

Nebraskaland
magazine

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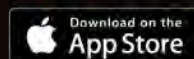
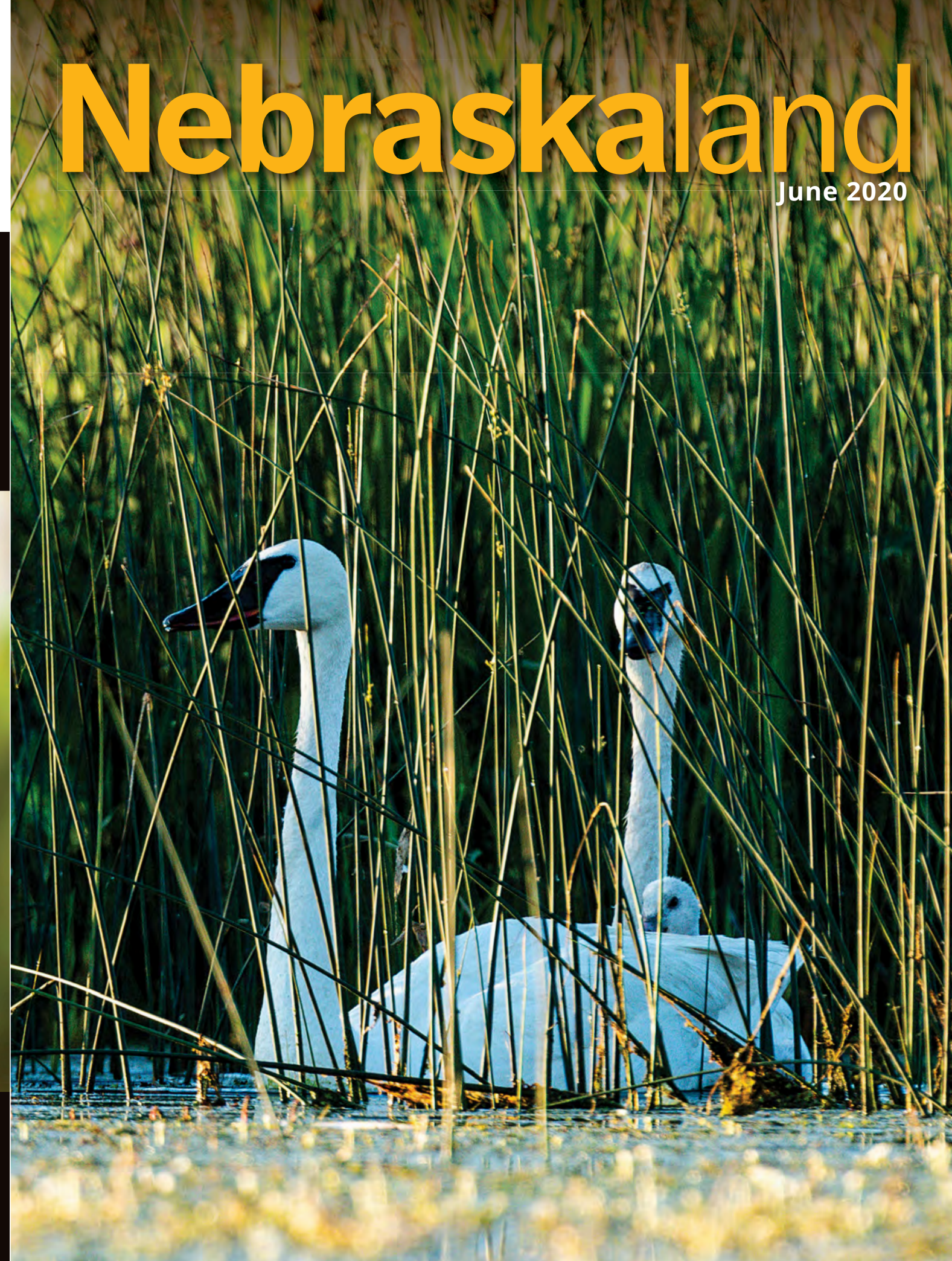
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June 2020



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

Nebraskaland

Volume 98 • No. 5
June 2020

Cover: A pair of trumpeter swans and their month-old cygnet emerge from the bulrushes surrounding their nest on Cottonwood Lake State Recreation Area near Merriman in Cherry County. Photo by Eric Fowler.

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



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Pheasants Forever & Quail Forever 2020 Habitat Tours		
Date & Time	Event Name & Description	Location
June 10 1:00 to 3:30 pm CST	The New CRP of 2020: See and understand the many different CRP practices that are available to benefit soil, water, and wildlife. Learn the best option based on your objective to make CRP work for you. Event will include both indoor and field training with plant identification, wildlife habitat techniques, and wildlife biology.	Red Willow Fairgrounds 4H Building 1412 West 5th Street McCook, NE 69001
June 11 1:00 to 3:30 pm CST	The New CRP of 2020: See and understand the many different CRP practices that are available to benefit soil, water, and wildlife. Learn the best option based on your objective to make CRP work for you. Event will include both indoor and field training with plant identification, wildlife habitat techniques, and wildlife biology.	Duncan Building Main Street Unadilla, NE 68454
June 20 5:30 to 8:00 pm CST	Family Nature Night: On the first day of summer, Ducks Unlimited and Pheasants Forever will partner to provide a fun family nature night at the Verona Complex! Bird song identification, pollinator netting programs, wetland ecology and habitat tours, large grazer management, and more will be provided for your enjoyment. Come see the birds, bees, and butterflies that could be in your own backyard! Education events for families and landowners of all ages. A meal will be provided for those who attend, please RSVP.	Verona Complex Fallen Heroes Memorial Pull Off Area County Road 315 & R Road, Northeast of Clay Center, NE 68933
June 24 5:00 to 8:30 pm MNT	Wildflowers, Wine & Whiskey Wednesday: It's National Pollinator Week. Come celebrate with us at our habitat tour. We will make stops at habitat areas and learn to identify blooming wildflowers. And the best part?! We will learn about the importance of pollinators to our food and beverages while sampling some of them! A meal will be provided for those who attend, please RSVP.	Imperial JC Hall East 5th Street, South end of the Chase County Fairgrounds, Imperial, NE 69033
June 27 11:00 am to 1:00 pm CST	Pollinator Palooza: Join Conservation Nebraska and Pheasants Forever as we celebrate bees and birds in your area! Participants will have the opportunity to learn from local conservationists about important native pollinators and birds while building bee hotels and bluebird boxes. We'll also highlight conservation programs for wildlife and visit a local wildflower habitat and view active blue bird nest boxes. Light snacks will be provided. A concession stand is available on site for those looking to purchase a lunch.	Cody Park 1601 North Jeffers Street North Platte, NE 69101
July 23 5:00 to 8:00 pm CST	Working Lands for Wildlife: It's for Birds and Beef! Join us for an informational evening showcasing the impact Eastern Red Cedar has on grazing systems, wildlife habitat, and a rancher's bottom line. The Working Lands for Wildlife program will be highlighted. Questions will be answered on financial and technical assistance through this program and our partnerships. A meal will be provided for those who attend, please RSVP.	Cast Iron Bar & Grille 806 US-20 Stuart, NE 68780
July 23 11:00 to 3:00 pm CST	The New CRP of 2020: See and understand the many different CRP practices that are available to benefit soil, water, and wildlife. Learn the best option based on your objective to make CRP work for you. Event will include both indoor and field training with plant identification, wildlife habitat techniques, and wildlife biology. A meal will be provided for those who attend, please RSVP.	Pierce USDA Service Center 210 East Main Street Pierce, NE 68767
July 25 7:00 to 10:00 pm MNT	Bonding with Bats: Join Pheasants Forever, Nebraska Game and Parks Commission, and Forest Service staff for a rare opportunity to get up close and personal with a highly misunderstood, flying mammal. Chadron State Park will host the opportunity to learn about bats and what they need to survive in Nebraska's Panhandle. This workshop will start with a presentation on bat ecology before taking a short night hike to observe mist netting and acoustic monitoring techniques. Available for all ages! Nebraska State Park Permit Required.	Chadron State Park Lagoon Shelter 15951 Highway 385 Chadron, NE 69337 Shelter is located north of main entrance
August 8 10:00 to 11:30 am CST	Walk on the Wild Side: Walk on the wild side as Nebraska Game and Parks naturalists, biologists, and Pheasants Forever join for a habitat stroll to remember. Participants will walk the Ft. Kearny Hike & Bike path to portions of the Bassway Strip Wildlife Management Area searching for native edibles, identifying plants and their uses, bird watching and more! Don't miss your chance to walk on the wild side. Bikes and pets welcome; Nebraska State Park Permit required. Turn left at the Brown Shack and follow around to 2nd parking lot.	Fort Kearny State Recreation Area Hike & Bike Trail 1020 V Road Kearney, NE 68848
September 13 1:00 to 3:00 pm CST	Monarch Tagging at Lake Wanahoo: Join us for a Monarch Butterfly tagging event at Lake Wanahoo where you will have the chance to catch, tag, and release Monarch Butterflies. See if the ones you tag make it to Mexico this fall migration!	Ron Larsen Day Use Area 1651 County Road 16 Wahoo, NE 68066

 Instagram Photos

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

Karen Kutz Smith, Omaha
Fontenelle Forest Great Horned Owl





Suzie Wahlgren, Gothenburg
Cottontail Rabbit



Gary Grantzinger, Grand Island
Sunset Reflections



Kris Kitson, Omaha
Yellow-rumped Warbler

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



LEWIS AND CLARK LAKE

The sun sets at Lewis and Clark Lake State Recreation Area marina.

PHOTO BY EMILY BURCH



PHOTO BY ERIC FOWLER

THREATENED AND ENDANGERED: THE AMERICAN BURYING BEETLE

By Melissa J. Panella

The American burying beetle (*Nicrophorus americanus*) looks like an intimidating specimen, cloaked in fiery orange and black and measuring over an inch long. But, looks can be deceiving because this giant beetle is harmless. It is one of nature's recyclers. American burying beetles are carrion feeders – not predators but instead specialized feeders of dead animals.

American burying beetles will smell a dead animal up to 2 miles away. As their name implies, a pair of American burying beetles will bury a carcass by digging diligently to remove the earth underneath it. The small- to medium-sized dead animal gradually sinks lower into the ground. The pair then removes the fur or feathers from the carcass, rolls it into a rounded shape, and coats it in secretions that slow decomposition. The beetles do this to provide a food source that will be ready when their eggs hatch, releasing a dozen or so hungry offspring to feast.

Animals like the American burying beetle serve an important function in the natural world by recycling organic material into ecosystems. They also help to eliminate vast numbers of microbes from the environment that otherwise could prove to be harmful to other animals or even to humans. Unfortunately, this giant carrion beetle is endangered both in Nebraska and elsewhere in the United States.

Multiple factors likely contributed to the endangered status. The beetles can be vulnerable to pesticides and conversion of grassland habitat to other uses. The passenger pigeon (*Ectopistes migratorius*), extinct since 1914, used to fill the sky as the most abundant bird in North America. As the pigeons were overhunted for food, unregulated sport and feathered embellishments on hats, their sharp declines were associated with fewer numbers of the beetles. It is likely that there was less of a food source for the beetles as the pigeons were being eliminated.

In Nebraska, American burying beetles live in the Sandhills and a few other areas in the state. The Commission is working with conservation organizations and researchers to monitor and improve habitat for endangered American burying beetles with a project focused on the Loess Canyons, Niobrara River and the Elkhorn River headwaters biologically unique landscapes – areas with known occurrences of at-risk species and natural communities. In coordination with dedicated biologists, the Nebraska Natural Legacy Project is working to prevent the American burying beetle from going the way of the passenger pigeon.

Melissa J. Panella is a wildlife biologist for the Nebraska Game and Parks Commission.



The Nebraska
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preserving NATURAL NEBRASKA™ for future generations

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

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

NebraskaLand Photo



PHOTO BY DAN FOGELL

SLENDER GLASS LIZARDS

By Monica Macoubrie

The slender glass lizard (*Ophisaurus attenuatus*) is one of the rarest lizards in Nebraska. This species was thought to be extirpated in the state. Now, biologists have records of sightings, or a specimen, from only two areas – Franklin and Johnson counties.

At first glance, it is easy to see how this animal is often mistaken for a snake, for it has a similar body shape and is without legs. When you look closer, however, you will notice three important differences between the slender glass lizard and its reptile cousins. First off, slender glass lizards have eyelids and can actually close their eyes. Secondly, unlike snakes, these lizards have external ear openings, which they use to pick up sounds. Lastly, they have a lateral skin fold that extends from the head to the vent. Another difference is in the way they move. Most people assume that having no legs, they would slither. However, they actually use their sides to push themselves off debris or vegetation.

This animal's long cylindrical body, pointy snout and narrow head make this legless lizard easily identifiable. Their color ranges from tan, brown or bronze, with a dark brown or black stripe running along the middle of the back from the head to the tail. The sides of the neck have speckled brown markings, and the belly is usually white or light yellow. These lizards prefer dry or arid areas, with tall grasses and loose soil. Here, they burrow and spend a majority of their time underground.

The slender glass lizard is an appropriate name for this reptile, given that when caught, it frantically tries to escape,

often breaking its tail into pieces, like glass. The shedding of its tail is the main defense mechanism for the species. Its tail will eventually grow back. Yet when it does, it will be darker and shorter than its original tail. Not only is it rare to find a slender glass lizard in Nebraska, but it is also rare to find one with the original tail still intact.

This secretive and rare reptile is considered a “species in need of conservation” within the state of Nebraska. If you see one, just leave it alone and enjoy it from afar. Also, report your findings to the Nebraska Game and Parks Commission wildlife division so biologists can continue to study this amazing creature.

Monica Macoubrie is an outdoor educator with the Nebraska Game and Parks Commission.



In modern times, slender glass lizards have been seen in only two Nebraska counties: Franklin, at left, and Johnson.

NEBRASKA LAND FOR SALE

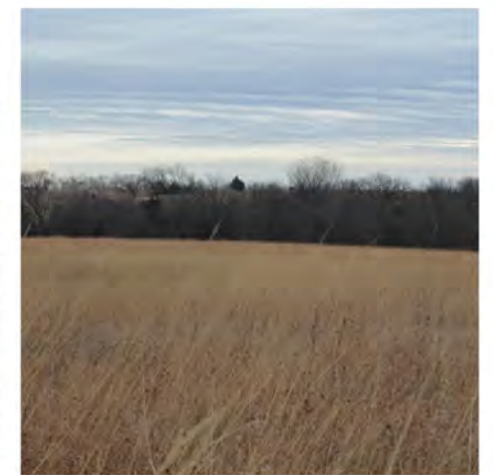
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NEBRASKALAND DIGITAL ARCHIVE ONLINE

By Jaclyn Cruikshank Vogt

Nebraskaland Magazine has long been a scrapbook of sorts. Its pages serve as portals into the history of our state. They track nearly a century’s worth of conservation work by the Nebraska Game and Parks Commission and pay homage to Nebraska’s unique range of flora, fauna, eco-regions and parklands – as well as the many outdoor recreation opportunities they afford the people of Nebraska.

Not only do Game and Parks staff frequently consult back issues of *Nebraskaland* for research about past and current outdoor information, but so do our subscribers. The pages of the magazine are also a source for families looking for long ago images of loved ones, or even of themselves.

Vintage issues of *Outdoor Nebraska*, the predecessor of *Nebraskaland*, are hard to come by. While we here in the *Nebraskaland* staff offices have long been able to thumb through many of those rare and crumbling pages, even our own archives lack physical copies of most of those early issues. In fact, no one repository houses a complete run of the entire magazine, from start to finish.

Now, in a collaborative effort between the *Nebraskaland*

Magazine Photo Library and the Center for Digital Research in the Humanities at the University of Nebraska-Lincoln, the first 50 years of the publication are available in the *Nebraskaland Magazine* Digital Archive: <https://nebraskaland.unl.edu/>.

The archive is fully searchable, allowing users to view, browse and explore all issues of the magazine, 1926-1976. Additional years will be added as they become available, with a one-year lag behind the current subscription year.

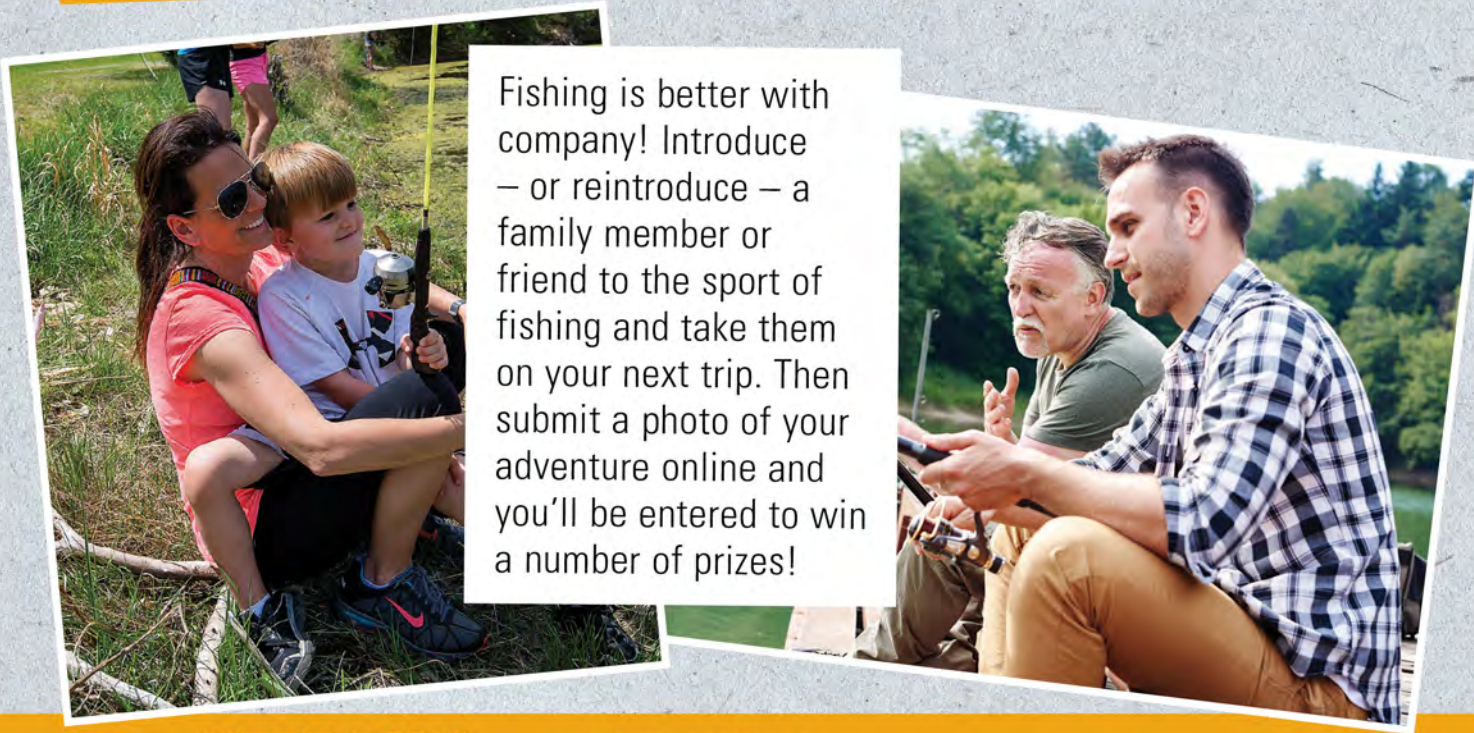
Whether you’re looking for information about the history of the Nebraska State Parks system; advice on how and where to hunt, fish or generally engage with the outdoors; want to learn more about the incredible diversity of plants, animals and eco-regions across our state as well as about the people who enjoy them – the *Nebraskaland Magazine* Digital Archive is a good place to start.

Jackie Vogt is the photo librarian for Nebraskaland Magazine and the Nebraska Game and Parks Commission.

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GHOST PLANT: A THIEF IN THE WOODS

By Gerry Steinauer

A ghost plant haunts the deep woods on the Missouri River bluff in southeastern Nebraska. Translucent white in color, the plant has forgone photosynthesis and taken up thievery to obtain its food. Its appearance and lifestyle are indeed strange.

Also called Indian pipe, ghost plant (*Monotropa uniflora*) can be found in deciduous and coniferous forests throughout much of Canada and the United States, including Alaska, but is never common. This perennial plant lacks chlorophyll, explaining why the entire plant is white, except for occasional black flecking. Its unbranched stems grow singly or in clumps and have reduced, scale-like leaves. Each stem is topped by a single urn-shaped flower, a characteristic of the blueberry family to which the plant belongs. These appear July through September. Each flower blooms for a week or two, after which the stem withers, gradually turning black, while the dry, papery seed capsule forms.

Relatively few plants have no chlorophyll and obtain their nutrients through means other than photosynthesis. In Nebraska, only the ghost plant, its close relative pinesap and four coral-root orchids obtain water and food through associations with soil fungi. Broomrapes and dodders insert their roots into the stems or roots of other plants to steal nutrients and water.



When ghost plants emerge from the soil, the young flowers point downward and are not flower-like in appearance. At this stage, the plants somewhat resemble white fungus. As they mature, the flowers become more upright.

From an early age, a ghost plant's roots, which are clustered into a short, circular mass, are infected by specific soil fungi. The fungi spread web-like through the soil, also infecting the roots

of nearby trees. They feed by breaking down and ingesting soil organic matter and by taking sugars, produced through photosynthesis, from tree roots. In this mutually beneficial relationship, the fungi assist the tree roots with the intake of water and nutrients from the soil.

By allowing its roots to be infected, the ghost plant tricks the fungi into believing they have entered into another beneficial association, but in reality, the fungi gets nothing in return. In simpler terms, the ghost plant is stealing from both the fungi and the trees: It gets water and nutrients from the fungi, and the fungi act as an intermediate to transfer sugars from the trees. We know this through studies that have shown radioactive marked carbon injected into the vascular tissues of trees later showing up in sugars in ghost plants.

Because it associates with a variety of fungi, which associate with a variety of trees, ghost plant grows under many tree species. Indifferent to sunlight, ghost plant often dwells in the deepest,

darkest corners of the woods, where it survives as a clever, though uncommon, thief.

Gerry Steinauer is a botanist for the Nebraska Game and Parks Commission.



Nebraska Game and Parks biologists shock and net fish from a resting pool in a fish bypass built at Spalding Dam on the Cedar River in Greeley County. The fish were caught and tagged as part of a study to measure the effectiveness of the bypass.

We're working to preserve beautiful Nebraska for years – and generations – to come. #MakingItLast

MAKING IT LAST

NEBRASKA
– GAME  PARKS –



PHOTO BY JENNY NGUYEN-WHEATLEY

VIETNAMESE-STYLE JALAPEÑO FISH “POPPERS”

By Jenny Nguyen-Wheatley

Servings: about 20 poppers

Ingredients:

- 1 pound of boneless and skinless white-fleshed fish fillets
- 2 cloves of garlic, coarsely chopped
- Half a large shallot, coarsely chopped
- Freshly cracked pepper, to taste
- ½ teaspoon of kosher salt
- ½ teaspoon of sugar
- 1½ tablespoons of fish sauce
- 1 tablespoon of cornstarch, plus extra
- 2 heaping teaspoons of freshly chopped dill
- 10 medium to large jalapeños
- Oil for shallow frying
- Mae Ploy sweet chili sauce, for dipping

Special equipment: meat grinder and food processor

1. Partially thaw or partially freeze

fish, and cut into 1-inch cubes. With the fine die plate attached on your grinder, grind the fish with garlic and shallot twice.

Then in a food processor, blend the ground fish mixture with cracked pepper, salt, sugar, fish sauce and cornstarch until you get a smooth, fine paste. Don't be afraid to let the food processor run for a few minutes. (The texture should be close to that of thick toothpaste – not the most appetizing analogy, but there you have it.)

Transfer fish paste to a bowl and fold in the chopped dill. Cover and refrigerate for at least 2 hours or up to 24 hours. Paste must be cold when you cook it.

2. To prepare the jalapeños, cut them in half lengthwise. Remove the seeds and ribs and lightly coat the insides with cornstarch; this step helps the fish mixture stick to the jalapeño.

Then, with a spoon, fill the jalapeño halves with the cold fish paste. Keep or remove seeds and ribs in jalapeños to suit your taste.

3. Coat the bottom of a nonstick skillet with oil and heat over medium. When the oil is hot, lay the poppers into the oil fish side down. Cook until golden brown, and when the fish easily releases from the pan – do not mess with them too much while they are cooking – flip to brown the jalapeño side. Take off heat when fish paste has cooked through; internal temperature should read at least 145 degrees.

If you're not a fan of peppers or don't like spicy food in general, you can form the fish paste into patties – with slightly greased hands to prevent sticking – and shallow fry in oil without the jalapeño.

4. Serve fish poppers with sweet chili sauce on the side for dipping.

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Close to Home

Appreciate the many natural wonders of Nebraska while communing in place.

Photos and story by Chris Masada

Many of us are turning to nature and outdoor activities to regain some sense of hope, reassurance and perspective as we navigate these times of uncertainty. With COVID-19 travel advisories in recent months, we are rediscovering local opportunities to experience and appreciate the rich biodiversity of woodlands, prairies and wetlands in recreation areas, nature centers, city parks and backyards across our state. In the heart of North America's Central Flyway, Nebraska is situated for observing migrations and seasonal variation while remaining close to home. Nature's refuge can be found only minutes away, in both remote and urban settings. Pursuing local options means less time and expense in transit and more time outside doing what we love. Nature and outdoor activities can have greater presence and priority in our daily lives.

For my part, I enjoy nature and wildlife photography, an often solitary activity that lends itself especially well to following social distancing guidelines. Exploring with a camera forces me to slow down and fully engage with subjects I otherwise might overlook, and more often than not, I'm delighted by what I find. A growing list of online resources and apps, many free of charge, makes species identification and retrieval of additional background information readily accessible to all of us. Sharing images and stories with family, friends and the broader online and *Nebraskaland* communities helps us stay connected in this time of increased social distancing.

The photos for this story were shot locally in Lancaster County, many at Holmes Lake, a 112-acre reservoir on Antelope Creek within the city limits of Lincoln. [📷](#)

A great blue heron
secures its fresh
panfish breakfast.





ABOVE: Acorns are an important food source in the primarily plant-based diet of eastern fox squirrels.

RIGHT: An American kestrel perches with a freshly killed vole on a chilly, heavily overcast February morning.

OPPOSITE RIGHT: Local birders were excited to view this common loon, a breeding adult, on a brief layover at Holmes Lake in early July 2019. It was observed as a lone individual but appeared healthy and feeding well.





ABOVE: Killdeer chicks are precocial, leaving their nest soon after hatching. A parent vocalizes to keep chicks close on this mudflat in early August 2019.

LEFT: I was up to my knees and elbows photographing this frog at eye level the morning after exceptionally heavy rains flooded low lying grassy areas of Holmes Park, July 4, 2018.

OPPOSITE LEFT: Sharp talons and backlit plumage of a roosting red-tailed hawk are featured in this photo taken at the east end of Holmes Lake in late August 2018.



ABOVE: One of a pair of little blue herons wades the shallows of Holmes Lake. Relatively uncommon spring migrants in our state, the birds were observed over several weeks in May 2019.

RIGHT: A house wren perches momentarily in the branches of a pine. Currently widespread and common across our state, the house wren's range is expected to shift northward with higher global temperatures.

OPPOSITE TOP: A metallic green bee collects pollen and forages on a native coneflower in Lancaster County.

OPPOSITE BOTTOM: Emerging from a small hole in the ice at Holmes Lake, a muskrat warms itself at first light this early February morning.

A Nebraska native and lifelong resident, Chris grew up in Kimball County and now lives in Lincoln, Nebraska. He is a regular contributor for Nebraskaland Magazine.



Outdoor Nebraska

By Renae Blum

The outdoor world is vivid and alive right now. Don't miss your chance to enjoy it! Here are a few ways you can engage with all the outdoors currently has to offer. **N**



ARCHERY TARGET PRACTICE
PHOTO BY JEFF KORNUS

Practice target shooting

Throughout the month | Statewide

Rather than cramming in last-minute practice, start honing your target-shooting skills well ahead of fall hunting seasons. Aside from keeping your shooting form in shape, target shooting is just plain fun.



MOON PHOTOGRAPH IN LANCASTER COUNTY
PHOTO BY CURTIS BLUM

Photograph the moon

Throughout the month
Statewide

Photographing the moon, the brightest object in the night sky, can be a fun challenge. *Nebraskaland Magazine* photographer Justin Haag recommends investing in a solid tripod and cable release, shooting in RAW mode, using a lens with a large focal length, and planning your shot ahead of time. June 5 is the next full moon. For more tips, read Justin's article, "Those Alluring Orbs," at NebraskalandMagazine.org.

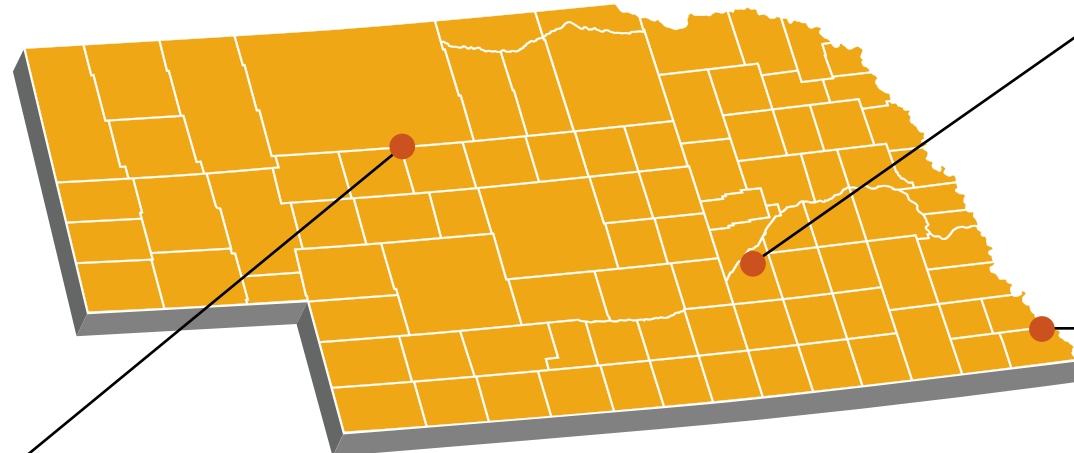


YELLOW CONEFLOWERS
PHOTO BY GERRY STEINAUER

Photograph and identify wildflowers at Gjerloff Prairie

Throughout the month | 4 miles west of Marquette on M Road

One place botanist Gerry Steinauer enjoys taking wildflower photos is the 390-acre Gjerloff Prairie west of Marquette. "It's got really great spring wildflowers," he said. Park by the barn-like education center to find the 5-mile mowed trail loop. Expect rolling hills, some steep slopes and a great view of the Platte. For more information, and to find a trail map, visit prairieplains.org/gjerloff-prairie.



Fish lakes in the Sandhills

Throughout the month
North-central Nebraska

The Nebraska Sandhills lakes are "incredibly productive fisheries," said Daryl Bauer, Nebraska Game and Parks fisheries outreach program manager. You'll find various species here, including bass, pike, bluegill and crappie. Fish here in June and not only will you likely enjoy good weather, you'll also get in before aquatic vegetation gets too thick.



FISHING AT SMITH LAKE WILDLIFE MANAGEMENT AREA
PHOTO BY JUSTIN HAAG

Hike at Indian Cave State Park

Throughout the month
7 miles northeast of Shubert in southeastern Nebraska

Hikers of all skill levels can find something to enjoy at Indian Cave State Park. You'll find more than 20 miles of trails featuring scenic oak woodlands and views of the Missouri River. For the best experience, plan your hike ahead of time with the park map.



HIKING AT INDIAN CAVE STATE PARK IN RICHARDSON COUNTY
PHOTO BY ERIC FOWLER

Saving Saltwort

Returning Salt to Salt Marshes

By Gerry Steinauer

The state endangered plant saltwort grows in salt marshes in Lancaster County and nowhere else in our state. Unfortunately, decline of the marshes during the past 150 years has left this species hanging on by a thread. I held little hope of saltwort surviving in Nebraska until I recently learned of a creative new restoration method for returning salt to the damaged marshes.

A Uniquely Adapted Plant

Within salt marshes, saltwort (*Salicornia rubra*) grows mainly on salt flats. Wet much of the year, these clay flats dry in summer and evaporation wicks salt to the soil surface, forming a white, crystalline crust. The flats are a trying environment for plants.

Salt marshes, also known as saline wetlands, are a rare habitat throughout

the Great Plains. Prior to settlement, these wetlands occupied about 20,000 acres in Lancaster County, mainly in the Salt, Little Salt and Rock creek valleys. Though uncommon in the Plains, saltwort is common in saline, inland habitats in western states.

Saltwort is a compact annual with a waxy stem and tiny, scale-like leaves, features that limit water loss. A nibble of the stem confirms

the saltiness of the plant's sap. High salt levels are needed in the roots for osmosis to draw water in from the soil. The wind-pollinated flowers bloom in late summer and consist of minute depressions in the stem. The tiny, green petals ring the depression. A single seed ripens within the stem as it fades to scarlet red then brownish in early fall.

The briny water feeding the marshes, and on which saltwort depends, is of ancient origin. During the Cretaceous Period, some 70 to 160 million years ago when central North America was a vast inland sea, the salts were laid down in shale sediments on the sea floor. Today, the now deeply buried salts reach the surface by becoming dissolved in groundwater that artesian flow carries upward through overlying layers of porous sandstone to the marsh floor. Over millennia, evaporation has concentrated the salts in these wetland soils.

Decline of the saline wetlands began soon after settlement when newly plowed upland soils washed down into the marshes burying their salt-laden topsoil with several feet of sediment. Many marshes were drained or filled as the city of Lincoln grew. Beginning about 1900, stream channelization turned the shallow, meandering creek beds bordering the marshes into deep canals that drained saline groundwater before it could seep into the marshes. And finally, increased overland flow of rainwater and snowmelt from urban areas and crop fields into the wetlands further diluted the saline soils, setting the stage for invasion by the highly-aggressive reed canary grass, narrow-leaf cattail and other non-native plants. As its habitat declined, so did saltwort.

Today there are 10 known populations of saltwort remaining in Lancaster County. Conservation groups have conserved through



PHOTO BY GERRY STEINAUER

At Marsh Wren, gated irrigation pipe is used to release salty groundwater into the marshes. The Saline Wetlands Conservation Partnership directed the salt marsh restorations at this site. The Nebraska Environmental Trust provided project funding.

acquisition and easements nearly 4,900 acres of land containing saline wetlands and restoration has occurred on several of these wetlands, mainly through the plugging of drainage ditches. Although this practice restored wetland hydrology, it did little to enhance salinity and saltwort habitat.

Returning the Salt of the Earth

A few months ago, Dan Schulz, resources coordinator with the Lower Platte South Natural Resources District, told me about the unique salt marsh restoration occurring at his agency's Marsh Wren Wetland,



PHOTO BY JON FARRAR

Saltwort grows on a submerged saltflat at Little Salt Creek West Wildlife Management Area in Lancaster County.

located just north of Lincoln on Salt Creek. The restoration began in 2016 when contractors scraped 1 to 2 feet of sediment out of two oxbow wetlands on the site until reaching the original salty topsoil. Ditches draining the wetlands were plugged and trenches were dug just upslope of the

marshes' upper perimeters to prevent freshwater runoff from entering them. Most creatively, saline groundwater was being pumped into the wetlands to restore salinity levels. Curious, I had to see the project.

On a cold, windy day in early March, I visited Marsh Wren with Schulz and



PHOTO BY GERRY STEINAUER

A salt crust forms around raccoon tracks in a drying saltflat at Arbor Lake wetland. These flats not only support saltwort, but are also habitat for the rare Salt Creek tiger beetle and act as excellent foraging sites for migrating water birds.

PHOTO BY GERRY STEINAUER



Dan Schulz sows saltwort seed at Marsh Wren.

Tom Malmstrom, natural resources coordinator for the City of Lincoln. Between them, they have decades of experience restoring wetlands. They first showed me the two electric wells that pump salt water from depths of about 200 feet. Located at the upper ends of each wetland was a 900-foot length of gated irrigation pipe that slowly disperses the water into the wetlands. Schulz explained how gravel-filled trenches located next to the pipes allowed some salt water to immediately enter the soil, providing for both subsurface and surface flow of the water through the marshes.

Pumping of salt water at Marsh Wren began in late summer of 2017

and continued through the summers of 2018 and 2019. Having seen the area before its restoration, I was immediately impressed with the vegetation response. In the north wetland, reed canary grass and narrow-leaf cattail were nearly absent within a roughly 600-foot band below the pipe (an area of about 15 acres).

"In the past, we did some aerial herbicide spraying of these invasive plants, but now the soil is too salty for them," Schulz said. In their place sea blite, saltgrass, marsh-elder and a few other salt-loving plants now grow. Their source, no doubt, was seed that survived in the now-exposed saline topsoil. Long-lasting seed is a survival

strategy of many wetland plants. Future pumping likely will expand the band of salinity and create more saltflats.

In the south wetland, an area near the pipe developed a salt crust last summer, along with a small colony of saltwort. This colony also originated from once buried seed. To supplement its native seed bank, late last summer Malmstrom collected saltwort seed from other local marshes. Last winter, he and Schulz planted the seed at Marsh Wren.

"I think it will take," he said. "The seed I collected last summer seemed good, the dried stems were thick and robust. I have seeded saltwort in

other saltine wetlands but the plants never took. I may have collected that seed too late, after seed was already dispersed."

In coming years, the pumping of saline groundwater will likely expand to other Lancaster County salt marshes. Fortunately, the saline aquifer below Lancaster County is unsuitable for domestic and agricultural uses, leaving plenty of water for marsh restoration. Returning the salt of the earth to Nebraska's salt marshes might be saltwort's saving grace. [N](#)

Gerry Steinauer is a botanist for the Nebraska Game and Parks Commission.

Surviving a 1909 Nebraska Glider Flight

By David L. Bristow, *History Nebraska*

In 1909 Ulrick Sorensen faced a decision that would determine his future. It was potentially a life-or-death choice.

This is a story about the early days of aviation in Nebraska. The state's first powered airplane flights happened in 1910, but a year earlier Sorensen made what I believe to be the first manned glider flight in Nebraska.

Sorensen launched his glider near Berwyn in Custer County. A farmer by background, "Professor" Sorensen earned money in the early 1900s by making parachute jumps at county fairs and events in central Nebraska.

This is where the story gets a little confusing to the modern reader. How did he do parachute jumps before there were airplanes?

You are correct if you guessed jumping from a balloon. But consider that the modern hot air balloon, with its onboard propane tanks, wasn't invented until 1960. What were balloons like before then?

Starting in 1783, there were two kinds of balloons. Gas balloons were filled with hydrogen. Smoke balloons were essentially big cloth bags heated over a bonfire. Smoke balloons didn't stay up long. They came back down as the hot air inside them cooled off.

Sorensen used a smoke balloon. He didn't use a basket. In the photo at (opposite middle) he's sitting on an iron bar. An unlabeled photo (opposite bottom) from Spalding shows a balloon and parachute that are probably Sorensen's.

The first parachutes were demonstrated in the 1790s, more than a century before airplanes, but the earliest knapsack parachutes and harnesses weren't invented until several years after this photo. What were parachutes like before that?

The parachute is hanging from the balloon, and a trapeze bar hangs from the parachute. Many parachutists would hang from the trapeze bar while straddling a bit of netting that served as a kind of safety harness. Sorensen appears to be sitting on the trapeze bar. He used no safety harness, only his hands and the seat of his pants. He pulled a release cord to detach the parachute.

By now you may have guessed how Sorensen planned to launch his glider, which he based on a Wright Brothers design.

On June 13, 1909, Sorensen attached his glider to his balloon, and a crowd watched him go up.

It was reported that the

balloon rose so quickly that the glider's tail was damaged as it left the ground. But Sorensen didn't notice it.

Sorensen pulled the release cord at about 3,500 feet, and

the damaged glider tumbled through the air for the first 500 feet before finally righting itself and pulling into a tight spin. Witnesses said he hit the ground within about 1 to 1 1/2 minutes – fast enough to knock him out, but not fast enough to kill him.

Ulrick Sorensen had survived Nebraska's first plane crash. Reports appeared in newspapers around the country.

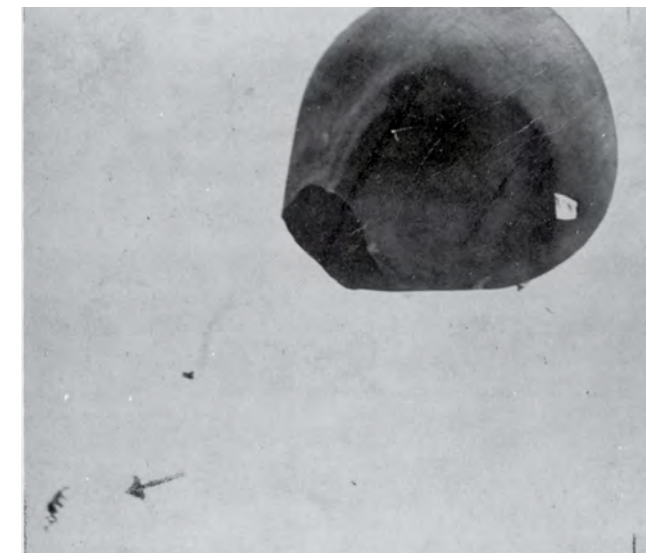
He promised to try again. He was sure he'd get it right this time. But the 27-year-old Sorensen had a problem. His 17-year-old girlfriend, Cora, told him he could fly again if he wanted. And she said they could get married. But she made it clear that one of those two things was not going to happen.

And that was the big decision that Ulrick Sorensen faced in the summer of 1909. We don't know if he agonized over it or if it was easy. But we do know that in 1969, Ulrick and Cora celebrated their 60th wedding anniversary, still living on their farm near Berwyn. [N](#)

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



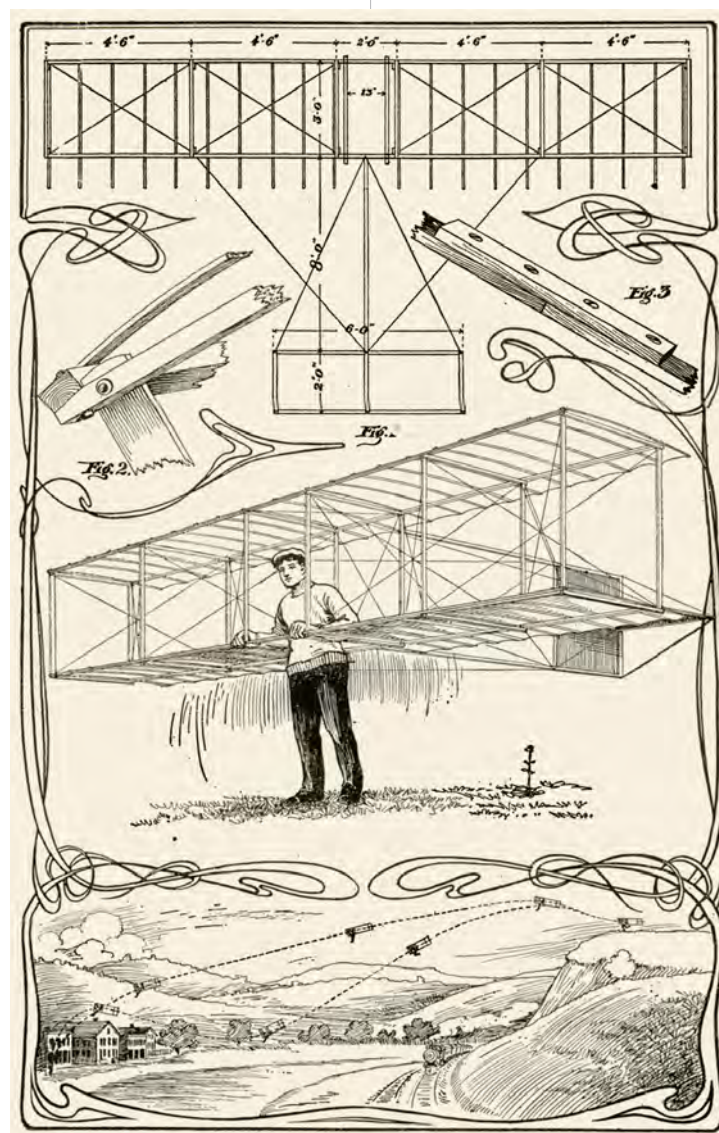
Sorensen inflates his balloon at Litchfield, Nebraska, 1909.



Sorensen at Ord, 1909.



Spalding, Nebraska, undated. Probably a Sorensen balloon and, in the inset, his parachute. History Nebraska RG3542-111-6



Plans for building a Wright-style glider appeared in the April 1909 issue of *Popular Mechanics*.

Preserving the Pine Ridge

Catastrophic wildfires have ravaged more than half of northwestern Nebraska's pine forests. Land managers are making strides toward a more sustainable future.

*Story and photos
by Justin Haag*

This scene at Peterson Wildlife Management Area, with adequately spaced pines at various points of the life cycle, is what land managers would like to see throughout the Pine Ridge.

On this sunny day, Bryce Gerlach is visiting a timber-thinning project at Gilbert-Baker Wildlife Management Area in the northwest corner of the state. Gerlach, who is a forester funded by the National Wild Turkey Federation and the Nebraska Game and Parks Commission, likes what he sees.

“This is the project that is going to save Gilbert-Baker someday,” he says as he looks over this part of the Pine Ridge that, unlike other areas of the region, does not bear the scars of wildfire. Gilbert-Baker, north of Harrison, is recognized as a jewel among the eight scenic wildlife management areas that comprise more than 19,600 acres in the Pine Ridge.

Gerlach is surveying the northwest portion of the property,

where sandstone ridges and buttes rise some 1,000 feet from the Hat Creek Basin and provide a sweeping view of the grasslands to the north. Mixed among the magnificent landforms and rugged terrain to the south is the towering forest of ponderosa pine – the iconic tree of the West for which the Pine Ridge region is named.

Gilbert-Baker is reminiscent of what once existed throughout almost all of the Pine Ridge, a roughly 10-mile wide escarpment that spans about 100 miles across northwestern Nebraska between the Wyoming and South Dakota borders. Only 2 percent of the Cornhusker State is forested, so the pines and rugged topography here are especially valued and have long served as a destination for outdoor enthusiasts.

The Challenge

The management decisions of Euro-Americans and their descendants were not ultimately beneficial to the landscape of the Pine Ridge. Prior to the settlers’ arrival in the 1800s, lightning strikes caused periodic wildfires that burned in the understory of forest and boosted plant diversity. In addition to natural causes, American Indians used fire to burn the brown plant matter on the landscape to start afresh with green plants – an attractant that served well for hunting some of the 30 million bison that once roamed North America.

With motivations that included preserving lives and property, the first generations of Euro-Americans on the Plains extinguished wildfires at every chance, and hunted bison to near extinction. Consequently, pine stands, especially where logging was not feasible, grew thick. The result is what land managers call “dangerous levels of fuel accumulation.”

As periods of drought gain intensity with global warming, land managers know the potential for disaster looms heavy. The danger was especially evident, and realized, in 2006 and 2012 when more than 100,000 acres burned in catastrophic wildfires that raged across the landscape and charred trees from bottom to top. The wildfires’ toll was heavy as about 120,000 acres



This before-and-after scene at Gilbert-Baker Wildlife Management Area shows the extent of an effort to clear pines from a service road to serve as a firebreak.



Most of the wildlife management areas that were burned in 2012 have tree regeneration that I do not see from other large fires like in 2006 and 1989. You can walk through the '12 footprint and find 1- to 2-foot pines coming in.

— Rick Arnold, Game and Parks wildlife biologist in the Pine Ridge

remain of the estimated 250,000 forested acres in the Pine Ridge prior to the 1950s.

Simulating Nature

Where possible, land managers thin the forest in a way to mimic nature. The result is decreased fuel loads and returning forest structure to historic conditions. The ultimate goal is sustainability.

In places such as Gilbert-Baker, however, the steep terrain that gives the land aesthetic appeal eliminates most practical means of thinning the forest. Moreover, while some pines have been harvested in the region, the market has not been strong enough to maintain high demand of timber there.

Thinning is a concept easily related during times of “social distancing.” If a fire reaches the top of one pine, it will spread to the crown of another nearby and continue raging as long

as it can. Thinning keeps fires at an intensity low enough that trees distanced appropriately can survive such events, and the forest may even be better for them.

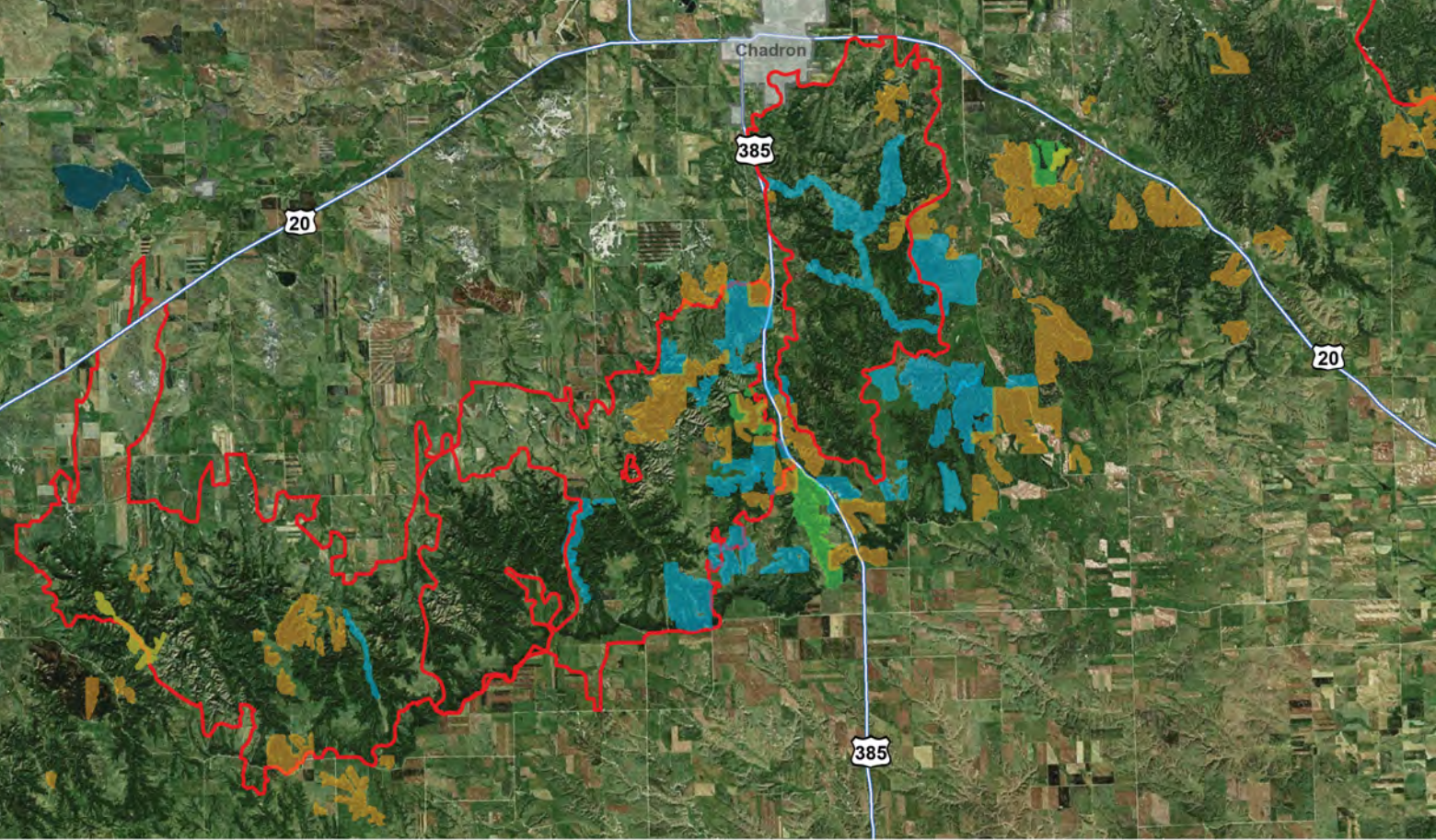
The project at Gilbert-Baker, where an old service road has been cleared of pines at a width of about 100 yards, is a prime example of methods being used throughout the Pine Ridge to make immediate impact.

Fred McCartney of the Nebraska Forest Service facilitates cost-share programs with private landowners and public land managers to best leverage available money. Much inspiration for his work, he said, comes from a first thing firefighters want to know when responding to a blaze: “Where are the sides of the box?”

That is, where is an accessible break in the trees where the fire can be stopped? Knowing such locations can help contain wildfire to established areas and prevent unrestrained spread



The U.S. Highway 385 corridor, which includes Chadron State Park and Chadron Creek Ranch Wildlife Management Area, has been a focus area for creating a thinning buffer in the Pine Ridge.



- Nebraska Forest Service – complete/in progress
- United States Forest Service – complete/in progress
- Nebraska Game and Parks Commission – complete/in progress
- 2006 and 2012 fire perimeter

0 1.25 2.5 5 Miles

Pine Ridge Shared Stewardship Project Areas



A map created by the Nebraska Forest Service shows shared stewardship forestry project areas near Chadron.

throughout the Pine Ridge. With a system of firebreaks, the hope is to at least limit the size of wildfires.

“We’re building those box sides and communicating them to area fire departments,” McCartney said, as he points to a map of the Pine Ridge with areas shaded in various colors to show projects in progress and completed. “Absence of a commodity to pay for the work, this is the best approach; the best bang for our buck.”

A primary focus area of the collaborative effort has been the U.S. Highway 385 corridor, which runs north and south through the ridge near Chadron and features many private tracts interspersed among public land. Through cooperation between the Nebraska Forest Service, Game and Parks, the U.S. Forest Service and the many landowners, a large buffer has been created through thinning. In the event of another large wildfire, the area will be invaluable in efforts to stop it from moving east or west.

An area of emphasis in the collaboration has been Chadron State Park. Situated along the highway, it had experienced

valuable thinning prior to 2012 and, though that year’s fire burned through much of the park, it did not charge eastward. Since then, the park has undergone more thinning and the removal of burned trees.

The Strategy of Thinning

For thinning, land managers are strategic in selecting trees to cut. Gerlach prefers an approach he calls “groupy-clumpy.” With that method, trees are not spaced uniformly throughout large areas, but rather in small groups. This approach keeps crown fires from spreading, yet lessens the likelihood that the trees will be uprooted or damaged by the wind. The groups of trees also serve as a seed source.

Gerlach said about 2,200 acres have been treated on state wildlife management areas in the Pine Ridge with thinning and removal of “ladder fuels,” the brush and other vegetation that helps fires climb trees.

The other big public land organization in the Pine Ridge, the U.S. Forest Service, has completed about 4,000

acres of thinning and logging on lands primarily between East Ash Creek Road and Bordeaux Road.

Silver Linings

Rick Arnold, a Game and Parks wildlife biologist who oversees the Pine Ridge WMAs, notes a silver lining in the cloud of 2012.

“Most of the WMAs that were burned in 2012 have tree regeneration that I do not see from other large fires like in 2006 and 1989,” Arnold said. “You can walk through the ’12 footprint and find 1- to 2-foot pines coming in.”

Also on the bright side, the wildfires of 2006 and 2012 garnered a lot of attention and prompted needed funding for some of the region’s forestry demands.

The pines are tall, the terrain is rough, and the equipment is large, so thinnings are not cheap. Various factors play into it, but thinning projects generally range from \$300 to \$950 per acre.

“With the land being appraised at very close to the high end of those project costs, it is hard to do a landscape-level job without several partners and adjacent landowners doing projects as well,” Arnold said.



Contractor Alex Gomez uses a skidder to pile cut pines at Gilbert-Baker Wildlife Management Area.

Money from the Nebraska Environmental Trust has been critical. Support from the trust, which operates with proceeds from the state lottery, dates back more than two decades, and it has contributed well over \$1 million to Pine Ridge forest management since 2006.

The trust grants often require a sizable match, and that



Game and Parks employees Steve Masek, at left, and Greg Schenbeck burn a pile of pines, a final step in the thinning process.



While this image from the Pine Ridge of Sioux County may have aesthetic appeal, it bears evidence of the great forestry challenge in the West. Even though no wildfires were in the immediate region on this September 2017 morning, the smoke from fires hundreds of miles away was evident.

is where many partners come into play. For Game and Parks forestry projects, for instance, there is considerable collaboration and multiple financial supporters.

Another big funding source, especially for private lands, is the U.S. Forest Service’s State and Private Forestry program. Money collected from the Pittman-Robertson Act’s excise tax on sporting goods and State Wildlife Grants, administered through the U.S. Fish and Wildlife Service, also have been instrumental.

Cows and Flames

Thinning projects are a benefit to the forest from a fire perspective and also a wildlife one. For instance, a multi-year thinning of more than 200 acres underway near the buttes at Fort Robinson State Park is designed to not only provide fire protection for the park and nearby community of Crawford, but also to boost wildlife habitat for species ranging from bighorn sheep to bats. Just as the vegetation gains diversity with open areas among tall trees, so too does wildlife.

Managing the density of pines is just one of many aspects of management in the Pine Ridge, and the changes come with consequential challenges. Arnold notes that the ecology of the forest floor changes with removal of shade.

“We are, in theory, just reorganizing the fuels. We went from a heavy fuel model, the dense forest, to a more open savannah with grass understory,” he said. “Now, we need to

manage the fine fuels, the grass.”

A point of emphasis has been to create infrastructure for grazing. He said most of the wildlife areas in the Pine Ridge do not have adequate livestock infrastructure, such as fences and water sources. Thanks to partnerships, that infrastructure is being constructed so grazing can be used to meet management objectives while not damaging habitat.

Along with thinning, Arnold sees grazing to be instrumental to balancing the needs of the forest, even if it is done with cattle instead of bison. Also important, he said, is reintroducing fire to the land.

“With the right prescription we can put ‘safe’ fire on the landscape and restore a historic fire regime,” Arnold said. “Fire is needed to naturally thin and prune ponderosa pines.”

Even though staff is highly trained and prescribed fires follow strict guidelines, it is not always an easy sell.

“The challenge is mainly a social one,” he said. “The public sees the catastrophic wildfires and perceives all fire to be a bad thing and it has been suppressed so many years. Our goal is to do a forest management timber thinning and then use fire to maintain these areas so they do not go back to overgrown stands.”

Fire also can treat areas already struck by catastrophe. Game and Parks has plans with the U.S. Forest Service and an adjacent landowner to conduct the largest prescribed burn ever in the Pine Ridge this fall; it’s an area encompassing about

1,500 acres from Chadron Creek Ranch Wildlife Management Area near U.S. Highway 385 to Deadhorse Road 4 miles to the west. That burn, which will capitalize on dry conditions of the season, has a goal of removing the fallen “jackstrawed” timber that was scorched in 2012. That deadfall is complicating noxious weed control and hindering access.

Bringing the Forest Back

Those who have long loved the Pine Ridge have resigned themselves to the prediction they will never see it as rich with big pines as it was. Although pine growth in burned areas is occurring, ponderosas are slow-growing trees and success is sporadic.

An effort to replant 10,000 pines on the hills south of Chadron State College after wildfire threatened the campus and community in 2006 yielded virtually no surviving trees, for instance. On the other hand, annual plantings of deciduous trees and pines on Bighorn WMA, the Commission’s property

that burned most intensely in 2012, have done well the past few years. The U.S. Forest Service has planted about 2,200 acres of ponderosa pines and 50 acres of hardwoods in riparian areas at points throughout the region. The Boy Scouts of America planted pines at Fort Robinson State Park for 25 years following the park’s 1989 catastrophic wildfire, and have conducted similar operations at Chadron State Park for the past five years with some success.

Nevertheless, planting pines is largely avoided because it is labor-intensive, unpredictable and costly. A much better approach, officials say, is protecting pines still standing. “If we want to ensure that there’s a forested Pine Ridge in the future, we need to protect these seed sources,” McCartney said.

Regardless, the goal is not to get back to the way things were, said Tim Buskirk, U.S. Forest Service district ranger.

“I would say we are on the way up when it comes to recovery, but it’s a relative term,” Buskirk said. “Our goal isn’t to fix everything that has changed. Our goal is to improve the



This sunrise at Bighorn Wildlife Management Area, where the 2012 wildfire burned most intensely, shows there is still ample beauty throughout the Pine Ridge.



The single-engine air tanker, added to the region's fire resources after the 2012 wildfires, provides a demonstration during a forestry workshop at Chadron State Park.

resiliency of the Pine Ridge: Do things that will lessen the effects of the next fire that comes through the area and begin to incorporate more prescribed fire along the way.”

No doubt, land managers have plenty of other jobs to keep themselves busy in the areas that burned.

“Over the next few years, the cleanup will continue. Building fence and piling trees that continue to fall over,” Arnold said. “I have been told by others that have seen the catastrophic fires that it takes 10 years to recover from infrastructure damages, and I think we are on pace with that from 2012. I do think in five or 10 years we will see much more regeneration from the 2012 footprint than we have seen in the 2006 burn area. There were enough trees that put on seed before they passed, and we have had several good years of precipitation to provide for good regeneration.”

Those years of above-average precipitation have helped buy time to complete forest management projects, but everyone expects a drought cycle to return soon. When it does, the Pine Ridge will be more prepared.

Air Support

While the practices of land managers are helping prevent catastrophic wildfires, the capability to respond to fires also has improved. With such rugged landscape, it helps to attack fire from above.

After the wildfires of 2006 and 2012, officials recognized the need for first-responders to have more resources for wildfires. One result was increased aerial capabilities from the Legislature's Wildfire Control Act of 2013.

In conjunction with the Nebraska Forest Service, the Nebraska Emergency Management Agency contracts a single-engine air tanker, known as a SEAT plane, to be stationed in western Nebraska during fire season. With designs based on agricultural sprayers, the small aircrafts can get to places trucks cannot and possess the capability to make substantial impact by dropping 800 gallons of water or retardant in a single action. With bases in Chadron, Valentine, Alliance, Scottsbluff and McCook, the airplane is serving where Nebraska's range fire danger is greatest.

Seth Peterson, a Nebraska Forest Service employee who serves as the SEAT base manager in Chadron, said the goal is to have the airplane loaded with retardant, off the ground and communicating with the fire chief within 15 minutes of receiving a dispatch.

“Our goal is to provide a quick response to volunteer fire departments on small fires, hopefully keeping them small before they cause any real problems,” Peterson said.

It seems to be working. He said there has been just one fire over 500 acres in the Pine Ridge since the program's inception in 2013. If a fire is highly active and growing, Nebraska may

call upon its relationship with South Dakota Wildland Fire. That organization usually has an additional SEAT at nearby Hot Springs to serve the Black Hills.

“Then, we may have two SEATs reloading at the Chadron SEAT Base, providing quick and continual aerial suppression to any Pine Ridge fire,” he said. “In return, we have allowed South Dakota to utilize our SEAT many times.”

Burning Questions, Uncertain Future

No one knows for certain what the future brings to the Pine Ridge wildfire scene, but officials are making strides in preventing past horrors. Healing from catastrophic wildfires takes time, for both human emotions and the landscape.

Regardless, unrivaled beauty remains in the region, both in places that have not been scorched and those that have. While the landscape has been altered, a new kind of splendor is in these burned areas. The fires uncovered many landforms previously obscured under the blanket of trees, and in many places improved the ecology.

The Pine Ridge surely will always be an attraction. Thanks to the coordinated efforts of many, there is a much better chance a sustainable pine forest will be there forever, too. 



Although planting is regarded as a costly way to reforest pines, it will forever be a good way for Boy Scouts and other youth to invest in the future.



Even though the prospects of pine survival in Chadron State Park were uncertain after the 2012 wildfires burned through the property, many trees survived and it has retained remarkable splendor. Many credit the years of thinning operations.

Make a Lure

Have you ever been interested in making a homemade lure? Glen Oliver of Lincoln shows that you probably have everything you need to do so within the comfort of your own house.

By Jeff Kurrus

Most people have “stuff” lying around the house – a screw left over from self-installed window blinds, a rubber band from a pile of bills in the mailbox, or the frayed ends of a dusty rope in the corner of the garage. By themselves, they are little more than objects whose lives will probably end in a landfill.

Yet with a little bit of imagination, these items could be fashioned into fishing lures – a chance at a story that goes beyond the catch and centers instead on creating the lure that caught the fish.

A Box of Lures

Several years ago a box of fishing lures showed up on the desk of Larry Pape, a Nebraska Game and Parks Commission fisheries education specialist. This isn’t uncommon, as people often donate used equipment to the Commission’s youth programs. When anonymous donations like this appear, Larry passes them along to youth fishing instructors. However, the lures in this box were different.

Lures made of nails, chain, beads, brush bristles, pipe cleaners, shrink tubing, soda straws, jewelry parts – anything hidden in drawers around the house – were made into fishing lures. Yet the donation remained anonymous. For some time, Larry kept the lures on his desk and reveled at them – and so did his visitors.

Finally, Larry got a call from the culprit – Glen Oliver of Lincoln – wanting to know if the lures had landed in the right place. They most certainly did, Larry told him.

“What amazed me about the collection he brought was the creativity and fine craftsmanship involved,” Larry said.

During Glen’s 85 years, he’s never been formally trained in making fishing lures. He’s never been to art school nor taken any classes.

“I’ve just always liked to build,” Glen said. “And I’ve always liked to fish. This just allowed me to combine both of them.”

It’s hard not to be amazed when you see the lures, yet there will be a moment when you say, “I can do that.” And you’re right.

Make Your Own

When creating your own lures, you are only limited by your imagination. First, sift through the drawers in your house to look for anything colorful or shiny.

Start with single shank hooks at a size you can work with, then gather a small pile of tools including, but not limited to, needle-nose pliers, crimpers, scissors, super glue and sewing thread. For color, use Sharpie markers and fingernail polish. “A fly-tying vice is sure helpful as well,” Glen said, as it helps secure the lures while making and drying.

Next, look at the picture opposite and play copycat. One of Glen’s most ingenious creations was placing a couple of split shots inside of a section of shrink tubing, then bookending the tubing with two plastic beads. The lure will rattle as it moves through the water.

What is Possible

“Glen’s lures are examples of what is possible,” Larry said.

These are especially possible now, as many of us have all the necessary tools to accomplish this goal, most important of those is time.

We also have stuff, and many of us have a lot of it. From using miniature Christmas light bulbs to ear plugs, there is a fishing lure just waiting to be made in every corner of your house.

When you begin, don’t worry about how the lure will fish. It’s not going to be perfect. Just start creating. 

Glen Oliver’s collection of homemade lures includes everything imaginable, from pipe cleaners and rubber bands to shrink tubing and frayed rope. The possibilities for him, and for you, are limitless.

PHOTO BY JEFF KURRUS



Sandhills Trumpeters

STORY BY MARK VRTISKA
PHOTOS BY ERIC FOWLER





The marsh had a lot more cattails and bulrushes than most Sandhills lakes, concealing the trumpeter swans we were after. The swans themselves were doing their best to hide by swimming in a different direction than the large and loud airboat zigzagging through the marsh. So, when we burst through a wall of vegetation, and there were four swans right in front of us – two adults

and two young, known as cygnets – we were not sure who was more surprised, us or the swans. The action instantly intensified as the swans scattered, and we gunned the airboat and swung around to pursue one of the adults. The big male, as it turned out, was already in the process of wing molt; having lost the last of his loose wing feathers, and unable to fly, he lunged for the protection of the vegetation. I

managed to get the large hoop net over his head and rolled him up in the rest of the net. We had our swan.

We were after these swans to study their movements and fidelity in the Sandhills – their faithfulness to return to the same wintering and breeding areas each year. To help identify and direct conservation actions for these birds and their habitats, these studies are critical to help us better understand

where and when these birds move about the landscape. For the most part, we found these trumpeter swans neither left Nebraska nor traveled far from the Sandhills.

Additionally, basic information on Sandhills trumpeters, such as nesting and hatching success and cygnet survival, was lacking. Aerial surveys indicate that while the Sandhills population was growing, the number

A pair of trumpeter swans and their month-old cygnet swim through a wetland at Cottonwood Lake State Recreation Area near Merriman in Cherry County. When the nest was monitored in 2016, the female laid seven eggs, only two of which hatched. Neither cygnet survived to fledge.

Previous Page: A trio of swans flies over Blue Creek in Garden County north of Oshkosh, a major wintering area for swans in the state.



Mark Vrtiska, waterfowl program manager with the Nebraska Game and Parks Commission, prepares to net a swan from an airboat on Ballards Marsh Wildlife Management Area in Cherry County.

of cygnets produced each year was declining. Therefore, locating swan nests was the other part of this study. We needed to determine how many nests resulted in eggs being laid, how many eggs hatched and how many cygnets made it to flight stage.

Capturing, collaring and following these birds would help us answer these questions.

Biology and Background

Trumpeter swans are the largest of waterfowl, and even claim the title of largest native bird in North America. Males, also known as cobs, typically weigh between 24 and 28 pounds and stand about 4 feet tall, with females

being only slightly smaller. Their corresponding wingspan is also large, reaching up to 8 feet. Trumpeters are solid white except for their bills and feet. Cygnets have grayish plumage, which they keep for a year. On rare occasions, cygnets will display white plumage similar to their parents.

Trumpeters can be distinguished from their close cousins, the tundra swan, by having a totally black bill, with a little pink or red on the bottom jaw. Tundra swans have a yellow marking at the base of their bill, just in front of the eye. Non-native mute swans have pinkish bills and a distinctive head shape, with a bulging knob at the base of the beak.

Swans are long-lived and known to have reached age 24 in the wild and age 33 in captivity. They will pair for life, but most will obtain another mate if one perishes. They don't breed until they are 3 to 6 years old. Their nest sites are located overwater and typically start with muskrat huts on which adults build the nesting structure. Swans are quite territorial and only on the largest lakes or marshes will there be more than one pair nesting. Despite being big white birds, they are adept at hiding themselves and their nesting sites among the cattails and bulrushes.

Females will lay 4 to 6 eggs during late April or early May and incubate them for about 35 days. It takes



Lead field researcher Heather Johnson kisses a swan captured on a private lake in Cherry County while waiting to place a collar on the bird, an image that speaks to the docile nature of swans.



Neck collars used in the study also carried a GPS transmitter.

Right: A female swan takes off from a restored wetland near the North Platte River in Keith County.

It was one of roughly 60 swans wintering on the wetland at the time. The swan was captured and collared in 2014 on a wetland in Arthur County, where it also nested. The bird also wintered on Birdwood Creek in Lincoln County and, during warm stretches, returned to the wetland where it nested.





A flock of trumpeter swans flies low over a frozen Calamus Reservoir in Loup County, a major wintering area for swans.



A female swan sits on its nest at Cottonwood Lake SRA as its mate hangs in the cattails nearby.

cygnets more than 100 days to grow feathers and attain flight. During this period, adults will undergo a wing molt, rendering them flightless.

Trumpeter swans were nearly extirpated from North America by the end of the 19th century. Euro-American settlers hunted them for food and market hunters targeted them for fashion and supplies: soft swanskins were turned into powder puffs, quills were made into ink pens and feathers adorned hats. By the time the Migratory Bird Treaty Act was passed in 1918, giving swans protection, only remnant populations remained. Yet the decline continued. The last record of a swan in Nebraska came from Holt County in 1928. By 1932, only 69 swans were known to exist in the lower 48 states, with all of those found in remote locations around Yellowstone National Park. Others were later found in remote parts of Canada and Alaska.

From those remnant populations in the Greater Yellowstone area, trumpeter swans were reintroduced into other western states beginning in the 1930s and 1940s. That work resumed in the early 1960s, when 57 cygnets were placed at LaCreek National Wildlife Refuge near Martin,

South Dakota, a short distance from the Nebraska border, north of Merriman. The swans flourished and soon found their way into the Sandhills. In 1964, the first cygnets hatched at Cody Lake near Cody.

The Sandhills is a perfect area for trumpeter swans, as a number of its lakes, marshes and rivers have excellent water quality and are full of submerged vegetation, their primary food. From those first nesting birds, the population has fanned out across the Sandhills, with recent winter surveys counting about 1,000 birds. Even though their status has improved greatly over the years, they are still considered a Tier 2 species in the Nebraska Natural Legacy Plan. Tier 2 species are typically not at-risk from a global or national perspective, but are rare or imperiled within Nebraska. In the case of swans, their limited range puts them at risk.

Restoration efforts in other parts of the United States and Canada have also been successful, with an estimated 70,000 swans now found throughout their range. The success can be seen in eastern Nebraska, where an increasing number of swans from restored populations in Iowa and Minnesota now winter.

Swan Movements

Lucky for us, trumpeters are docile when captured. In fact, they've proven to be the most docile waterfowl species we've ever had the pleasure to handle. If these birds reacted in similar fashion to the Canada geese we band, we would've needed a medic when capturing and handling them. Even so, when swans have lunged in an attempt to escape, the big claws on their huge feet have easily slashed holes in waders and hip boots.

From 2014 to 2018, we captured 37 trumpeter swans in Cherry, Arthur, Grant and Sheridan counties. Each swan was fitted with a red neck collar with a unique code to identify the bird. Also attached to that neck collar was a solar-powered GPS transmitter that provided us with accurate locations of where and when this bird went for the next 2 to 3 years. Given the lack of roads in the Sandhills, the ability to track these birds without having to physically find them was critical. Additionally, we were not sure how far these birds would move once their breeding marshes froze over.

The collared swans provided us with a few surprises. One bird spent part of a winter along the Kansas/Oklahoma border southeast of Dodge

City, Kansas. This area is not known as a mecca for wintering waterfowl. However, summer and fall rains provided plenty of water, and this male was thought to be a 2- to 3-year old adult that may have just wandered around for a while. A couple of swans also led us to wintering areas we were not aware of from our aerial surveys – one swan used the Platte River. The vast majority of marked birds stayed and wintered on the rivers and creeks in the Sandhills. None of our marked swans went farther east than Calamus Reservoir near Burwell, but that may be more of a reflection of where we captured the birds than their behavior.

We also saw swans move to a wintering area, and then, during a warm spell, go back to their breeding marshes for a brief period. Once weather turned cold again and the lakes froze over, they returned to their wintering area. As we anticipated, most swans were faithful in returning to the same breeding and wintering areas each year. There were some departures, with some swans using different river systems during the same winter. While a few birds went south for the winter, most passed on that seasonal migration. Some actually traveled north, and some



Heather Johnson measures eggs in the nest at Cottonwood Lake SRA. Her work on the study earned her the nickname “The Swan Lady” among Sandhills residents she worked with.

went more east than south. Some also bypassed the wintering area closest to their breeding marshes.

Swan Nesting

In conjunction with the movement study, we began assessing how well trumpeter swans were reproducing in the Sandhills in 2016 and 2017. Aerial surveys helped us find a number of nesting pairs, and observations by Game and Parks staff, U.S. Fish and Wildlife Service staff at the Valentine National Refuge, and tips from local landowners and other interested parties helped us find more.

Once a nest was found, Heather Johnson, who led the field work on this part of the study, used a kayak to visit and study the nest. Eggs were numbered and floated – a technique to age the stage of incubation – as quickly as possible to allow the female back on the nest. After the anticipated hatch date, or when the pair was observed with cygnets, Johnson returned to the nest to determine how many eggs had actually hatched. Pairs and cygnets were observed until late summer, just prior to when they were able to fly, to determine how many cygnets survived.

The study found that 92 percent of the nests we monitored were successful, hatching at least one egg, and that a little more than 70 percent of the eggs laid hatched. Both of these numbers match the high end of success rates found in studies from other parts of North America. However, where we found the biggest discrepancy between trumpeter swans in the Sandhills and other populations was in cygnet survival. Only about 40 percent of cygnets survived to flight stage, compared to 70 to 85 percent elsewhere. The biggest difference was that in lakes with largemouth bass and northern pike, cygnet survival was much lower than in lakes without those aquatic predators. Despite cygnet survival rates being lower than in other populations, the swan population continues to grow in the Nebraska Sandhills.

The Future

The Sandhills is a unique place in North America and, indeed, the world. One aspect of its uniqueness is that it is relatively undisturbed compared to other habitats. But that may change. Swans need water throughout their life cycle, and water demand will only increase in the future, a fact that already has some looking at ways to move water from the Sandhills elsewhere. Climate change could also affect water in the region. Other threats to swans include the development of wind and other energy sources, and the corresponding transmission lines may alter where swans can or want to go.

One thing is certain, though. The beauty and calm splendor of trumpeter swans in this unique region will remain. As a biologist, one reward is the observations that few others get to have. We had the fortune to watch a cygnet take its first swim with its father, while the mother stayed behind to continue to incubate the remaining unhatched eggs. The cob waited patiently as the cygnet carefully, yet clumsily, made its way



Swans spend an evening on the ice in the upper reaches of Calamus Reservoir. In some years hundreds of swans winter on the reservoir and on the Calamus River above it. Below: A swan stretches its wings on Blue Creek.

down the large muskrat house from his nest. Once it reached the water, the cob started out swimming slowly, letting the cygnet get used to the cool water and figure out how to navigate it. Within minutes, both cob and cygnet set out exploring the lake.

It is also comforting to know that thanks to the efforts of ranchers, landowners, conservation agencies and the public, trumpeter swans will continue to thrive in the Sandhills for generations to come. [N](#)

Heather Johnson did much of the field work for this study and contributed to this story. We would also like to thank the landowners who allowed us access; Game and Parks biologists Al Hansen, Tom Krolikowski and Zac Brashears; technicians and other individuals for their help; and Letitia Reichart at the University of Nebraska at Kearney.



Time to Train

By Todd Mills
Photos by Jeff Kurrus

Preparing a dog for hunting season can be a good way to keep yourself engaged during the long off-season, but it can also be time consuming.

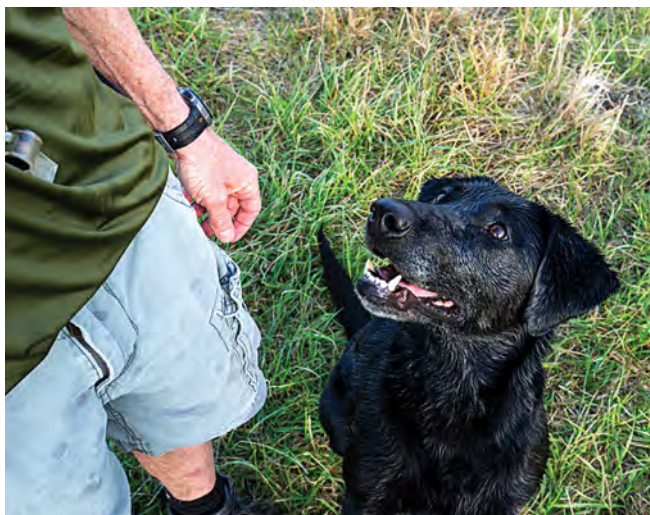
With the overall shutdown we are experiencing due to COVID-19, it seems most of us have a lot more time on our hands. So now may be the perfect time to start getting your dog prepared for when game day hits in the fall or to help condition him or her to the rigors of hunting season. It may be a good time to purchase that new puppy you've been longing for.

Training your own gun dog can be challenging, frustrating and rewarding all at the same time. It takes commitment on your part to finish what you start. Whether it's your first or your last dog, watching your dog make that first retrieve or flush that first bird is well worth the time you put into it. Training is also important because an out-of-control dog with little discipline can ruin any good hunt.

Here are a few tips that I've found helpful when training my own gun dogs.

Keep Them in Shape

Much like us, a dog who is on a properly structured routine will perform best. Taking your dog for a "walk" will not allow him to get in the kind of condition he needs to be in. Dogs need



Developing a connection with your dog will allow you to use training techniques more effectively.

to be active at a high level to keep them running at top speed during the season. If you're a runner, take them with you. If you have access to a field, then use that area for retrieves and distance marks. Also be cognizant of your dog's calorie intake this time of year. For example, during the season I'll feed my dogs a higher caloric, higher protein dog food. During the off-season, I'll switch to feeding them maintenance food. Come hunting season, an overweight dog can face joint issues and eventually even more serious issues like heat stroke.

Back to the Basics

Much like in our daily lives, the first thing that will go is the "fundamentals" associated with a fine-tuned gun dog if they're not being repeated. A backyard is the perfect place to reinforce the commands of sit, stay, heel and come. Younger dogs, particularly around the adolescent stage, love to break the rules when they can. Take 20 minutes a day to repeat these commands and be stern about your follow up. If you allow your dog to take an inch, they'll take a mile. Ask your family to serve as distractions so you can see how they handle diversion. After all, you'll have plenty of those in the field, the blind and the boat.

Research Dog Training Tips

Whether you're new to the dog training world, or a seasoned veteran, you can never learn enough about training gun dogs. YouTube is a great resource to reference training techniques. Find a mentor whom you can bounce off ideas and troubleshoot. In this day of electronic media, you can find several sources that can guide you in the right direction. Understanding the dynamics of your dog and the personality



Training your own gun dog can be challenging, but one that comes with great joy if done properly.

they bring can be helpful in your training approach. One of my favorite resources for discovering this potential and troubleshooting is the book *The Art of Raising a Puppy* by the Monks of New Skete.

Hunt Your Dog

Sounds like a overused cliché, but in the dog world, it's fact. You're going to experience many ups and downs in the training process. It's a marathon not a sprint, so ongoing repetition with your dog is the key to being successful once hunting season starts. And don't be "embarrassed" to hunt your dog with others, even if you think they might screw something up. All the training in the world is no good if you don't put live birds in front of your pup. Nothing replaces shooting birds over your dog. I've seen dogs with very average blood lines excel around other more "champion" blood lines purely because they have the most in-game experience. Stay committed to the process and take this time to not only improve your dog's chances of being successful, but to also socialize them around others.

One of my favorite quotes comes from legendary waterfowler Nash Buckingham circa 1947:

"The best long-range shotgun load to have in one's boat for mallards is a fine retriever."

Well said, Nash. 🦋



A steady dog is a crowd pleaser. Use this down time to instill confidence in your dog by reinforcing and repeating the basic commands.

TAKE THE PICTURE

By Emily Burch

We always search for the image that no one else has taken, but some landmarks are so spectacular, captivating or out of place that everyone who passes by has to take a picture. In Nebraska, the list includes Scotts Bluff National Monument, Smith Falls and the water towers at Fort Robinson State Park. Anyone with a camera or smartphone that’s been to any of these places knows what I’m talking about. The urge to capture them is irresistible. So give in.

The beauty of taking pictures, besides the final product, is that no two photographers end up with exact replicas. The same subject, even the same angle, will turn out remarkably different depending on the person, the light, the season. So whether you are a professional photographer or just now taking up the camera as a social distancing hobby, take the picture that everyone else has already taken. Take it unashamedly. And then send it to us.

Water for the Fort

By Justin Haag

Similar to other man-made landmarks on the High Plains, the water towers at Fort Robinson State Park sprang from a purpose of utility. They came during a period of transition for the U.S. Cavalry, and surely served as a symbol of reassurance for area residents who feared the military base would close as the Indian wars were ending.

The U.S. Army constructed the two towers in 1903, shortly after squadrons of the Tenth Cavalry – the black regiment known as “buffalo soldiers” – were assigned to Fort Robinson. The new metal structures replaced a wooden tower that had stood at the northeast corner of the grounds since 1889.

With a capacity of about 32,000 gallons each, the towers served the grounds until 2005. That year, two 90,000-gallon concrete tanks were constructed, three-fourths underground, near the ridge northwest of the park’s main campus.

Park superintendent Jim Miller said the towers still have a function.

“When we have guests who can’t get their bearings here at the fort, we tell them to stop and look at the towers. They are the only structures at the fort that are set due north and south of each other,” he said.



PHOTO BY EMILY BURCH



PHOTO BY JENNY NGUYEN-WHEATLEY



PHOTO BY BOB GRIER



PHOTO BY JUSTIN HAAG

NEBRASKA WALNUT TWIG BEETLE UPDATE

By Julie Van Meter, State Entomologist
Nebraska Department of Agriculture

In 2019, staff with the Nebraska Department of Agriculture set 54 traps for walnut twig beetle in 11 counties across the state. Traps were up from May through October, and samples were collected from the traps every two weeks. Walnut twig beetle specimens were collected from a single location in Gering. This was the first find of walnut twig beetle in Nebraska. All other traps in Nebraska were negative.

The beetle can carry the *Geosmithia morbida* fungal pathogen that causes thousand cankers disease. The fungus is particularly lethal to black walnut (*Juglans nigra*) trees. Nebraska forests are home to more than 1.5 million black walnut trees, which are all susceptible to this pest.

The number of beetles trapped at Gering were low, with 2-12 beetles per trap, collected over a six-week period in the fall. Walnut trees near the traps are relatively isolated, and other surveillance traps in the county did not collect any walnut twig beetles. No obvious symptoms of thousand cankers disease were observed in nearby walnut trees.

The NDA plans to continue to survey for the beetle across the state in 2020. Trapping will occur statewide, with an emphasis on Scotts Bluff and surrounding counties. The

NDA will also set baited branches in Gering this summer to determine if any beetles found at a location are carrying the *Geosmithia* fungus. Walnut branches baited with a lure will be suspended from a metal pole near black walnut trees where the beetles have been previously trapped. At the end of the survey, the branches will be de-barked to collect any beetles that have infested the branches, and the beetles will then be tested for *G. morbida*.

There are no changes to the Nebraska Thousand Cankers Disease of Black Walnut quarantine at this time. Additional information from the 2020 survey will be used to determine if changes are necessary. For more information on the Nebraska TCD quarantine, visit https://nda.nebraska.gov/plant/entomology/tcd_quarantine.pdf.



Adult walnut twig beetle (*Pityophthorus juglandis*). STEVEN VALLEY, OREGON DEPARTMENT OF AGRICULTURE, BUGWOOD.ORG



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BUY LOCAL, BURN LOCAL.

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

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BACKYARD CAMPING

By Monica Macoubrie

During these uncertain times with social distancing, we’re inviting you to look no farther than your own home or backyard for your next campout experience. The “getaway” that everyone craves is only a few feet from your front door. The excitement of sleeping outdoors is fascinating for people at any age: not just kids. So, get to packing for your next big adventure right in your own backyard.

So where do you start? Pre-planning for your backyard adventure as a family gets everyone involved and promotes anticipation. Treat your backyard like an honest-to-goodness campsite. Take your tent outside and find the perfect location for the night. Don’t have a tent? Then use supplies that you have on hand such as a tarp, rope, big sticks or a clothesline between two trees with a blanket or sheet on top. It doesn’t have to be perfect – just make it fun.

One of the best parts about camping is eating around the fire. If you have a fire pit, it’s easy to roast hot dogs, toast marshmallows and even make tinfoil packet dinners. Or, if you don’t have a fire pit, try a small charcoal grill. Of course, you don’t need a campfire to eat like a camper – pack some sandwiches, trail mix, juice

boxes and desserts in a cooler instead. Once dinner is over, remember to keep yourself entertained with games during the day or into the night. Do a scavenger hunt or play classic games like Simon says or tag – activities that don’t require extra packing are always a plus. If none of these suggestions sound interesting, then invent your own games with items you have around the house. Encourage creativity and family fun competitions.

Don’t be discouraged if you don’t have a yard. Many of these same experiences can be created on a porch, driveway or even in a living room. S’mores in the microwave are still just as good. Single tents or homemade forts fit well in small spaces. What will your campsite look like? Make the adventure your own.

Remember to take a few photos and share them on social media with the hashtag #CampAtHomeNE. Those who send Nebraska Game and Parks a direct message on Facebook or Instagram with their camp-at-home photo, their name and address will be automatically entered into a drawing for prizes. Learn more at OutdoorNebraska.org/campathomene.



PHOTO BY JEFF KURRUS

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A NEBRASKA TOURISM PROGRAM



OUTDOOR EDUCATION IN YOUR OWN HOME

By Monica Macoubrie

In response to COVID-19 and social distancing guidelines, the Nebraska Game and Parks Commission is committed to helping the public by providing resources, lesson plans, toolkits and activity guides that still get students outside in a fun and educational way. For instance, parents and educators who would like more structure may download free conservation **lesson plans**, **PowerPoints** and **videos** on a variety of topics, including birds, pollinators, prairies, habitats, life cycles, plants and much more.



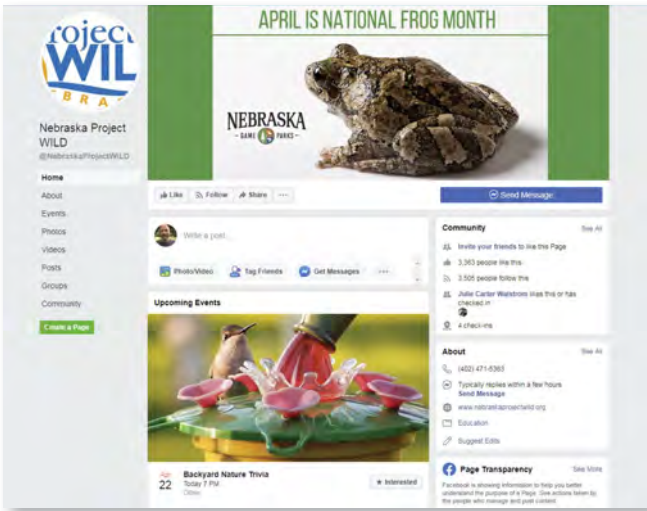
Many videos are available on the website.

If you are looking at taking a more hands-on approach by getting into the field, then try a **Citizen Science project**. Here, you can engage in nature and help scientists from your own backyard. Look for current Nebraska-based projects, including searching for spotted skunks, participating in regal fritillary and monarch butterfly surveys, or tracking and conserving bumblebees throughout the state with the Nebraska Bumblebee Atlas. There are also many national projects to choose from, such as Project FeederWatch, Budburst and Journey North.

While you're spending time outside, I'm sure you or your kids have had some questions about nature. Well, send those questions to our **Wild What's Up** email address and get a response back from one of our naturalists. If you don't have a question, but still would like to gain some knowledge, check out the Wild What's Up videos posted about nature



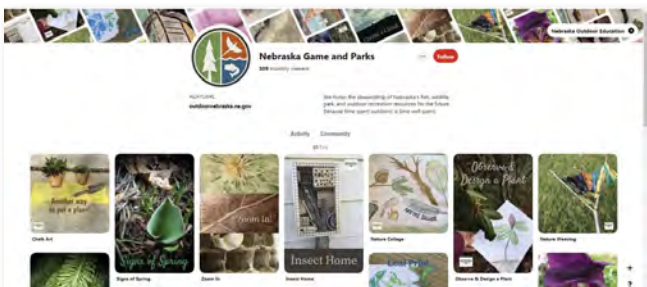
Nebraska Game and Parks Citizen Science page.



Project WILD Facebook page from Wild What's Up.

questions that have come in already. These hilarious videos are a great way for gaining knowledge and having a laugh.

Another great resource we have is our **Watchable Wildlife Guides**. If you are looking for less structure and just some information about species that live in your backyard or in your area, check out the many different regional guides. Here, find information on mammals, birds, insects, plants, reptiles and amphibians. These guides are free and available for download to aid in your exploration of Nebraska's diversity. Not only do they provide species information, they also provide information on the region and tips for wildlife viewing.



Nebraska Game and Parks Pinterest page.

Lastly, check out the new **Pinterest page** for Game and Parks. Here you will find fun crafty outdoor education ideas for kids and families. This page will encourage children's love of nature as well as stimulate their creative side.

All of these outdoor education ideas can be found at OutdoorNebraska.gov/onlineeducation.

Monica Macoubrie is an outdoor educator for the Nebraska Game and Parks Commission.



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HUNTERS HELPING THE HUNGRY



OPPOSITE PAGE – These photos from the fall of 1952 show a log cabin my friends and I built on an island on the Loup River west of Fullerton during high school. I was told that in later years the Boy Scouts used it for campouts. From left, Leroy Emery, Lyle “Zeke” Pierce, Lowell “Coon” Harris and Jay “Eager” Brown.

–Lowell Harris, Central City



Here are a few photos from my childhood in the mid-to-late '70s. All pictures are from the collection of my parents, Larry and Kay Allen of Grand Island.
– Suzie Hartman, Omaha

Camping at Harry Strunk Lake on Memorial Day weekend 1977 with kids by the baby pool. From left, Nicole Hutchison and cousin LaRae Mamot, Jarrod Allen and sister Suzie Allen (Hartman), Jeni Dreier (Cook) and sister Tricia Dreier (Camplin).



Visiting Smith Falls in the summer of 1979. My mom, Kay Allen, is in the front. Others in the photo were with Third City Archers, an archery club from Grand Island.



My dad, Larry Allen, and I with the catch of the day in the summer of 1979 at Pibel Lake.

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



PHOTO BY JENNY NGUYEN-WHEATLEY

LEAVE NO TRACE

By Jenny Nguyen-Wheatley

This happens too often: Me, trying to immerse myself in the beauty and solace of nature, and then laying eyes on Styrofoam bait boxes by the lake, or finding a soiled diaper while mushroom hunting, or crushed cans of beer scattered around what was an illegal campfire.

These sights pull me out of my reverie. The romance disappears, and my annoyance becomes blinding. Trash is a disruption to the experience of nature, a sad reminder of humanity in places where I go to get away from it. How a person could enjoy the

outdoors, yet feel no remorse about trashing it – I could beat myself up just thinking about it.

The good news, there are still good people, and I’m especially impressed when I see kids picking up after themselves – and others. We’ve dedicated many pages and campaigns to passing on traditions at *Nebraskaland* and Game and Parks. Although Leave No Trace might not be as exciting as other outdoor lessons, I believe it is the most fundamental one.

“Time outdoors is time well spent” – littering not included.

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