

NORTH DAKOTA OUTDOORS

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A well-camouflaged American woodcock was spotted on Apple Creek Wildlife Management Area south of Bismarck by the photographer who was in search of morel mushrooms. A migratory bird biologist said that while it wasn't confirmed that the woodcock was nesting, there is a high probability that the bird was brooding.
Photo by Bill Haase, Bismarck.

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• Information 701-328-6300 • Administration 701-328-6305
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NORTH DAKOTA OUTDOORS

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The mission of the North Dakota Game and Fish Department is to protect, conserve and enhance fish and wildlife populations and their habitats for sustained public consumptive and nonconsumptive use.

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

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CONTENTS

- 2** | My 2 Cents
- 4** | Breeding Duck Survey at 75 Years
- 8** | Taking Eggs for the Future
- 14** | Lasting Look at Conspicuous Birds
- 18** | Nearing an Endpoint
- 22** | Buffaloberry Patch
- 25** | Back Cast

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Front Cover

Native sharp-tailed grouse loafs near a backroad in southwestern North Dakota. Photo by Sandra Johnson, Bismarck.



My 2 Cents

By Jeb Williams, Director

In this space in the March-April issue of *North Dakota OUTDOORS*, I addressed ongoing drought conditions and some of the concerns leading into spring and summer. The ink was hardly dry, and we were hit with a couple massive snowstorms, followed by several rain events that have left certain areas of our state waterlogged.

Prime examples, certainly, that once again demonstrate how quickly things can change in North Dakota.

Many people wondered how the spring storms impacted wildlife and while we know from experience that most devastating spring storms aren't exactly what wild critters need after a long winter, it was hard to turn down the precipitation that rejuvenated our important grasslands and wetlands these same wild critters rely on during their reproductive seasons.

The 2022 fall deer season is upon us. Well, at least the application season is. It was as difficult a year as any for our big game biologists to set deer license numbers due to the disease outbreak which took place beginning in early August 2021 and continued into late October.

Epizootic hemorrhagic disease is no stranger to southwestern North Dakota but unfortunately introduced itself to other areas of the state and in some parts left quite an impression as many white-tailed deer were lost.

The challenge with a bad EHD outbreak has always been the same. How many deer licenses do wildlife managers trim, considering the inconsistency of mortality across units? Some areas within a unit see a much higher mortality rate than others and so what may make sense for a portion of the unit doesn't make sense for the entire unit.

I want to commend our big game staff for their decisions while trying to manage the inconsistency of the EHD outbreak across the landscape and making the necessary and bold determinations to significantly reduce deer licenses in hard-hit hunting units. Consistent with most years, the decision will likely find some in agreement and leave others frustrated that we went too far or not far enough.

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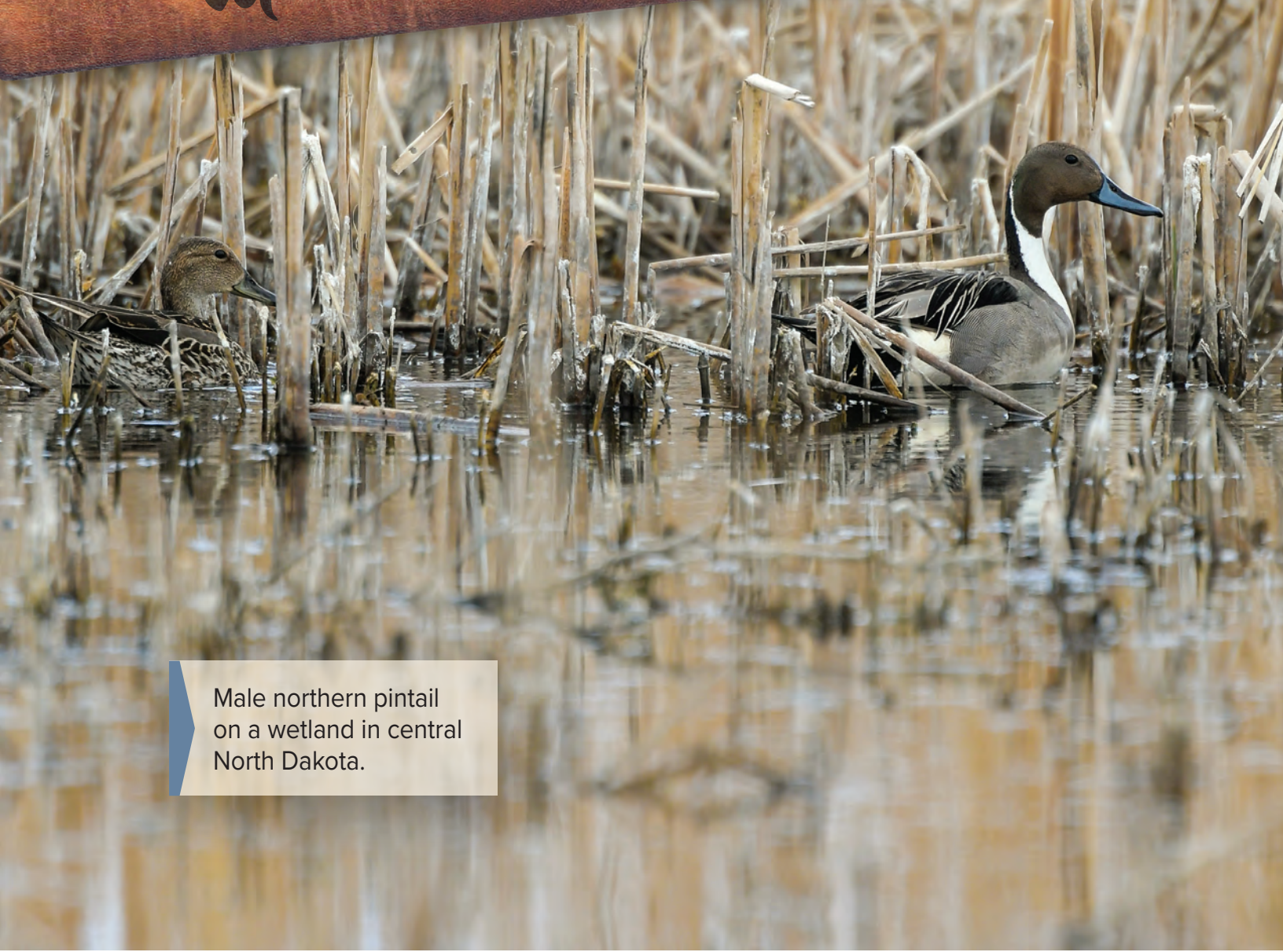
Game and Fish



BRIAN SCHAFFER

BREEDING DUCK SURVEY

at 75 Years



Male northern pintail
on a wetland in central
North Dakota.



SANDRA JOHNSON

By Ron Wilson

May 16 was significant. That day, a Monday that fell more than a month before the first day of summer, marked the start of the longest running breeding waterfowl survey in the world.

Counting this year, the North Dakota Game and Fish Department's annual breeding duck survey has run uninterrupted for 75 years.

There is some pride in the survey that has long provided breeding duck population estimates, an annual index of wetlands on the landscape and, among other things, sightings of upland game, coots and crows.

"It's certainly a very unique dataset and impressive in its longevity and scale," said Mike Szymanski, Game and Fish Department migratory game bird management supervisor. "Being a statewide survey in the most important waterfowl state in the lower 48, it's a pretty big accomplishment."

Because the survey has continued without pause makes it even more remarkable, especially when you consider that many wildlife management efforts were sidelined around the country in 2020 and 2021 during the pandemic.

"We were able to make some changes, some significant changes, to run the survey in 2020," Szymanski said. "We had people who were willing to take on single observer roles and work different types of routes and we didn't stay overnight, so it was a lot of work for folks to keep the survey going. But we have people who are very dedicated to the survey and the data that it provides."



ASHLEY PETERSON

Ryan Herigstad (front) and Mike Szymanski run the Game and Fish Department's annual breeding duck survey.



Mike Szymanski (left) ran his first breeding duck survey in the state in 2005. The use of modern technology (right) has greatly aided biologists in their effort to survey the many ducks and water bodies across the state.

That dedication is nothing new, as there is a long list of wildlife professionals who guided the survey from its early years and beyond.

"From 1969 through 2021, the top 10 individuals on that list for that time period accounted for 63% of the observation years," said Szymanski, who participated in his first breeding duck survey in 2005. "So, there were 44 observers during that time period and 10 of them are very core individuals."

The annual survey begins sometime in May, depending on how spring shakes out. Every year is a little different in North Dakota. There is no average spring it seems like.

"Historically, one of the things Mike Johnson (retired Department game management section leader) said when referencing the old timers was that it was time to do the survey when the tree leaves were in the mouse ear stage, but that's gotten real hinky over the last 15 years," Szymanski said. "I think as our climate has shifted and we have timing differences going on in spring where leaf emergence has gotten quite early, but wetland phenology is still maybe lagging behind and duck migration is behind a little bit as well."

"What we don't want to do is start too early when the ducks aren't settled out because there is a higher risk of double-counting birds that are still migrating, and not accurately representing what is breeding in the state," he added.

When it's go time, Department biologists drive the same routes — eight transects that run from South Dakota to the Canadian border, covering 1,816 miles — counting waterfowl and water areas (river, creek, wetland, ditch or live-stock dugout) within 220 yards of the road. Four two-person crews conduct the survey, each

crew driving two transects.

Survey vehicles are equipped with blinking lights and a decal to inform motorists about frequent stops during the roadside counts.

"There is a main observer counting everything out loud and the recorder is taking it all down," Szymanski said. "It's up to the observer to make sure that they've counted everything that's there to the best of their ability. When you pull up to a wetland, there's all manner of ducks ... some of them are super busy and some of them are pretty still."

For years, all the data relayed from the observer was handwritten. When Szymanski joined the Game and Fish Department, Johnson tasked him with making some major changes.

"Mike Johnson said 'It's your job to figure out how to make this digital,' because Johnson was really forward thinking in technology, especially for his time," Szymanski said. "So, we started working on it with Brian Hosek (Department business operations manager) and in about 2006, I started testing tablets to use that Brian had found and started developing software for, and it took a couple of years or so to kind of get the kinks worked out."

"It was really interesting because Brian found these tablets that worked really well," he added, "but keep in mind that this was before tablets were mainstream devices. There weren't even smartphones yet."

By 2009, the survey crew was running full-bore with digital data entry.

"It's pretty cool because it saves us at least a week of data entry and proofing when we get back to the office, and the data are all georeferenced," Szymanski said. "I'm now able to complete my annual report in two and a half to three

weeks, whereas before it was in later June or even July."

Typically, in a dry year, it can take less than three days to run the survey from border to border versus up to six days during a wet year if there's lots of ducks.

"We try to get the survey done as quickly as possible to avoid changing conditions across the survey area," Szymanski said.

Szymanski and his crew typically observe 12,000 to 15,000 social groups of ducks on more than 4,500 wetlands, and in a good year, numbers are much higher.

The survey this spring started about a week later than typical, thanks to a winter that refused to loosen its grip on North Dakota. Szymanski anticipated a changed landscape compared to an incredibly dry 2021.

"We're getting back to pretty wet conditions, which is good for attracting pairs and, in some cases, good for providing different places for ground-nesting waterfowl," he said. "But remember, the drought last year was not just in North Dakota, but in prairie Canada, so duck production was quite poor ... the fall flight last year was pretty small. So, we're kind of expecting to see lots of water and probably not many ducks as we have in the past, but that's why we do the survey because we don't know for sure. We might be surprised."

Biologists have seen major changes during 75 years of survey work including the introduction of the Conservation Reserve Program and quality nesting habitat, to drought, to an abundance of water on the landscape.

"Our habitat conditions right now are looking a little rough as we've lost CRP and other good nesting cover over the last 15 years," Szymanski said. "But throughout time, we've seen some huge changes in 75 years of the survey going through various drought periods, to when conditions on the landscape became super good for ducks, and it really had that high capacity for hunting opportunities."


The heyday, the big era for ducks in North Dakota, Szymanski said, was 1994-2020, when good water conditions teamed with good nesting conditions, and there was way fewer red fox on the landscape.

"When the skies opened up and dropped 7 inches of rain over most of North Dakota the summer of 1993, it was just 'to the moon' from there," Szymanski said. "And that's our big era for ducks in the state from 1994 to 2020. During that time, we had a much wetter cycle, better wetland conditions overall, despite drainage that's gone on over time, and then having all that program grass across the countryside, providing secure nesting habitat for good production on a very consistent basis. In 2002, for example, we hit a record high breeding duck population estimate on our state survey with about 5.4 million ducks."

Unfortunately, after losing about 65% of CRP across the state and other grass habitat suited for nesting ducks, 2021 showed itself as one of the first years that started to look like the old era for ducks prior to 1994.

"We had a couple of recent years before that where we dipped below 3 million ducks in the survey, but we still had a decent number of wetlands and grass. But 2021 was a very stark difference where it looked like kind of the old days of the 80s, where it was just looking real rough," Szymanski said. "We're going to have a wet year this year, and that could bring our number back up above 3 million birds in the survey, but for us to maintain that kind of average where we were very often between 3 and 4 million breeding ducks in the annual state survey from 1994 to 2020, and very often-times exceeding 4 million ducks, we have to have a lot more grass come back to the landscape in our high wetland areas."

RON WILSON is editor of North Dakota OUTDOORS.



Blue-winged teal in early spring on a North Dakota wetland.



TAKING
EGGS
FOR THE
FUTURE



MIKE ANDERSON

By Ron Wilson

With a record number of walleye lakes on North Dakota's landscape, what went on at waters like Lake Sakakawea and Devils Lake in late April and early May is important.

Jerry Weigel, Game and Fish Department production/development section supervisor, said taking eggs and milt from Sakakawea and Devils Lake walleye, raising the eggs in Garrison Dam National Fish Hatchery, and later releasing millions of fingerlings in the dozens of prairie walleye lakes and elsewhere is vital to maintaining those fisheries to meet angler expectations.

Weigel said the 2022 walleye egg goal was about 58 million eggs.

"We got 62 million eggs so far, and our crews are still taking eggs," he said a few days before mid-May. "With the crazy weather, you just never know the quality. I would say, though, we have enough eggs to certainly stock all our hatchery ponds and meet our priority commitments."

No surprise, Lake Sakakawea walleye provided the majority of the eggs in spring.

"For much of the last decade, the vast majority of our walleye eggs have come from Sakakawea," said Dave Fryda, Department Missouri River System supervisor. "Overall, the fishery in Lake Sakakawea is still in good shape. We're able to take ample numbers of quality eggs for use throughout North Dakota."

Yet, declining water levels on Sakakawea could change things down the road.

"While the walleye population is still doing really good in Sakakawea, we have some concerns in the coming years as we're at the lowest level we've been in well over a decade," Fryda said. "And where we go from here in the next year or two is probably kind of the turning point. We're still in good shape, but if water levels continue to decline, we could see some compromise in the fishery."

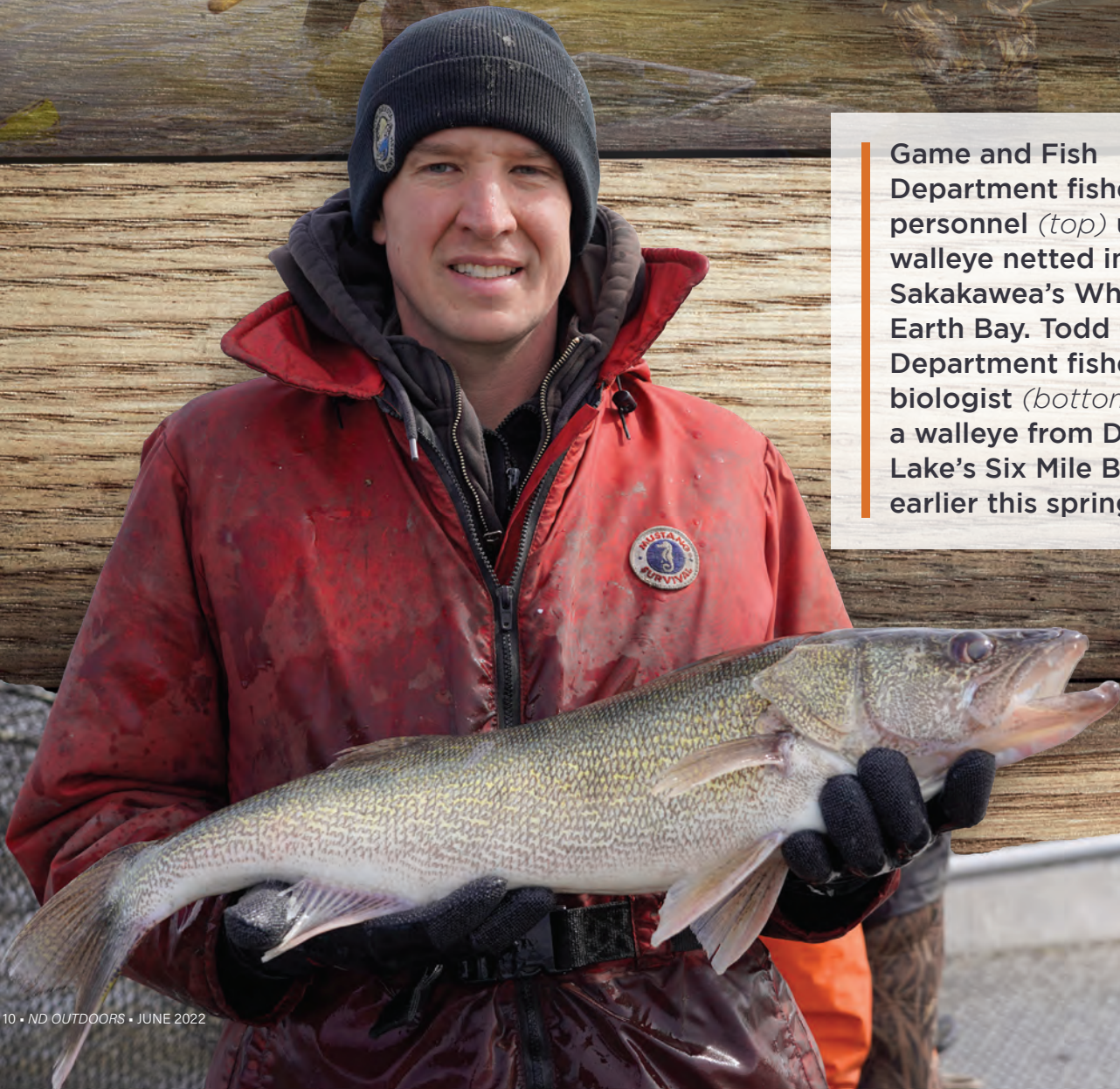
RON WILSON is editor of North Dakota OUTDOORS.

Over 70 million walleye eggs were harvested in 2022



MIKE ANDERSON

Game and Fish Department fisheries personnel (*top*) unload walleye netted in Lake Sakakawea's White Earth Bay. Todd Caspers, Department fisheries biologist (*bottom*), with a walleye from Devils Lake's Six Mile Bay earlier this spring.



MIKE ANDERSON

Fisheries personnel harvest eggs from a female walleye. On average, a female walleye produces about 200,000 eggs.

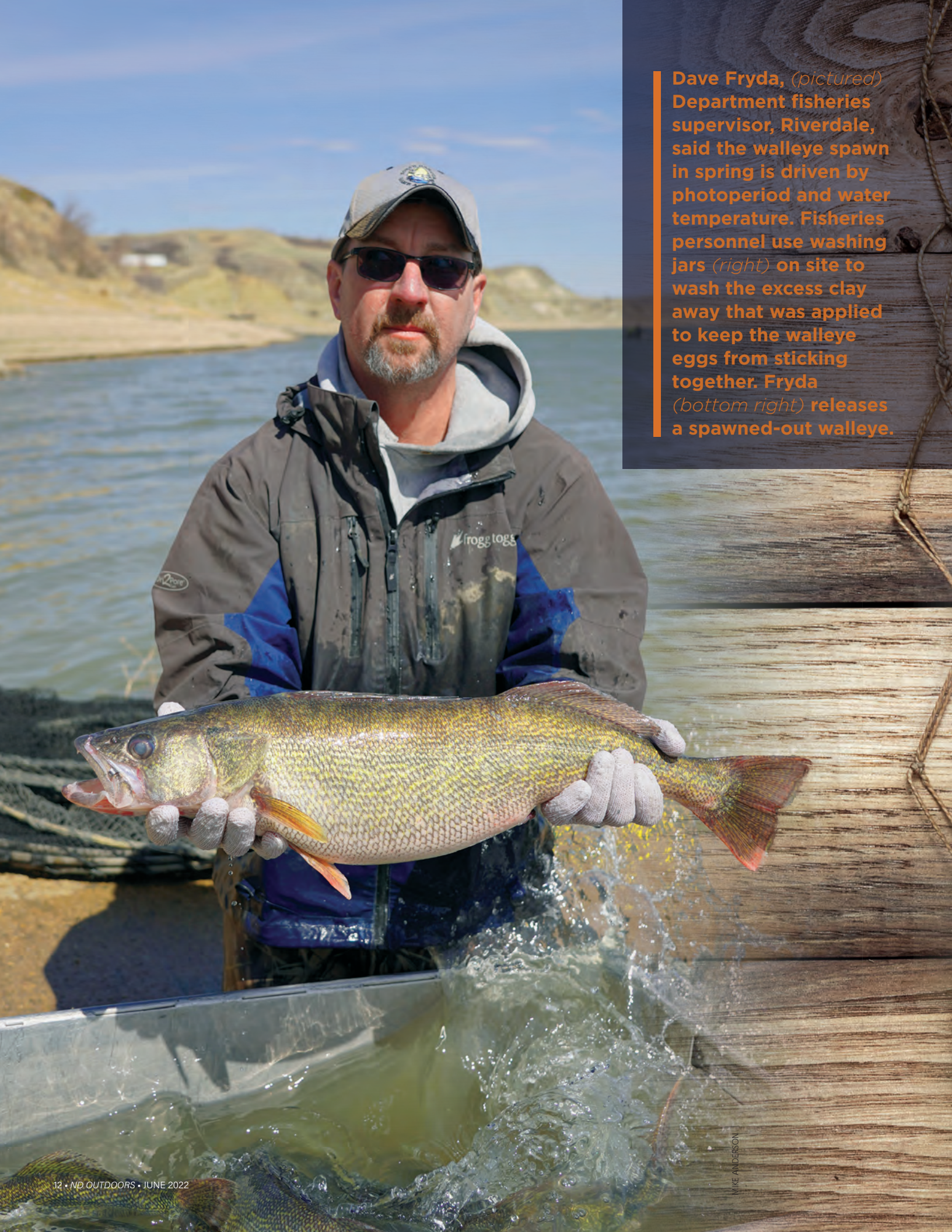


MIKE ANDERSON



MIKE ANDERSON

Walleye captured in trap nets from Lake Sakakawea's White Earth Bay.



Dave Fryda, (pictured) Department fisheries supervisor, Riverdale, said the walleye spawn in spring is driven by photoperiod and water temperature. Fisheries personnel use washing jars (right) on site to wash the excess clay away that was applied to keep the walleye eggs from sticking together. Fryda (bottom right) releases a spawned-out walleye.



PAUL BAILEY

MIKE ANDERSON



A long-billed curlew that was tagged and fitted with a solar-powered tracking device in southwestern North Dakota.

LASTING LOOK

AT CONSPICUOUS BIRDS

By Ron Wilson

The North Dakota Game and Fish Department has teamed with two leading conservation organizations to study the movements of a conspicuous shorebird to better recognize the bird's habitat use in southwestern North Dakota and elsewhere.

In the Department-funded study managed by Boise State University's Intermountain Bird Observatory and Northern Great Plains Program of American Bird Conservancy, researchers planned to fit long-billed curlews, that migrated in spring to North Dakota to breed, with solar-powered tracking devices.

"We're hoping to be able to find some curlew nests and then be able to trap adult birds and outfit them with satellite or cellular transmitters that can give us data remotely," said Jay Carlisle, research director for Intermountain Bird Observatory. "Then we can just be armchair biologists and collect data on their movement throughout the year. The main goal is to get information on habitats and regions that are important to curlews, not just while they're here in North Dakota, but during migration, during the long non-breeding season and then spring migration again."

Kevin Ellison, program manager for Northern Great Plains Program, said the goal was to fit five curlews nesting in North Dakota with transmitters and an additional four to five in South Dakota.



SANDRA JOHNSON

Researcher Jay Carlisle with the aptly named long-billed curlew, North America's largest shorebird.



SANDRA JOHNSON

The solar-powered devices fitted to the study birds will provide tracking information for more than a year to researchers.

"Sometimes you can get lucky and get most of it done in two days, or it can take up to nine days or so, depending on the weather," Ellison said. "We have a bunch of local staff and volunteers we can rotate through. American Bird Conservancy employs some local staff based out of NRCS offices, both in Miles City, Mont. and nearby Buffalo, S.D. who are able to come here and help out."

While the long-billed curlew is North America's largest shorebird, roughly the size of a sharp-tailed grouse, but on stilts, finding these birds in big, open, grassland country has a needle-in-a-haystack feel to it. Tougher yet, is finding a well-hidden nest occupied by an incubating adult secure enough in its hiding ability to let researchers tiptoe in and capture it.

The best chance for finding a nest is in the morning or evening when the birds switch incubation duties. Carlisle said, in general, males incubate from, say, 6 p.m. until 7:30 or 8 a.m.

"And then the female, who has been off the nest all night, returns to the territory, maybe feeds a little bit and then switches onto the nest. And then the male has the day to feed and be on patrol and then he'll switch back on in the evening," he said. "So, we have the most success being on site by sunrise and watching for those first 2 or 3 hours of the day hoping to catch a single female switching with a male onto the nest."

Or researchers can do the reverse and spy a nest-

ing site in the evening when the male returns to switch duties with the female.

Once researchers locate a nest, they sneak to the nest site carrying an 18-meter mist net parallel to the ground, with someone directing from behind, then drop the net on top of the incubating bird.

"Oftentimes, they actually stay until you approach them and then they'll jump into the net. Sometimes as you're arriving, they'll flush and you miss them," said Carlisle who has helped capture more than 100 curlews. "Then we detangle them as quickly as we can and move usually at least 200 meters from the nest to be able to do all the processing and put a band on the bird, take measurements, and then finally put on a satellite transmitter with a harness."

Researchers describe curlews as a generalist species as they aren't as picky as to where they construct their nests. From grasslands to stubble fields, to a pasture next to a cowpie, these birds adapt.

"They're probably looking and responding to fewer conditions than some of the pickier species that we affectionately call 'Goldilocks' species that have to have it just right," Ellison said. "Some of the pickiest species are like pipits and longspurs that nest at higher densities in native grass. So, you range from species that are really adaptable and generalist to really specialized and the curlew is a little more on that generalist side."

So, why study long-billed curlews as many other spe-

cies, ones that researchers know by song or simply by glancing at as they wing speedily by, share much of the same landscape?

"Long-billed curlews are a species of concern because of population declines, and they're also seen as an indicator species for the health of grasslands, even agricultural lands," Carlisle said. "Mainly it's because of this population decline that has happened disproportionately in different areas, that there's been interest in understanding more about the full annual cycle of long-billed curlews and ideally stitching together what are some limiting factors, what are some threats that affect populations and are they affecting different populations differently? We already know this is the case, but we're still learning more and more about different populations."

Ellison said studying curlews comes back to the understanding that everything is connected, and conservation doesn't happen on its own.

"These birds are great indicators of ecological health. Their position in food chains and their lifespan is pretty short, so they can help us see how healthy our environment is," he said. "These are working lands here in North Dakota and we're just looking at how we can have all the pieces work together."

Carlisle said that while researchers would prefer to get a 50-50 sample size when trapping curlews and outfitting them with tracking devices, in the end it really doesn't matter.

"I honestly don't remember how many pairs we've tracked now, at least 10, and never have the two indi-



Long-billed curlew eggs, like the birds, are big. Bigger than a chicken will lay.

viduals migrated to the same wintering site. They always go to different sites, say, at least 50 or 100 miles apart, sometimes many hundreds of miles apart," Carlisle said. "And, yet somehow they easily find each other again in the spring. It's like, 'Oh, hey, it's you. How was your winter?' And they probably don't need any courtship."

Sandra Johnson, Game and Fish Department conservation biologist, said the hope is that the study will reveal a full lifecycle perspective on these interesting birds.

"Long-billed curlews are only in North Dakota for a couple of months during the breeding season and then they migrate to the Texas coast or elsewhere for seven, eight, nine months," Johnson said. "So, it's really important to learn more about whether we are all doing our part to make sure that this bird has safe places all along the way."

The long-billed curlew has some history in North Dakota, Johnson said, as the bird was mentioned in Theodore Roosevelt's journal.

"It's a bird he observed when he was here in North Dakota, when he spent time on the Elkhorn Ranch, he called it one of the most conspicuous birds. It was a bird he really enjoyed. And it's a bird that you probably can't find in that Elkhorn Ranch area anymore," she said. "We still have a good curlew population in North Dakota, but there are places where we're just not finding them. So, that's where the study will really help figure out what's going on with our curlews."

RON WILSON is editor of North Dakota OUTDOORS.

Researchers measure the length of the bill of a long-billed curlew captured in a mist net.





Nearing *an* Endpoint

By Ron Wilson

Sharp-tailed grouse on a lek in North Dakota in spring.



GAME AND FISH PHOTO



MIKE ANDERSON

Jerry Kobriger views a sharp-tailed grouse lek in southwestern North Dakota.

grouse – he helped manage for 43 years while with the agency.

Kobriger visited with Jesse Kolar, Department upland game management supervisor in Dickson, about the possibility of notching 60 years.

“Well, I talked to Jesse about that and asked if he’d let me work at least one day next year, then I’ll have 60 years in,” Kobriger said. “And I think that’s going to be an endpoint. I don’t know what is magic about 60, I mean, it’s just a kind of personal goal, I guess.”

An endpoint to sunrises on the prairie, counting sharptail males as they stomp and coo on some of the same prairie hilltops that attracted generations of birds long before Kobriger started making his rounds in the early 1960s.

“I enjoy going out early in the morning. It’s a nice time to be out here. It’s just a nice job and you don’t have somebody looking over your shoulder all the time,” he said. “That’s one of the things that puzzles me. Some people count down almost to the minute when they’ll retire, when they’ll be out of here. And I’ve never felt that way. Nope. Never did.”

In addition to binoculars, spotting scope mounted on a rifle stock, clipboard and paper to record daily observations and a flat of cookies in the passenger seat, Kobriger carries decades worth of observations, a historical perspective of the land

From where Jerry Kobriger stands in mid-May on a two-track somewhere in southwestern North Dakota, where cattle graze on one side of the fence and sharp-tailed grouse dance in spring on the other, he can envision an end to something that has been a part of his life for decades.

Kobriger, who retired in 2007 from the North Dakota Game and Fish Department as its longtime upland game management supervisor, has been running census surveys and brood counts for 59 years in spring and summer on those birds – sharptails, prairie chickens, pheasants, sage grouse, ruffed



A younger Jerry Kobriger checks upland game bird wings back in the day while with the Game and Fish Department.



MIKE ANDERSON

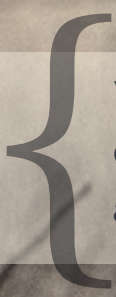
Kobriger records data from his morning observing sharp-tailed grouse.

and animals he's monitored since the early 1960s.

"This is a township that I've counted every year since 1964, until Jesse took over the position, and he has done it the last few years now. There are probably 15 to 20 active grounds (leks) on the whole township. Only two of them are on the same spot they were back in the 1950s. All the rest of them have moved around," he said. "Some of them moved two or three times. I don't know why the grouse move. Sometimes they'll move from a nice grassy area like this, to a stubble field or something. And why do they do that? That's not what the literature says they do, but it's up to the birds. They go where they want to go."

In his nearly 60 years of slowly prowling North Dakota's landscape, looking for pheasant broods in roadside ditches or sharp-tails gathering on leks, Kobriger couldn't help but notice changes to the landscape, no matter how subtle.

"The one thing in the Badlands, of course, is the oil development. When I started, I was going to a meeting with the Forest Service and I was riding with the district ranger, and I said, 'How long do you think this oil field is going to last?' and he said, 'Well, they're predicting about 20 years.' That was in 1964. So, you can see the change. And that's something that everybody notices because it's so evident," he said. "There's a lot of other subtle changes that go on that you don't really pick up on right away. It's like if you look in the mirror in the morning and tomorrow morning, there is no change. But if you had a back button on that mirror like you do on a computer, you could go back, back, back to day one. Who is that guy? I mean, there's a lot of land use changes that you just don't notice."



“My point is, don’t lose contact with the outdoors and with the field.”



Determining the highs and lows of doing survey work for nearly six decades is a difficult question, but one that Kobriger answered after a pause.

“A couple of highlights, I guess, would be finding a new dancing ground, particularly if there hasn’t been one in the area before or when you’re running brood surveys and finding sharptail broods,” he said. “I guess the one thing that kind of bothers me is that the partridge population really dropped. One year, hunters harvested almost a quarter million partridge, and in 1992 they took a big drop and just never recovered. And I don’t know why, and I don’t think anybody else knows why. I mean, they have some ups and downs, but nothing like they were back before that big drop.”

After a 43-year career with the Game and Fish Department, and his continued work with the agency after retirement, Kobriger has some advice for those younger people thinking about a conservation career.

“Let me tell you a little story about that. I went to a meeting of the Central Mountains and Plains Wildlife Society, and I think it was in Colorado. And I gave a report on the land use study that we did down at Bucyrus. I showed all of the land measurements and stuff that we did,” he said. “When I got to the question-and-answer part of it, a guy raised his hand and said, ‘You know, I really enjoyed that because it actually showed somebody out in the field doing something.’ I mean, some people, if they can’t do it on the computer, they just won’t do it, it seems like, or they don’t do it as much as they should. My point is, don’t lose contact with the outdoors and with the field.”

Kobriger hasn’t for nearly 60 years.

RON WILSON is editor of North Dakota OUTDOORS.



BUFFALOBERRY PATCH



SANDRA JOHNSON

Spring Mule Deer Survey Complete

The North Dakota Game and Fish Department completed its annual spring mule deer survey in May, and results indicate western North Dakota's mule deer population is 13% higher than last year and 34% above the long-term average.

Biologists counted 2,923 mule deer in 298.8 square miles during this year's survey. The overall mule deer density in the badlands was 9.8 deer per square mile.

Bruce Stillings, Department big game management supervisor, said he is encouraged with current mule deer densities across the badlands.

"The spring index was higher than 2021 despite having very poor fawn production," Stillings said. "Although fawn production was low due to extreme drought, habitat in the badlands was still in a condition able to provide high over-winter survival, leading to a slight population increase in 2022."

Stillings said the 2022 spring survey was the longest on record due to two April blizzards.

"Two blizzards produced approximately 40 inches of snow with high winds and low temperatures," he added. "The effects of these storms will not be understood until upcoming surveys are completed."

The spring mule deer survey is used to assess mule deer abundance in the badlands. It is conducted after the snow has melted and before trees begin to leaf out, providing the best conditions for aerial observation of deer. Biologists have completed aerial surveys of the same 24 study areas since the 1950s.



MIKE ANDERSON

Pronghorn Hunting Season Statistics

Hunter success during last fall's pronghorn hunting season was 68%, according to the North Dakota Game and Fish Department.

Game and Fish issued 1,710 licenses (1,034 lottery and 676 gratis), and 1,457 hunters took 991 pronghorns, consisting of 807 bucks, 159 does and 25 fawns. Each hunter spent an average of three days afield.

The 2022 pronghorn hunting season will be determined in July.

Check Fire Extinguishers in Boats

Boat owners should take note of a new U.S. Coast Guard fire protection regulation that took effect in April.

Recreational boats with a disposable (non-rechargeable) fire extinguisher with a manufacture stamped date on the bottle that is older than 12 years are considered expired and must be removed from service. Fire extinguishers with a label stamped "Marine Type - USCG Approved" are considered up-to-date, and extinguishers without a date or marine label are most likely older than 2007 and must be replaced.

The following recreational boats are required to carry marine fire extinguishers:

- Boats with permanently installed fuel tanks.
- Spaces that are capable of trapping fumes, such as:
 - closed compartments, such as under seats,
 - double bottoms not sealed to the hull or not completely filled with flotation material,
 - closed living space,
 - closed stowage compartment where combustible or flammable materials are stowed.

NASP State Tournament Results

School-aged archers from across the state participated in the 2022 National Archery in the Schools state tournament in Minot.

Oakes students claimed top honors in the bull's-eye high school (grades 9-12), middle school (grades 7-8) and elementary (grades 4-6) team divisions. The overall individual male winner was Wahpeton archer Joshua Wiebusch, while Hankinson student Danica Onchuck claimed the top individual spot in the female division.

Oakes students also took first place in the NASP 3-D Challenge



MIKE ANDERSON

high school and middle school team divisions, and Mt. Pleasant followed up with top honors in the elementary team division. Wiebusch was the top male winner, and Madison Samuelson from Mt. Pleasant was top female.

In addition, Layton Jacobson from New Rockford-Sheyenne (bull's-eye middle school boys), Shayle Zimelman from Oakes (bull's-eye middle school girls) and Presley Thompson from Bob Callies (3-D elementary girls), captured first place at the Western Nationals, and as a state North Dakota placed in the top 10.

Place winners by competition at the state tournament in Minot:

Varsity boys – 1) Joshua Wiebusch, Hankinson; 2) Jayce Rivinius, Gackle-Streeter; 3) Brady Graves, Wahpeton.

Varsity girls – 1) Zoey Bohnenstingl, Lidgerwood; 2) Octavia Ralph-Martinson, Griggs County Central; 3) Madison Graves, Wahpeton.

Bull's-eye high school boys – 1) Joshua Wiebusch, Hankinson.

Bull's-eye high school girls – 1) Octavia Ralph-Martinson, Griggs County Central.

Bull's-eye middle school boys – 1) Grant Grabinger, Medina.

Bull's-eye middle school girls – 1) Danica Onchuck, Hankinson.

Bull's-eye elementary boys – 1) Wyatt Arrowood, Oakes.

Bull's-eye elementary girls – 1) Elissa Estenson, Mt. Pleasant.

3-D high school boys – 1) Joshua Wiebusch, Wahpeton.

3-D high school girls – 1) Madison Samuelson, Mt. Pleasant.

3-D middle school boys – 1) Layton Jacobson, New Rockford-Sheyenne.

3-D middle school girls – 1) Shayne Zimelman, Oakes.

3-D elementary boys – 1) Carter Belgrade, Mt. Pleasant.

3-D elementary girls – 1) Elissa Estenson, Mt. Pleasant.

Scholarships Available for Students

The North Dakota Game Wardens Association, Ray Goetz Memorial Fund and Report All Poachers are sponsoring two \$600 scholarships for graduating high school seniors or current higher education students interested in majoring in wildlife law enforcement or a related field.

Applicants must be North Dakota residents, be in good academic standing and have an interest in wildlife law enforcement or a related field. Scholarships will be awarded in fall upon proof of enrollment.

Applications are available by contacting the North Dakota Game Warden's Association, ndgamewardens@gmail.com. Applications must be received no later than July 8.



SANDRA JOHNSON

Game and Fish Pays Property Taxes

The North Dakota Game and Fish Department recently paid more than \$718,000 in taxes to counties in which the Department owns or leases land. The 2021 in-lieu-of-tax payments are the same as property taxes paid by private landowners.

The Game and Fish Department manages more than 200,000 acres for wildlife habitat and public hunting in 51 counties. The Department does not own or manage any land in Traill or Renville counties.

Following is a list of counties and the tax payments received.

COUNTY	TAX DUE	COUNTY	TAX DUE	COUNTY	TAX DUE
Adams	188.65	Grand Forks	15,017.82	Pierce	3,279.22
Barnes	6,698.85	Grant	1,240.37	Ramsey	16,613.75
Benson	5,041.29	Griggs	101.89	Ransom	2,141.83
Billings	289.80	Hettinger	4,797.87	Richland	18,437.69
Bottineau	6,659.40	Kidder	12,317.52	Rolette	58,854.22
Bowman	2,278.57	LaMoure	10,845.98	Sargent	20,589.68
Burke	1,275.83	Logan	422.37	Sheridan	84,201.15
Burleigh	26,269.81	McHenry	1,693.92	Sioux	318.21
Cass	7,908.60	McIntosh	10,029.29	Slope	1,993.35
Cavalier	14,896.63	McKenzie	35,374.75	Stark	5,632.41
Dickey	13,598.38	McLean	130,467.84	Steele	10,637.84
Divide	2,460.37	Mercer	23,702.99	Stutsman	5,601.63
Dunn	5,691.13	Morton	25,459.76	Towner	2,476.61
Eddy	6,705.08	Mountrail	6,747.28	Walsh	10,215.94
Emmons	6,969.02	Nelson	6,199.99	Ward	58.90
Foster	1,449.53	Oliver	2,512.79	Wells	62,208.26
Golden Valley	169.75	Pembina	11,163.89	Williams	8,475.96

Staff Notes

Moose Harvest Correction

Harvest statistics for the 2021 moose season published in the May 2022 issue of *North Dakota OUTDOORS* were incorrect. The corrected version is provided.

The North Dakota Game and Fish Department issued 470 moose licenses last year. Of that total, 448 hunters harvested 405 animals – 163 bulls and 242 cows/calves. Harvest for each unit follows:

Unit	Hunters	Bulls	Cow/Calf	Success Rate
M5	5	5	0	100
M6	10	10	0	100
M8	15	14	0	93
M9	114	33	67	88
M10	179	56	108	92
M11	125	45	67	90



From left, Scott Winkelman, enforcement division chief, Jeff Sieger, warden pilot, Jerad Bluem, district warden, and Jeb Williams, Department director.

ASHLEY PETERSON

Wardens Receive Lifesaving Award

North Dakota game wardens have shared many stories in the Behind the Badge blog on the Department's website (gf.nd.gov), providing readers insight into the daily lives of wildlife enforcement officers in our state. Many of these narratives were humorous, while some educational. This story is neither, said Scott Winkelman, chief of the enforcement division.

"It is written with extreme thanks and sincere recognition for the actions of two wardens," he said.

On May 16, Winkelman said he was fortunate and proud to present district game warden Jerad Bluem and game warden pilot Jeff Sieger with the North Dakota Peace Officers Association Lifesaving Award. The Lifesaving Award is given to a law enforcement officer who by his/her actions significantly contributes to saving a human's life.

On September 5, 2021, Bluem and Sieger responded to an emergency call on the Missouri River near Bismarck. An individual had slipped and fallen on a pontoon boat that was stuck on a sandbar. The individual caught his leg on a cleat on the boat, causing a significant laceration in his thigh, severing the major femoral vein.

Bluem and Sieger were quick to respond by patrol boat and used their medical training and equipment to evaluate the patient and effectively use a tourniquet and hand pressure to control the heavy bleeding. The wardens then transferred the patient to their patrol boat and transported him to the nearest boat ramp, where an ambulance was waiting. Without the quick, professional response, Winkelman said, this story most likely would have ended in a different, terribly sad way.

"North Dakota Game and Fish Department wardens are some of the most professional law enforcement officers that I have been around in my 19-year career, and I am extremely proud of their service to the citizens and wildlife of North Dakota," Winkelman said.

The Game and Fish Department enforcement division recently completed their annual in-service training, which included training on tactical first aid, vehicle operations, defensive tactics, and low light firearms use. Game wardens often attend training to ensure they are prepared for emergency situations such as the one previously described.



Otter Cam

North Dakota Game and Fish Department staff placed two trail cameras along the Sheyenne River in Sheridan County on May 10 to possibly confirm a river otter sighting on May 8.

"I put the camera out to potentially document them and get photos and video for staff use," said Bruce Kreft, Department resource biologist. "We didn't know how lucky we'd get."

Sure enough, the cameras photographed two river otters just three or four days later. The animals were caught on the trail cameras a number of times after that.

"It was a pretty quick turnaround," Kreft said. "We also got good photos of deer, raccoon, beaver, mink, waterfowl and some nongame birds."

According to Game and Fish records, there was one other verification of an otter about 10 miles downstream of this sighting in 2015.



BACKCAST

By Ron Wilson

There's six of us, walking abreast roughly 10 feet apart in a stubble field looking for a bird that doesn't want to be found, safeguarding the singular reason she and her mate migrated hundreds of miles earlier this spring to this corner of Bowman County.

I so want to be the person to heroically spy the well-camouflaged bird and nest, tiptoe away nonchalantly and point out my find at a safe distance to the experts in the group. Even more, and this thought nags at me as I occasionally stumble through the field absently thinking about lunch and wishing I wouldn't have left my water bottle in the vehicle, that I don't want to be the guy who unintentionally steps on what we are trying so hard to find with my size 12 hiking boot.

What we're searching for is a female long-billed curlew, North America's largest shorebird, sitting on a nest that likely harbors four eggs bigger than chickens lay. For curlew newbies, and I was one of them before watching a handful through binoculars earlier, this bird certainly stands out in this grassland/agriculture landscape as it's about the size of say, a sharp-tailed grouse. It has a long sickle-shaped bill that, I continue to imagine, looks a lot like any old, random stick in the terrain we're walking.

Before we even start our search, we're told the odds of finding the curlew is about 10%. Cruddy odds, certainly, but I'm up for the hike and tired of watching these cool birds since sunrise from a quarter mile through optics.

The idea is to cover as much ground as possible, without skipping any in our search area. We're told sto-

ries by researchers about walking past nesting curlews because the birds blend so well into their surroundings. We hear that the birds will oftentimes nest near cowpies that possibly helps conceal them somehow or provides some sort of visual reference when they need to find the nest after feeding, bathing and preening elsewhere.

Yet, no one says anything about that time someone accidentally stepped on a bird and its eggs and bummed everyone out.

Once we start walking slowly abreast, everything and nothing looks like a curlew hunkered motionless on a nest. I see several black beetles that I've been told the birds feed on. There is sign of a badger having done some dirt work recently. And, of course, there are many cowpies, but none with nesting neighbors.

Once we get to the end of our first pass and it's time to turn and head back in the direction in which we came, our group swings like a metal gate opening, with one person staying put imitating the gate's hinge.

We do this for 45 minutes to an hour. Several oil field workers drive by, but I doubt that they notice us. The landowner, who likes curlews on his property and applauds the research, drives his farming equipment back and forth off in the distance. A small airplane flies low over our chain of searchers once, twice, three times. I can't imagine what the pilot thinks we're doing, but I'm guessing the odds are better than 10% that he or she has witnessed weirder from up there.

RON WILSON is editor of North Dakota OUTDOORS.

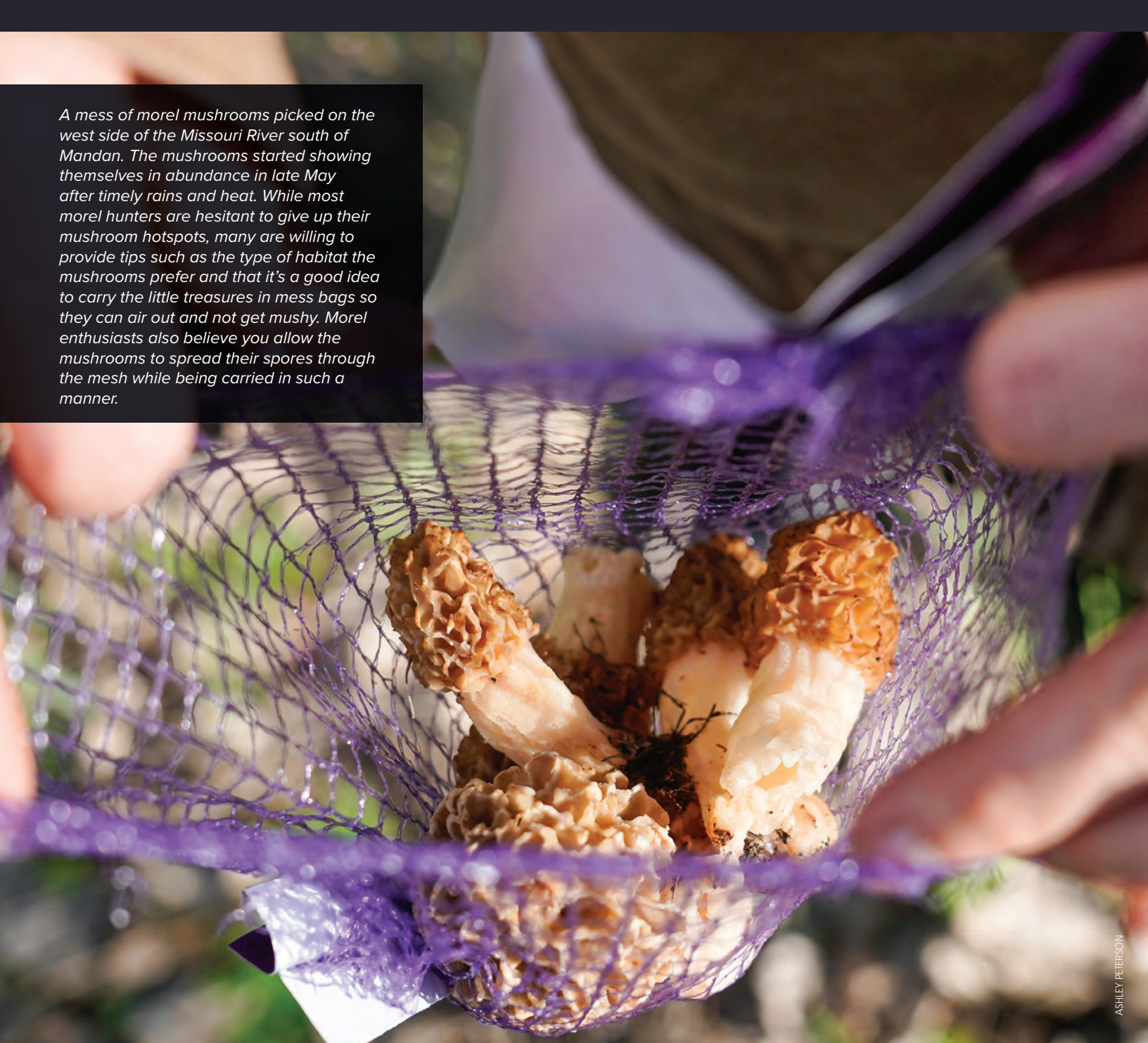
MIKE ANDERSON



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100 N. Bismarck Expressway
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A mess of morel mushrooms picked on the west side of the Missouri River south of Mandan. The mushrooms started showing themselves in abundance in late May after timely rains and heat. While most morel hunters are hesitant to give up their mushroom hotspots, many are willing to provide tips such as the type of habitat the mushrooms prefer and that it's a good idea to carry the little treasures in mess bags so they can air out and not get mushy. Morel enthusiasts also believe you allow the mushrooms to spread their spores through the mesh while being carried in such a manner.



ASHLEY PETERSON

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