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NEBRASKAland

August-September 2013



A coyote stares at the camera while hunting field mice in Cass County. Photo by Larry Kurrus.

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Michael Forsberg's Nature in Monochrome • Broken Bow
Your Last Summer Vacation • Fishing With Gulls



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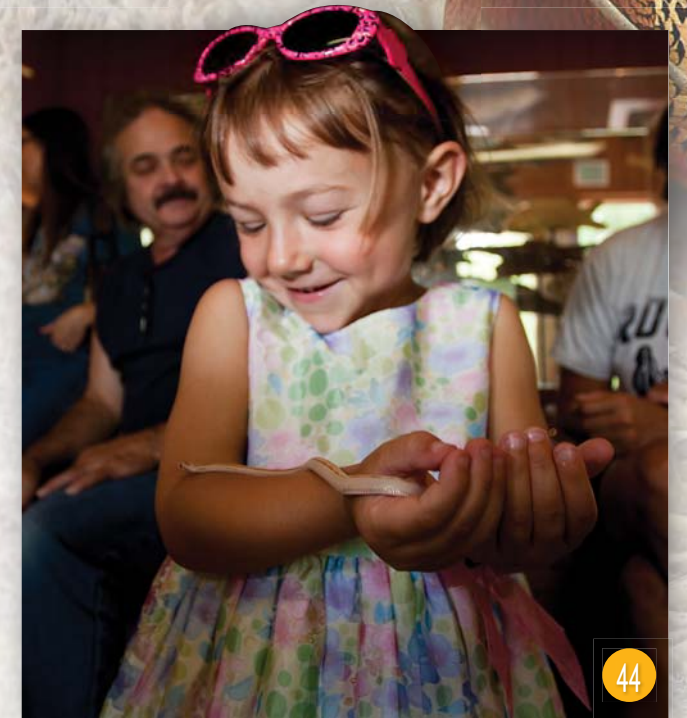
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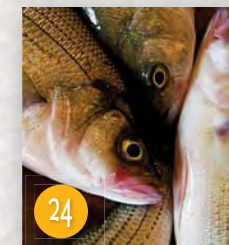
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ON THE WEB...

Art Meets Taxidermy

BY OLIVIA JOHNSON

Grand Island taxidermist Dustin Harrie provides a very personalized option for his clients. Visit NebraskalandMagazine.com to read this essay.



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Cover: Toadstool Geologic Park, located 30 miles north of Fort Robinson State Park, is a great location for a day trip when staying at the Fort during a late summer vacation (see the story on page 38). Photo by Jeff Kurrus.
Opposite: Black-eyed susans fill the frame in a roadside ditch in Sarpy County. Photo by Jeff Kurrus.



Max Meyer, of St. Paul, watches dad work cows near Ericson in May. Photograph by Brittni Meyer.



Susie Kelley photographed this "upside down" bald eagle on the Flying V Ranch near Niobrara on December 31, 2012. The bird remained in this position for quite some time scouring a nearby treeline for movement, said Kelley, before eventually flying away.

NEBRASKALand Visitor Letters

We want to thank all 36 readers who sent e-mails and letters for last issue's visitor, a **soldier beetle**, that was on **page 8**. See page 15 for the winner, rules and this issue's hint.

Outdoor Message Plates

When Warren and Ann Woledge of Lincoln load the kayaks on the roof of their car in the spring, they stay there all summer, coming off for quick trips to any of the Salt Valley lakes or bigger adventures to the Niobrara River or other Nebraska waters, or beyond the borders to the Boundary Waters Canoe Area in Minnesota. There's no better way to experience nature, Warren says, and brags about it frequently.

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.



PHOTO COURTESY OF KANE MILLER

Thanks for a great issue of *NEBRASKALand Magazine* this month. I enjoyed the "Boiled Omelets" brief; something my friends and I have prepared many times during Niobrara tubing trips. Also, I can't wait to try the recipe for Philly cheesesteak duck rolls – my family, friends, and are avid duck hunters, and I am always looking for new, tasty ways to prepare flying liver. Finally, I enjoyed the article about Nebraska lifetime permits. My wife and I just had the enjoyment of a new son being born April 24. I plan to purchase a lifetime hunt and fish combo permit so he can grow up, right by my side, enjoying what the outdoors has to offer. While reading this article I

noticed a "visitor" on page 38.

I have also attached a few pictures of the 30-foot custom duck boat my uncle, cousins and I hunt from at Santee. Nothing beats putting out decoys while my uncle brews coffee for us. Then, as the sun rises and birds start flying, my uncle spins around in his chair and fires up the stove. He fries up fresh scrambled eggs from his farm, mixed with sausage and hashbrowns.

At that moment, after some successful shooting, we sit back down to watch the sun come up and admire the ducks hanging in front of us. Then the smell of breakfast hits your nose, and you realize you are far away from everything – hunting with your family and friends. At that point, life can't get much better.

Kane Miller
Omaha, Nebraska

First glance at the insect on page 8 of your July issue brought to mind boxelder, milkweed and assassin. I'm somewhat leaning toward the assassin bug. I'll eagerly await your next issue.

Thanks for a wonderful magazine. I spent a week over the Memorial Day holiday visiting family and friends in the central and southeastern parts of the state. Next trip back will be lots of camping and fishing. My itinerary is coming from issues of your magazine.

R.M. Barclay
Petaluma, California

Several species of soldier beetles are found in Nebraska, including the **marginated soldier beetle** (*Chauliognathus marginatus*), hidden in last month's issue, and the very similar looking **goldenrod soldier beetle** (*C. pennsylvanicus*). The **marginated soldier beetle** can often be found feeding on pollen and nectar, and pollinating flowers, in the spring and summer. While most beetles have hard outer wings, those of the soldier beetles are soft and leathery, and they are sometimes referred to as **leatherwing beetles**. But don't let the soft wings fool you, these beetle have a hidden defense. They produce a toxin unpalatable to most other animals. Typical marginated soldier beetles are orange with a black stripe on the pronotum ("neck"), and a spot near the rear of each wing, but they can be highly variable. Some may appear nearly all black, and others all orange. They may be confused with lightning bugs, another soft winged beetle. But the head of a lightning bug appears hidden when viewed from above, and the head of the soldier beetle larva is predaceous, hatching in the summer to feed on aphids, grasshopper eggs and other soft bodied insects. They overwinter as pupae in the soil and leaf litter to emerge as adults in the spring.



Special thanks to Julie Van Meter, State Entomologist, Nebraska Department of Agriculture. Visitor image by Chris Helzer.
www.bugguide.net is a good site for identification

Send your comments to:
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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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U.S. Fish and Wildlife Service Proposes to Revise Critical Habitat for the Salt Creek Tiger Beetle

Courtesy of the U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service is seeking public input on a proposed revision of critical habitat for the rare Salt Creek tiger beetle (*Cicindela nevadica lincolniana*), listed as endangered in 2005 under the Endangered Species Act (ESA). While only a few hundred beetles remain in three small populations in Nebraska on less than 35 acres, this revision will guide conservation efforts for the species, which includes proposed critical habitat for 1,110 acres of saline wetlands.

The beetle is unique to Nebraska's eastern saline wetlands, the most limited and endangered wetland type in the state. Habitat loss associated with urbanization, road construction, stream channelization and agricultural development has greatly reduced the species' numbers and distribution, making it vulnerable to extinction.

In 2010, the Service designated 1,933 acres of critical habitat for the beetle along Little Salt Creek and Rock Creek in Lancaster County. As a result of a 2011 settlement agreement, we propose to revise critical habitat to include saline wetlands along Little Salt Creek, Rock Creek, Oak Creek and Haines Branch Creek that are functioning saline wetlands or have the potential to be restored to that capacity.

This designation of 1,110 acres is smaller than the previous designation, but contains sufficient suitable habitat to support recovery of the species, and includes two additional stream corridors that were not previously included which could support Salt Creek tiger beetle populations in the future. The goal of this designation is to support at least six populations of Salt Creek tiger beetles in the future. This designation will accommodate growth of existing populations and reintroduction of additional tiger beetle populations, as well as protect dispersal corridors and support sufficient prey insects to ensure adequate food for the species.

The Service has opened a 60-day period to allow the public and stakeholders an opportunity to comment on this proposal until August 5, 2013. During that time, the Service will also seek peer review from qualified members of the scientific community to ensure that our final decision is based on solid science. A copy of the proposed rule and more information on how to submit comments can be found at Fws.gov/mountain-prairie/species/invertebrates/saltcreektiger/index.htm or by contacting the Nebraska Ecological Services Field Office at 203 West 2nd Street, Grand Island, Nebraska 68801 or 308-382-6468. ■

A Look Back – August 1979

By Olivia Johnson

The August 1979 issue of *NEBRASKAland* featured this advertisement for the Nebraska State Fair's entertainment. Held August 31 to September 9, the 1979 fair boasted a commendable lineup of entertainers for its guests. A few of them included Kenny Rogers, Willie Nelson and The Oak Ridge Boys.

Advance tickets could be purchased by mail, and all concerts were held in the Bob Devaney Sports and Entertainment Complex, about which the ad was sure to mention the lure of air conditioning.

Thirty-four years later, the Nebraska State Fair's scene is much different, most notably its move to Grand Island in 2010. Headlining entertainment at the 2013 fair, which will be held August 23 to September 2, includes Trace Adkins, Eli Young Band, Mel Tillis and Chicago.

Advance Forecast: Fair & Fun

Kenny Rogers	Charley Pride	Steve Martin
Ann Murray	Larry Gatlin	Loretta Lynn
Johnny Cash	The Oak Ridge Boys	Edgar Winter
Willie Nelson	Ray Charles	Charlie Daniels Band

In concert, in person at the 1979 Nebraska State Fair.

Aug. 31–Sept. 9/Lincoln/State Fairgrounds

**Cut out this coupon now...
Cut out for Lincoln later!**

And save money in the process. When you order your show tickets in advance (insuring yourself the best seats), you'll save 25% on the cost of gate admission to the Fair.

Please send my advance ticket order form by return mail.

It details each of 9 great evening shows with 12 top stars appearing in the air-conditioned Bob Devaney Sports & Entertainment Complex. By ordering in advance you can save 25% on the outside gate admission and receive FREE tickets to the Nebraska State Fair INTERNATIONAL CIRCUS.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

TELEPHONE (AREA CODE) _____

Mail this form to: Tickets, Nebraska State Fair, P.O. Box 81202, Lincoln, NE 68501

NO PHONE RESERVATIONS

NEBRASKA Pheasants Forever & Quail Forever Gun-A-Week Raffle

**TICKETS
\$50
EACH**

Gun-A-Week ticket proceeds will go towards Nebraska's Youth Education Programs and Habitat Equipment plus State Habitat Programs that benefit everyone in the state.

In years past, the raffle has provided hunting vests to over 10,000 boys and girls who were introduced to the Nebraska Outdoors through your continued support!

Each ticket you purchase enters you into *ALL 104 separate gun drawings, lowering your cost to 48¢ per drawing.**

Average gun retail value is over \$900!

***Each ticket has the opportunity to win multiple times.**



To order tickets contact your local chapter or go to www.NebraskaPF.com

Travelogue

by Jeff Kurrus

Royal

Create history of your own or view some of Nebraska's most interesting history? That's the quandary you'll find when visiting the **Royal** area this time of the year. Therefore, give yourself a couple of days and do both.

First, drop a boat into 50-acre **Grove Lake** and search for **northern pike** in the 40-inch plus range. One of the state's best trophy pike fisheries, it may take no more than a spinnerbait to land the fish of a lifetime.

But if that fish doesn't come during the morning, visit **Green Gables Restaurant** in nearby Orchard to contemplate the afternoon's plans, which are numerous. You could re-visit Grove in search of toothy critters, largemouth bass or pan fish, trout fish at Verdigre Creek, or, if it's September, go for an afternoon **dove hunt**.

A dove hunt at **Grove Lake Wildlife Management Area** (WMA) has provided me some of my fondest memories of the area. While you may have to spend a little time locating the flight paths of these often hard-to-hit game birds, you definitely have time to locate them by prime shooting time in the last hour. If you're visiting with a group of friends and can't decide, half fish and half hunt. Someone will have a great story to tell when you re-group to primitive camp at the WMA.

Then, on the way back home the following day, drop by **Ashfall State Historical Park** and its, among other attractions, 17,500 square foot **Hubbard Rhino Barn**, where 3-dimensional skeletons of large prehistorical animals are displayed. Plus, you'll be able to witness paleontologists working to uncover even more alongside curator Mike Voorhies. For more

information, including park hours, visit Ashfall.Unl.edu.

Lastly, suggest this trip to a friend. I bet they'll be just as impressed as you.



Rhino Barn at Ashfall



Verdigre Creek trout fishing



Pike fishing at Grove Lake



BLT wrap and mac 'n cheese at Green Gables restaurant in nearby Orchard

What'd You Say?

Jenny Nguyen

With so many brands of ear protection products on the market, it can be difficult to choose which one is right for you. And as consumers in the recreational market, we often mistake higher price tags for better quality. According to Garry G. Gordon, audiologist and CEO of E.A.R. Inc., "Price doesn't always mean that the more you pay for something that it's better. The critical thing is that ear protection has to fit and be worn properly at the time of the exposure."

When hunting or shooting, hearing protection should never be overlooked. Sound intensities beyond 85-90 decibels can be detrimental. To gain an appreciation for the sound of gunfire, a simple .22-cal. rifle, depending on the length of the cartridge, comes in at around 140 decibels.

How do the foam, disposable earplugs stack up to more expensive models? "With the disposables, if you get them in your ear properly, they do work. But a lot of times you see people wearing earplugs that are sticking halfway out," said Gordon. Even if the box says that it's got a Noise Reduction Rating (NRR) of 30-31, that's laboratory data and assuming you get the earplugs in properly.

The consequences if you don't? Hearing loss and tinnitus (ringing of the ears), plus having to shell out four to six thousand dollars for a set of hearing aids that actually work. Instead, use the disposables properly or do additional research to locate the right type of protection for you. Regardless of your choice, do not fire a weapon without keeping your hearing in mind. ■



Nick Tramp wears hearing protection at the .22 rifle range at Ponca State Park.



Lower Platte River plover observed overwintering along the Gulf Coast of Florida.

A Celebrity Piping Plover

Lauren Dinan

A small town Nebraskan has become a star in south Florida. What started out as a typical rough-n-tumble childhood with three brothers and sisters at a small-town housing development in Dodge County, Nebraska, has become anything but typical for this ... piping plover.

Yes, the celebrity is a piping plover and is quite possibly the most popular Nebraskan in Florida these days. This plover hatched on June 13, 2011 and was banded as a three-day old chick by a research group lead by the Tern and Plover Conservation Partnership and the Commission's nongame bird program.

The piping plover color-banding project along the lower Platte River system began in 2008 with a total of 187 chicks and 73 adults banded to date. This piping plover was one of 31 plover chicks banded along the lower Platte River in 2011, but has made sure to make his color band combination known wherever it goes.

It was last observed on a lower Platte River sandbar in Nebraska as a 30-day old fledgling in late July 2011 before heading south on its first migration. The next time this plover was observed was in November 2011

on Bunche Beach near Fort Myers, Florida – 1,300 miles away from its home in Nebraska. During the winter of 2011-2012 this photogenic plover made itself well known at Bunche Beach to local birdwatchers and visiting wildlife photographers. It was reported on the same beach 15 times from November, 2011 to April, 2012.

It was not observed in Nebraska during the summer of 2012, but was reported back at Bunche Beach, Florida in August, 2012 and has been reported there 12 times this winter. Other plovers color banded along the lower Platte River in Nebraska have been seen overwintering on beaches surrounding the Gulf of Mexico and Atlantic Coast from the southern tip of Texas to the Florida Keys and up the Atlantic Coast to South Carolina – feathered ambassadors for Nebraska.

This piping plover has been observed and reported more than any of the 260 plovers banded along the lower Platte River. While only two years old, this plover's ambition took it from life in a small Nebraska town to fame in Florida. The question remains, will it ever feel a tug pulling it back its small town Nebraska roots and return to Dodge County to raise a family of its own? If so, hopefully viewers will continue to photograph this star and share the news with all of us. ■

A Brief History — Beating the Heat in 1906

Patricia C. Gaster

In the days before air conditioning, getting a good night’s sleep during the heat of summer was sometimes a problem. One obvious solution was to sleep outdoors. The *Norfolk Weekly News-Journal* on August 3, 1906, reported that many residents of that city pitched tents in their yards and spent sweltering summer nights under canvas. The *News-Journal* said:

“In many of the lawns of the city today there are pitched good-sized white canvas tents, within which are cots that hold in slumber every night tired human frames that enjoy the coolness of out-of-doors, tired brains that find absolute rest in the stimulating night air and hungry lungs that fairly eat up the ozone that is to be had in larger quantities than are possible within doors.”

Sleeping outdoors wasn’t considered old-fashioned. In fact, it “has only been in vogue here for two or three years” and was winning many new converts.

“How do you feel since sleeping out of doors?” was asked of a man who has been at it for some weeks. ‘Much better,’ he said. ‘I sleep more soundly, get more rest and wake up in the morning feeling like a prizefighter. Indoors I had a hard time getting to sleep before midnight and I was awake at 5 in the morning. In the tent I drop to sleep the minute I strike the cot and never wake up until I am called.’

“To what do you attribute the change?”

“Better air and more of it. In a room you get only what air can creep in through two or three windows at the most, and that comes largely in draughts so that you don’t dare get it directly. In the tent it is all fresh air, there are no such things as draughts and you inhale good, fresh, life giving ozone all night long. I am going to keep at it until the snow flies, and I know I shall feel much hardier and much better in every way for it.” ■



Two couples seated in front of their tents sometime between 1907 and 1917.

NEBRASKA STATE HISTORICAL SOCIETY



PHOTO COURTESY OF THE NEBRASKA STATE FAIR

The Nebraska State Fair

Olivia Johnson

In 2010 it was big news when the Nebraska State Fair moved to Grand Island after 109 years in Lincoln. Although mixed feelings surfaced, the event is experiencing major success that only seems to be increasing.

When asked if they would recommend the fair to family and friends, 93 percent said yes in 2010, 94 percent in 2011 and 95 percent in 2012.

Joseph McDermott, executive director of the fair, stated, “The vast majority of people who come to the fair in Grand Island are excited about it and like what they see and feel they are getting value for their dollars. The first three have been spectacular. We know we need to keep the programming fresh

and the facilities clean and well maintained to keep people coming back, and that’s our goal every year.”

And the facilities have certainly proven to be one of the new location’s most redeeming qualities. “We were able to design the fairgrounds from scratch,” McDermott added. “Due to this we have one of the premier fairgrounds in the country.” The facilities also get used for other purposes during the off-season, including a national convention last March.

Another factor that has improved with the move is the large group of volunteers organized by the Grand Island Chamber of Commerce. Cindy Johnson, president of the Chamber, stated, “Grand Island is known as

a caring, sharing and volunteering community and the Nebraska State Fair volunteers are a good example of why that is true. Volunteers greet, welcome, provide directions and assist fair staff and talent. Last year, there were approximately 900 volunteers who donated more than 12,000 hours of their time.”

If you’re unsure about visiting the fair, McDermott said this: “It’s an entirely different fair and fairgrounds. There’s entertainment at every corner, and some of the best food around. There’s just a lot to see and do, and it’ll take you more than a day to do it.”

Whether you’ve been to the fair in Grand Island every year since its move, or if you haven’t seen it yet, visit this year August 23 to September 2. ■

Women’s Outdoor Weekend

Grab your best girlfriends for a weekend of outdoor fun and learning!

October 4-6, 2013

NEBRASKA
— GAME & PARKS —

See You Out There

To learn more visit NebraskaBOW.com
or email peggy.kapeller@nebraska.gov

Thermacell Outdoor Lantern

Eric Fowler

I’ve had the chance to test a new version of a product I’ve sworn by since 2008, and the Thermacell Outdoor Lantern measures up just as good as the original, keeping mosquitoes at bay on my deck in Lincoln and on another in Minnesota while providing enough light to see my dinner.

Thermacell products use a butane flame to heat a pad impregnated with a patented allethrin, an artificial version of a natural insecticide found in chrysanthemum flowers. I first followed a friend’s recommendation and picked up a Thermacell while doing photo blind work on the Platte River, hoping to catch a river otter. I was amazed to see the mosquitoes instantly turn tail as

they approached the blind’s mesh windows. Whenever I stepped away from the blind, I was attacked. I was sold. The following summer I thought the skeeters might pick me up and carry me back to their nest while walking across a wet meadow to a spot where I hoped to photograph elk cows and calves feeding in the evening. As soon as I plopped my chair down in a fencerow to wait, the invisible force field the Thermacell provides took effect and I didn’t see another skeeter until the sun set and I headed back to the truck.

Now I can use the lightweight lantern, with 8 LEDs powered by 4 AA batteries, to cast a light on whoever



is sitting across the table enjoying a wonderful summer evening with me on the deck or at the lake, or to illuminate the fish-cleaning table. And I won’t have to wash off bug spray DEET when I call it a night. ■

PHOTO BY ERIC FOWLER

Czechs in Nebraska: A Heritage that Lives On

By Olivia Johnson

Nebraska is one of the most “Czech” places you’ll find – well, outside of the Czech Republic, of course. Between April and October each year there is a Czech festival occurring somewhere in the state almost every month. Since they began arriving in Nebraska around the end of the nineteenth century, Czechs have left a lasting effect on the livelihood of many people and communities across the state that’s still present today.

Czechs began immigrating to Nebraska between 1860 and 1880 for various reasons. Life was difficult in Czechoslovakia due to political and religious conflicts, lack of personal freedom, overpopulation and poor soil for farming. According to David Biroczi in his writing on the Czech presence in modern America, “Many Czechs were convinced to emigrate in their homeland by American railway agents who looked for people to settle along the new railways.”

However, many Czechs were specifically drawn to Nebraska for other reasons. Rose Rosicky writes in her 1929 book, *A History of Czechs in Nebraska*, that Czech newspapers played a major role in bringing Czechs to Nebraska. These papers promoted “good” areas and were a gateway through which the non-English speaking Czechs could find desirable areas in the U.S. And, as many Czechs had an agricultural background and desire, they were led to Nebraska.

Rosicky also mentions several perks available to the Czech immigrants. There were laws in place that allowed the new immigrants to obtain tracts of land by following government regulations.

The Homestead Law, for example, allowed Czechs who lived on a piece of land for six months to purchase it for \$1.25 an acre. Once Czechs arrived in Nebraska and became settled, they wrote to their family and friends back home encouraging them to join, which led to an even greater number of immigrants.

“Nebraska, of all our states, contains the largest number of Czech farmers of the first generation (born in Europe), or one-fifth of all who live in the United States. This is in accordance with the report of the Immigration Commission,” Rosicky stated in her book. Dr. John A. Habenicht wrote a history of Czechs in the U.S. in 1904 and estimated 57,000 Czechs living in Nebraska. He broke down his distribution by counties, which showed the highest number of Czech families residing in Butler, Colfax, Douglas, Saline and Saunders counties. Over a century later, Habenicht’s calculations still stand as fairly accurate.

The various chapters of the Nebraska Czechs Incorporated still annually hold vibrant cultural festivals across the state. Perhaps the most well known of these festivals, Wilber Czech Days, always kicks off the first weekend in August. Wilber, the Czech Capital of the U.S. as designated by Ronald Reagan in 1987, has a population of about 2,000, but that expands to roughly 40,000 during its festival each year. The festival sponsors the Miss Czech-Slovak U.S. Pageant, and offers plenty of traditional music, dancing, and food, like beloved kolaches which are baked by the thousands.

Beyond the festivals, hints of Czech heritage are statewide. Many Nebraskans have Czech last names that have endured through the generations and continue to carry on. The University of Nebraska-Lincoln has continued to offer Czech as a foreign language for more than 100 years. Dedicated students, instructors and the Czech Language Foundation have ensured the endurance of the unique language program.

Being both a proud Czech and a proud Nebraskan has proven to go hand-in-hand for many. It takes a special heritage to endure so strongly throughout so many decades, and as festivals like Wilber Czech Days only seem to be growing each year, the future continues to look bright for the Czechs of Nebraska. ■

PHOTO BY HEIDI HOFEMAN, LINCOLN JOURNAL STAR

PATH

Eric Fowler

About 11,000 acres on 40 sites scattered throughout Nebraska provide a unique opportunity to introduce youths to hunting and fishing through the Passing Along the Heritage program (PATH).

Only youths age 17 or under can hunt these areas. This allows their mentors to focus their attention solely on teaching, safety and making the hunt enjoyable. Mentors can wet a line with the youths at the fishing sites. The properties can be reserved, so the youth and mentor can be assured that they will have the field, woods or waters to themselves for the day.

“We’ve got a lot of good areas and they don’t have much hunting pressure,” said Caroline Hinkelman, who oversees the program as public access coordinator with the Nebraska Game and Parks Commission. “We’ve gotten a lot of good feedback from mentors who have taken youth out. They come back year after year because they are seeing a lot of wildlife and harvesting the species they went for.”

The sites are located in the Panhandle, south-central and southeastern Nebraska, including several on the Platte River, and offer deer, wild turkeys, upland game or waterfowl hunting. Seven sites located at Lake Wanahoo State Recreation Area north of Wahoo get the most use, but Hinkelman said there is room for many more youths on the remaining areas.

PATH is a partnership between the Commission, the National Wild Turkey Federation, the National Shooting Sports Foundation and the landowners who open their land to youths for the program.

The sites are listed and can be reserved on the Commission’s web site. The days of the week or times of the years each site is open may also vary. To learn more, visit OutdoorNebraska.org and search for PATH. ■



Bill Hancock and his son, Billy, hunt pheasants on a PATH site at Lake Wanahoo State Recreation Area.

PHOTO BY ERIC FOWLER

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What You Should Probably Read

Jeff Kurrus

“There are few topics that lend themselves to both a serious examination and playfulness,” writes Bill Adler, Jr. in his opus to every birder who has spent time trying to thwart squirrels away from feeders.

In his book, Adler is assisted by biologists, historians and practical birders who share knowledge about squirrels to educate and entertain the reader. While not as funny as it wants to be in parts, *Outwitting Squirrels* is relevant in its ability to teach about these cunning creatures. ■



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.

August 1
Squirrel hunting season opens

August 1
Fish for Millions Winners to be announced

August 3
Buffalo Cookout Niobrara State Park (SP), Niobrara, 6 p.m., 402-857-3373

August 3
National Park Service Outdoor Event, Niobrara SP, Niobrara, all day, 402-857-3373

August 3-4
Living History Fort Atkinson State Historical Park (SHP), Fort Calhoun, 402-468-5611

August 4-9
Nebraska Star Party Merritt Reservoir State Recreation Area (SRA), Valentine, 402-376-3320

August 5
Pistol League Platte River SP, Louisville, 402-234-2217

August 7
Family Fishing Night Birdwood Lake, North Platte, 6-8 p.m.

August 8
Family Fishing Night Mormon Island SRA, Lake No. 1, Grand Island, 6-8 p.m.

August 8-10
Music Jamboree Lake Minatare SRA, Minatare, 308-783-2911

August 9
National Park Service Campground Program, Niobrara SP, Niobrara, 7 p.m., 402-857-3373

August 9-11
Northern Ponca Pow-wow Niobrara SP, Niobrara, 402-857-3373

August 9-11
Becoming an Outdoors-Family Workshop Fort Kearny SRA, Kearney, 402-471-5547

August 10
The Night Sky Stargazing Event at Wildcat Hills Nature Center, Gering, 308-436-3777

August 13
Family Fishing Night Lake Halleck, Papillion, 6-8 p.m.

August 14
Beyond Becoming an Outdoors-Woman Shotgun class, Platte River SP, Louisville, 6-9 p.m., 402-471-5547

August 15
Family Fishing Night Holmes Lake, Lincoln, 6-8 p.m.

August 15
Bullfrog season opens

August 16
Stargazing Eugene T. Mahoney SP, Ashland, dusk-11 p.m., 402-944-2523

August 16-17
Women in the Outdoors Platte River SP, Louisville, 402-471-5547

August 17
Color for a Cause 5K Run Fort Kearny SRA, 9 a.m., Familyadvocacynetwork.com

August 18
3-D Archery Shoot Lake McConaughy SRA, Ogallala, 308-289-6509

August 20
Archery antelope hunting season opens

August 21
Beyond Becoming an Outdoors-Woman Shotgun class, Platte River SP, Louisville, 6-9 p.m., 402-471-5547

August 23
National Park Service Campground Program, Niobrara SP, Niobrara, 7 p.m., 402-857-3373

August 24
Lewis and Clark Heritage Day Ponca SP, Ponca, 402-755-2284

August 28
Beyond Becoming an Outdoors-Woman Shotgun class, Platte River SP, Louisville, 6-9 p.m., 402-471-5547

August 30
Nebraska Game and Parks Board of Commissioners meeting, Valentine, 8 a.m.

August 30-September 3
Hobie Fleet 61 Regatta Lake McConaughy SRA, Ogallala, 303-359-4275

August 31
Buffalo Cookout Niobrara SP, Niobrara, 6 p.m., 402-857-3373

August 31-September 1
Living History Weekend Fort Atkinson SHP, 402-468-5611

September 1
Sidewalk Chalk Art Niobrara SP, Niobrara, 10 a.m., 402-857-3373

September 1
Hunting seasons open for many small game species. Visit OutdoorNebraska.org for complete list.

September 7-October 12
Roger G. Sykes Outdoor Heritage Education Complex open Saturdays and Sundays, Platte River SP, Louisville, 10 a.m.-4 p.m., 402-234-2217

September 13
Stargazing Eugene T. Mahoney SP, Ashland, dusk-11 p.m., 402-944-2523

September 14
Night Owl 5K Run Niobrara SP, Niobrara, 8 p.m., 402-857-3373

September 14
Feathered Friends Birding Hike Wildcat Hills Nature Center, Gering, 308-436-3777

September 14-15
Walleye Tournament Lake McConaughy SRA, Ogallala, 308-726-2368

September 15
Statewide fall turkey hunting season opens

September 15
Multiple big game archery seasons open. Visit OutdoorNebraska.org for complete list.

September 16
Final day of participation in the Great Park Pursuit

September 21
Muzzleloader antelope hunting season opens

September 21-22
Missouri River Outdoor Expo Ponca SP, Ponca, 402-755-2284

September 21-22
Applejack Festival and Fine Arts Show, Arbor Lodge SHP, Nebraska City, 402-873-7222

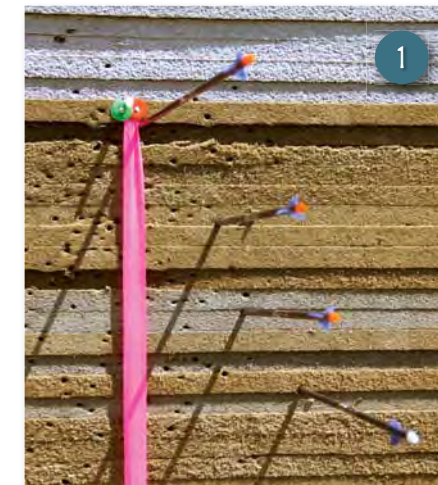
September 28-29
Becoming an Outdoors-Family Adventure Camp Camp Kateri, McCool Junction, 402-471-5547

Center Shot – Setting Your Bow for Perfection

By Nebraska Outdoor U!

Finding the “Center Shot” of your bow isn’t just about finding the exact center of the bow. For a correct center shot, make sure the center of your arrow rest lines up with the path your string travels when you release it.

Hang a string on your target with a weight on the bottom so it is perfectly up and down. Place a small sticker towards the top of your string for something to aim at. Using your existing 20-yard pin, step back 20 yards from the target and shoot an arrow at the sticker. Don’t worry about where the arrow hits.



Move straight back to 30 yards and using your 20-yard pin, shoot an arrow at the sticker. Repeat this process at 35 and 40 yards making sure that you are using your 20-yard pin and firing at the sticker.

More than likely your arrow pattern will look like “/” or “\” (see figure 1). Pick a direction (in or out), and move your arrow rest 1/16th of an inch and start the process over. If after the second round of shooting your arrows are getting a straighter “|” great, keep moving the arrow rest in that direction. The goal is to have all of the arrows form a parallel line to the weighted string.

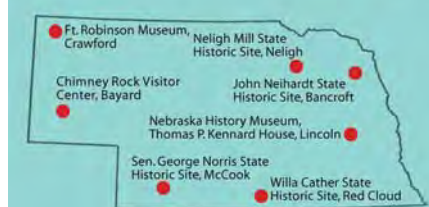
When the arrows you shoot are parallel to the string (see figure 2), lock down your arrow rest (see figure 3). You have now found the correct center shot for your bow and your shooting style. Now, adjust your windage on your sights so that the arrows are hitting the string. If your arrows are to the left of the string, move your sight to the left. If your arrows are to the right of the string, move your sight to the right. Once your arrows are hitting the string, lock down your windage adjustment on your sight. Your center shot and windage are set for your bow and how you shoot.

Remember, just because you set the center shot for your target arrows, it doesn’t necessarily mean it will be the same for your hunting arrows. You may want to try this with one practice broadhead to make sure that your center shot is still the same.

Visit us at OutdoorU.org for more information. ■



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NEBRASKAland Visitor Winner and Hint



Last issue’s winner of the Visitor drawing was Robert Chaloupke of Lincoln, Nebraska, who found the **soldier beetle** on page 8. Readers are encouraged to contact *NEBRASKAland* within 10 days after this issue’s publication with the correct page number and name of this issue’s “Visitor” – a bug found in Nebraska that just happened to find its way onto one of the pages.

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 5, 6, 44, or 58.

Nature in Monochrome

A Different Photographic Option

Photos and text by
Michael Forsberg

Early this spring I was standing in a photo blind along the Platte River watching cranes return for a midday respite to drink, loaf and bathe. The scene was Disney-like but the light was anything but – a harsh squinting noon sun with no clouds. As a photographer I knew a color photograph would wash out and fail miserably in this situation, so I was content to just be present among these ancient birds.

Then I remembered the digital camera I was using had a “monochrome” setting (many digital cameras do today) that would render the scene in black and white. I had never tried it before and had nothing to lose so I switched over to the “MC” setting on the Nikon, took a shot and looked at the back of the camera. Interesting. I took another, then another. In this high contrast light of sun, water and shadow I was beginning to look at these birds I have photographed a million times in a way I never had before.

Now the images were no longer about their gray bodies against the blue sky or the tawny-colored prairie grasses along the banks or the scarlet red accent of their foreheads. It was about how their thin lines organized themselves on the river, the intricate textures in their wings and how their prehistoric forms looked descending from the blank sky above. When one crane flew over the top of the blind nearly blocking out the sun I shot a picture that revealed all the layers of feathers on the underwings of the bird in a brand new way. I knew I had stumbled onto something special and a new tool of expression.

Sandhill crane in flight, Platte River Valley, central Nebraska.



Eurasian collared dove and starlings, Utica.

Like most species, humans are hard-wired to live in a world of color, and scientists believe human sight can distinguish roughly 10 million colors and tones.

So if we are hard-wired this way, why does a black and white image have such appeal?

Perhaps it is because sometimes the picture is not about color at all. Sometimes it is simply the interplay of light and shadow that in turn accentuates pattern, texture, contrast and form. Perhaps it forces us to look at the content of a photograph where color could otherwise be a distraction. Perhaps a black and white image forces us to look at the world in another way.



Turkey vultures on a grain silo, Geary County, Kansas.



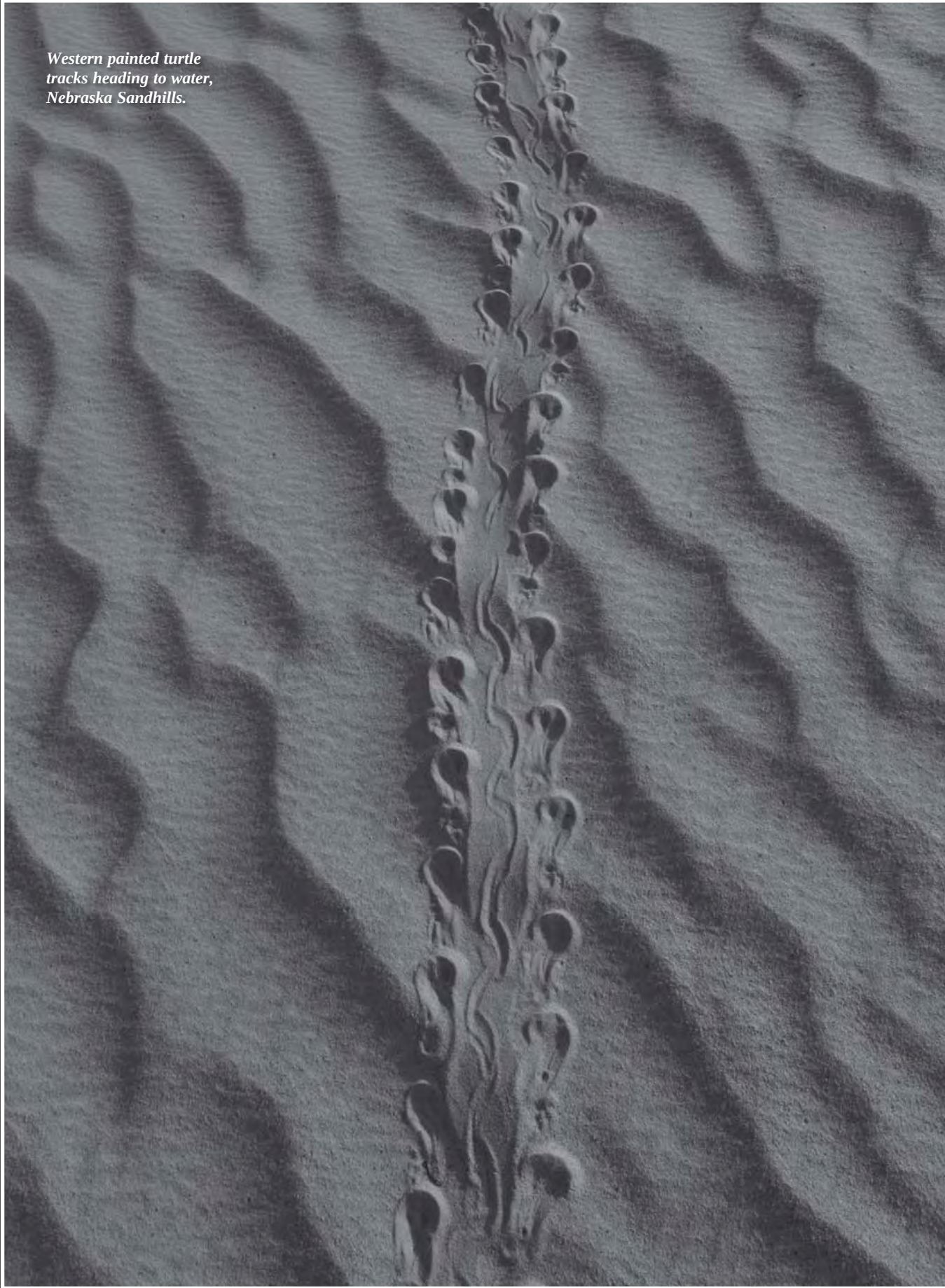
Mushrooms and fallen logs in springtime, Indian Cave State Park.

Black and white was the way early photographers and explorers brought us our first glimpses of the untamed wilderness and native cultures in the American West. It was the way photographers of the Farm Security Administration in the 1930s documented the Dust Bowl years. It brought us the harsh reality of World Wars I and II and the Korean War. Even after color increasingly leaked onto the scene with photographers like Larry Burrows documenting the Vietnam War in the 1960s and becoming commonplace by the early 1970s with the



Black-footed ferret at night on a prairie dog town, Buffalo Gap National Grassland, South Dakota.

*Western painted turtle
tracks heading to water,
Nebraska Sandhills.*



help of color TV, black and white was still often the choice of photojournalists who could shoot it in low light conditions or communicate a starker reality that forced us to look squarely at the photograph's content and cause us to think.

Today, black and white digital photography is increasingly being used as a tool in wildlife work, even at night when color doesn't matter with the use of infrared. From a practical standpoint, now you can give up your noon nap under a shade tree when the light is harsh and shoot images all day long from before sunrise to after sunset which for those obsessed by photography can be both a blessing and curse.

Maybe legendary black and white photographic landscape masters such as Ansel Adams and Elliot Porter, or documentary photographers like Yousaf Karsh, would roll over in their graves with the novice simplicity of pushing a button and recording a black and white image instantly

in a digital frame. Pushing a button is certainly not a substitute for the high craft and artistry of traditional black and white photography that helped move policy and public sentiment for some of the most important issues of our time, such as Adams' conservation work in the Sierra Nevada. Nor does it substitute for the high end digital darkroom work converting color to black and white that is being done by many photographers today.

But there is something to be said about capturing a black and white image in an instant whether it's a bison roaming across a wide prairie or a painted turtle making track art in the sand. At the very least, black and white opens a window into another form of visual expression available to all of us who carry a camera in hand, and can lead us on a new visual journey of simplicity, appreciation and discovery in what often is not a black and white world. ■



Bison bull in a prairie at twilight, Nebraska Sandhills.

Free to Roam

Wildlife-friendly fence helps animals move between habitats while reducing maintenance costs.

By Justin Haag

The saying goes that good fences make good neighbors. Depending on the type of fence, that adage can also apply to the wild animals that share the land. As European settlers spread westward throughout the American West in the 1800s, so did fences. Those barriers have played a critical role in the nation's success, but often have been a hindrance to the daily movements and seasonal migrations of wild species that once roamed without obstruction.

A Gruesome Death

It's not surprising that wildlife officials promote the benefits of installing fence designed with the movement of wildlife in mind. They have observed the carcasses of countless animals that jumped short and died a slow death hanging with their legs wrapped in the top wires of a fence.

"We get a lot of calls to pull wildlife out of fences and a lot of this suffering could have been avoided if the fence would have been constructed a little differently," said Greg Schenbeck, a Nebraska Game and Parks Commission biologist who works in the Pine Ridge wildlife management headquarters near Crawford.

Not only is entanglement a consideration, but also is the extra effort animals expend to negotiate fences, especially during winter when they need to conserve energy. Having a fence easier to negotiate helps animals conserve energy, whether it is a heavy late pregnancy doe or a recently born fawn that has to cross through or under a fence to keep up with its mother. Deep snow only makes fence passage more difficult.

Posing perhaps the greatest challenge to wildlife is woven wire fence, also known as "sheep fence." Woven wire fence employs both vertical and horizontal strands in a mesh pattern, allowing only relatively small animals to cross through the small square gaps instead of jumping the fence. Such an obstacle may prolong a herd's stay at one location.

At least twice in recent decades, large herds of Nebraska

pronghorn have been found dead beneath snow after they encountered an impassable length of woven wire during blizzards.

Schenbeck said a lot of woven wire fences were constructed in the early 1900s for grazing domestic sheep, but like sheep production, the amount of woven wire fence continues to decline. While woven wire continues to be phased out in many places, much still stands.

Getting 'Friendly'

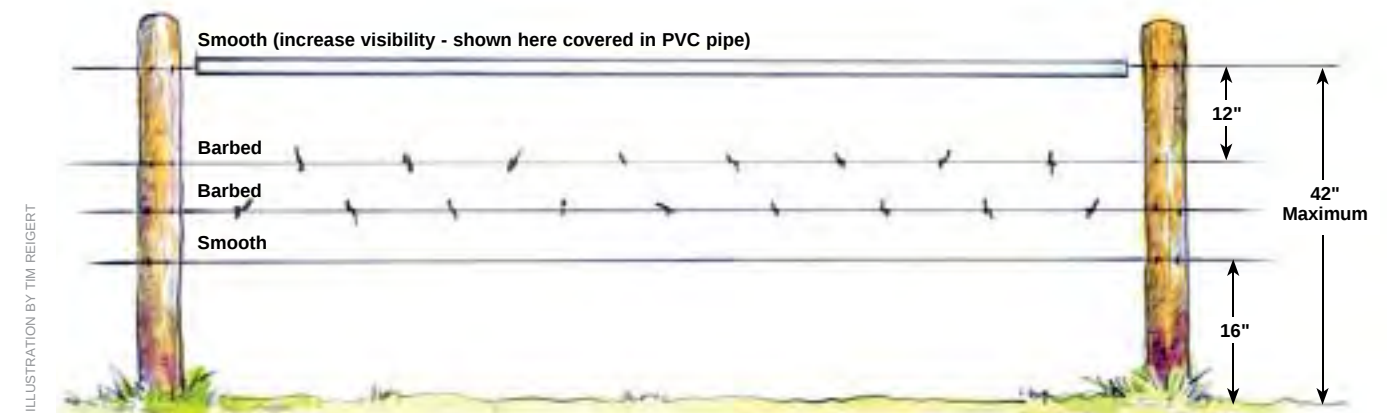
"Wildlife-friendly fence," as it has been named, gives big game animals a better chance at moving between areas without harm or excess spent energy. It also results in less maintenance costs for the landowners. If a fence is designed with wildlife movement in mind, big animals are less likely to damage the fences.

However, officials are quick to point out that there is no one-size-fits-all answer when constructing wildlife-friendly fences. The written standards vary between federal and state agencies, and what's best in one area may not work well in another.

In eastern Nebraska, one of the major considerations is the sizable population of white-tailed deer and a high volume of vehicle traffic, prompting officials to experiment with tall meshed fence along Interstate 80 with crossings at road underpasses. In the more sparsely populated Panhandle, wildlife officials deal with movements of a wider range of large animals,

including two species of deer, pronghorn, bighorn sheep, and one of the most challenging species of all, elk.

Todd Nordeen, the Commission's northwest district wildlife manager, said his staff usually builds fence with a smooth bottom wire 16 to 18 inches from the ground, a space that allows for pronghorn to follow their instincts to crawl under. The top wire is placed about 40 inches high, a jumpable height for most big game animals. The fence has just one or two middle wires, placed at least one foot below the top to reduce chances of catching legs during an animal's jump.



The ideal wildlife-friendly fence consists of a smooth bottom wire, approximately 16 inches from the ground; two barbed wires above that, the first about 22 to 23 inches from the ground and the second 30 to 31 inches; and on top, a smooth wire 40 to 42 inches from the ground. The top wire should have increased visibility. Options include covering this top wire with PVC or flagging it.

Proponents of such a design say it not only helps wildlife, but usually does a good job of holding cattle. Schenbeck noted that most of the cattle producers in northwestern Nebraska are cow-calf operators with mainly heifers and calves on their land. If a calf makes its way under the fence, it will usually return to its mother without much trouble, Schenbeck said.

Commission staff members say wildlife safety is just one consideration to building a fence, and will occasionally stray from their guidelines. Along roads with high traffic, for instance, they will often yield to human safety and put a barbed wire on the bottom instead of smooth.

"Common sense has to prevail along with the wildlife considerations," Schenbeck said.

Regardless of design, Nordeen said it's important for wires to be tight. Loose wires with their probability of wrapping around wildlife and livestock are especially problematic.

Another component for building an effective wildlife-friendly fence is visibility, and special measures can be taken in areas with frequent animal movements. A length of plastic pipe threaded over the top wire helps make the fence more noticeable for deer and elk, two species known for having poor depth perception. Making a fence more visible not only helps large hoofed species but also aids birds – especially species of night-flying raptors that frequently collide with wires while pursuing prey.

Some might assume a tall fence is best for deterring elk, but officials say a shorter one may trigger elk to jump over the obstruction instead of charging through or leaning against it. Braided cable instead of single-strand wire at the top will help the fence withstand a collision with an elk's back legs.

"Adult elk are lazy and big, and they'll drop their hind legs and bust those top two wires a lot," Nordeen said.

A Spirit of Cooperation

Commission employees continually gain awareness of what works best by putting designs to practice in wildlife management areas and other agency properties throughout the state. They often work with neighboring landowners by using cost sharing programs to install fence. In the Pine Ridge, for instance, the agency is working with landowners

to rebuild or replace fence that was destroyed or damaged in the 2012 wildfires.

"There are many considerations besides wildlife when it comes to building fence. We just hope that folks will keep wildlife and big game in mind when thinking about fencing," Schenbeck said.

Whether or not a good fence has the power to make a good neighbor, Nebraska wildlife officials are doing their best to at least make them friendlier. ■



A ewe bighorn sheep stands trapped in a barbed-wire fence in northwestern Nebraska. Commission staff often get called to respond to animals stuck in fences.



A deer carcass hangs on a fence along Sowbelly Road in Sioux County. As deer cross conventional barbed-wire fences, their hind legs often become entangled, rendering them helpless and ensuring a slow and painful death. Nebraska Game and Parks Commission officials encourage the installation of wildlife-friendly fence designs.

Feathered Fish Finders

Gulls often lead to hungry white bass

Text and photos by Eric Fowler

Fishing can be a shot in the dark, especially if you don't possess one of those fancy, schmancy HD fish finders with side scan sonar and GPS. Okay, even if you have one of those electronic gizmos, it's still a crap shoot. You cast or troll where you think there are fish, hope they will see your bait or lure and then actually be hungry enough to eat it. We wouldn't blindly throw bullets into the woods hoping to get a deer, but with fishing, it's that mystery, and the thrill that comes when we do occasionally outsmart the fish, that keeps us coming back for more.

There is, however, one surefire case when there is no doubt where the fish are and if they're hungry: the annual feeding frenzy that occurs on many large Nebraska reservoirs when white bass are feeding on the surface. At times it is such a melee that the water appears to boil. You almost pity their quarry – the gizzard shad – which are being attacked from below by the bass and, on some days on some lakes, from above by hungry gulls, feathered fish finders which might as well be a neon sign flashing the message: "Fish Here!"

The top-water action starts in late July, when the young-of-the-year gizzard shad, now one to two inches long, form large schools in deeper, open water. Not ones to miss an easy meal, most of the predators stocked in these reservoirs follow the schools of shad throughout the dog days of summer. One such predator, the white bass, also has a propensity to form large schools. When these schools of shad and white bass meet, the action

can be fast and furious.

Schooling white bass will surround a school of shad and either push them to shore or to the surface of the lake. Witness this phenomenon and you will sometimes see the frightened baitfish leaping out of the water in an attempt to escape. When things get really serious, the bass might even follow, launching their entire bodies, but more often just their backs, above the surface.

On a calm day, these boils can be visible from a long distance. If you're in the mood for a tasty dinner or just some fun, get there quick. The action might last for only seconds, but when the bass are really on their game, it can last for several minutes. When gulls, primarily ring-billed and herring gulls, are getting in on the action from their elevated vantage points, you can spot the action from miles away through binoculars.

When the action is on top, approach the edge of the school with your electric motor and send lures you can throw a mile into the fray. Kastmasters are a favorite spoon and Rat-L-Traps are a good crankbait. Don't go barreling into the middle of the school with your gas motor. Not only will you push the fish down, you risk getting one of those aforementioned lures in the ear from an annoyed fellow angler.

There are plenty of fish that aren't on top, too. Vertically jigging slab spoons on the edge of a surfacing school can provide fast action. Tie a marabou jig two feet or so above your spoon and you can often double your fun and catch two fish at once.

There are several Nebraska companies building and selling slabs, half- to two-ounce chunks of lead with treble hooks on one or both ends, and other more sophisticated lures built to do the same thing, including Patterson's Reel Bait of Seward, with its Fergie Special and Lytle's Secret Lure both designed by Nebraska fishing guides, and John Boy Lures of Ogallala. The bait shop at your lake of choice will be stocked with the local favorite and tell you which color has been hot.

There isn't a better bet right now for white bass than Harlan County Lake. Last year, more white bass were harvested there – an estimated 112,000 – than in the rest of the state's reservoirs combined. More fish than that were caught and released. Second place went to Calamus Reservoir with

16,000 fish, a total that was considered good but not as good as it can be.

"This year was a great year for white bass," said Don Lewton, a retired bait-shop owner in Republican City, after what he considered a slow day on Harlan last August that only produced a half-dozen keeper-sized fish among 30 or so he and fishing partner Roger Foster caught. "Everybody caught hundreds of white bass. Of course they caught a lot of small ones, but they don't care. As long as they're catching fish they're just happier than hell."

Lewton said the only thing anglers haven't been able to consistently count on at Harlan these days is the flocks of gulls to point them to fish. "We used to chase them all over the lake and the fish would be boiling on top of the water," Lewton said. "We would get



Anglers troll through a flock of gulls feeding on gizzard shad pushed to the surface by schooling white bass near Harlan County Dam. When gulls are working the surface like this, the fishing is hard to beat.

Best Bets for White Bass

White bass can be found in most of the irrigation reservoirs in central and western Nebraska, but Harlan County Lake, hands down, was the state's top white bass water in 2012. Among the rest, here are the best bets. Each of these State Recreation Areas offers campgrounds and other amenities.

- **Calamus Reservoir:** Very good numbers of fish and plenty of keeper-sized fish. Some gull action.
- **Enders Reservoir:** The best of the southwest reservoirs, Enders has lots of white bass, including the highest percentage of 15-inch-plus fish of all lakes surveyed. Gull action can be good but is hit and miss.
- **Lake McConaughy:** Surveys don't tell the story here. While numbers aren't as high as they were historically and gull action is rare, the lake has quite a few 15- to 18-inch white bass now and good year classes are coming following high water in 2010 and 2011.
- **Swanson Reservoir:** Good numbers of white bass and a few big ones. Lower lake levels should concentrate fish this summer.
- **Others:** Davis Creek Reservoir, Gavins Point Dam Tailwaters, Lake Maloney, Lake Minatare, Medicine Creek Reservoir and Sherman Reservoir.



Don Lewton lands a white bass while fishing with Roger Foster on Harlan County Lake last summer.



tired of catching fish.”

Brad Newcomb, the Nebraska Game and Parks Commission’s southwest district fisheries manager, said a good gizzard shad hatch can lead to less action on top, and that may be what has been happening at Harlan in recent years. With plenty of shad to eat, the white bass don’t have to work as hard and don’t push as many to the surface. But they’re still there.

The gull action, if it is happening, is typically best from early- to mid-morning, Lewton said. It doesn’t take long for a flock to draw a crowd of anglers. “Invariably there’s got to be one guy that’s got to plow right through the middle of them and spook them down and then you got to wait for them to come up again,” Lewton said, lamenting the ethics of some who can cost other less zealous anglers fish.

But there are also plenty of other ways to catch white bass that don’t require following the

White bass await the fillet knife on the cleaning table at Lewton’s home.

gulls. Fishing picks up in May when white bass spawn in one of two places on most reservoirs: the rivers, streams or canal inlets that feed the reservoir or the rock rip-rap of the dam. After the spawn, white bass will disperse throughout a lake. In July, they will school up and start chasing shad, and will continue to do so into September, sometimes even October. This is when, like most anglers, Lewton starts searching the depths of Harlan with his sonar, looking for schools of shad. Wherever those are found, there are white bass to be had, and maybe even a wiper, walleye or catfish. Often, Lewton finds them in 13 to 15 feet of water.

The likely places to look for these schools are near ledges, points and wind-blown shores where water currents concentrate plankton that the shad feed on. “If you know the lake pretty good you know where the drop offs are,” Lewton said. “Most of the time, if the wind ain’t blowing, the things will stay right on a ledge and then you can just anchor right down there and jig for them and catch all of the white bass you want.”

Other anglers prefer to troll crankbaits or spinner rigs to find the white bass. Others drift to find fish.

However you find the fish, you will often find lots of them, which is one of the factors that makes white bass an excellent “family fish.” Being able to see the action on top, and being able to catch a lot of fish, is more than enough to keep all but the most ardent gamers interested. ■



Bomber slab spoon



Bucktail jig



Acme Kastmaster



Rat-L-Trap



Heddon Sonar Flash



Reel Bait Lytle's Secret Tail Spinner



Reel Bait Fergie Special



When white bass aren’t working the surface, anglers can find them by searching the depths for schools of gizzard shad.

What Now?

Text and photos
by Eric Fowler

Analyzing the Aftermath of the Missouri River Flood



ABOVE: Floodwaters above and below Omaha show as blue on this Landsat 5 image captured on June 30, 2011, the same day the photo at left was captured, showing those waters backed up behind the levees protecting Omaha's Eppley Airfield.

River is channelized and armored banks contain its flow to a narrow navigation channel, bottomland flooding occurred once again. Between Ponca and Omaha, there are only a handful of agricultural and municipal levees to contain the floodplain. At Fort Calhoun, water covered the entire 5-mile wide floodplain.

From Omaha to its mouth at St. Louis, federal or private agricultural levees line most of both sides of the Missouri River. Below the Platte River, flooding between the levees is nothing new, spilling over its banks in 2008 and 2010. But the levees weren't designed to hold back this much water for this long, and several breached. Two breaches at Hamburg and Percival, Iowa, allowed water to cover most of a 20-mile long stretch of floodplain, spanning its entire 7-mile width in spots.

Rearranging Things

Below Fort Randall and Gavins Point dams, which hold back sediment, clean water rushing through the dams during the 2011 flood scoured the bed of the unchannelized reaches of river below them, piling sand in massive sandbars 10 feet above the normal waterline.

In 2010, there was an estimated 400 acres of suitable sandbar nesting habitat for the federally endangered interior least tern and the threatened piping plover between Fort Randall Dam and Ponca. During the flood, there was almost no habitat other than two

For more than 100 years, man has been trying to tame the Missouri River. They've dammed it, channelized it and wrapped it with levees, hoping to shackle it enough that its nickname, the Mighty Mo, no longer fits. Two years ago, with record runoff raging down its course, the river once again showed everyone who's boss.

Much was written about the

\$2 billion in losses sustained to farms, homes, roads, businesses, parks and other floodplain belongings. Many called it damage, and when it affected real property, the term did fit. But what the river did to the land was not damage. Spilling over its banks and carving away land here and piling it there is what a meandering river like the Missouri is supposed to do. These natural processes are life to the river

and the fish, wildlife and plants that live around it, as natural as the water that feeds them. And in some cases, the flood was actually good.

Same Flood, Different Result

Six dams built on the mainstem Missouri River were designed to handle massive runoff from rain and snowmelt in the Plains and Rocky Mountains.

Officials with the U.S. Army Corps of Engineers, which manages the reservoirs and river system, were prepared to handle most of it in 2011. But no one was prepared for the year's worth of rain that fell in the upper basin states of Montana, Wyoming and the Dakotas that May. And rain kept falling in June.

The record runoff required the Corps to release more than twice as much

water through those dams than ever before, and continue those releases for months.

Between Fort Randall Dam and Lewis and Clark Lake, water filled almost the entire valley from bluff to bluff. Between Gavins Point Dam and Ponca, there was little overbank flooding. Those two reaches are unchannelized and semi-natural.

Below Ponca, where the Missouri

sandbars in the upper end of Lewis and Clark built by the Corps at great expense to benefit terns and plovers. Now, the Corps estimates there are more than 9,000 acres of sandbar habitat.

Similar to previous record flows in 1997, which also created thousands of acres of sandbars, terns and plovers responded with excellent nesting success due in part to a drop in predation that comes when nests are spread out. Annual surveys estimating

the number of chicks fledged in 2012 were up 40 percent for terns and 73 percent for plovers from 2010, stemming a downward trend that mirrored reduced acres of bare sandbars to the erosive action of the river and vegetation encroachment.

But the river’s scouring action was not all good news. Because it degraded the bed of the river, sand piled above the waterline or flushed downstream, causing water levels to drop 10 feet or more in some areas. Boat ramps

at Sunshine Bottoms and Mulberry Bend became inaccessible during low flows. The Ferry Landing boat ramp near Niobrara was also closed because the access road was washed out by the flood.

Other effects aren’t as easy to see, including the lowering of the water table in the valley which, for the most part, matches the level of the river. In the Verdel, Niobrara and Bazile Creek areas, where sediment buildup below the mouth of the Niobrara River has caused groundwater levels to rise since Gavins Point Dam was built in 1955, some wetlands are now dry.

The eight-foot drop at Ponca State Park was one of three things that affected two backwaters that had been restored there. Lower river levels meant less water in the backwater, making them less welcoming for fish. The flood also filled portions of the backwaters, including the mouths, with sand, making the north backwater, depending on the level of the river, “more of an oxbow lake than a backwater,” according to Jeff Fields, Ponca State Park superintendent. The most visible change following the flood was a new chute cut by floodwaters now connecting the north and south backwaters.

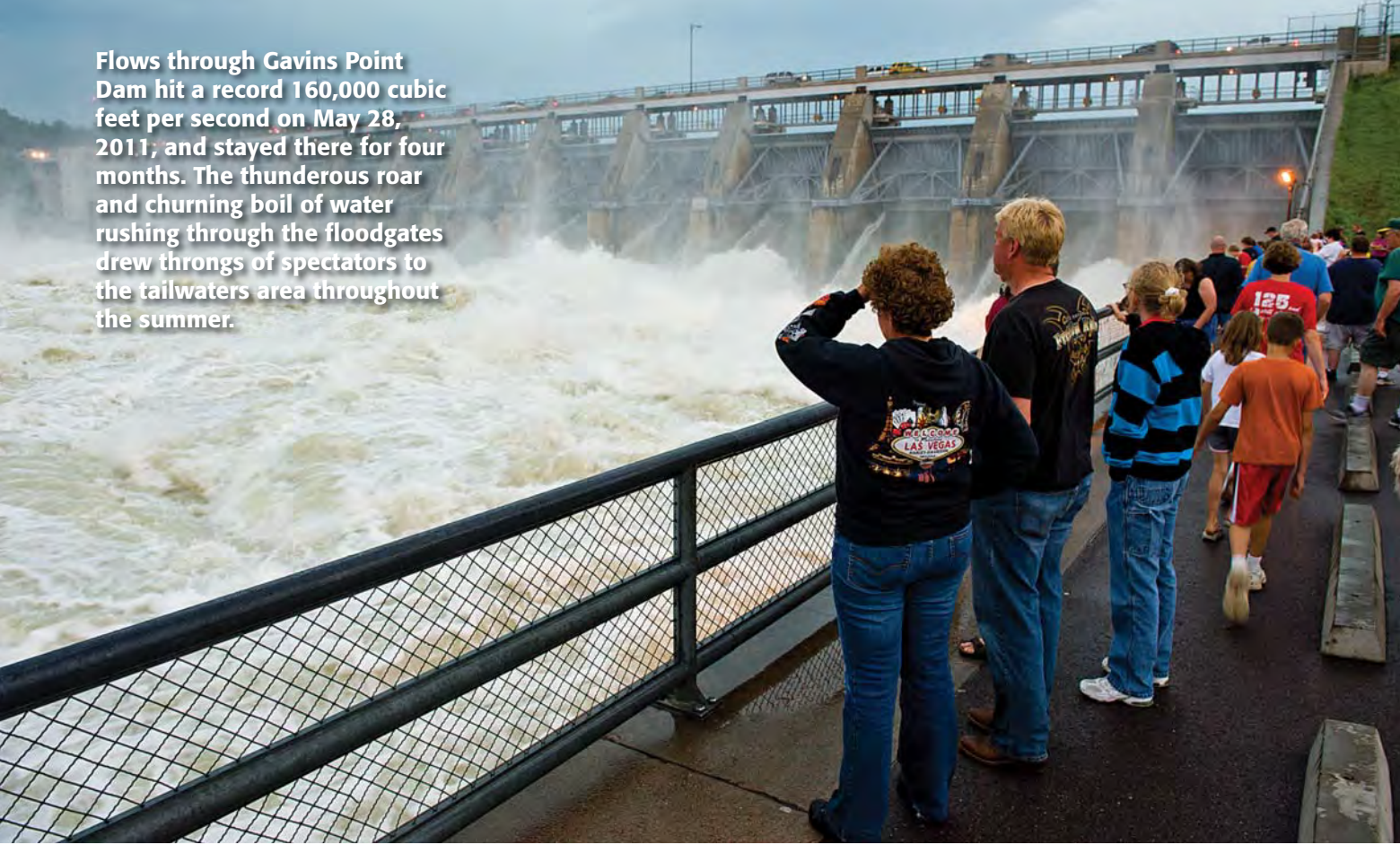
Of bigger concern now at Ponca State Park, however, is the future of the boat ramp. The main channel of the river, which hugged the Nebraska shore at the park before the flood, has shifted to the South Dakota side of the river, leaving a massive, half-mile long sandbar in front of the ramp. Commission officials are concerned the sandbar will migrate downstream and fill the shallow channel in front of the ramp, making it unusable. Therefore, plans are being made to build two ramps at the park later this year, one in the riverbottom campground and the other at the canoe launch at the upper end of Elk Point Bend 5 miles north of the main park.

Just as the sandbar at Ponca could move, the river, in time, will again rearrange the others, moving sand back to the bottom of the main channel. This will bring the “normal” water level back up, but it may not recover completely. Some of the sediment from above Niobrara is now part of the delta in the upper end of Lewis and Clark Lake and now extends a half-mile or



Floodwaters still filled the bottomland forest north of Omaha as the leaves turned in late September, 2011. Leaves on some flooded trees turned much earlier in the summer, a sign of the stress they were under.

Flows through Gavins Point Dam hit a record 160,000 cubic feet per second on May 28, 2011, and stayed there for four months. The thunderous roar and churning boil of water rushing through the floodgates drew throngs of spectators to the tailwaters area throughout the summer.



more farther into the lake than it did before the flood. And some of the sediment from above Ponca was flushed into the channelized reach and is now on the floodplain below Sioux City.

Farther downstream, however, the river carried a larger sediment load, much of it sand and soil scoured from riverbanks it pushed against and fields it rushed over. Cottonwoods lining the banks or crossing bends stopped sand like snow fences, leaving massive drifts as deep as the water was high. The fan of sand spread out across miles-wide bends, including Boyer Bend near Blair, where Boyer Chute National Wildlife Refuge is located. Below the Platte River, which continually feeds sediment to the Missouri, the splay of sand was massive at places like Schilling Wildlife Management Area and below levee breaches. The U.S. Geologic Service estimated at least 67,500 acres of bottomland were covered with at least a foot of sand.

In most cases, the sand deposited on the floodplain was plowed back into crop fields and it was business as usual for farmers in 2012. However, where sand was piled too high to plow through, some farmers went to great

expense to remove it. But there is some land that may never be farmed again, especially places where the river flowed swiftly across the floodplain. Ten miles north of Nebraska City on the Iowa side of the river, two holes scoured inside the levee are each more than 100 yards wide, measure a combined 1½ miles in length, and average 15 feet in depth. Other scour holes are up to 50 feet deep.

The flood did create quite a bit of this type of shallow water habitat, something the Corps and its state partners like the Commission have been working hard to restore in the river’s channelized reach. The Corps is also creating more, strategically excavating to rebuild levees to create wetlands while leaving the scour holes.

A Corps project below Decatur had lowered the height of a revetment, the rock and pilings protecting the outside of a bend, to allow water to flow over it, erode the bank and create shallow water habitat behind it. The flood, however, washed out several hundred feet of that bankline and scoured a hole more than 30 feet deep. While repairing the revetment and restoring the adjacent navigation channel, the

Corps is attempting to keep as much of this new habitat connected to the river as possible.

Chutes and backwaters restored through the Corps’ Missouri River Mitigation Program were affected by the flood in both good and bad ways in the channelized river. Chutes paralleling the river, such as Hamburg Bend Wildlife Management Area (WMA) near Nebraska City and Kansas Bend WMA near Peru, were widened so much it affected navigation. The Corps is now rebuilding inlets to restrict the flow, which Gerald Mestl, Missouri River program manager with the Commission, said is a good thing.

“The chutes actually got too big and the velocities and the depths were approaching what you would see out in the main channel,” Mestl said. “That’s not what we’re interested in from a habitat standpoint. We want diversity.”

Portions of chutes perpendicular to the river’s flow silted in and will have to be reopened. This was the case at Schilling WMA near Plattsmouth, where the first task was to rebuild the inlet that was washed out. The inlet to the backwater, which was also silted in, also had to be reopened.

Snags line a submerged sandbar in the Missouri River near Ponca State Park last August. The flood washed numerous trees in the river, providing valuable fish habitat and creating countless sandbars. This bar, however, threatens to close the park's boat ramp.



Life on the Beach

While the Missouri no longer functions like a natural river, the erosion and deposition that occurred during the 2011 flood are a natural riverine process that will benefit flora and fauna at least on a local scale.

“Rivers are constantly destroying and creating habitat at the same time,” said Gene Zuerlein, assistant administrator with the Commission’s environmental service division who has worked on Missouri River issues for decades. “That helps with the succession of plant communities.”

That succession is perhaps most visible in the forest, particularly the trees carved from flooded banks and deposited somewhere downstream. But while many trees like cottonwood, ash, elm, sycamore, mulberry, willow and others adapt to occasional flooding, the 2011 flood was too much. Graham Herbst, a community forestry specialist with the Nebraska Forest Service, has seen losses ranging from 20 to 60 percent in floodplain forests, with even

more expected. The stress will make trees susceptible to disease and insects, and their weakened root systems will make them apt to topple in high winds, a fate many already suffered. Trees with bases surrounded by sand and silt may slowly smother. Drought in 2012 certainly added to the stress. “It’s such a slow process that it wouldn’t be out of line to say that a decade from now you could still be seeing some of those impacts,” Herbst said.

Numerous dead trees were removed from Ponca State Park’s riverbottom campground and from other city and state park and recreation areas along the river – 2,000 from N. P. Dodge Park in Omaha alone – due to the hazard they could pose.

The loss of some trees is welcomed. Eastern red cedar was easily killed by the floodwaters. In some cases, so was Russian olive. But managers aren’t sure what will sprout in their wake.

Grasslands were also affected, with species including switch grass, Indian grass and big and little bluestem, which are more suited to uplands, being smothered. So were wetlands. In

the Niobrara area, the flood set back cattails, phragmites and reed canary grass that had overtaken much of the riverbottom between Verdel and Lewis and Clark Lake. But those changes weren’t as noticeable to the untrained eye thanks to the flush of plant growth that occurred in 2012.

Many pioneering plant species rely on the natural succession that begins on the bare sand that rivers deposit either in their normal function or during floods. Cottonwoods are a prime example. This native tree is the keystone species on the floodplain forest. Young dog hair stands provide shrubby structure that benefit species like belles vireo. Old, mature trees provide nesting, perching and roosting areas for bald eagles, wild turkeys, great blue herons and the like. When the trees die, the snags are prime habitat for cavity nesters. When they are washed from the banks by natural river processes and stick in the riverbed, they slow the river’s flow below them and allow sandbars to form. This shallow water habitat, and the food chain that blossoms from the submerged trees, is vital for fish.

Cottonwoods are adapted to grow and thrive in harsh riverbottom systems. To reproduce, their fluffy, cotton-like seeds that set sail from the treetops each spring must land in moist, bare ground. Often, this germination occurs as water recedes following high flows or flooding. But with the Missouri confined to its banks, few new cottonwoods were sprouting along the river in Nebraska, especially in the channelized reaches, leaving few trees to replace the aging ones that are now found on the floodplain.

There are plenty of cottonwoods sprouting now, and their growth was almost unheard of. In a joint project between the Nature Conservancy

and the Nebraska Forest Service, Tyler Jahnke is studying cottonwood regeneration by cultivating trees under varied conditions near Nebraska City, mostly relying on irrigation to germinate seeds. He was surprised after the floodwaters receded in October to find tiny cottonwood seedlings sprouting on the highest sand piles. By the summer of 2012, some of those trees had topped 6 feet in height. By the end of the 2012 growing season, some were more than 14 feet tall.

“What’s neatest about that is this happened in the year of probably the most severe drought on record and somehow, in this sandy area which is going to be the driest, most harsh



Cottonwood seeds found exactly what they wanted in a narrow band of soil on the sand-covered floodplain at Boyer Chute National Wildlife Refuge near Fort Calhoun as seen here in July of 2011.

Life of a River

The Missouri River in 2011 was simply doing what it has always done. Historically, the river spilled out of its banks almost every year, sometimes more than once. There are three primary sources of runoff in the Missouri River Basin, which covers one-sixth of the United States. The first comes in early spring, when snow melts on the plains. The second is spring rainfall on the plains. The third is runoff from snowmelt in the Rocky Mountains. Before massive dams were built, and even since, any one of the three could cause spring rises on the Missouri or its tributaries. These yearly rises came and went quickly, though.

Rising and falling flows shape meandered rivers like the Missouri. These rivers wind their way across their valley, carving sand and soil from one bank and depositing it on another. Eventually, as these bends became wider and the river looped back on itself, it would take a shortcut during high flows, charting a new course and leaving an oxbow lake in its wake.

The riverbed constantly shifted too, bringing sand and sediment from the bottom of the river and its banks and building sandbars to just beneath the waterline. These sandbars are constantly moving downstream, only to be replaced by another, and when river levels dropped in the summer, which they always did on the historic Missouri, it would leave a wealth of exposed sandbars above the water line.

Fish, wildlife and plants adapted to the cycles of rising and falling water levels and thrived in the dynamic that was constantly creating and destroying habitat at the same time, leaving a maze of sandbars, side channels, chutes, backwaters and oxbow lakes throughout the valley.

Because of our encroachment onto the floodplain, today’s Missouri River is dramatically changed. Dams store runoff and meter out flows throughout the year to support navigation and other purposes, compressing the high and low flows and, for the most part, erasing the threat of flooding. The dams also trap sediment that is needed to rebuild sandbars in the river below them. Below Sioux City, armored banks keep the river confined to something that more closely resembles a canal. Below Omaha, when it does top its banks, levees confine the flooding to a narrow floodway.

environment you’re going to have, these little, itty, bitty cottonwood seeds were able to germinate and grow, whereas we had areas we were actively irrigating and we couldn’t get that kind of effect. Nothing that I’ve done yet has been able to replicate the efficiency with which nature did it on its own.”

Succession is also a natural part of the rest of the floodplain plant community. Wherever the flood piled sand or scoured holes, annuals like sunflowers, smartweed, cocklebur, pigweed and mare’s tail took hold and flourished, creating a habitat that had mostly disappeared on the river.

“When you think about it, the annuals are what produce seeds for these birds to eat, and annuals were always a large component of these floodplains that flooded frequently,” said Tom Cox, manager of the DeSoto National Wildlife Refuge (NWR). “They show up as a result of disturbance and that has really been pretty positive from a wildlife perspective.”

However, one concern following the flood is saltcedar expansion along the unchannelized river. After the flood, colonies of the invasive shrub grew both

in size and range said Scott Wessel, a biologist in the Commission’s habitat partners section in the region.

The succession will continue. In time, grasses will colonize these sandy areas and there will be fewer forbs. Some of the cottonwoods will persist and grow big and tall. Cattails and rushes will colonize some scour holes. “It will take time for cattails to come back, but they will,” Wessel said, adding that lower water tables could limit their recovery in some areas.

But without periodic floods, which aren’t likely to happen again in some reaches for many years, the early successional habitat will again disappear from the river.

Wildlife

As was the case with people, many wildlife were displaced by the flooding. Some perished. But the benefits provided by new habitat could outweigh the losses, especially for birds.

At DeSoto, pheasants and quail took advantage of the food, Cox said. So did neotropical birds such as Harris and other sparrows, dickcissels, goldfinches,

red starts, and yellow throats, all of which appeared to be nesting in greater numbers on the refuge following a year of no reproduction.

Mammals may not have responded as positively, especially white-tailed deer, which were forced to higher ground. Managers saw deer gather at the north end of the horseshoe inside DeSoto Lake when a levee broke and sent water across the area and left the deer to swim north to dry ground. The flood hit when fawns were young, and there were reports of some that died. When the water receded and deer returned in the fall of 2011, they again left because there was no food.

Commission biologists saw similar movement of deer out of flooded areas all along Nebraska’s portion of the Missouri. In areas where there was little if any regrowth in the forest understory in 2012, leaving little browse for deer, the deer have yet to return.

Whether fawn loss during the flood was significant to affect the population will never be known. Kit Hams, the Commission’s big game program manager, said biologists don’t survey deer or monitor harvest on a scale



Already well-populated with white-tailed deer, the wooded bluffs on the edge of the Missouri River Valley, including those in north Omaha, became home for even more as deer were forced from their flooded bottomland homes.

small enough to accurately gauge such effects.

Many more deer were killed by epizootic hemorrhagic disease (EHD) in 2012, especially along rivers. Cox estimated the population at DeSoto to be half of what it was prior to the flood.

The flood did provide new wetland habitat for waterfowl along the channelized Missouri, including everything from the scour holes to expanded eddies behind wing dikes. While annual mid-winter surveys by Commission staff and the U.S. Fish and Wildlife Service don’t show it, nor are they designed to, the added habitat may even be boosting waterfowl use of the river. Cox said at one count last fall, more than 50,000 ducks were using new wetlands on the refuge, some created by the flood and others by management changes that restored historic wetlands in areas that had been farmed, well above previous counts. This spring, the refuge hosted 272,000 ducks and geese, including more snow geese than they’ve seen in seven years, and a record 284 bald eagles.

Fisheries

Nothing benefits more from a flood than fish. When a river spills over its banks, the vegetation it inundates becomes food, nutrients that provide a spark at the base of the aquatic food chain that carries a fire to the top. Microorganisms thrive, which provides more food for small or young fish –

which in turn provide more food for big fish – and for big filter-feeders like paddlefish.

Some fish evolved to spawn on the floodplain, laying eggs on vegetation in still water. When the eggs hatch, the young find food and refuge from the current, giving them a chance to grow up a bit before they follow the receding water back into the river. By then, the natural flows of a river would be reduced, providing plenty of slow moving water for fish to grow. In untamed rivers, this process repeats itself almost every year.

In these respects, the flood of 2011 was not natural. And as such, not all fish benefitted. During the flood, Commission crews set nets in or pulled trawls through floodplain areas that included crop fields under 10 feet of water. Some nets found hundreds of baby channel catfish. Others found numerous young paddlefish, but nets weren’t needed to witness their prolific spawn: reports of hoards of spoonbills cruising the surface came from both the channelized and unchannelized reaches.

But Mestl said most of the fish that were spawned during the flood were not found by sampling crews in 2012. Flows simply remained too high for too long, he speculated. “It was always fast,” said Mestl. “There was just no place for these young fish to get out of the current.

“And it was such a total abnormal duration, so we didn’t have this reduction in flows that normally

By the Numbers

The Missouri River Flood of 2011

- Gavins Point Dam Releases**
- Previous Record: 70,000 cubic feet per second (cfs), 1997. Releases topped that mark May 28, 2011, and dropped below it September 28.
 - 2011 Peak: 160,000 cfs, enough to drain the 492,000 acre-foot capacity of Lewis and Clark Lake in 1½ days.
 - Normal Summer releases: 32,000 cfs

Flows at Omaha

- Flood of 1952: 396,000 cfs. Crest of 40 feet.
- 2011: 217,000 cfs. Would have been 313,000 without the six mainstem dams. Crest of 36 feet. Flood stage of 29 feet. Flows of 104,000 cfs topped flood stage June 1 and stayed there until September 10. Flows were above 200,000 cfs for an entire month.

Total Runoff

- 61 million acre feet, most in 114 years of records, 26 percent more than the previous high in 1996.
- 49 million acre feet: total runoff from March 1 to July 1 was double the norm. Inflow would have exceeded the capacity of the Corps reservoirs had they started empty.

The Losses

- 1 million acres flooded below Fort Peck Dam in Montana, with nearly half of that in the reach flowing past Nebraska, including land in South Dakota, Iowa and Missouri.
- 4,200 people displaced.
- 3,600 homes and 300 other structures damaged or destroyed.
- \$2 billion total losses.
- \$1.5 million in losses on Nebraska Game and Parks Commission properties, \$500,000 reimbursement expected from FEMA.

occurs after a few weeks. It just lasted and lasted and lasted. It was on the floodplain from 80 days around Sioux City to over 170 days below the Platte, and flows were high throughout the fall.”

Mestl said year-old paddlefish rarely show up in nets, so the verdict is still out on their survival, but early indications are good. But there was no spike in the number of native minnows and chubs like was seen after floods in 1993 and 1997.

What did fare well during the flood



Sunflowers were among the many annuals growing from the sand covering Boyer Chute NWR in July, 2012.



Thousands of young-of-the-year channel catfish were surveyed by Commission crews in flooded crop fields near Plattsmouth in 2011.

was older fish. Endangered pallid sturgeon and the common shovelnose sturgeon sampled in 2012 were fat, Mestl said. “They were in the best condition we’ve ever seen, which is good because they have more energy stored to put into reproductive efforts and growth.”

Other native fish, including sauger, channel catfish and buffalo, were also in good condition during the flood. However, the improved body condition of fish in the river may not last, at least in the channelized river. Length-to-weight ratios of catfish were already reduced in 2012 compared to 2011.

It had declined even more for native river species like paddlefish and sturgeon that made up the greatest percentage of fish trapped in newly created lakes on the floodplain. That could be because those fish were built to live in moving water, or because there was too much competition for food. But Mestl said as those species decline, the number of native gamefish like bluegills, crappies and largemouth bass found in those habitats will increase. Those species can still be found in restored backwaters where they had been thriving prior to the flood.

The flood also brought a host of new fish into Nebraska’s portion of the Missouri. Wide open floodgates flushed countless fish out of upstream reservoirs into Nebraska waters. A new state record Chinook salmon that came downriver from the Dakotas was caught

below Gavins Point Dam. A 107-pound paddlefish, another new record, snagged below Gavins didn’t travel quite as far, having been tagged below Fort Randall Dam in 1992 when it weighed 49 pounds and likely having spent most of its time since in Lewis and Clark Lake. Drove of walleyes and sauger were flushed through the reservoirs as well.

“Even this spring people are targeting walleye and sauger in eastern Nebraska,” Mestl said. “Prior to the flood, that was unheard of for decades.”

Those walleyes and other sight feeders may benefit from another byproduct of the flood that could hurt native species: improved water clarity. Mestl said the flood apparently flushed a considerable amount of clay and silt out of the system, and the cleaner water will benefit non-native river fish.

The flood also washed an immense number of trees into the river. Historically the meandering Missouri River was choked with snags, trees felled both by everyday flows and raging floods. These fallen trees would provide not only breaks in the current and refuge for fish, but in a sand-based river the only hard surfaces in which aquatic insects like caddis flies could live. Before the flood, some snags could be found in the unchannelized river but few below it. There are more today, even in the channelized reach, and will provide short term benefits to the fishery and a long term source of carbon for the entire food chain.

Rebuilding

There was and still is plenty of rebuilding to do after the flood. On 11 Commission properties, losses totaled \$1.5 million. Work has ranged from rebuilding washed out roads to removing piles of sand. Where possible, structures such as outhouses were moved before the flood. So were electrical hookups in campgrounds. Some that could not be moved and were washed away are still waiting repair funding.

At Schilling WMA, much of the land rented to farmers that also provided field hunting opportunities for geese was covered with sand. Of that, 125 acres can’t be farmed. A road along the Platte River to its mouth on the Missouri will be restored to maintain access.

Mark Rettig, superintendent at Niobrara State Park, hopes to have the road to the east end of the popular Railroad Trail, which follows an abandoned rail line across a Niobrara River bridge and along the Missouri on the park’s northern edge for 2.5 miles, repaired this summer.

But Commission and other land managers are mindful of rebuilding structures in the floodplain. At Boyer Chute NWR, for example, a concrete hiking trail on the island that was covered with several feet of sand in the flood will not be reopened. Cox said the refuge was closed five times by flooding in 2010 and the constant maintenance required by the trail is simply not a good use of funding.

Restoring habitat is also a question people are answering differently. Some with land enrolled in the USDA Wetlands Reserve Program would like to reseed associated grasslands that were killed in the flood. “They are taking their chances on when the next significant flood arrives, which it will,” said Scott Luedtke, biologist in the Commission’s habitat partner’s section. Reseeding would be expensive, and the early successional habitat created will be just as valuable to birds, he said. At Boyer Chute, Cox said they plan on letting cottonwoods, sedges and grasses more suited to riverbottom grasslands and meadows take over the island rather than reseeding grasslands.

Even levee reconstruction is being looked at differently. Levees that breached near Hamburg and Percival,

Iowa, were realigned slightly when repaired. A more dramatic shift was made to the Copeland Bend levee near Nebraska City that likely would have failed had the upstream section near Percival not gone first. By moving this levee back from 1,000 to 2,500 feet from its previous location both above and below Highway 2, persistent seepage and flooding issues, and the cost of fixing them, will be lessened and the flood stage at the location will be reduced. Future improvements to Highway 2, a major artery between Nebraska and U.S. Interstate 29 in Iowa, including possibly raising the road bed and lengthening the bridge or installing box culverts under the road, will lower the flood stage even more by removing the choke point caused by the previous bridge and levee alignment.

An extreme example of a chokepoint are the levees protecting Eppeley Airfield on Omaha’s northern edge and the one across the river protecting Council Bluffs, which leave only a 1,500-foot wide floodway for all of the river’s flows to pass. This likely caused water to back up above Omaha and contributed

to the bluff-to-bluff flooding at Fort Calhoun.

There is no room to move these metro levees back, but moving them elsewhere is part of something Mestl and Zuerlein have been promoting in recent years: an erodible habitat corridor that would restore 203,000 acres of riverine habitat between Sioux City and the Nebraska/Kansas state lines to lessen flooding and benefit fish and wildlife.

Currently the floodway between the levees is narrower, and can carry much less water, than the 3,000 to 5,000 foot width called for under the federal legislation that authorized the levee construction. With levees set back farther, it would “let the river be a river,” Zuerlein said.

Zuerlein said the dams for years provided a false sense of security to those near the river, encouraging people to build on the floodplain and making restoring the ecosystem even more difficult. There may never be another flood like 2011 that requires so much water to be released from the dams, but there are sure to be others caused by heavy rains below them.

Repairing and paying for flood damage over and over, especially to maintain a navigation channel for a handful of barges to use each year, does not make sense, Zuerlein said. What does is making changes that allow the system to handle floods without repetitive taxpayer bailouts.

“I think we need to learn to appreciate a river a little more and learn to live with them instead of trying to control them at all cost,” he said. “They’re trying to build levees so they can get every square inch for farms and cities. But the river needs a certain amount of space too, especially to help with flood risk reduction.

“The river is trying to talk to us and tell us what it needs and we’re not listening.” ■

The author would like to thank many with the Commission and others for information they provided for this story, including Jeff Fields, Kit Hams, Pat Molini, Nick Hoberg, Jeff Hoffman, Scott Luedtke, Mike Remund, Mark Rettig, Tom Welstead, Scott Wessel and Josh Wilhelm.



The Game and Parks Commission is allowing the U.S. Army Corps of Engineers to borrow soil from Peru Bottoms Wildlife Management Area to rebuild the levee along the area. The result will be wetlands that fill with groundwater when flows on the Missouri River are high, likely in the spring, as well as a diversity of plant life.

Your Last Summer Vacation

Where to go and what to do when summer wanes

By Jeff Kurrus

It's your last hurrah, the final time for making a memory before school rolls back around and your weekends are filled by games at Memorial Stadium and watching the leaves brighten above you. Don't get me wrong, autumn is one of Nebraska's finest times to be outdoors. But the last summer vacation could be even better. It's when sunsets last for hours on days that never seem to end. These are the times that your friends and family, for years to come, start their stories with "Do you remember that time?"

How will you remember yours? If you're not sure, visit some place new this summer to find out, or even re-visit one of your favorite spots that has yet to cross your windshield this year. And bring your camera. You'll want to make sure these trips are recorded for years to come. ■



TOP: The Nebraska Balloon & Wine Festival, which will be August 9-10 just south of 204th and Q streets in west Omaha five miles east of Two Rivers State Recreation Area, features a live band, games for the kids, wine tasting and hot air balloons.

BOTTOM: Anglers may be treated to fog rising off the Missouri River on a cool summer morning. Base your trip out of Ponca or Niobrara state parks or Lewis and Clark State Recreation Area.





PHOTO BY ERIC FOWLER



PHOTO BY JEFF KURRUS



PHOTO BY ERIC FOWLER



PHOTO BY ERIC FOWLER



PHOTO BY ERIC FOWLER

TOP: The Lindeken Pool at Fort Robinson State Park gives visitors a place to cool off when summer heats up.

BOTTOM LEFT: Mace Fowler holds up one of the rocks at Toadstool Geologic Park. Such photos are a requirement of any trip to the badlands area a short drive from Fort Robinson.

LEFT: Climbing the Lincoln Journal Tower to watch the sunset is the perfect way to end a day at Platte River State Park.

TOP RIGHT: There 42 county fairs held sometime in August, including the Sarpy County Fair July 31 to August 4.

RIGHT: Having a fishing pond in your backyard is just one reason to rent a mini lodge at Ponca State Park.



PHOTO BY ERIC FOWLER



PHOTO BY JEFF KURRUS



PHOTO BY ERIC FOWLER

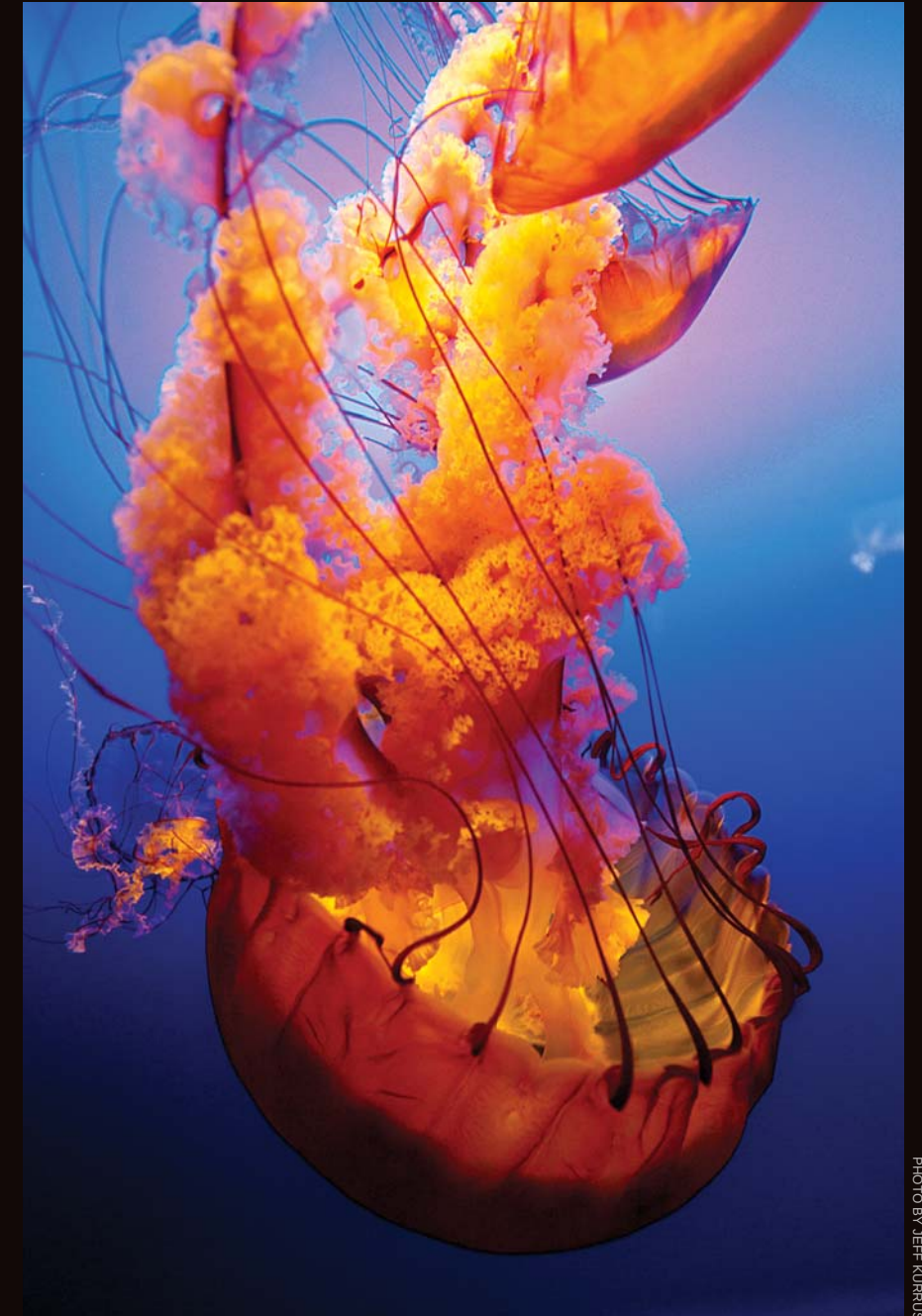


PHOTO BY JEFF KURRUS

TOP LEFT: Ryan Hawley of Gretna brings a northern pike to the boat at Box Butte State Recreation Area near Hemingford.

BOTTOM LEFT: Abby Caldwell of Kansas City, Missouri, rides Trooper at Eugene T. Mahoney State Park.

LEFT: Visitors take a paddleboat for one last spin around the pond at Chadron State Park at sunset.

TOP RIGHT: One of the nation's best zoos, the Henry Doorly in Omaha, features 130 acres of animal exhibits, including jellyfish displays.

For More Information

For more information about these and other Nebraska parks, call 1-800-826-PARK (7275) and leave your name, complete address and request. You may also call a park directly or look up information about Nebraska parks on the web at OutdoorNebraska.org.

Ak-Sar-Ben

Aquarium and Outdoor Education Center

By Lindsey Chizinski, Photos by Jeff Kurrus

Next time you're traveling Interstate 80 in eastern Nebraska, hop off the Gretna exit and head south on Highway 31. The scenery on this winding road can't be beat, especially in autumn when the trees are bright with color and turkey and white-tailed deer are always seen. Then, about six miles down the road you'll spot a sprawling stone building nestled into the base of the Platte River bluffs, and you've reached your destination – the Ak-Sar-Ben Aquarium Outdoor Education Center.

First, sit for a few minutes in the shade of the patio to view the activity in the butterfly garden. Once indoors, grab some public-use binoculars and

do a little bird watching from the expansive windows that face Schramm Park State Recreation Area.

Continue your visit at the Aquarium by viewing a diverse group of aquatic species including painted turtles basking on a log, yellow mud turtles keeping their cool in the water and bullfrogs trying their best to escape into the lobby. A tour guide on-site can help you identify each of the species.

Then take a stroll through the Aquarium and its 12 tanks displaying 32 Nebraska species, including prehistoric gar, behemoth blue catfish, invasive Asian carp, and several game species including largemouth bass, bluegill, northern pike and crappie.



University of Nebraska-Lincoln herpetologist Dennis Ferraro teaches during a snake demonstration at Ak-Sar-Ben Aquarium.

Clubs at the Aquarium

On the first Tuesday night of each month, the Schramm Park Photography Club meets at the Aquarium to discuss style, equipment and view the work of other local photographers. "The club is for those wanting to sharpen their skills in capturing the beauty that surrounds them," said president Steve Zechmann. "Join us in learning about camera settings, composition, lighting and many other techniques." All skill levels are welcome.



Also at the Aquarium, the Cornhusker Fly Fishers meet the third Wednesday night of each month to discuss fly fishing, fly tying and outdoor conservation. The group also brings in nationally known fly-fishing experts, offers casting tutorials and provides other activities for people of all ages.

For more information about either program, contact the Aquarium at 402-332-3901.

Plus, sequestered in its own tank, you'll see what could be the most gigantic snapping turtle you've ever laid eyes on.

In the adjacent classroom, a variety of amphibians are on display as well as an impressive collection of Nebraska bird species. In addition, furbearer pelts, skulls and scat can be viewed while your young ones immediately explore the touch table and its variety of bones and other animal artifacts.

After the table, kids can then curl up in a beanbag chair with a book from the nature library, crawl inside a tent and work on a puzzle or put on a show with a menagerie of wildlife puppets. While the kids let loose with their imaginations, parents can pull up a rocking chair and thumb through a field guide to prepare for a hike on the

nature trails at Schramm Park.

Kids and adults alike can then study an assortment of aquatic and terrestrial insects under magnification at the microscope station. On weekends, you may even be surprised by a classroom full of snakes on display, courtesy of Dennis Ferraro and the University of Nebraska-Lincoln. Other weekends may offer lure making or fish printing activities for the family.

One final peek around the corner will reveal the World Herald Auditorium, which offers viewings of nature and wildlife films and hosts seasonal workshops that cover topics ranging from Nebraska camping destinations to sausage making.

Additionally, the facility hosts monthly meetings of the Schramm Park Photo Club and the Cornhusker



Northern pike are one of the 32 species of native Nebraska fish featured at the Aquarium.



Naturalist Nicole Bekker works with students at the Aquarium.



A banded white-breasted nuthatch feeds near the Aquarium's bird viewing window.

Fly Fishers and hosts bird-banding demonstrations conducted by the Fontenelle Nature Association.

Lastly, tourism guides offer live animal presentations and fishing trips to school groups, and are available on weekends and throughout the summer to assist visitors. "The Aquarium and Schramm Park can be a fun place to visit for people of all ages, and I invite everybody to come learn about Nebraska's aquatic and wildlife world," said Aquarium Director Tony Korth.

Drop by to experience the Aquarium for yourself, but not before visiting OutdoorNebraska.org or calling 402-332-3901 for seasonal hours of operation. ■



Ak-Sar-Ben Aquarium and Schramm Park

Schramm Park State Recreation Area

In 1882, the Gretna Fish Hatchery, the state's first hatchery, was opened to raise trout and salmon on the current Schramm Park State Recreation Area site. In 1914, the original hatch house was replaced by the building that still stands. In 1974, this building was phased out by the Nebraska Game and Parks Commission and the land was transferred to the Parks Division, combining the structure with 277 adjoining acres willed to the Commission by E.E. Schramm, a geology professor at the University of Nebraska, for a total of 331 acres and the area's current namesake.

Schramm has long been a great picnicking spot for visitors, but the area also offers a three-mile hiking trail of rolling hills, a geologic display, wildflower viewing in the spring and summer and wildlife viewing year-round, and ponds next to what is now the Fish Hatchery Museum to feed carp, Canada geese and other waterfowl.

While camping is not allowed at Schramm, nearby Louisville State Recreation Area, just five miles east, allows RV and tent camping, and the combination of both Ak-Sar-Ben Aquarium and Schramm Park gives visitors an inexpensive day's worth of activities both indoors and out.



A white-tailed deer runs at Schramm Park.



Autumn colors line the three-mile nature trail at Schramm.



Schramm's Fish Hatchery Museum shines red during a winter storm in eastern Nebraska.

Just Passing Through Broken Bow

Text and photos by
Jenny Nguyen



Broken Bow was quiet the Wednesday afternoon I arrived. People went about their business walking in and out of the many shops, salons and boutiques in the old brick buildings that lined the four sides of the main town square. Planters of colorful spring flowers sat at almost every storefront, with the red, white and blue of Old Glory fluttering closely by.

An old man passed me on his tricycle, smiling at me gingerly. Another man crossed a beaten street of red cobblestone. In the middle of the square, a lady rested on a park bench by the picturesque town bandstand, shaded by large, green trees.

If you lingered here long enough you'd hear the distant roaring of diesel engines, the click-clacking sound and low whistling coming from the old railroad line that runs straight through town day and night. You'll also see that Broken Bow is small-town Americana at its best.

Pioneer Beginnings

Located in the Sandhills along Highway 2 in the heart of Custer County, this small town of roughly 3,500 surprised

me. Celebrating its 134th birthday, Broken Bow has aged considerably well – its now vibrant business community starkly contrasting the scenes in Solomon Butcher's black and white photographs of the town's early pioneer days. Butcher's collection (see sidebar, page 49), which deftly captured the grim, hard faces of the area's earliest settlers posing in front of their crudely built sod homes and dugouts, can be visited at the Custer County Museum in town.

The earliest recorded settlers were the Garringer brothers, Jesse and Edmund, who arrived in the fall of 1878. They were followed by others soon after, planting themselves on the banks of the historic Muddy Creek.

After three rejections by the Federal Post Office, the right name finally came to local postmaster Wilson Hewitt (see sidebar) after his young sons Ed and Fred brought him an old, broken Indian hunting bow that they'd found nearby. On November 4, 1879, the first post office, a simple dugout on the creek bank, opened with the name of "Broken Bow." It was also then that the community officially found its name.

The early pioneers of Broken Bow lived in a place



that was rarely easy and always unforgiving. Too often when it rained, it flooded. When the wind came, it blew relentlessly. But the residents stayed and business continued. It was the railroad that followed the pioneers into town, and not the other way around.

"Back breaking work," wrote Emerson Purcell, one of the earliest

History of Broken Bow

Broken Bow was actually named for a broken bow, and they have the pieces to prove it. The Custer County Museum houses pieces of a discarded bow, probably Pawnee. The bits of old wood might not look like much, but how many towns can display the thing after which they were named?

Wilson Hewitt, an early homesteader, had applied for the location of a post office on his place. Approving the location, the government rejected Hewitt's first three suggested names as being too similar to names previously approved. Remembering a bow recently found nearby, Hewitt then submitted the name "Broken Bow," which the Post Office Department readily approved.

This area was the center of what eventually came to be known as the Sod House Frontier. As homesteaders began to enter this largely treeless region, they made their first homes of prairie sod, which they cut into strips. Early churches, schools and some business places were also made of sod. Homesteaders used sod to construct corrals, henhouses, corn cribs, wind breaks and even pig pens. One enterprising Custer County resident even constructed a full two story sod house while others were usually a single story or story and a half.

As the region became more settled, Broken Bow grew, and in 1882 became the county seat of Custer County. That same year, Mr. Jess Gandy donated the sites for the county courthouse and city square.



Top: A Burlington engine pulls the first train to arrive in Broken Bow. Bottom: The Kilpatrick brothers were contractors during the construction of a railroad to Deadwood, Dakota Territory.



City Cafe and Westside Bakery are two worthy stops in Broken Bow.



Visit the Boneyard Creation Museum to view its fossils and replica displays.



frontier newsmen who wrote for the *Custer County Republican*, the first publication to appear in Broken Bow in 1882. Purcell's *Custer County Chief* – which still exists today – would buy out the *Republican* a few years later, but memories of working with his first employer as a journalist said a lot about the town's early wild west days.

"Custer was a cow country where cowboys shot up the town at occasional intervals. The bundle of ready prints (patent insides as they were called), came by stage from Kearney. The stage also brought a few jugs of whiskey and its arrival each evening was the signal for another wild night in Broken Bow, in which the editor for whom I worked was an enthusiastic participant.

"A checkless pay-day made rigid economy necessary. My brother [William G. Purcell] and I slept in the sod office and ate our meals from a grub box which my mother on the homestead [near Merna] always kept well filled. Two years later the railroad came. Towns sprang up overnight."

Not a Drive Through Town

I was immediately charmed by Broken Bow during my trip west. Its friendly citizens, attractions and deeply rich history and culture provided a passing traveler a reason to stop. I visited shops and parks, dined at the Bonfire Grill and stayed at the historic Arrow Hotel. The next morning, I ate at the charming Prairie Grounds Café & Gifts before continuing my trip with only one more desire – to stay just a little longer.

Residents say that the town square comes alive Thursdays with a farmer's market and a live band playing at the 1916 bandstand. But before leaving I did venture into the Custer County Historical Museum and the Sandhills Journey Scenic Byways Visitor



Babyback ribs at the Bonfire Grill.



Prairie Grounds Café & Gifts in Broken Bow with Chelsie Fox (left), Dustin Myers and Barb Myers.

Center – a little red barn located on the eastern edge of town on Highway 2.

Home to the Custer County Fair and Free Pit BBQ in July, One Box Pheasant Hunt in November, the Festival of Lights Parade in December and a part of Nebraska's 330-mile Junk Jaunt in September, Broken Bow can make a great weekend destination for the entire family during these festive times of the year.

Outdoor recreation opportunities also include the Broken

Bow Aquatic Center, fishing at Melham Lake, the Nebraska One Box Gun Club shooting facility, golfing at the Broken Bow Country Club, Tomahawk Park and rodeo events all summer at the Custer County Fairgrounds and Equine Center.

If you're a traveler passing through, stop and stay for a while. If you're looking for a quick weekend getaway, give this quaint little town a look. There will be more than a few things to keep you busy. ■



Broken Bow's town square gazebo was completed on July 4, 1916, costing a total of \$275.

Wiper Steamed in Grape Leaves

This month let's stay away from the fryer.

By Jenny Nguyen

Step AWAY from the fryer. Let's try something different.

The inspiration for this dish came from an old newspaper I found online. I don't remember what the newspaper was called, but it had a section that was filled with all sorts of ethnic recipes submitted from its readers. Scanning through, a brief mention of baking sole in grape leaves caught my attention. I am a big fan of fried fish, but sometimes, variety can be a pleasant surprise.

The original recipe I found did not allude to any origin, but I immediately interpreted it as Mediterranean due to the use of grape leaves. For this recipe, you can use any white-fleshed fish you have on hand, including white bass, crappie, catfish or walleye. I chose wiper because I find its flesh more meaty and substantial compared to a more delicate fish like crappie. But before we begin cooking, first remove the fish's bloodline.

This is the remnants of the fish's circulatory system. Removing it can significantly improve the taste of a fish you once thought tasted "fishy." For smaller, milder fish like crappie, I don't bother with cutting out the bloodline. But with fish like wiper or catfish, I always do. Bleeding these fish by cutting their gills before tossing them on ice can also improve the taste.

To remove the bloodline, simply use a fillet knife to slice off the darker flesh. Looking at the color of a fish's

bloodline is also a great indicator of its freshness, especially for those who like to buy fish from the store. The redder it is, the fresher the fish. If it's brown, stay away.

Once the bloodline is removed, grape leaves can be found at a local market. I found jars of preserved grape leaves at a local Hy-Vee store in Norfolk; they were by the olives. As for wine, I recommend 14 Hands' Chardonnay.

Servings: 2

Prep Time: 20 minutes

Cooking Time: 20-30 minutes

Ingredients:

- 12 ounces of wiper fillets, cut into serving size pieces
- 8 ounces of grape leaves, canned or fresh
- sea salt or kosher salt, to taste
- freshly cracked pepper, to taste
- extra virgin olive oil
- 1 lemon, thinly sliced; extra for garnish
- 4 cloves of garlic, roughly chopped
- ¼ cup of cilantro, finely chopped
- dried red pepper flakes, to taste
- ¼ cup of dry white wine, like Chardonnay or Pinot Gris

1. Preheat oven to 350° F. Boil a pot of water. One by one, blanch preserved grape leaves in water for about 3 seconds. Lay leaves on a plate or bowl as you blanch. If using fresh grape leaves, blanch for 5 seconds or until grape leaves begin to soften. Tip: Use a skimmer.

2. In a large baking dish big enough to lay fish flat in one layer, cover the bottom and sides with half of the grape leaves, glossy (top) side up. You should have at least 2 layers of grape leaves covering



the baking dish. Brush a generous amount of olive oil on the leaves. Sprinkle salt and pepper over the leaves.

3. Trim off any dark areas on fish, including the bloodline, and discard. Rinse remaining fish in cold water and pat dry with paper towels. Lay the fish on top of the grape leaves in the baking dish. Sprinkle red pepper flakes, salt and pepper, chopped cilantro and garlic over fish. Drizzle with a little olive oil. Place lemon slices over each piece of fish.

4. Pour white wine into the baking dish, but not directly over the fish.

5. Finally, cover the fish with the other half of the grape leaves, glossy side down.

6. Bake fish in a 350° F oven for 20-30 minutes, or until fish is cooked through and flaky. Depending on the thickness of your fish, cooking time will vary.

7. Once done, discard grape leaves and spent lemon slices. Serve fish over your favorite rice medley or couscous. Garnish with lemon wedges. Enjoy with the rest of your wine! ■



Wiper fillets showing the bloodline.

PHOTOS BY JENNY NGUYEN

Of Birds and Bees

Lessons in life from Dannebrog.

By Roger Welsch

Let's put up a bird feeder. That way we will have the delights of lovely little creatures in our own backyard, right outside the window! Uh huh. Sure.

Yeah. At this very moment, as I write these words, I see a couple downy woodpeckers, a flicker, some juncos, and a cardinal working on a seed block and a suet cage not five feet from my nose, through the window of my office. It is a pleasant thing, if a constant distraction from what I should be doing, but for darn sure it's not as simple as the people who sell feeders and seed would have you believe.

I'm not as fussy as some so I have no problem with sparrows and blue jays eating the expensive stuff meant for doves and cardinals. In fact, I rather like blue jays because they are cousins to my favorites, the crows. We solved the problem of jays wasting a half-pound of seed to get at the quarter ounce of stuff they prefer by putting out seed in the form of solid blocks the size of livestock salt blocks. We have adjusted to the occasional kestrel that picks off a smaller bird by way of a quick lunch on the fly. I was even willing to accept the snake I once spotted slithering up the trumpet vine outside my office window to bag a sparrow at the feeder. Linda not so much.

But then things start to get really difficult. As much as I love the crow family with whom we share this ground, I feed them well away from the house because I have heard way too many stories about crows figuring out where the food is kept and then making a real pest of themselves, going so far as to knock on windows or even ring doorbells (!) to remind their caterers that it is way past meal time.

We put our feeders outside the yard fence because we learned that our dogs' gastric woes were a result of the ingestion of bits of seed and suet that fell to the ground. Squirrels then proceeded to eat all the sunflower seeds

out of the feeder, throw the rest of the seeds onto the ground, and then moved on to dismantling the suet cages to get at those yummys. For a while we were amused that once they got their paws greasy, they had to perform Cirque du Soleil gymnastics to get up the metal pole, but that got to be expensive entertainment. The much larger night shift – raccoons and possums – then took interest in the Welsch All You Can Eat Buffet and proceeded to tear up whatever the squirrels neglected.

Had enough? Well, we had too but that wasn't the end of this simple exercise in feeding our feathered friends. Occasionally stray livestock from a neighbor who considers fencing to be a chore beneath her dignity came visiting, so we had sheep, horses, and cows at our fence, agitating the dogs into a frenzy. The first time we saw a turkey at our feeder, we were charmed. But when he invited 50 of his best friends and we discovered that we were one of Nebraska's major turkey growers, without the part about marketing or eating, and Linda was buying birdseed in 50-pound bags, our Audubon instincts began to fade.

But this year we finally think we have seen it all. Linda put out seed one morning, only to find it all gone by noon. And the feeder beset with thousands of ... honeybees. Now, I used to keep bees and have always been fascinated by them, so I was glad to see them return to this place after a decades-long absence. But ... what was their fascination with our bird feeder? And who was gobbling up all our expensive seed? It didn't take long or much observation to see precisely what

was going on: the bees were kicking out all the seed to get at the few kernels of cracked corn in the seed mix.

What? Huh? Bees? Corn? I guess it makes sense: corn is a sweet grain. I use cobs to smoke hams. Up in town, Holly makes jelly out of cobs. There is the whole debate about corn sugars and syrup. I thought maybe it was just something our birdseed, or the feeder, that attracted the bees but then I mentioned this to Jerry, our neighbor across the highway and he sputtered ... Yeah! They were having the same problem with bees in their birdfeeder.

In my constant pursuit of knowledge, I corresponded with University of Nebraska-Lincoln Professor and Graduate Chair of the Department of Entomology Marion Ellis about the birds and bees. After a false start – that was not the question about the birds and bees that I had in mind – Ellis told me that bees aren't thinking critters and are simply interested in collecting powdery material that resembles flower pollen, which sometimes turns out to be grain dust, or even fireplace ash. He says the bees will leave the bird feeder alone and head for the flowers once they blossom.

I am grateful to Ellis, but I beg to differ with him about bees not being bright enough to figure out the difference between flower pollinating and corn. I know how I feel when sweet corn first shows up at the St. Libory produce stands and the beds of pickup trucks scattered around the countryside. As Garrison Keillor once wrote, "Sex is good, but not as good as fresh sweet corn." Now, there is a lesson about the birds and bees! ■



ILLUSTRATION BY TIM REIGERT



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▲ Pictured are my grandpa Eddie (left), my father Homer King and my uncle Harlan, of Newman Grove, Nebraska. They caught these paddlefish on the Missouri River below Gavins Point Dam. We think this picture is from the early 1950s. One of my fondest memories is of my father taking my brother and I fishing for bullheads in Goose Lake near Chambers, Nebraska.

My father, Homer King, loved to hunt antelope. In Nebraska, he hunted on the Oglala National Grasslands and on a ranch west of Alliance. This picture (top right) is from the early 1960s and we think these antelope were taken on a ranch on the Sioux/Box Butte county line.

— Justin W. King, Columbus, Nebraska



▲ This is a picture of my dad, George, and older brothers, Bill (left) and John. My dad shot these two big Canadas at Stevensons Lake west of Petersburg around 1967 or 1968.

— Pete Fritton, Norfolk, Nebraska



◀ Perch and largemouth bass taken in 1949 by Glen Beerline (left), a senior at Alliance High School, and myself, Allen Zikmund, a coach and teacher at same school.

We used dried minnows for bait – first soaked two days in a strong solution of salt, then dried in the sun on brown paper – making them tough and rubbery.

We fished at Black Steer Lake, one of many in the Sandhills north of Oshkosh.

When back home in Alliance we went up and down the street giving fish to our friends. They always asked “Are they cleaned?”

Beerline is deceased after teaching and coaching in California for several years. I am retired from Kearney State

College after teaching, coaching football and serving as athletic director for over 32 years.

We fished many of these lakes between 1947 and 1953 with great success.

— Allen Zikmund, Kearney, Nebraska

Out of Reach? – Carry Your Camera Along

Capture more photos with better preparation.

By Bob Grier

Carry your camera with you wherever you go is the most basic intention of every photographer but also one of the simplest, most rewarding practices that we often forget or overlook. I can’t guess the number of times I’ve encountered beautiful light with great subjects, including wildlife and dramatic landscapes, and the camera was out of reach or even worse, sitting in the camera bag at home.

The enjoyment of using our cameras to add to the photographic record of family, friends and the places we visit isn’t really the difficulty here – it is those seemingly unimportant and often “routine” activities that can catch us flat-footed.

The white-tailed doe and her fawns shown here is a perfect example of a great moment captured only because the camera was within reach and preset

for immediate use.

September in the Pine Ridge was lovely, the sunlight was softened by a thin layer of high clouds, and fall color along the Ridge’s creeks and canyons was in the beginning stages. During a routine trip between Chadron and Alliance for a news assignment, I detoured slightly to drive the interior loop road within Chadron State Park. Parking the vehicle near the tennis courts, I heard the loud rattle of a riding mower working along Chadron Creek. It really didn’t seem like the time for a photo opportunity.

Then I noticed a white-tailed doe standing less than 100 yards away along the tree line, obviously watching the nearby mower as it moved back and forth. I glanced again at the mower then back to the doe. Then, from nowhere, the deer’s two spotted fawns appeared and began feeding.

The camera, a 35mm digital single lens reflex fortunately fitted with a 200mm lens and a 1.4X teleconverter for a combined focal length of 280mm, was on the passenger seat, the driver side window was already down and it took only a second or two to raise the camera to eye level. The camera was set to the “TV” (shutter preferred) mode of auto exposure and capturing the image was instantaneous. Almost as quick, the mower turned and approached the fawns and doe and they vanished into the timber.

Try to have your camera available as often as possible. A small padded camera bag takes up too little room to be left at home. Some photographers think it is a matter of luck to capture images like the two fawns feeding at Chadron State Park. You can improve on that luck by keeping the camera close at hand. ■



PHOTO BY BOB GRIER

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.



Grasshopper

Photographing insects takes a lot of patience. A high percentage of potential subjects hop or fly away before I even get in position for a photo. This photo was taken while I was working my way back to my truck after an early morning in a local prairie. When I spotted this grasshopper, I slowly spread my tripod legs and positioned my camera several feet away and took a very mediocre picture from that distance. Then I nudged the tripod forward and shot again. During the next few minutes, I kept shooting and nudging until I was finally close enough to fill the whole frame with the grasshopper's face. He sat perfectly still as if he was posing for the photo. He even looks like he's smiling – in a demented sort of way.

One of the great things about close-up photography is that it allows me to see details I wouldn't otherwise have noticed. In this photo, I love the grasshopper's hinged leg – it reminds me of a child's plastic toy. I also like being able to see one of the grasshopper's ocelli, or simple eyes. It's the little round dimple located between, and a little below, the bases of the antennae. There are two more located above each antennae, but they're hard to see in this photo. Until I started photographing insects, I didn't realize how many species have at least a few of these "extra" eyes.

I'm not sure why this particular grasshopper allowed me to get so close to it – a lot of his cousins hadn't been so accommodating. When I saw him, I was dripping wet from both dew and sweat, and getting really tired of swatting mosquitoes. It would have been easy to just keep walking back to my truck and its air conditioned, mosquito-free comfort, but I decided to try one more time.

I'm glad I did.

*Chris Helzer
September 28, 2011, Lincoln Creek Prairie, Aurora.*



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