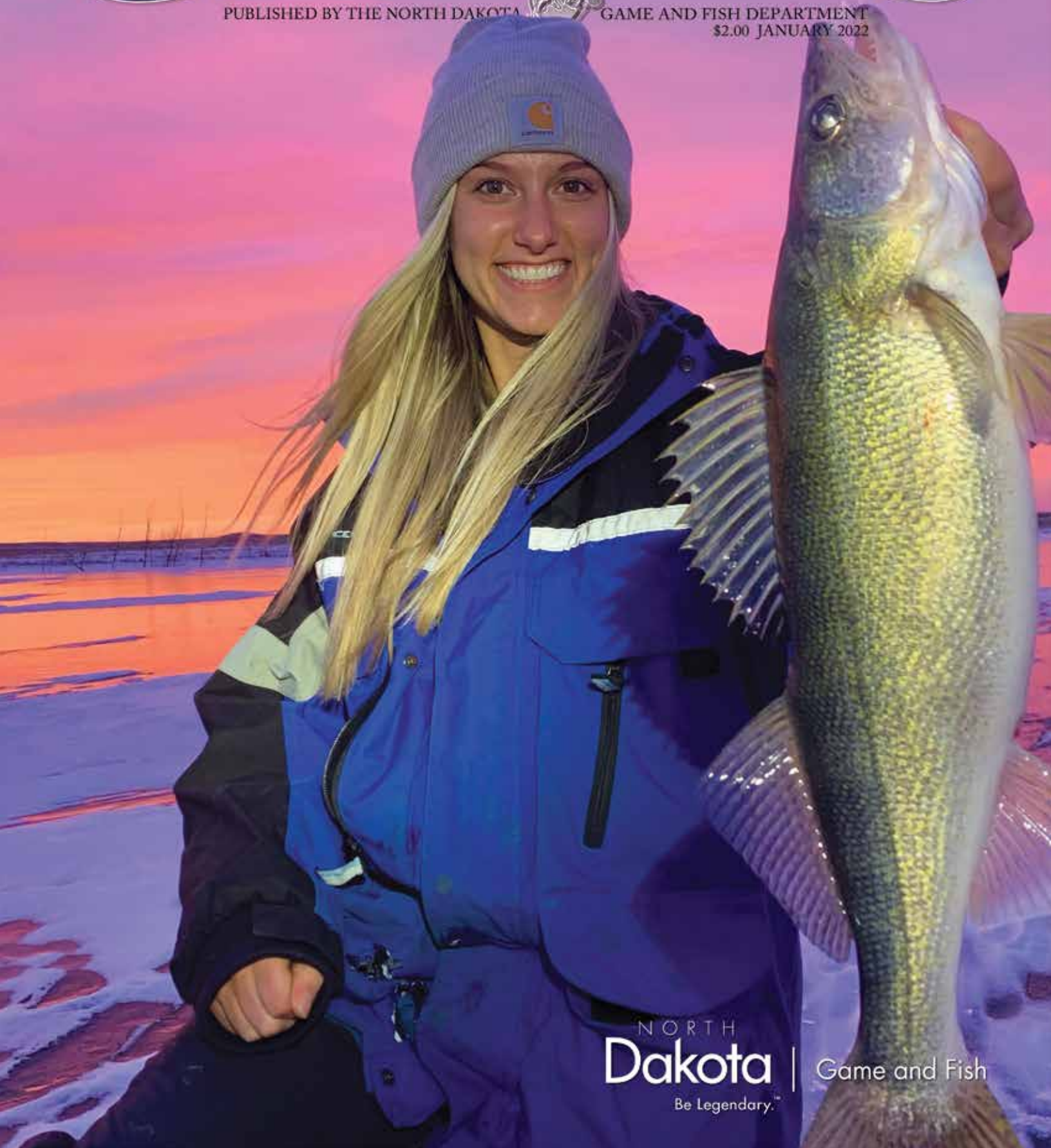


NORTH DAKOTA OUTDOORS

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• **Editor:** Ron Wilson • **Graphic Designer:** Kristi Fast • **Circulation Manager:** Dawn Jochim

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Front Cover

Jettie Strand of Thompson with an early winter walleye from a lake south of Interstate 94.

Photo by Seth Kreft of Bismarck.



My 2 Cents

By Jeb Williams, Director

Happy New Year!

I hope everyone had a healthy and safe holiday season and that 2022 treats you and your family to good health, safety and many outdoor adventures.

In the latter part of November and into much of December, myself, along with many Game and Fish Department staff, had the privilege of attending and presenting at the eight district advisory board meetings across the state. As many of you are aware, the governor appoints a citizen within each district to serve as a member of the Game and Fish Department advisory board to serve as a local liaison to the agency. Each fall and spring, advisory board members work with a local organization to host a meeting within their district and Department staff attend these meetings to hear about local fish and wildlife issues and provide updates to those in attendance on topics we are currently working on.

This fall's meeting cycle consisted of Williston to Wishek, Grand Forks to Amidon, with Bottineau, Bismarck, Casselton and Leeds sandwiched in between. In my years with the Department,

I've been to many advisory board meetings, all of which provided the opportunity to connect with interested citizens across the state. I have always looked at these gatherings as an opportunity and not a burden, a way to make local connections, talk through difficult issues, and celebrate accomplishments with local partners who are so instrumental in fish and wildlife management in North Dakota.

In all sincerity, I can say that most of the meetings I've attended over time were very productive because, in large part, the informal atmosphere fostered constructive dialogue between those in attendance.

The meetings this fall were no exception and I want to thank those who made the effort to attend and provide input on issues that matter to you. From deer management to fishing tournaments, baiting and nonresident hunting pressure, electronic posting and wildlife diseases, there wasn't a shortage of discussion. Certainly, there were some agreements and disagreements, but I hope everyone walked away with a better understanding of opposing views. I know I did.

"WHAT I DIDN'T SEE COMING,
WAS FALLING IN LOVE WITH THE PRAIRIE"



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2021

YEAR IN REVIEW

By Scott Peterson

In 2021, more than 72,000 licenses were made available for the deer gun season, an increase of 3,150 from 2020.

I'm guessing when most of us look back at the last year, the one thing that will stick prominently in our minds is the drought. It has been several years since we've experienced a statewide drought the magnitude of which we went through this past year.

While drought conditions can and do have negative effects on fish and wildlife, its greatest impacts are undoubtedly felt by our friends in the farming and ranching community. It is extremely disheartening to read or hear about ranchers having to sell cattle in the middle of summer because of a lack of grass, and to watch farmers harvest corn fields in August to salvage some part of the crop for forage.

The long-term impacts of the drought on fish and wildlife populations will depend largely on the weather pattern this coming spring and summer. Virtually all the state's fishing lakes are going into the winter at lower levels than we've seen in many years, and some are undoubtedly at a higher risk of winterkill, depending on the amount and timing of snowfall to come.

Wildlife, on the other hand, can recover rather quickly with adequate habitat on the landscape, so if we are blessed with timely precipitation next year, the major impacts to animals in this state will be relatively short-lived.

Wildlife diseases and invasive species are two likely constants on North Dakota's landscape. Epizootic hemorrhagic disease, or EHD,

SANDRA JOHNSON

is a fatal disease that mostly affects white-tailed deer and it's been around for quite some time in North Dakota. We've historically experienced periodic outbreaks of EHD, but in late summer and fall, we had an outbreak that had a much larger impact on deer populations in localized areas.

While EHD is typically contained to the southwestern part of the state, the nucleus of this latest outbreak appeared to be farther north and east, even extending east of the Missouri River. EHD is transmitted by a tiny midge that breeds in exposed mud flats, so Mother Nature is holding all the cards in terms of what we're likely to see next year.

Electronic posting was a new option offered to landowners this past year, as a means of posting their land closed to hunting. This option was made possible by the passage of a bill in the most recent legislative session. In the past, if a landowner wanted to designate his or her land closed to hunting, the only available option was to post with physical signs indicating their intentions.

By all accounts, this option has been well received by landowners, and I would anticipate the option to grow in popularity as we move forward.

Another new cooperative venture that the Department is now taking the lead on is referred to as the Meadowlark Initiative, a broad-based landscape initiative aimed at restoring and preserving our state's grassland resources. It will utilize several of our conservation and ag partners to create landowner-friendly programs to restore and enhance grasslands. This will ultimately help all of our state's grassland-dependent species, including the Western meadowlark, our state bird. We are excited to see where this new venture will lead and initial reports of landowner interest is promising.

Reflecting over the past year, we are reminded that there are several factors influencing the abundance of our fish and wildlife resources in North Dakota. We are also reminded that we rarely

have complete control over many of those influences, including the weather. For many reasons, we will be hoping for much more normal weather patterns and better moisture conditions next year.

If all the pieces fall into place in 2022, we'll all be pleasantly surprised at how quickly our wildlife species rebound and we can look forward to enjoying the many outdoor opportunities afforded us in this great state.

SCOTT PETERSON is the Game and Fish Department's deputy director.



Jeb Williams

NEW LEADERSHIP

Jeb Williams was appointed director of the Game and Fish Department by Gov. Doug Burgum in August after more than 20 years with the agency, the last seven as wildlife division chief.

Williams, a North Dakota native who grew up in Beach and graduated from Dickinson State University with a bachelor's degree in biology, replaced Terry Steinwand, who retired July 31 after nearly 40 years with the Department, 15 years as director.

Williams joined the Game and Fish Department in 1999 and served in a variety of roles including natural resource technician and biologist, outreach biologist and wildlife resource management supervisor. He was named chief of the Department's wildlife division in 2014 after having served as assistant wildlife chief since 2011.

21 – Number of outdoors-related bills Department officials tracked during the legislative session.

33 – Length in inches of the record 16-pound, 6-ounce wall-eye caught by Dickinson angler Jared Shypkoski from the Missouri River System in March.

DROUGHT

North Dakota endured a hot, dry summer that featured little precipitation and a record number of days over 100 degrees. While some late summer rains in parts of the state provided some hope and relief, farmers, ranchers and wildlife managers continued to wonder as winter neared if there was an end in sight.

Realistically, wildlife managers said drought conditions had been around the state closer to two years, not just 2021 alone. The fear, they said, is when you start getting into multi-year droughts, things start to get really taxing across the landscape for wildlife, habitat, agriculture producers, the list goes on.

Some of the fallouts for wildlife during a drought is a decline in habitat, which means lower quality food and scarce to lower quality water sources. Because of this, animals are unable to thrive like they normally would in spring and summer when they add fat and have large broods with the good available nesting cover.

The drought also severely impacted breeding duck habitats across North Dakota in spring and summer. Breeding conditions varied from very poor to fair, and the Game and Fish Department's wetland index declined by 80%.



JASON LEE

Lakes were down 2-5 feet across the state in 2021 compared to two years ago.

While 2.9 million ducks were estimated during the Department's annual breeding duck survey in May, behavioral cues suggested breeding efforts by those ducks would be low. Conditions were not good statewide, and after a high count in 2020, the decline in wetlands counted represented the largest one-year percentage-based decline in the 74-year history of the survey.

The number of broods observed during the Department's July brood survey dropped 49% from last year's count and 23% below the 1965-2020 average. The number of broods observed was the lowest since 1994, yet the count in 2021 was still 62% above the long-term average. The average brood size was down 4% from last year's estimate.

While Department fisheries biologists described the drought as a "tough one," they were quick to point out that North Dakota fisheries got through summer without really any substantial fish kills. Given how hot and dry it was, fisheries biologists expected to have half a dozen to 10 lakes with some type of, maybe even substantial kills, especially pike lakes. Yet, they didn't see it.

Despite falling water levels – lakes were down across the state from 2 to 5 feet from where they were two years ago – fishing opportunities remained abundant in about 430 North Dakota waters, and fisheries personnel continued their walleye stocking efforts by releasing about 9 million walleye fingerlings in 144 waters.

EHD FALLOUT

Based on reports of deer mortality, including documentation of substantial mortality in some areas due to epizootic hemorrhagic disease, the Game and Fish Department allowed hunters with whitetail or "any" deer gun licenses in 22 hunting units the option of turning those licenses in for refunds.

The first confirmed EHD report occurred in early August. Department wildlife managers said there was evidence of moderate to significant deer losses in some areas that might affect hunting success in those locations.

Hunters who returned their licenses had their bonus points restored, if applicable, to the same number of points prior to the 2021 deer gun lottery.

EHD, a naturally occurring virus spread by a biting midge, is almost always fatal to infected white-tailed deer, while mule deer do not usually die from the disease.

The whitetail population, big game biologists noted, was not decimated and in many areas a good harvest was still needed.

Game and Fish made license refunds an option for hunters in 2020 in 12 hunting units in western North Dakota. Prior to that, the last time the agency made available this option because of an EHD outbreak was 2011.

MEADOWLARK INITIATIVE LAUNCHED

The Game and Fish Department announced a new statewide strategy that will team landowners, conservation groups, scientists, and others to enhance, restore and sustain native grasslands in North Dakota.

The vision of the Meadowlark Initiative, named after the state's iconic, yet declining Western meadowlark, is to promote and create healthy, thriving grasslands that provide biodiversity and prosperity for wildlife, pollinators, ranching operations and communities.

Agency leaders said North Dakota has lost more than 70% of its native prairie over time, and it will take more than the Game and Fish Department and its long list of contributing partners in the long-haul task of enhancing, restoring and retaining what's left of North Dakota's native grasslands.

Through the Meadowlark Initiative, producers can plant marginal cropland back to diverse native perennial grasslands for grazing. Cost-share to establish the grass and to install grazing infrastructure, such as fencing and water, is available. During the first three years of grass establishment, producers also are eligible to receive rental payments as the land transitions

90 – Number of years North Dakota OUTDOORS has been in publication.

780 – Number of any-deer bow licenses made available to nonresidents.

from cropland to grazing land.

A year ago, the Game and Fish Department and 13 contributing partners submitted a USDA Regional Conservation Partnership Program grant proposal, seeking to leverage over \$12 million in partner contributions with \$10 million of USDA-NRCS funding to kick-start collaborative work toward goals and objectives, encompassed in the Meadowlark Initiative. In spring 2021, it was selected as one of 85 successful projects nationwide.

Together, the collected effort focuses on improving, increasing and connecting wildlife habitat, and supporting the sustainability of new and existing livestock ranches by offering incentives and programs to promote regenerative grazing with grass-based livestock operations.

MUSSELS FOUND IN TWO LAKES

The Game and Fish Department confirmed the presence of invasive zebra mussels in Lake Elsie, Richland County, and Twin Lakes, LaMoure County.

Both lakes are now considered Class I ANS Infested waters, joining Lake LaMoure, Lake Ashtabula, the lower portion of the Sheyenne River, and the Red River in this designation. Emergency rules went into effect immediately to prohibit the movement of water away from the lakes, including water for transferring bait. Notices were posted at lake access sites.

Follow-up sampling at Lake Elsie found zebra mussels at various loca-

tions and life stages throughout the lake. The 390-acre lake is a popular recreation destination located a few miles southwest of Hankinson.

At Twin Lakes, follow-up sampling revealed a few other zebra mussels attached to woody debris. In addition, Game and Fish Department ANS staff processed plankton tow net samples collected from Twin Lakes from earlier in summer, and zebra mussel veligers were detected in those samples indicating a breeding population of mussels within the lake. The 1,735-acre lake is a popular fishing destination located a few miles north of LaMoure. Twin Lakes is located approximately 6 miles from Lake LaMoure, which had a confirmed finding of zebra mussels in 2020.

ELECTRONIC POSTING

The landscape changed for hunters in North Dakota in 2021.

While current posting laws allowed landowners to leave lands unposted or to post land with physical signs, lawmakers in 2021 passed a bill allowing electronic posting of private land, giving landowners another option for posting private property.

That law went into effect Aug. 1.

Landowners who were interested in posting electronically for the 2021-22 hunting season had to do so by July 15. According to Department statistics, about 4 million acres were enrolled by the deadline.

Tools were made available on the Game and Fish website for hunters to use to determine land that has been

electronically posted. Those tools included multiple map applications and digital PDF documents that could be saved to a device or printed for use in the field.

The map applications could be accessed by a computer or smart-phone. The applications offered features to identify a point of contact, work offline or without cellular service, and the ability to create your own maps. Custom maps provided the ability to turn on other map features, such as deer hunting units and aerial imagery, or zoom into areas to see more detailed information.

A benefit of electronic posting for hunters, Department officials stressed, is that they could determine a valid point of contact when requesting access. The name of the landowner, or authorized individual who posted the land, was included on the map applications.

While law requires the name of the individual who posted the land to be available to the public, hunters were told they may also find additional contact information such as an email address, phone number and/or alternate point of contact.

BIGHORN SHEEP LICENSES

The Game and Fish Department allocated five bighorn sheep licenses for the 2021 hunting season, one fewer than last year.

One license was issued in unit B1, one in B3 and two in B4. In addition, one license, as authorized

There was evidence of moderate to significant losses of deer to EHD in some parts of the state in 2021.

under North Dakota Century Code, was auctioned in May by the Midwest Chapter of the Wild Sheep Foundation, from which all proceeds are used to enhance bighorn sheep management in North Dakota.

The number of once-in-a-lifetime licenses allotted to hunters is based on data collected from the Game and Fish Department's summer population survey, and results showed a similar count of adult rams to 2020.

The objective of the 2021 hunting season was to maximize hunter opportunity in the northern badlands where ram numbers remained strong, while continuing to reduce the number of rams in the southern badlands, to lessen the risk of transmitting disease to the northern population. The con-

cern, as in past years, is the ongoing effects of the bacterial pneumonia outbreak that was first detected in 2014 that resulted in a loss of 15-20% of the adult population.

MULE DEER COUNTED IN BADLANDS

The Game and Fish Department's fall mule deer survey indicated the drought had a big influence on fawn production.

Biologists counted 2,163 mule deer in the October aerial survey. The ratio of 60 fawns per 100 does was significantly lower than last year (82/100) and the long-term average (88/100), while 38 bucks per 100 does was similar to 2020 (36/100) and the long-term coverage (43/100).

The 2021 count was the lowest fawn-to-doe ratio since 2011 and 2012, following the severe winters of 2008 through 2010. Nutritional stress related to the drought was also apparent with considerably more yearling bucks observed as spikes rather than forked bucks.

Snowfall and windy conditions dur-



A limit of ring-necked pheasants.

PAUL BAILEY

ing the survey limited biologists to 20 of the 24 study areas. The fall aerial survey was conducted specifically to study demographics in western North Dakota. Biologists also surveyed the same study areas in spring to determine deer abundance.

UPLAND BIRDS

North Dakota's late summer roadside surveys indicated pheasants were down from last year, while sharp-tailed grouse and gray partridge numbers were about the same.

13,909 – Number of applicants who applied for the 1,720 pronghorn licenses.

165,000 – Estimated number of Canada geese counted during the Department's annual midwinter waterfowl survey.

HE SAID, SHE SAID

"Well, I don't think it would be as much fun by myself ... I mean, experiences like this are just a lot better when you can share them with somebody," Randy Meissner said about his first deer hunt in 36 years.

"I've been asked, well, what's your legacy? I never came into this job with an idea or a goal of leaving a legacy, that never even crossed my mind. But in thinking back on it, the biggest legacy in it is the people I'm leaving here who can do the job," said Terry Steinwand who retired after nearly 40 years with the Department, the last 15 as director.

"I had never seen a prairie chicken before coming out here and I was unaware of their conservation status in the state," said Cailey Isaacson, a junior in UND's fisheries and wildlife biology program, about the opportunity to survey prairie chickens and sharp-tailed grouse in Grand Forks County. "I would say that I'm very fortunate because a lot of students don't get this opportunity."

"We have worked literally shoulder to shoulder with hatchery personnel for years with virtually no conflict," said Greg Power, Game and Fish Department fisheries chief, on the Department's working relationship with the federal fish hatcheries in North Dakota. "In the end, everybody benefits from that type of relationship."

Department biologists said results of the annual upland late summer counts were expected, as recent weather patterns shifted toward a drier period, particularly 2021, with a warm, open winter and exceptional drought across much of the state. Hunters were said to expect to find similar numbers to 2020, with the exception that there would be fewer acres of typical grassland cover to hunt.

Total pheasants (45) observed per 100 miles were down 23% from last year and broods (5) per 100 miles were down 30%. The average brood size (six) remained unchanged. The final summary was based on 266 survey runs made along 102 brood routes across North Dakota.

Sharptail hunters were told to expect to find mainly adult grouse last fall. Numbers along the Missouri River were still high compared to long-term averages, so hunters who could find cover should have had average to good hunting. The eastern part of the state had fewer sharp-tailed grouse, with isolated hot spots.

Sharptails observed per 100

800,000

– Approximate number of Private Land Open To Sportsmen acres featured in the PLOTS Guide.

1.8 MILLION

– Number of chinook salmon eggs collected during the Department's salmon spawning operation in fall on the Missouri River System.

miles were up 2% statewide. Brood survey results showed two sharptail broods and 19 sharptails per 100 miles. Average brood size was six.

Although partridge numbers indicated a slight increase, most of the partridge harvest remains incidental while hunters pursue grouse or pheasants.

Partridge observed per 100 miles were up 9%. Observers recorded one partridge brood and 10 partridge per 100 miles. Average brood size was 10.

SCOTT PETERSON is the Game and Fish Department's deputy director.

"As you look across North Dakota, you see a lot of passion. You see a lot of people who choose to make North Dakota home because of our outdoor resources," said Jeb Williams after been named Game and Fish Department director. "We know North Dakotans are hard working. We know they're well-educated and can go just about anywhere in the country to make a home, but to choose here, in part, because of our outdoor opportunities is a really powerful thing."

"There's nothing more empowering and cool than going into the field and coming back and cooking what you harvested, or maybe saving for later to share with friends and family," said Cayla Bendel, Department R3 coordinator on cooking what she harvests. "I love the feeling of connecting all those dots together from field to table."

2020-21 LICENSES AND PERMITS ISSUED

	Resident	Nonresident
Individual Fishing	54,077	20,665
Married Couple Fishing	14,609	6,511
Senior Citizen Fishing	15,225	
Disabled Fishing	229	
Short-Term Fishing		
10-Day		7,863
3-Day		26,036
Paddlefish Tags	0	0
Commercial Tags	14	
Retail Bait Vendor	219	
Wholesale Bait Vendor	28	4
Fish Hatchery	3	
2019 Boat Registrations	60,262	
(First year of 3-year decal)		
General Game Hunting	46,059	41,326
Small Game Hunting	15,158	20,607
Combination License	63,215	
Waterfowl Hunting		24,063
Furbearer Hunting/Trapping	8,284	2,992
Fur Buyer	25	8
Deer Gun Hunting	54,809	671
Deer Gun Hunting (Gratis)	11,845	285
Deer Bowhunting	27,041	3,301
Moose Hunting	400	
Moose Hunting	53	
(Preferential Landowner)		
Elk Hunting	438	
Elk Hunting	88	
(Preferential Landowner)		
Turkey Hunting (Spring)	6,355	
Turkey Hunting (Fall)	3,525	
Turkey Hunting (Gratis Spring)	543	
Turkey Hunting (Gratis Fall)	277	
Habitat Stamp	109,274	
Shooting Preserve	12	
Fishing/Hunting Guide	293	52
Taxidermist	275	11
Falconry	5	
Scientific Collector	34	18
Swan	1,324	876
Sandhill Crane	3,046	2,122

2021 SPECIAL BIG GAME LICENSES

	Licenses Available	Applications Received
Moose	470	26,034
Elk	519	23,016
Bighorn Sheep	5	19,126

FINANCIAL STATEMENT

July 1, 2020 to June 30, 2021

Income	\$36,035,448
Expenses	\$39,615,968
FUND BALANCES, FIXED ASSETS AND LONG-TERM DEBT	
Game and Fish General Fund	\$31,634,292
Habitat and Depredation Fund	\$2,430,357
Nongame Wildlife Fund	\$131,907
Aquatic Nuisance Species Program	\$348,328
TOTAL ALL FUNDS	\$34,544,884
FIXED ASSETS	\$55,576,348
DEPARTMENT NET WORTH	\$90,121,232



OVERALL WINNER

Great horned owl

Thomas W. Wirtz, Bismarck

Photo taken at McKenzie Slough WMA



WATCHABLE WILDLIFE

Photo Contest



NONGAME WINNER



Black-crowned night heron
with leopard frog

Dale Rehder, West Fargo

Photo taken near Eckelson

By Patrick T. Isakson

It seems fitting, but maybe just to us, that the overall winning photograph in the North Dakota Game and Fish Department's 2021 Watchable Wildlife Photo Contest is a great horned owl perched on a Private Land Open To Sportsmen sign.

Fitting because both the photo contest and the walk-in access program are longtime North Dakota staples. The Watchable Wildlife Photo Contest was initiated more than 30 years ago, and the first PLOTS signs were pounded into the ground in the late 1990s.

The great horned owl, of course, is the star of this photograph taken by Thomas W. Wirtz of Bismarck, as it's been around for eons.

While this stoic, year-round resident is recognized most easily by its feathered ear tufts, it's also known for initiating nesting in January and February when North Dakota can be at its most inhospitable, and many other feathered creatures are wintering way south of here.

PATRICK T. ISAKSON is a Game and Fish Department conservation biologist.



NONGAME RUNNER-UP

American kestrel

Brandee Hoyt

(residence not provided)

Photo taken at Arrowwood NWR

NONGAME RUNNER-UP

Porcupine

Cindy Nagle, Fargo

Photo taken near Marmarth



NONGAME RUNNER-UP

Black-tailed prairie dog

Jack Dura, Bismarck

Photo taken at Theodore Roosevelt NP

NONGAME RUNNER-UP

Chorus frog

Sharon Watson, Buxton

Photo taken Near Buxton



NONGAME RUNNER-UP

Bison

Tangula Unruh, Bismarck

Photo taken at Theodore Roosevelt NP



NONGAME RUNNER-UP

Virginia rail

Seth Owens, Grand Forks

Photo taken near Wing





NONGAME RUNNER-UP

Ruby-throated hummingbird
Al Wald, Bismarck

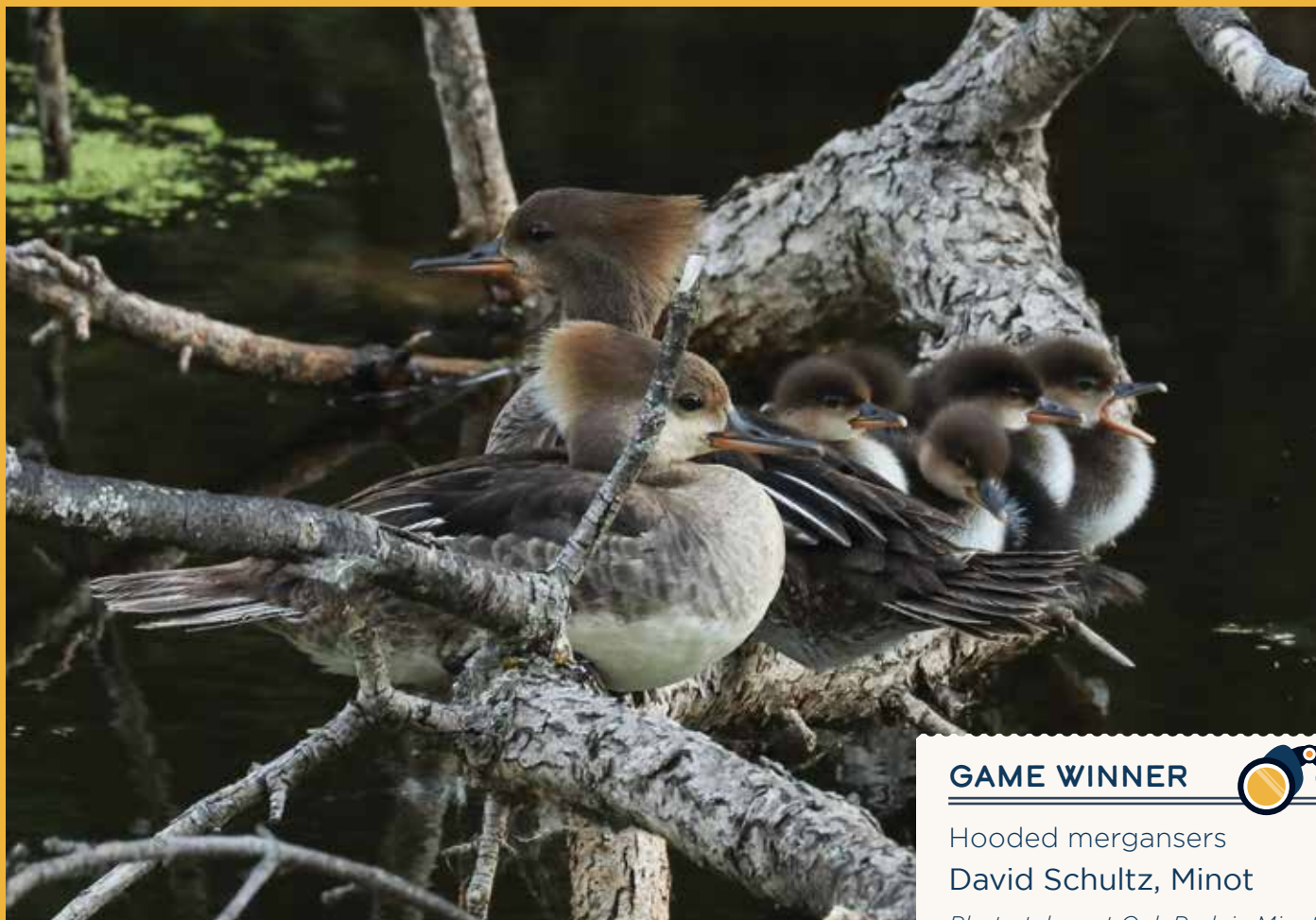
Photo taken in Burleigh County



NONGAME RUNNER-UP

Barred owl
Lisa Buchweitz, Langdon

Photo taken in Cavalier County



GAME WINNER



Hooded mergansers
David Schultz, Minot

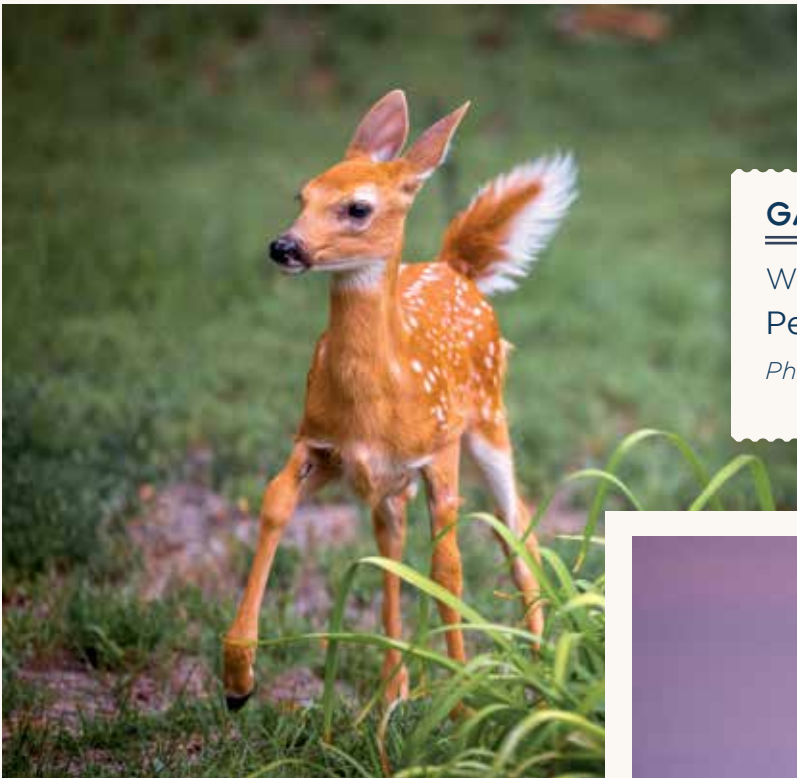
Photo taken at Oak Park in Minot



GAME RUNNER-UP

Moose
David Schultz, Minot

Photo taken at Upper Souris NWR



GAME RUNNER-UP

Whitetail fawn

Peter Ladendorf, Minot

Photo taken near Minot

GAME RUNNER-UP

Elk

Michael Ranum, Bismarck

Photo taken at Theodore Roosevelt NP



GAME RUNNER-UP

Bighorn sheep

Jeremy Witte, Dickinson

Photo taken near Grassy Butte



GAME RUNNER-UP

Whitetail bucks

Ron Hieb, Bismarck

Photo taken west of Mandan on the Heart River



GAME RUNNER-UP

Mule deer

Thomas Krebs, Dickinson

Photo taken in Stark County



GAME RUNNER-UP

Elk

Lisa Buchweitz, Langdon

Photo taken in Cavalier County



GAME RUNNER-UP

Bighorn sheep

Deb Huether, Lisbon

*Photo taken at Theodore Roosevelt
NP*



PLANTS AND INSECTS WINNER



Cat face spider
Sharon Watson, Buxton

Photo taken Near Buxton



PLANTS AND INSECTS RUNNER-UP

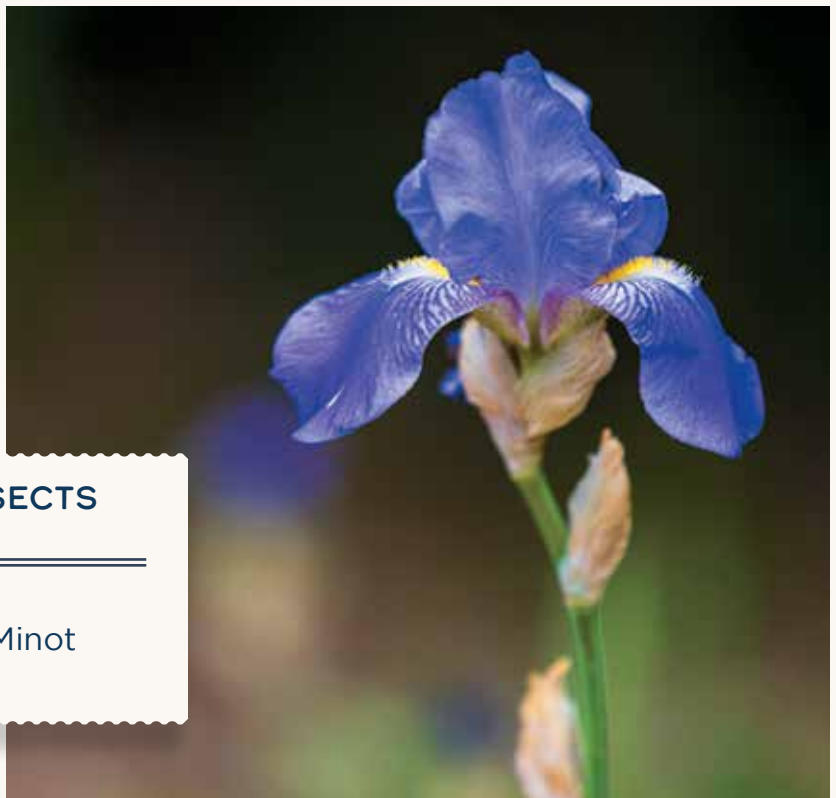
Ambush bug
Mark Broden, Grand Forks

Photo taken in Grand Forks

**PLANTS AND INSECTS
RUNNER-UP**

Rocky Mountain iris
Peter Ladendorf, Minot

Photo taken Near Minot



**PLANTS AND INSECTS
RUNNER-UP**

Purple coneflower
Coty Schoenwald, Keene

Photo taken Near Keene



PLANTS AND INSECTS RUNNER-UP

Pearl crescent on milkweed

Greg Stetz, Detroit Lakes, MN

Photo taken near Cooperstown



PLANTS AND INSECTS RUNNER-UP

Rocky Mountain juniper

Cherrett Brunelle, Epping

Photo taken near Williston

PLANTS AND INSECTS RUNNER-UP

Eastern tiger swallowtail
Dick Monson, Valley City

Photo taken near Valley City



PLANTS AND INSECTS RUNNER-UP

Bumblebee on thistle
Nancy Secrest, Hettinger

Photo taken near Hettinger

PLANTS AND INSECTS RUNNER-UP

Checkered skipper on blanket
flower

Emilee Franklin
(residence not provided)

*Photo taken at Ft. Stevenson State
Park*





BUFFALOBERRY PATCH



SANDRA JOHNSON

Tentative 2022 Season Opening Dates

The North Dakota Game and Fish Department annually provides its best estimate for opening dates to help hunters prepare for hunting seasons.

Dates become official when approved by governor's proclamation. Tentative opening dates for 2022 include:

Spring Turkey	April 9
Dove	September 1
Deer and Pronghorn Bow, Mountain Lion	September 2
Sharptail, Hun, Ruffed Grouse, Squirrel	September 10
Youth Deer	September 16
Youth Waterfowl	September 17
Early Resident Waterfowl	September 24
Youth Pheasant, Regular Waterfowl	October 1
Pronghorn Gun	October 7
Pheasant, Fall Turkey	October 8
Mink, Muskrat, Weasel Trapping	October 22
Deer Gun	November 4
Deer Muzzleloader	November 25

Salmon Spawn Completed

Fisheries crews completed their annual salmon spawning operation on the Missouri River System in fall, collecting more than 1.8 million eggs.

North Dakota Game



ASHLEY PETERSON

and Fish Department Missouri River System fisheries biologist Russ Kinzler said crews collected enough eggs to stock 400,000 smolts planned for Lake Sakakawea in 2022.

The majority of the eggs were collected from Lake Sakakawea, with a significant contribution from the Missouri River below Garrison Dam. Average size of female salmon was 7.4 pounds, which is about 1 pound smaller than 2020. The largest salmon in 2021 were about 14.5 pounds, which is about 2 pounds heavier than the largest salmon the year prior.

"We've had good numbers and size of rainbow smelt, which is the primary forage for salmon in Lake Sakakawea," Kinzler said. "That has led to some larger salmon the last couple years."

Chinook salmon begin their spawning run in October. Since salmon cannot naturally reproduce in North Dakota, Game and Fish personnel capture the fish and transport them to Garrison Dam National Fish Hatchery where they are relieved of their eggs.

Once the eggs hatch, young salmon spend about 6 months in the hatchery before being stocked in Lake Sakakawea.

Coyote Catalog Available

The North Dakota Game and Fish Department and North Dakota Department of Agriculture are again opening the Coyote Catalog, a statewide effort designed to connect committed hunters and trappers with landowners who are dealing with coyotes in their areas.

Landowners can sign up on the Department of Agriculture website, nd.gov/ndda/. Hunters and trappers can sign up at the Game and Fish website, gf.nd.gov.

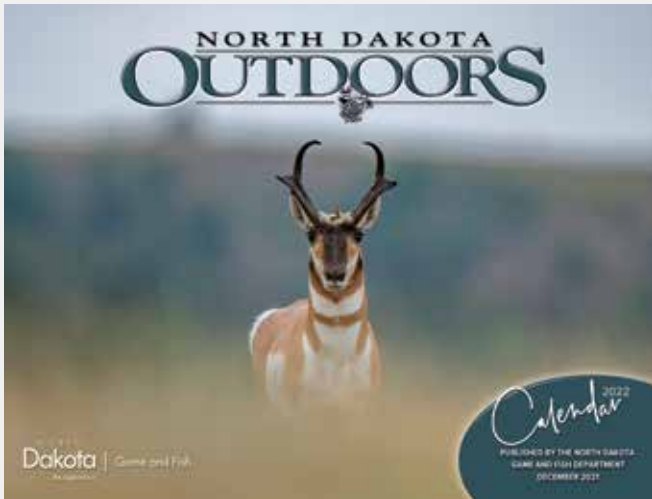
Anyone who registered for the Coyote Catalog in the past must register again to activate their names on the database.

Throughout winter, hunters or trappers may receive information on participating landowners, and they should contact landowners to make arrangements.

Landowners experiencing coyote depredation of livestock should first contact the U.S. Department of Agriculture Wildlife Services.

The Coyote Catalog will remain active through March 31.

For more information, contact Ryan Herigstad at Game and Fish, 701-595-4463 or rherigstad@nd.gov; or Colby Lysne, at the Department of Agriculture, 701-390-7515 or clysne@nd.gov.



NDO Calendar Available

The 2022 *North Dakota OUTDOORS* calendar is available for ordering online at the state Game and Fish Department website, gf.nd.gov.

The calendar features outstanding color photographs of North Dakota wildlife and scenery, and includes season opening and application deadline dates, sunrise-sunset times and moon phases.

Calendars are also available via mail order. Send \$3 for each, plus \$1 postage, to: Calendar, North Dakota Game

and Fish Department, 100 N. Bismarck Expressway, Bismarck, ND 58501-5095.

The calendar is the *North Dakota OUTDOORS* magazine's December issue, so current subscribers should have already received it in the mail.

Fish House Regulations

Winter anglers are reminded that any fish house left unoccupied on North Dakota waters must be made of materials that will allow it to float.

Other fish house regulations include:

- Fish houses do not require a license.
- Occupied structures do not require identification. However, any unoccupied fish house must have an equipment registration number issued by the North Dakota Game and Fish Department, or the owner's name, and either an address or telephone number, displayed on its outside in readily distinguishable characters at least 3 inches high.
- Fish houses may not be placed closer than 50 feet in any direction to another house without consent of the occupant of the other fish house.
- All unoccupied fish houses must be removed from all waters after midnight, March 15.

Anglers should refer to the North Dakota 2020-22 Fishing Guide for other winter fishing regulations.

STAFF NOTES



Niesar Receives 2021 Trees Award

Sherry Niesar was awarded the 2021 Environmental Educator of the Year Trees Award at the Trees Bowl in Fargo in October. Nominations were received from across the state and the winners were recognized by the North

Dakota Forest Service and North Dakota State University.

Niesar has been an environmental educator for the North Dakota Game and Fish Department since 1985 when she began as a Project Wild facilitator.

In 2019 alone, she hosted 30 events throughout the state for students of all ages. She has led Habitats of North Dakota trainings at seven universities for credit to teachers, as well as hunter education for the Game and Fish Department.



Schiff Retires

Longtime employee Connie Schiff retired Dec. 31 after 16 years with the North Dakota Game and Fish Department.

Schiff was a graphic designer during her service to the agency, beginning in 2005.

SUBSCRIBER ALERT

Moving? Don't miss an issue of your *North Dakota OUTDOORS* by changing your address online at the Game and Fish website gf.nd.gov. Each month we receive a number of magazines with "no longer living at this address" return labels. Don't let this be you. Act now to ensure you stay updated with all the latest issues from the Game and Fish Department.

BACKCAST

By Ron Wilson

We've struggled in the woods the last two seasons. Gone bleary eyed staring into the confusion of cottonwood, elm and bur oak tree limbs.

Was it our timing? The wind? There's always wind. Too cold? Too hot? Too whatever?

I've threatened to keep a log of sorts, jotting down weather conditions and other particulars that maybe contributed to our success or lack thereof. Yet, like the promise of breaking a bad habit, I never got around to it.

It's just a handful of days before the winter solstice as I slowpoke my way through the woods in maybe 2 inches of snow, which means the return of more sunlight thereafter, and the expectation that we'll come out the other side of another Northern Plains winter.

Yesterday, when I rolled out of bed before sunrise and it was minus 9, my outlook wasn't as enthusiastic. Today, the forecast calls for a nearly 50-degree swing in the other direction, which is something we can all certainly get behind.

I heard there was a good acorn crop this year from a biologist scouting wood ducks in a Missouri River feeder stream, which, considering the drought and all, doesn't make much sense. Then again, I know about as much about mast-producing trees as I do about the unpredictable ways of river bottom fox squirrels, despite years of pursuit.

What I do know is that fox squirrels like acorns, and I know from prowling around these parts where a nice stand of bur oaks is located.

The fallen acorns are buried beneath the snow so it's difficult to vouch for rumors of a bumper crop, but there are many signs where the squirrels have been rooting around in the snow trying to find them.

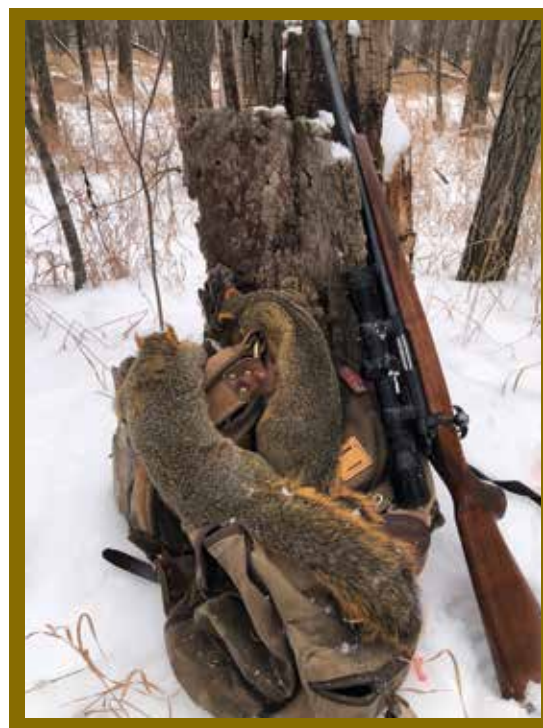
From what I gather, fox squirrels have excellent vision and a well-developed sense of hearing, which means they know I've been skulking around for the last hour, slowly working from tree to tree to break up my outline. What I'm banking on, especially if I have the patience to stay hidden and mostly stationary long enough, is for them to forget about me, to go back to doing whatever squirrels do when I'm not around.

I hear the barking and unmistakable chatter first, somewhere to my right, before I finally spot two squirrels 30 feet up a tree where the limbs are seemingly knitted together, providing an untold number of escape routes if they bust me or I shoot and miss.

Firing a .22-caliber rifle in these river bottom woods is louder than you'd expect. I can't explain it, but even the tiniest of noises, like the birdy chitchat of nuthatches and chickadees and passing Canada geese are amplified.

And when a 2-pound, headshot fox squirrel falls from 30 feet and thumps to the ground, you more than hear it. You can almost feel the thud in your chest.

RON WILSON is editor of North Dakota OUTDOORS.



RON WILSON

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North Dakota Game and Fish Department
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Bismarck, ND 58501

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Darkhouse spearfishing participants have been cutting holes in North Dakota lakes for more than two decades in an effort to spear northern pike. A lot has changed in 21 years of darkhouse spearfishing in the state. Early on, few waters were open to spearfishing as compared to today. Last year, like this year, essentially the entire state is open to darkhouse spearfishing, except for a handful of muskie lakes. In winter 2020-21, nearly 17,000 northern pike were harvested by darkhouse participants.



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