SRA. This is a great time for the new fly angler to tie on a popping bug and watch hungry bluegills strike on top. For the veteran, put a nymph on a dropper behind your popper, which then becomes a strike indicator.

Rock Creek

Largemouth Bass

Use your favorite techniques, from topwater offerings



PHOTO BY JEFF KURRUS

Fly-fish for bluegills with an assortment of topwater poppers this month at Nebraska's smaller reservoirs, including Maskenthine and Maple Creek.



PHOTO BY ERIC FOWLER

The 20 sandpits at Fremont Lakes State Recreation Area provide a variety of angling opportunities, including many locations where you can fish from your lakeside campsite.

to slow-rolling spinnerbaits, to catch largemouth at this southwestern lake this month. A good place to start is near any visible structure.

Sleeper

Don't rely on Merritt alone for musky fishing. Wagon Train, Fremont Lake No. 20 and L.E. Ray near Grand Island are worth trying, especially when you may be the only one muskie fishing there. Fish above 40 inches can be found in each of these.



PHOTO BY JUSTIN HAAG

Stockings of cutthroat trout on Open Fields and Waters properties along the White River west of Fort Robinson State Park have provided another unique opportunity for anglers.

July

These are the dog days, when air conditioning often sounds better than sweating on the lake all day. But for those who don't mind the heat, there are plenty of underwater rewards.

Calamus Reservoir

White Bass

White bass numbers are fantastic at this reservoir. Look for gulls and surface feeding early and late in the day. Drop into deeper water for vertical jigging, watching your depth finder for schools of shad.

Lewis & Clark

Mixed Bag

Troll for walleye, sauger and white bass with crankbaits close to the bottom across river channels and drop-offs. Try lead core line to get your lures deeper. Your main focus is covering water, so use the two lines per person you're allowed. When you're tired of trolling, look for smallmouth bass along the riprap dam, entrances to coves, and other breakwaters with downsized crankbaits and spinners.

Swanson

Wipers

Go deep in open water by jigging, casting or trolling. Use cast nets to match the size of the lake's shad, and increase size of your lure choices through the summer as the shad will grow as well.

Sleeper

Don't wait for dawn or dusk on farm ponds to catch largemouth this month. Topwater frogs at high noon, even on windy days, work great near vegetation.

August

You only have a few more weeks of extreme heat left. You may be one of few on the water, so take time to learn a new lake.

Harlan County Lake

Mixed Bag

Fish for white bass by setting out floating lights at night. The lights attract plankton, which attracts shad, which attract white bass. Fish near the dam with a minnow and prepare for strikes just out of range of your lights. Stick around and also drift for channel catfish using bloodbait or fresh shad.

White River

Trout

Use floating grasshopper patterns for browns and cutthroats on the White River at Fort Robinson State Park. Seven miles of river to the south of the park are also accessible through the Open Fields and Waters Program. Simply walk the bank and look for feeding fish.

Missouri River

Catfish

Fish the channelized portion from South Sioux City to Rulo for blue, channel and flathead catfish. Use fresh cut bait, such as a silver carp, and try behind wing dikes along the river. Because you're fishing for 100-pound fish and there is constant current and a lot of snags, tackle up.

Sleeper

Use the same drifting techniques from Harlan for channel catfish at Calamus and Merritt reservoirs.

September

When many anglers become hunters this time of year, hit the water for one of fishing's most productive months.

Missouri River

Smallmouth Bass

Now go to the unchannelized stretch of the Missouri River above Niobrara for the state's best smallmouth fishing. The Missouri River offers many different types of structure and habitat to fish, including sandbars, riprap and vegetation. You could fish it for a lifetime and never learn it all. So pay attention to where you catch each fish and look for similar structure. Boat ramps are found at Verdel Landing, Niobrara and Sunshine Bottoms.

Fremont Lakes

Mixed Bag

Pond hop these 20 sandpit lakes for a number of species,

Fishing Forecasts

By Jeff Kurrus

The Nebraska Game and Parks Commission's yearly fishing forecast is a must-have for every angler's tackle box, even when the survey year has passed.

By studying the year-by-year statistics at the surveyed lakes, you can get an idea of the production you might experience at a lake from previous data. For example, if a lake's walleye production year to year reveals high numbers of fish and a strong percentage of big fish, like Lake McConaughy, then one can expect good success as long as no other factors have interrupted the lake's consistency, such as low water levels.

So don't just keep these surveys for a year and then pitch them. This information can be valuable years after a survey has been conducted.



View the 2015 Fishing Forecast.



including largemouth bass, bluegill and even muskies this month. If fishing is slow at one lake, drop your john boat in the one down the road. Rapalas are good starting lures for bass, and all species will bite a beetle-spin. Target drop-offs and shoreline structure.

Northeast Reservoirs

Largemouth bass

Those still on the water can chase numbers at Buckskin Hills Lake. Also take a look at Chalk Rock, Powder Creek and Norfolk's Skyview Lake.

Sleeper

Pond-hopping can also be done using the same strategies from Fremont on sandpits at Bridgeport, Fort Kearny, Louisville, Mormon Island, Sandy Channel, Two Rivers and Windmill state recreation areas.

October

Try something different this month, with ideas of providing food for the dinner plate as well as chasing some of the state's most elusive trophy fish.

Trout Ponds Statewide

Rainbow Trout

Each fall and spring, the Nebraska Game and Parks Commission stocks fry-pan sized trout in lakes throughout



Harlan County Lake near Alma annually ranks as one of the state's top white bass fisheries, especially in late summer.

the state. Find the list of lakes by searching “Stocking Reports” at OutdoorNebraska.org. Once you’re on the water, start with a small crankbait, spoon or spinner. If you’re getting strikes but no fish, you can catch them on anything from nightcrawlers to corn. Berkley makes PowerBait that looks and smell just like the pellets these fish were raised on. Fish these on the bottom or below a bobber, and expect to vary your depth to find these 10- to 12-inch eaters.

Branched Oak Lake

Flathead Catfish

The No. 1 way to catch flats is live bait. Catch white perch or sunfish during the afternoon and move your boat next to flooded trees near nightfall, where flatheads will be concentrated. Bank anglers can bounce crankbaits off the bottom along the lake’s rocky shorelines.

Grove Lake

Northern Pike

The rainbow trout-fed trophies in Grove are fat and happy. There aren’t many fish, but some 40-inch plus fish are possible using a variety of artificial lures, including spinnerbaits. Or, use creek chubs or white suckers on quick strike rigs. Just do us one favor: put these trophies back in

the water when you’re done snapping photos so we can all have some fun.

Sleeper

With the water starting to cool, again take a look at Lake Ogallala’s trout. This can be an ace in the hole for fall.

November

Die-hards come out the month before ice, and for good reason. There are some gems left to fish before hard water arrives.

Pine Ridge Streams

Trout

Sight fish Soldier Creek, Squaw Creek and others for brook trout with either crawlers or nymphs. These fish are very spooky, so don’t wear bright colors and keep your distance. If you can get a bait to them, you’ll catch fish.

Lewis and Clark Lake

Walleye

As the water cools, prey moves deeper and big fish

follow. Vertical jig with slab spoons and blade baits on the downsides of humps and other contour changes. Look for bait balls on the depth finder, and experiment with different lure colors. A subtle change of depth or lure choice can be the difference between a mess of fish and no fish at all.

Gavins Tailwaters

Sauger

Jigs and minnows rule this time of year in the tailwaters. Bladebaits are also good, but expect to find underwater snags.

Sleeper

Try the cooling pond at Sutherland Reservoir for channel catfish by tightlining on the bottom with your favorite stink bait. Make sure you bring your lawnchair.

December

For ice anglers, there’s nothing better than first ice. When it comes, especially in recent years in Nebraska, is anyone’s guess. When it does appear, here are a few places to start.



PHOTO BY JEFF KURRUS

As chunks of ice float on the water, anglers fish for sauger with jigs and minnows at the Gavins Tailwaters during late fall and winter.

Valentine National Wildlife Refuge

Mixed Bag

Use the same last ice techniques you did in February as soon as you have four inches of good ice.

Crescent, Blue and Island lakes

Panfish

Located on or adjacent to the Crescent Lake National Wildlife Refuge, these Sandhill lakes are prime spots for bluegill and perch. Be sure to check the Fishing Guide for special access rules and fish each using the same techniques, targeting the edges of shallow weed beds with panfish tackle.

Farm Ponds

Mixed Bag

Because bass and bluegills are warmwater fish, they are most active at first and last ice and will be active in the same locations. If you want to target bass, upsize to jigging spoons or chubby darters.

Sleeper

Travel northwest to Smith Lake for panfish and pike through the ice. Try jigs for bluegills and crappies and Rippin’ Rap lures and jigging spoons for northern pike. Anglers will also use dead smelt, because northerns eat a lot of dead fish during the winter and early spring.

Now you’re set, a year’s worth of vacation and after-work plans taken care of. Let the fishing, and debating, begin. ■

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Whittling Away at the Cold

Deerstand shivers can become a big problem for hunters of any age, especially if near poison ivy.

By Jeff Kurrus

Nothing good can come from the cold. Well, almost nothing. I get cold when I hunt. Not a tad bit uncomfortable cold, but real, I-think-they-may-find-me-dead-here cold. Especially in the mornings in the period right before the sun rises. I pray for clear days, with no concern if I'm going to kill anything or not. I just want to survive.

I eat before I go, wear moisture-wicking materials, have Hot Hands and Toasty Toes covering my body like electrodes, and put my top layer of clothes on at the deer stand, and still I freeze.

But it's not the cold that actually bothers me the most. It's the thought of what happened to me in the cold one day as a boy that truly gives me the shivers.

I was deer hunting in Yazoo, Mississippi, one afternoon and quickly became bored. At 10 years old, this doesn't take long, so I pulled out my hunting knife and began to carve on a branch hugging the side of the tree. Come to find out, this was no ordinary branch.

You could call it more of a vine, but it took the place of actually trying to kill a deer as I wiled away the afternoon concentrated on my woodshop project. Well, my little fingers got cold, as one's will in the woods, and there is still no pair of gloves in the world (sorry Cabela's) that takes the place of pulling a double Al Bundy right in the stand and fighting through three layers of non-moisture wicking cotton to the spot between my legs.

Ah, warmth.

Ten minutes later, and I was back to whittling.

I alternated these hand positions for the rest of the afternoon, carving on this now sappy vine and keeping my hands warm between my legs. Not one deer showed up, but I survived the cold. Which was, as a kid, all I was supposed to do in the first place.

The discomfort started around bedtime, the feeling that something just wasn't right down low. I thought about the whittling, I did, but poison ivy didn't grow in the fall (everyone knew that, right?), so I was fine.

By the next morning, I was still 10 years old from the waist up, but a battle-weary man from the waist down.

The itching, and accompanying pain, was awful. But at four hours away from home and on a Sunday morning, Dad decided that we should hunt instead. "Just keep your hands out of your pants," he said, taking me back into the field once again. On a even colder day. You can guess what happened next – with both cold finger tips and an insatiable itching to blame.

On Monday morning, it was straight to Dr. Pender's office. Oh, yes, Dr. Pender. The one person who knew my childhood body more than my own mother. From the emergency visit after I slid down a handrail with my hands



Poison ivy grows in woods, fields and along roadsides and riverbeds in the form of ground cover, a small shrub or a climbing woody vine.

behind my head to know what it felt like to rack myself (it really hurts) to the countless "turn and cough" moments (what actually is a hernia?), Pender knew the real me more than anyone.

By the time I got back home, after one more day of hunting, the poison ivy – yes, it can get you in the colder months – had spread across my body and was beginning to close both of my eyes. So much for hand washing.

A shot to the rump, and a week of Calamine, and I was up and running – looking, sort of regrettably, like a 10-year-old again.

Nowadays, there is no whittling on branches, or pulling vines off of trees. All my deer stands are on the edges of fields in short grass, and turning off the alarm clock at 5 a.m. sounds a lot better than freezing by 6 a.m. on those too-cold mornings.

Regardless of how quickly the time would pass with just a little whittling. ■

Photography in Winter Light

Later mornings and earlier evenings make winter's sun ideal.

By Chris Helzer

Sure, it's cold outside, and all the flowers are dead and gone, but winter is a great time for outdoor photography. Many wildlife species are still active during the winter, snow and ice can be fantastic photo subjects and backdrops, and

intrepid and creative photographers can even turn dead plants into interesting images. Most importantly, winter light is some of the best of the year, and shouldn't be wasted!

Outdoor photographers know that quality images depend upon good light.

Early and late day light is often the best because the low angle of the sun creates interesting shadows and warm colors. During the height of summer, that low sun angle usually occurs for only an hour or so in the mornings and evenings, and the sun blasts down from high in the sky during the rest of the day. However, during winter months, the tilt of the earth provides for low sun angles – and great photography light – for much of the day.

If you do venture out in the snow,

remember that your camera may work against you if you aren't careful. Cameras assume that anything bright white should be toned down to a nice medium gray. That's helpful when you're photographing gray subjects in bright sunlight, but pretty frustrating when you're trying to show off the brilliant whites of snow or ice. If you can, set your camera to manual exposure and "open up" your aperture a stop or two (let more light in) to compensate for your meter's hijinks.



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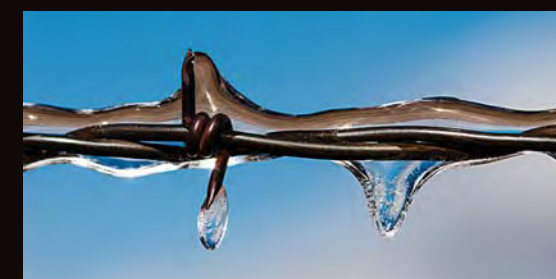


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If your camera doesn't have a full manual setting, it may still allow you to adjust the exposure in one way or another. (Just be sure to figure out how to do that before you get into the field. You won't want to be fumbling around with your camera while an eagle and otter wrestle over a fish on a snow-covered frozen river!) If all else fails, try metering off of something fairly neutral toned (blue sky, tan coveralls, or brown grass) hold the shutter release button halfway down, reframe the shot, and then take the picture.

There are a couple more tips to keep in mind when taking your camera for a winter hike. First, cold temperatures are hard on camera batteries. Carry an extra battery in your pocket, and when the one in your camera dies, swap it for the warmer one. Second, when you bring your camera inside after a few hours in the frosty air, keep it sealed in the camera bag until it warms up to prevent condensation from forming inside.

Yes, winter weather can be frightful. On the other hand, do you really want sit on your old couch and watch re-runs of old westerns or mid-season college basketball all day? I didn't think so. There is a big beautiful natural world out there waiting for you to photograph it. Stand up, grab a thermos of your favorite hot drink, dig out your old coveralls, and get out there and shoot. You'll be glad you did. ■



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Chris Helzer is an ecologist with The Nature Conservancy in Aurora and writes The Prairie Ecologist blog. He has been a NEBRASKAland contributor since 1994.



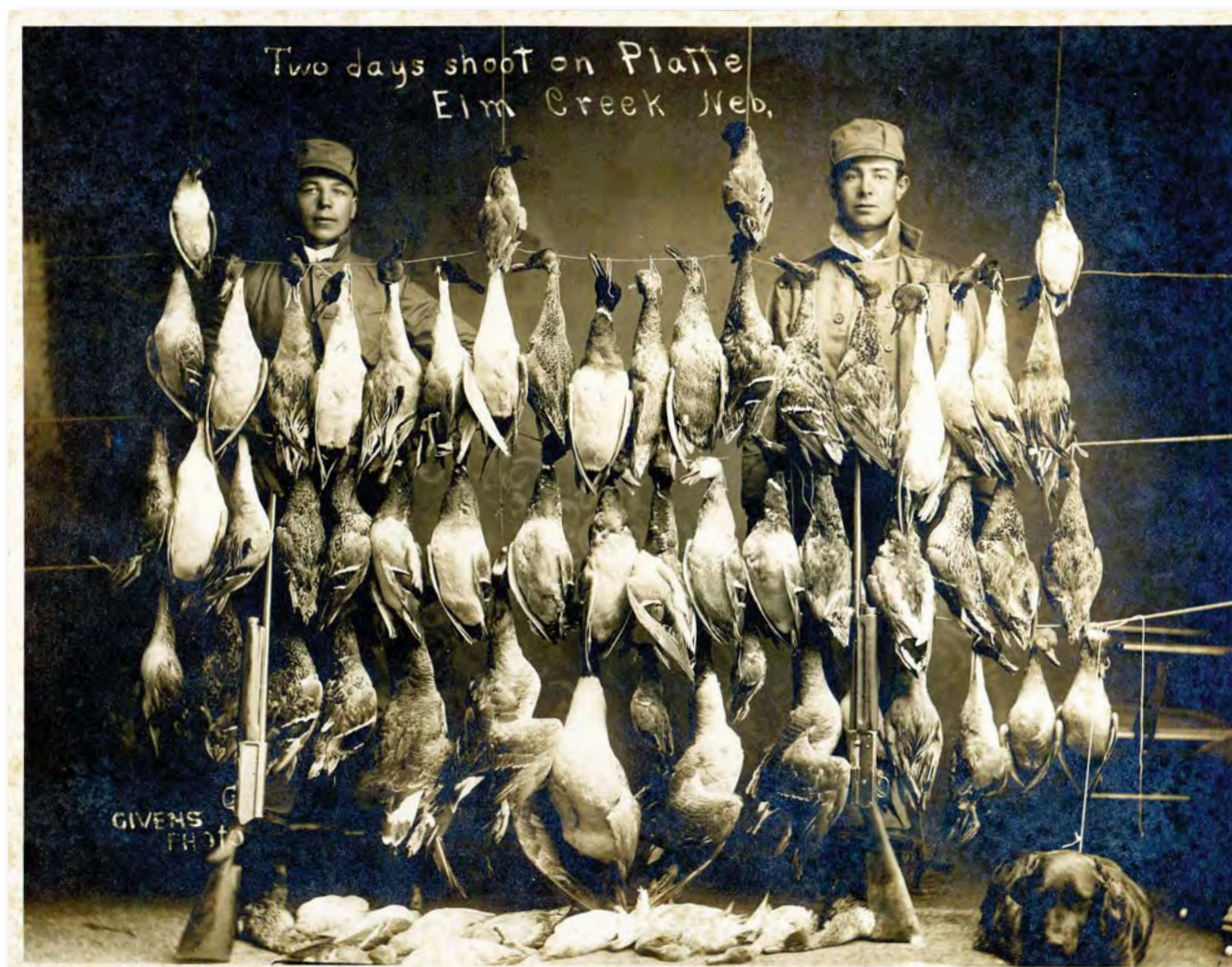


◀ Picture taken winter of '86 with me and Hank, a dog owned by my hunting partner, Terry Rasmussen, in northern Howard County. Hunted there in the '50s to the '80s. Great times.

– Henry "Hank" Lokke,
Omaha, Nebraska

▼ August Blenderman (left) and Henry A. Heumann (right) are pictured after a two-day shoot on the Platte River near Elm Creek, Nebraska.

– Bob Basoco, Lincoln, 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. Photos will be returned.

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junior journal

interesting notes for readers of all ages

by Lindsay Rogers and Donna Schimonitz

The Twilight Zone Crepuscular, Nocturnal, and Diurnal

Monica Keep, Nebraska Project WILD

Nebraska has a large biodiversity of animals that may be awake or active during different parts of the day. Humans are considered diurnal, but some activities may make us be nocturnal, instead. This means that we are adapting to certain situations just like animals do.

DIURNAL

This is a word that most people aren't familiar with, but you should know it, because it's what most people are. Diurnal means active during the daytime. Remember diurnal starts with the letter "d" and so does daytime.

Diurnal animals have adapted to being out in the daytime because their main way of hunting is through their vision.

Some Nebraska animals that you may see out during the daytime are squirrels, songbirds, butterflies, turtles, hawks, snakes, prairie dogs, and burrowing owls.

NOCTURNAL

Nocturnal means being active at night. Remember nocturnal starts with the letter "n" and so does the word nighttime. Some Nebraska nocturnal

animals you may see are opossums, moths, badgers, bats, amphibians, mice, and owls.

Owls have great eyesight, but they rely more on their hearing for hunting. An owl's ears are asymmetrical on their heads, with the right ear being higher than the left ear. This gives them amazing depth perception. They also have eye tubes instead of eyeballs; this allows their eyes to let in as much light as possible, even in complete darkness.

CREPUSCULAR

Crepuscular means being active at dawn and dusk, right before the sun sets, and right before the sun comes up.

Animals in Nebraska that are considered crepuscular are deer, rabbits, coyotes, foxes, and mosquitos.

Rabbits are a great example of crepuscular animals. These creatures are preyed upon by several animals in Nebraska, so, they have adapted to coming out at twilight and dawn.

Whether animals are diurnal, nocturnal, or crepuscular, they have adapted to fit their needs, and adapted to hunting their food. 🐾

Which Are We?

Circle the correct letter beside the Nebraska wildlife.

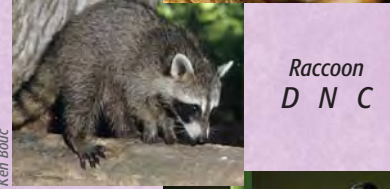
D = Diurnal, N = Nocturnal, C = Crepuscular



American Robin
D N C



Big Brown Bat
D N C



Raccoon
D N C



Dragonfly
D N C



Cottontail
D N C



Leopard Frog
D N C



American Elk
D N C

ANSWERS: American Robin (D), Big Brown Bat (N), Raccoon (N), Dragonfly (D), Cottontail (D), Leopard Frog (N), American Elk (C).

NATURE CALENDAR

- Canada geese search for mates: February through mid-April
- Look for evidence of animals feeding on twigs and saplings: December through February
- Mink begin breeding: February through April
- Smallmouth salamanders emerge after winter hibernation: Late February through early March



American mink photo by Thinkstock

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Venison Neck Irish Stew

Don't grind neck meat. Stew it.

By Jenny Nguyen

This venison neck Irish stew is one of my favorite dishes to prepare in the winter. Instead of cutting up neck meat into pieces, filet both sides of the deer to get two large pieces for two meals. Any visible fat on the surface is removed. Because it is nearly impossible to remove every bit of fat that is found throughout the neck, the little bit left over does add a distinct taste to this dish, and it is a taste that I can appreciate.

Though I have never eaten a mature, rutting buck before, I would imagine that the neck meat from a young buck or doe would be more suitable for this preparation. While some people like the taste of deer fat, others do not. Keep in mind that later season deer will usually carry more fat on their bodies to combat colder temperatures.

Additionally, an animal's flavor is also influenced by what it ate before it died. For example, deer that forage on weeds, twigs and shrubs in western states will taste different compared to Midwest deer that spend most of their lives feeding on corn, soybeans and acorns. I think we are quite lucky in Nebraska to be able to hunt such well-fed deer, which equates to better-tasting venison at the table.

Servings: 4

Prep Time: 15-20 minutes

Cooking Time: 2½ hours

Ingredients:

- ¼ cup of all-purpose flour
- 3 pounds of venison neck, deboned and visible fat removed
- 2 large onions, chopped
- 3 carrots, sliced
- 4 red potatoes and 4 baby Yukon potatoes, halved
- ½ teaspoon of dried thyme
- 3½ cups of heated beef stock (or deer stock if you have it)
- 2 tablespoons of chopped fresh parsley, for garnish
- Salt and pepper, to taste

1. Preheat oven to 325°F. Remove as much fat as you can from venison neck and large areas of silver skin, and then rinse under cold water and pat dry with a paper towel. Season venison well with salt and pepper, and then dredge well in flour. Lay meat flat in a baking or casserole dish.

2. Next, layer ingredients on top of the venison in this order: onion, carrot and potatoes skin side up. Sprinkle in the thyme and pour in hot beef stock. Cover with aluminum foil



Sprinkle thyme over layered ingredients.



An Irish-style stew with tender venison and hearty vegetables.

and bake in a 325°F oven for 2½ hours.

3. Once tender, shred venison neck into smaller pieces. Add more salt and pepper, to taste. Ladle meat and vegetables into individual bowls and garnish with chopped parsley. ■

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

 Read Jenny's *NEBRASKA*land blog "Midland Musings."



PHOTOS BY JENNY NGUYEN

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Behind the Scenes

At my first *NEBRASKAland Magazine* staff meeting in 2006, I was sitting in the room with more than 150 years of writing and photography experience with Kenny Bouc, Jon Farrar, Eric Fowler, Mike Forsberg, Bob Grier, Rocky Hoffmann and others. And everyone there, myself included, was taking direction from Sarah Johnson, the magazine’s photo librarian.

The job of a photo librarian is to manage photos. And in a publication such as *NEBRASKAland*, where pictures reign supreme, it’s a lofty job. Sarah was responsible of managing the organization of millions of images for us, including where and when they were taken and, if it was a plant or animal, who to talk to in order to correctly identify the species.

You would figure that a person in this position would be constantly cranky, but Sarah was surprisingly upbeat nearly all the time. But if you’re weren’t appropriately ID’ing photos, you got a talking to. If you weren’t culling hard enough, you got a talking to.

And if you weren’t sending her enough pictures of animal butts, you got a talking to.

See, Sarah had very few requirements as a colleague, but she did find humor in both outhouse photos and animal backsides. So, as a staff, we did our best to oblige on both.

And nothing was better than to see the smile on her face when we had captured the perfect image, hind end or otherwise. But now Sarah has moved on. She is the head librarian at the Geneva Public Library, and Jaclyn Vogt has filled her old position.

But if I know Sarah like I think I do, she’ll thumb through this publication and laugh when she gets to this page, until she starts reading. Then she’ll be embarrassed and I might get a scolding phone call.

On that day I hope to be in the field, capturing the many miracles occurring daily in the Nebraska outdoors ... and whatever else will make Jaclyn laugh.

Because the photo librarian is definitely a person you want on your side.

Jeff Kurrus, November 11, 2014

Nebraska Prescribed Burn Training Workshops

DATE	TITLE AND DESCRIPTION	LOCATION	TIME
January 15, 2015	Prescribed Fire Basics — Learn why, when and how to plan and complete a safe and effective prescribed fire.	UNL Extension Lancaster County 444 Cherry Creek Road, Suite A • Lincoln	9:00 am - 4:00 pm CST
January 20, 2015	Prescribed Fire Basics — Learn why, when and how to plan and complete a safe and effective prescribed fire.	United Methodist Church 340 Miller St. • Hay Springs	9:00 am - 4:00 pm MST
January 21, 2015	Prescribed Fire Basics — Learn why, when and how to plan and complete a safe and effective prescribed fire.	North Platte NRD 100547 Airport Road • Scottsbluff	9:00 am - 4:00 pm MST
January 27, 2015	Prescribed Fire Basics — Learn why, when and how to plan and complete a safe and effective prescribed fire.	North Platte Community College 1101 Halligan Drive • North Platte	9:00 am - 4:00 pm CST
January 28, 2015	Prescribed Fire Basics — Learn why, when and how to plan and complete a safe and effective prescribed fire.	UNL Extension - Hall County 3180 West US Hwy 34 • Grand Island	9:00 am - 4:00 pm MST
February 4, 2015	Prescribed Fire Basics — Learn why, when and how to plan and complete a safe and effective prescribed fire.	Life Long Learning Center • Northeast Community College 801 E Benjamin Ave • Norfolk	9:00 am - 4:00 pm CST
February 10, 2015	Fire Weather — Understand and predict fire behavior based on weather. Use tools to determine a good burn day. Presented by National Weather Service Meteorologists.	Wild Bills Wings & Bowling 1100 S Jeffers St • North Platte	6:00pm-8:00pm CST
February 11, 2015	Fire Weather — Understand and predict fire behavior based on weather. Use tools to determine a good burn day. Presented by National Weather Service Meteorologists.	Mid-Plains Community College West Hwy 2 • Broken Bow	1:00 pm—5:00 pm CST
March 3, 2015	Tree Pile Burning — Learn the tips and tricks of burning tree piles. Timing, surrounding vegetation, ignition, and safety will be presented.	Guide Rock Community Center 120 W Douglas • Guide Rock	6:00pm-8:00pm CST
March 12, 2015	Fire Weather — Understand and predict fire behavior based on weather. Use tools to determine a good burn day. Presented by National Weather Service Meteorologists.	Homestead National Monument 8523 W State Hwy 4 • Beatrice	1:00 pm—5:00 pm CST
March 18, 2015	Firebreak Management — See different firebreak methods and the uses and benefits of each. Live fire will occur weather permitting.	Ponca State Park Visitors Center 88090 Nebraska 26E Spur • Ponca	12:00 pm—3:00pm CST
August 13, 2015	Fire Ecology and Results — Learn how fire can increase native plant quality, quantity, and diversity. Take a tour to see the effects of fire after the growing season.	The Gathering Place 612 Howard Avenue • St. Paul	10:00 am—3:00pm CST

Prescribed Burn Workshops provide guidance and instruction for people with or without prescribed burning experience.

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