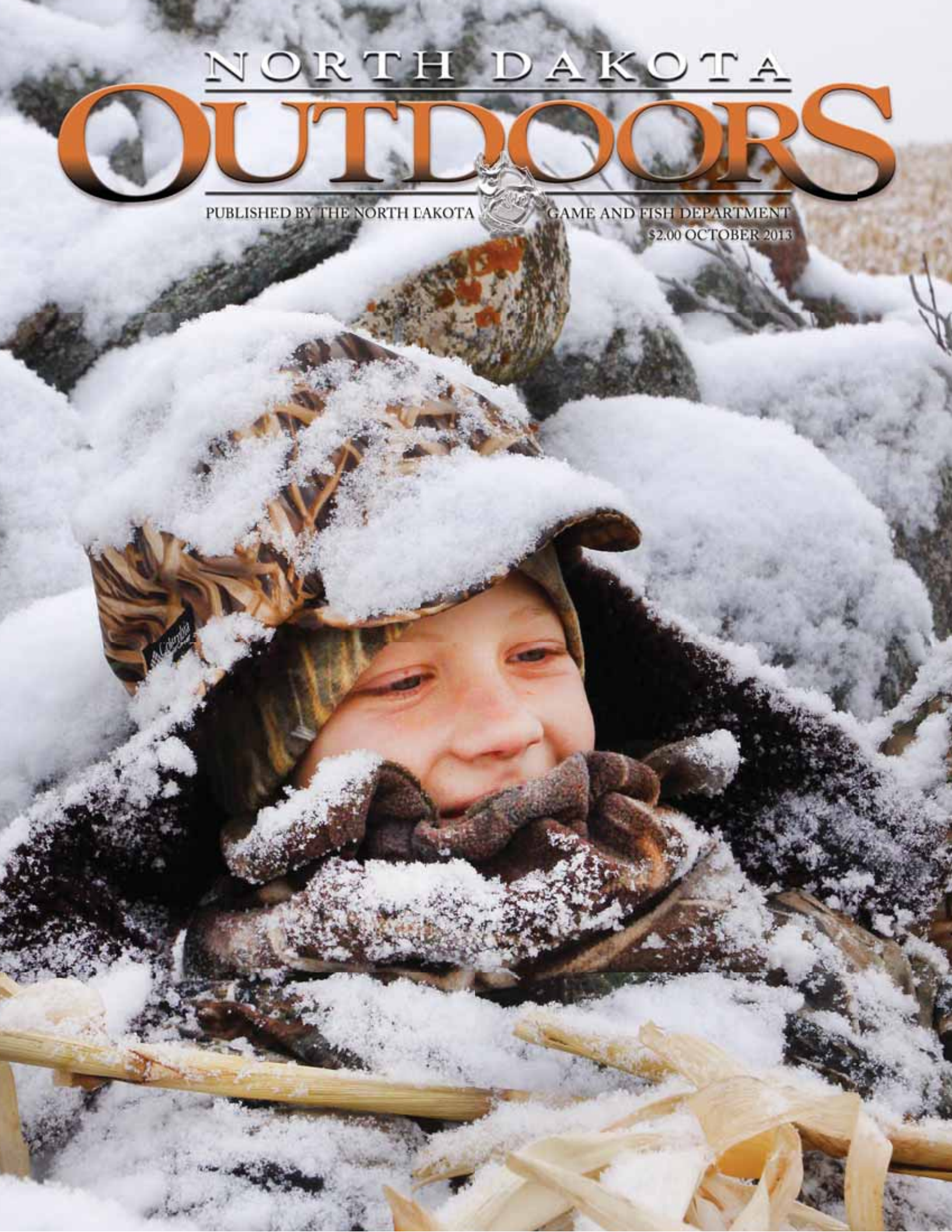


NORTH DAKOTA OUTDOORS

PUBLISHED BY THE NORTH DAKOTA

GAME AND FISH DEPARTMENT

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MATTERS OF OPINION



Terry Steinwand
Director

The challenge this time of year in North Dakota is deciding which outdoor activity to pursue.

Fishing has been nothing short of phenomenal this past summer and it's fully expected to continue this fall and winter. While upland game populations aren't looking as good as we'd like to see, there are still plenty of opportunities.

My point is that there are many hunting and fishing opportunities available.

I've always said that hunting or fishing involve a minimum of two issues – having the resource and having access to that resource. There has been some concern voiced on the access issue from the PLOTS perspective. We've seen a reduction in PLOTS acres this year, due largely to the reduction in Conservation Reserve Program acres across the state.

The loss of CRP acres in North Dakota is certainly a concern and we're watching evolving farm bill discussions closely to assess which direction lawmakers are going to take, while at the same time providing input where we can to positively influence wildlife populations and access.

Game and Fish Department private land staff has been working on ways to increase acreage in the program. Their goal is to not simply increase access, but also add quality habitat to produce the birds and animals we pursue. I have total confidence they will develop new and innovative programs to accomplish that. They've always done so in the past.

The other portion of the equation is having the habitat to produce the resource. As mentioned, losing CRP is undoubtedly affecting the number of upland game birds, deer and other wildlife we have on the landscape. But other factors also influence wildlife populations, including continued loss of native grasslands, weather and diseases.

In this issue of *North Dakota OUT-DOORS*, Department staff address the issue of epizootic hemorrhagic disease and its negative influence on the state's white-tailed deer population. This disease occurs almost every year in North Dakota, but most years the impact is minimal. Of course, there are years when the impact is more severe. The point is that there is rarely just a single factor that determines the status of North Dakota's wildlife populations.

I never get to hunt or fish as much as I'd like, but take my opportunities as they come. I'm not really choosy on what I hunt or fish for, but I certainly have my preferences and they sometimes change on an annual basis. As of this writing, I've been out sharp-tailed grouse hunting three times and the survey reports were certainly correct in the areas I've frequented. Department biologists stated sharp-tailed grouse were down about 50 percent and that certainly appears to be true. I've had a tough time finding birds, but in my wanderings I've certainly seen more pheasants than expected. It's now going to be a waiting game to see if they're still hanging around come pheasant opener.

Remember, surveys are averages for areas of the state and statewide. As our biologists always say, some areas will be lower and some localized areas will be higher. Birds are out there, you just have to get out and find them.

Over time, our terrestrial resources have been more abundant, but they've also been lower. At Game and Fish we will continue to work toward higher wildlife populations across the state. The bottom line is that we have many fishing and hunting opportunities, and we encourage you to pursue them with a kid, family member, neighbor or friend. So get out and enjoy what is undoubtedly one of the most beautiful times of the year in the great North Dakota outdoors.

Terry Steinwand

NORTH DAKOTA OUTDOORS

PUBLISHED BY THE NORTH DAKOTA GAME AND FISH DEPARTMENT

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.

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Front Cover

If a youngster can stay still long enough to accumulate a covering of falling snow, he has a promising future as a waterfowl hunter, in field or marsh. *Photo by Craig Bihle, Bismarck.*



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MEASURING REPRODUCTION, STOCKING SUCCESS

Story and Photos by Ron Wilson

Marvin Miller Lake – located 6.5 miles south, 8 miles west and .5 miles north of Gackle – is off the beaten path. You have to be looking for the 800-acre fishery to find it.


With a wealth of waters in south central North Dakota – some with names, some without, and many that look like the one you just passed – a sign along state highway 34 confirms its location.

First stocked with walleye in 2002, and annually thereafter, this Logan County fishery didn't really catch the interest of anglers until fall and winter of 2012. By then, the walleye had finally reduced the fathead minnow population to the point that anglers' baited hooks looked tempting.

"We saw the walleye population building and building, but they weren't reducing the fathead minnow population," said Paul Bailey, North Dakota Game and Fish Department district fisheries supervisor.

Things changed when Bailey started doubling the walleye stocking rate for Marvin Miller.

"What I learned at Marvin Miller changed my approach to managing this type of walleye fishery," Bailey said. "I believe it works better to take an aggressive stocking strategy right from the start. A lot of these prairie lakes won't be around 10 years down the road."

A man wearing a grey baseball cap with a logo, glasses, and a green jacket is focused on measuring a fish. He is wearing white gloves and holding a ruler vertically against the fish. The fish is held in a green mesh bag. Another person's hand and part of a cap are visible on the right side of the frame. The background shows a body of water and a cloudy sky.

Scott Gangl (left), Game and Fish Department fisheries management section leader, and Paul Bailey, Department fisheries supervisor, sort, measure and record lengths of yellow perch and walleye caught from a Logan County lake. Fall reproduction survey work occurs annually on dozens of North Dakota waters across the state.



Scott Gangl releases hundreds of young-of-the-year yellow perch, and the occasional fathead minnow, caught in a single trap net set in Marvin Miller Lake earlier this fall. During the release, Gangl estimates just how many young fish are in the tub.

Scott Gangl (left), and Paul Bailey, deal with a mess of young perch and fathead minnows caught in a trap net on Marvin Miller Lake in Logan County. (Below) Fisheries biologists measure some of the fish during fall reproduction surveys to get an idea of how fast they are growing. How fast fish are growing tells biologists, among other things, whether fish are finding enough to eat.



The word has been out on Marvin Miller, and a number of other prairie lakes like it, for awhile. “The walleye fishing in May and June was unbelievably good,” Bailey said. “It’s not a secret anymore.”

To predict the future of Marvin Miller Lake, or any other body of water for that matter, is difficult, considering the role an unpredictable Mother Nature can play. Even so, every fall fisheries biologists conduct fall reproduction surveys on all large and mid-sized reservoirs in the state, and many of the smaller waters as well, to see what they can possibly expect in the coming year.

Fall reproduction sampling provides fisheries biologists with an index that measures natural reproduction and stocking success. It allows biologists to see if fish did spawn, and how fingerlings stocked in June survived summer.

“Oftentimes, the biggest hurdle for fish is getting through that first year of life,” said Scott Gangl, Game and Fish Department fisheries management section leader.

Department fisheries personnel have been conducting fall reproduction surveys for decades. Today, with a record number of fisheries in the state,

biologists are sampling 30 or more lakes in each of their districts alone. Bailey manages 90-100 waters in his south central district and planned to sample 30 in fall, especially those waters where walleye were introduced this year.

“With so many lakes on the landscape, our biologists try to get to as many as possible,” Gangl said. “As far as sampling goes, our fall reproduction surveys are in the top two or three in terms of tools that we use. We combine the information learned from fall reproduction sampling with a number of other things to determine management goals, stocking requests and plans for the upcoming year.”

Gangl said fish stocking requests are made months in advance to help federal fish hatcheries prepare. “Initial stocking requests for 2014, for example, will come in around November,” he said. “District fisheries supervisors may tweak those numbers over winter, depending on the forecast for winter-kill in district lakes.”

On September 10, Bailey, Gangl, and Justen Barstad, Department fisheries technician, sampled Marvin Miller Lake, using half-inch mesh gill nets and 3- by 4-foot trap nets, both

of which are designed to catch smaller fish.

"The small mesh gill nets are set in deeper water and are well-suited for catching young-of-the-year walleye," Gangl said. "The traps nets are really good at catching other fish species, like fatheads and yellow perch, which cruise the shallow shorelines."

With many lakes to pick from in his district, Bailey said one of the reasons he chose to run a fall reproduction survey on Marvin Miller is because of the lake's importance as a walleye fishery.

"Between the really good walleye population and the angler pressure, we wanted to make sure that we've got more walleye on the way," Bailey said. "Plus, we wanted to see what was happening with the forage population."

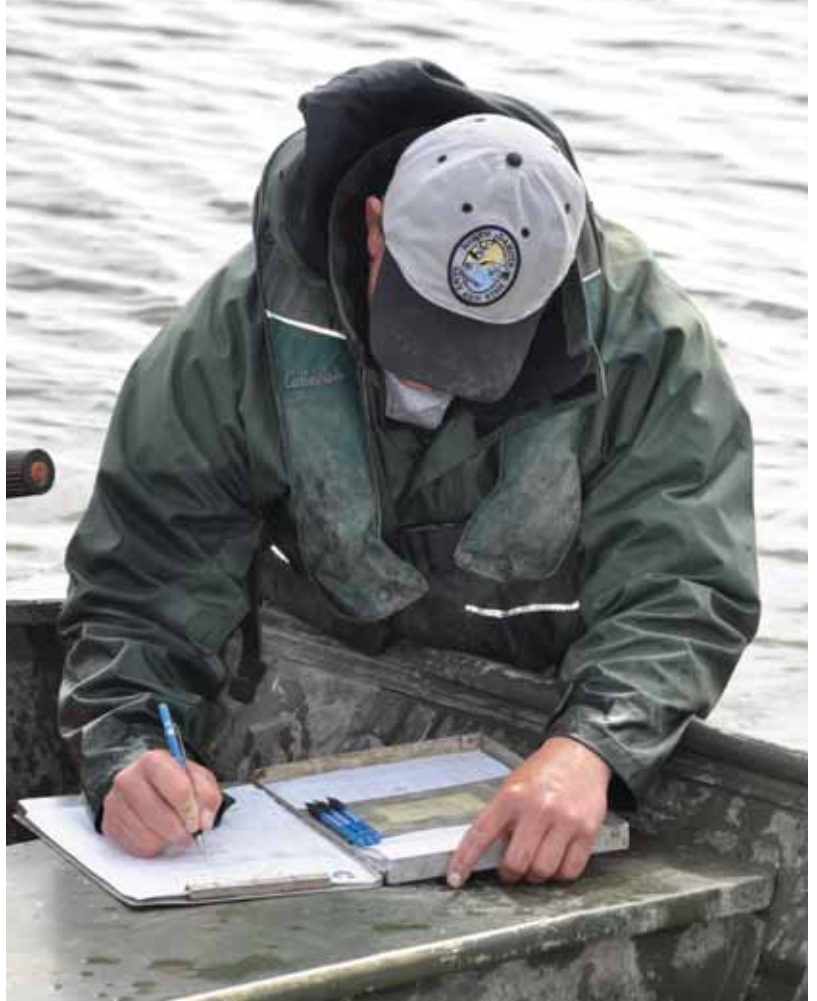
Without crunching the numbers, Bailey said the fall reproduction survey at Marvin Miller suggested that walleye stocking efforts earlier in 2013 were successful.

"Young-of-the-year walleye were fairly abundant and in a few years should be to the size that anglers are interested in," Bailey said. "Also, there is a good yellow perch population, which will provide forage for walleyes for some time to come."

Bailey said fall reproduction surveys are more important than ever, considering the advent of 40-plus new walleye lakes in the state in the last decade.

"These surveys let us know where we are having some success in developing these fisheries," he said.

RON WILSON is editor of North Dakota **OUTDOORS**.



Justen Barstad, Game and Fish Department fisheries technician, records the lengths and an estimate of the number of walleye and yellow perch young-of-the-year netted during fall reproduction survey work in September in Logan County.

Late Spring Influence

Fisheries biologists who questioned how a late spring and delayed ice-off would influence fish reproduction in North Dakota waters finally have a few answers.

"Things aren't looking too bad," said Scott Gangl, North Dakota Game and Fish Department fisheries management section leader. "We weren't really sure what to expect. While we aren't setting records, we are seeing some good reproduction."

Department fisheries biologists have for years conducted fall reproduction surveys on many of the state's big and small waters in an effort to gauge natural reproduction and stocking success.

Gangl's report came with about a week remaining in September. At that time, about 80 percent of the scheduled survey work on selected waters was complete. A more complete report will surface sometime in October, he said.

"One thing to note, our biologists around the state are seeing some pretty good numbers of young-of-the-year yellow perch, signaling some good reproduction this year," Gangl said. "Perch are fairly early spawners, so it appears they weren't bothered by the late spring."

According to early reports, Devils Lake was one of those waters that reported fair to good numbers of young-of-the-year yellow perch.

Earlier reports also indicated good numbers of young walleye in the upper reaches of Lake Sakakawea, and fair to good numbers of perch on the east end.

"Another noteworthy thing on Sakakawea is the number of emerald shiners found in the back part of bays," Gangl said. "While Sakakawea is not hurting for forage, it's always nice to see those alternate forms of forage for the lake's game

fish species."

Lake Oahe, on the other hand, is in need of a forage fish boost after the majority of the rainbow smelt were lost during high water in 2011.

"Our fisheries biologists, thus far, are finding good numbers of white bass in Oahe and some shad," Gangl said. "This was our second year in a row of stocking shad in Oahe, so it's nice to see some reproduction."

On another note, Gangl said fisheries biologists are seeing fair survival of walleye stocked around the state in North Dakota's smaller waters.

"They're also seeing fair numbers of young-of-the-year pike," he said. "While we initially didn't know what to think of the late spring, it apparently was good for fish."

EHD·EHD·EHD·EHD·EHD·EHD

EHD·EHD·EHD·EHD·EHD·EHD



White-tailed deer infected with EHD will seek out water because the animal is running a fever. Because of this, whitetails with EHD often die in water or are found near water.

EHD·EHD·EHD

THE BITE THAT



KILLS

By Ron Wilson

Scientists understand that white-tailed deer in North Dakota die every summer from epizootic hemorrhagic disease, because the biting midge responsible for transmitting the virus is forever present.

It's just that some years more whitetails are killed from the disease than others, and 2013 happens to be an outbreak year.

In mid-September, Dr. Dan Grove, North Dakota Game and Fish Department wildlife veterinarian, said it was impossible to say exactly how many deer had died up to that point.

"We can only get an estimate based on the phone calls of dead deer, frequency and location," Grove said. "We went out and looked at one last week where the landowner reported 30 dead deer. We were shown 10 deer that were easy to get to, so the thinking is that there were more on the property."

With reports of dead whitetails from Bowman to Bismarck, and the likelihood of

more to follow, Game and Fish Department officials decided not to issue about 1,000 doe licenses remaining after the second lottery in three hunting units in southwestern North Dakota.

Randy Kreil, Department wildlife division chief, said the decision was based on previous years' experience where moderate to significant white-tailed deer losses were documented in situations similar to 2013.

While Grove said in mid-September that it was difficult to characterize this year's EHD outbreak as it was still ongoing, he did say it likely isn't as bad as 2011 when dead deer were reported from southwestern North Dakota to the Canadian border and as far east as Minot.

Typically, EHD is something that mainly occurs in the southwestern part of the state. "Unlike 2011, we haven't had any reports north of Interstate 94. But the experts say the disease will go as far as the wind will blow the midge," said Grove, who noted

ANNA BLOCK

EHD Outbreaks in North Dakota:

- 1962
- 1970
- 1971
- 1976
- 1981
- 1987
- 1988
- 1995
- 2000
- 2003
- 2008
- 2011
- 2013

(Note: In 1994 a small outbreak was isolated in the Yellowstone River bottoms southwest of Williston, but it was not particularly significant in terms of geographic area or number of deer deaths. According to Game and Fish Department records, the outbreak in 2000 was not widespread.)



that there were two confirmed EHD cases in the Grand Forks area in 2006.

According to the Southeastern Cooperative Wildlife Disease Study, the leader in hemorrhagic disease research in the country, EHD is the most important viral disease of white-tailed deer in the United States.

“It causes the most losses of white-tailed deer in the United States,” Grove said. “Hemorrhagic disease kills deer more efficiently than other factors, such as chronic wasting disease, starvation during difficult winters, habitat loss ... you name it.”

The naturally occurring disease, as it’s been said before, is spread by a biting fly, or midge, that some people refer to as no-see-ums. EHD is primarily a disease of ruminants, or cud-chewing animals with four stomach chambers, such as white-tailed deer, mule deer, pronghorn, bighorn sheep, moose, elk, bison, cattle and domestic sheep. While all these animals can be infected with the virus, it seldom kills anything but whitetails in North Dakota. However, Grove said, the Department received unconfirmed reports of deaths due to EHD to pronghorn and mule deer in 2013.

“We don’t know why mule deer, elk, moose, pronghorn and bighorn sheep don’t die from the disease,” Grove said. “Researchers say these animals are all susceptible to the disease, but just not on the same level as whitetails.”

Killer Bite

While it makes sense that EHD has been killing white-tailed deer in the state for years and years, it wasn’t until 1962 that the disease was first identified in North Dakota as the culprit to a whitetail die-off.

Over the years, *North Dakota OUTDOORS* has covered news of EHD outbreaks and how they happened. The following, which came on the heels of an outbreak in the mid-1990s, is an example.

EHD starts innocently enough, with a female midge biting an animal that hosts an active virus. When an outbreak is underway, several ruminant species can carry the virus, but in the beginning the midge needs to bite something that is still carrying the virus, which is called a reservoir host.

The primary reservoir host – the animal from which EHD begins – has been identified as domestic cattle. Some cattle – not all of them harbor the virus – can host active EHD virus for up to 8-10 months, allowing the virus to overwinter in North Dakota.

While the EHD virus lives in some domestic cattle, it rarely affects them. But when a female midge bites a cow that carries a virus, in an attempt to secure a blood meal to nourish her eggs, the virus can transfer with the blood to the midge. After an incubation period of 10-14 days, the virus has multiplied in the midge to a point where it can be transferred to another animal.

By the time the midge needs a blood meal to nurture a second or third crop of eggs, it can transfer the virus to the next animal it bites. If that animal is another cow, sheep, mule deer, pronghorn or any other warm-blooded animal, the virus is transferred but fought off by the animal's immune system. However, this new blood donor becomes a host for the virus.

Grove said white-tailed deer infected with the disease in North Dakota almost always die, and they do so within three to four days of showing clinical signs. During the early stages of the disease, these deer are also important virus hosts, perhaps the most important hosts once the disease gets rolling.

"The virus, depending on weather and other factors, dies within a couple of hours after the animal dies," Grove said. "Dead animals aren't at risk of spreading the disease. That's why the midge plays such a critical role."

The more animals that become part of the cycle, the greater the odds that a midge carrying the virus will bite a whitetail. When habitat and weather conditions are right, midge populations can explode, further increasing the odds.

Grove said whitetails with EHD often die in water or are found near water. "An infected whitetail will seek out water because it's running a fever," he said.

Before dying, a whitetail may wander, walk in

circles, or simply act as if it doesn't know what it's doing. The clinical abbreviation for this, Grove said, is ADR, which stands for "ain't doing right." A deer that "ain't doing right" is going to die, he said.

Some postmortem signs of death by EHD, Grove said, include bloody froth from the nose and anus, and pink skin caused by fever.

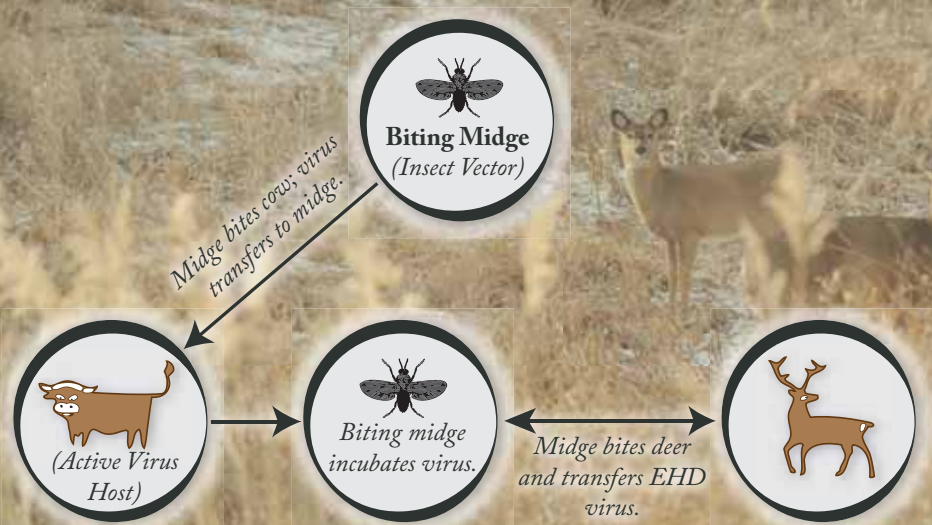
According to the Southeastern Cooperative Wildlife Disease Study, there are no wildlife management tools or strategies available to prevent or control hemorrhagic disease in wild animals. While EHD is not infectious to humans, a large number of dead animals on the landscape can cause alarm and the only thing to do is hope for a change in the weather.

"You need a hard freeze to kill the midge," Grove said. "Some years we might not see that first hard freeze until late October, which means the disease simply hangs on that much longer."

RON WILSON is editor of North Dakota **OUTDOORS**.

(Editor's note: Winter arrived, if only temporarily, in southwestern North Dakota October 4-5. Snow and below freezing temperatures, a Game and Fish Department wildlife biologist said, will be helpful in limiting the continuation of the EHD outbreak in the area.)

How EHD Gets Started



Volunteers

PROGRAMS FUELED BY

By Ron Wilson

Renae Patrick works with a youngster at an event sponsored by Missouri Valley Shooting Sports. Volunteers are essential in the statewide effort of introducing youngsters to shooting and other outdoor activities.



CHRIS GRONDAHL

There's a history of selflessness in North Dakota's outdoors.

For example, a half-century ago, and likely earlier, a number of people across the state concerned with the state's natural resources, volunteered their time as special game wardens. Their compensation, while not monetary, was an understanding that violations related to North Dakota's wildlife would come under greater scrutiny thanks to their help.

This altruistic mindset continues today in North Dakota Game and Fish Department programs that teach the inexperienced to fish, trap furbearers and understand why habitat on the landscape is so important to wildlife.

When asked where Department programs, such as Hooked on Fishing and Fur Harvester Education, would be without volunteers, Jeff Long, Department education coordinator, had a simple answer.

"Without volunteers," he said, "these programs just wouldn't exist. We just don't have the staff to pull off a fish camp or whatever it may be."

Greg Link, Department conservation and communications chief, said that while the time commitment from volunteers is sometimes considerable, the results don't often vary.

"The kids get excited because they're outdoors learning something new, then the volunteers get excited ..." he said. "It's often a pretty rewarding experience for the volunteers working with kids."

Sherry Niesar, Bismarck, has volunteered with the Game and Fish Department for nearly three decades. She started years ago because the agency's mission echoed her recreational and personal interests.

"I got started because I wanted to share my passion and pass on my interest in the outdoors to others," she said.

Niesar continues to visit classrooms and educate youngsters about North Dakota's natural resources.

"A lot of kids don't even go outside anymore and they've never seen a skunk, raccoon or a mink," she said. "If I can go into a classroom and spark some interest and get a kid outside, then what I've done is worth it."

Of all the Department's programs that enlist volunteers, hunter education is the only one that is mandatory. State law, enacted in 1979, requires anyone born after December 31, 1961 who wants to hunt in North Dakota to pass a certified hunter education course. The courses are taught largely by volunteers.

Hunter education is required for youth who are turning 12 years old, and kids can take the class at age 11.

Since hunter education became a requirement, Game and Fish has certified about 185,000 students. It's likely that a couple of thousand volunteers have helped teach classes during that time.

This year, 192 hunter education classes were taught around the state from January to August. That, according to daily emails and phone calls to Department headquarters in Bismarck, wasn't enough.

To try to meet a growing demand for classes in a growing state, today Game and Fish is looking to add many new volunteers, both men and women, to its roster of instructors. In addition, Link said there is always a need to certify new instructors to replace longtime volunteers who retire, or others who simply leave the ranks.

"We need to recruit a large force of younger instructors so we have enough people to teach the courses in 5-10 years," said Chris Grondahl, Game and Fish outreach section supervisor.

Link said veteran instructors understand the inevitability of turnover. "I think the longtime instructors realize this as well as anyone and wonder 'who is going to take my spot.' They, as much as anyone, want to see a healthy hunter education program," he said.

Becoming a volunteer instructor is not an overly involved process. In the past, besides a background check, prospective volunteers would take a 14-hour online instructor course, then teach a full class under guidance of a certified instructor, followed by an instructor quiz.

From start to finish, if everything goes as planned, Grondahl said it takes about two months to become a certified hunter education instructor in North Dakota. After that, Game and Fish's expectation is that volunteer instructors participate in at least one full class, which typically includes six classroom sessions in the evenings over the course of about two weeks.

"Our message in our hunter education program goes beyond gun safety," Grondahl said. "It also includes landowner-hunter relations, conservation, wildlife management, what it means to be a hunter. It's a good course and we want to maintain its value."

Link said hunter education graduates are expected not only to know the ins and outs of gun safety and hunter ethics, but be loud voices in the conservation community.

"In this day and age where there are a lot of stressors on our natural resources, you really need to have vocal people willing to stand up for the conservation of that resource," Link said. "Part of the responsibility of being a hunter is to be an advocate for conservation and the resource."

Starting in 2014, the process to certify volunteer hunter education instructors in North Dakota will change. Instead of an online course followed by assisting with a full class as an apprentice, Game and Fish will certify instructors through a one-day, hands-on course.



John Riske of Reynolds, a North Dakota Game and Fish Department volunteer, works with two possible future hunters at the Department's Conservation and Outdoor Skills Park at the state fair in Minot.

“New hunter education volunteers will attend a day-long academy,” Grondahl said, “and go over all the materials and training aids ... and they’ll be taught by a cadre of certified instructors.”

By providing instructors with more modern visual and other teaching aids, “we expect to add to what is already a good hunter education program,” Link added.

Game and Fish will also require current certified instructors to attend a one-day training session over the next two years, Grondahl said.

While the change in the training process wasn’t designed as a recruiting tool for new volunteer

instructors, Game and Fish hopes it will help the effort.

“We hope the people who attend the academy walk away excited and become promoters in their communities to help bolster our volunteer force,” Grondahl said. “Volunteers contribute to North Dakota’s hunting heritage and introduce youth to the outdoors. That alone is incentive to become an instructor.”

RON WILSON is editor of *North Dakota OUTDOORS*.

Volunteers are essential to many of the Game and Fish Department’s programs. Without people like Skip Balzer of Bismarck, pictured here working with young anglers through the Department’s Hooked on Fishing program, many of these programs just wouldn’t exist.



ASHLEY SALWEY

HUNTER EDUCATION COURSES

The North Dakota Game and Fish Department offers two types of hunter education courses.

- Traditional hunter education: 14-hour course taught entirely in the classroom.
- Home study: 14-hour course time split between classroom and online study. For more information on either course, see the course description page on the Game and Fish Department’s website, gf.nd.gov.

Courses focus on safety, ethics, laws and regulations, landowner relations, wildlife identification and conservation.

Students generally receive their hunter education card in the mail 7-10 days after successfully completing a class. Hunter education certificate numbers may be found online once the records for a completed class have been processed.

A list of available classes is found on the website. The list is updated as classes

are added or filled. Classes are taught by volunteers across the state and are held primarily during the spring and early summer months. In some areas a few classes may be available during the late summer and fall depending on volunteer instructor availability.

To enroll in a class go to the hunter education section of the Department’s online services website. For any questions about the course email ndgf@nd.gov.

teach
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WILDLIFE MANAGEMENT
HOOKED ON FISHING
VOLUNTEER
HUNTER EDUCATION
GUN SAFETY
LEARNING

ETHICS OF HUNTING AND FISHING
BOAT AND WATER SAFETY
HABITATS OF NORTH DAKOTA
landowner-hunter relations
CONSERVATION
mentor

Be a Conservation Volunteer

The Game and Fish Department hopes to help as many people as possible learn about wildlife, habitat and conservation. Because Department staff is limited,

much of this effort depends on volunteers.

Anyone interested in helping people learn more about wildlife and the outdoors, check out the volunteer projects below, visit the Game and Fish Department's website, gf.nd.gov, and contact us (701) 328-6300.

- Hunter Education – Teach students about safe firearms handling, wildlife conservation and hunter ethics.
- Boat and Water Safety – Teach about water safety using the Boating Basics Course and hands-on learning trunk.

- Conservation Volunteers – Assist in outdoor activities such as planting trees, maintaining properties, collecting and entering data, and work at area lakes.
- Fur Harvester Education – Share your knowledge and expertise with all ages and levels of fur hunters and trappers, from beginners to veterans. You do not need to be an experienced trapper to help teach this course. Individuals with a background in teaching or knowledge of furbearer biology are encouraged to become instructors.
- Habitats of North Dakota (for K-12 Educators) – Habitats of North Dakota materials promote teaching and learning about wildlife conservation and resource management. There are five Habitats of North Dakota texts available that cover wetlands, prairie, badlands, woodlands and riparian areas. Each text is illustrated and greatly enhanced with color photographs provided by the Game and Fish Department.
- Hooked on Fishing – Teach basics of fishing, aquatic habitats and fish species found in the state. Take students fishing with Department-provided equipment.



LARA ANDERSON

Tom Sauvage (far right) of Linton is a volunteer instructor with the Game and Fish Department's Fur Harvester Education program. The Fur Harvester Education course is a comprehensive study covering all aspects of fur harvest in North Dakota. The course includes both classroom and hands-on activities.

Few experiences in waterfowl hunting are as exciting as canvasbacks locked in on diver decoys. This year, hunters can take two canvasbacks daily.

Divers!

By Craig Bibrle

Nowadays, the duck of choice in North Dakota is the mallard, with everything else a distant second, but that wasn't always the case.

Perhaps about 125 years ago and counting, when the state was just becoming a state, it was often diver ducks that captured the fancy of gentlemen waterfowlers who packed passenger trains coming from the east in October.

In the 21st century, the odd diver specialist – odd meaning out of the ordinary, but not an oddball – is presented with a wealth of options in North Dakota, without much bother from competition.

In North Dakota in late October, says Mike Szymanski, the State Game and Fish Department's migratory game bird biologist, "you get a huge push of scaup (lesser scaup or bluebills) that come through ... maybe half the scaup in North America are in North Dakota at one time."

But it's not a very long time, and unfortunately, the same weather that funnels scaup into North Dakota from northern nesting grounds is also the same weather that prompts canvasbacks to head toward their primary coastal wintering areas. "The thing is, most cans leave by the end of the third week in October ... and the scaup really don't get here until about that time," noted Mike Johnson, the Game and Fish Department's game management supervisor. "Redheads are kind of here the whole time."

Put another way, for anyone who wants a good chance at a variety of diver species, the time between mid-October and Halloween is the open window, give or take a few days depending on annual weather.

And while the stereotypical diver diehard has a big boat for big water and a lot of decoys, such equipment is not always requisite to a successful diver hunt. Scaup are looking for amphipods (freshwater shrimp), Szymanski said, which they can find in fairly small marshes as well as large lakes.

Some days, Szymanski added, you don't even need decoys or a boat if you can find a pass or route between marshes where divers are trading back and forth.

Divers, Dabblers and Distinctions

The four species that comprise more than 95 percent of the diver harvest during a North



The eastern Dakotas are an important breeding ground for the continent's redhead population. In a given year, up to one-third of North America's redheads nest in this region, according to U.S. Fish and Wildlife Service statistics.



Lesser scaup or bluebills are widely abundant during a North Dakota fall, but not many hunters pursue them.



Most hunters who have spent fall mornings on a North Dakota duck marsh know the sound of canvasbacks splitting the still air, like jet-fighters flying high above in formation.

Dakota fall include lesser scaup, redheads, canvasbacks and ring-necked ducks (ringbills). The average take in the years from 1999-2012, according to U.S. Fish and Wildlife Service statistics, looks like this:

SPECIES	1999-2012 AVERAGE ND HARVEST
Lesser Scaup	20,000
Redhead	17,600
Ring-necked Duck	7,400
Canvasback	6,000

The puddle duck or dabbling side looks like this:

SPECIES	1999-2012 AVERAGE ND HARVEST
Mallards	194,000
Gadwall	81,500
Blue-winged Teal	29,000
Green-winged Teal	22,400
Shoveler	21,400
Wigeon	20,900
Pintail	18,000

One qualifier to these statistics is that all of the primary diver species except ring-necked ducks have had restrictive daily limits in most years since 1999, when the scaup limit went from six to three. The canvasback limit was consistently one per day (with sometimes a shortened season), and two for redheads, during the same time.

The only dabbling with major restrictions was pintail, which has had at times a daily limit of one or two, and shortened seasons as well in some years. The daily limit for mallards stayed consistently at five, with six daily for the other dabbling species.



CRAIG BIRLIE

Michael Bihrlie's first duck ever was a North Dakota bluebill. The average total bluebill harvest in the state over the past 13 years is about 20,000, compared to about 194,000 mallards per year.

A Different Look in 2013

This year, for the first time in decades, the canvasback daily limit in North Dakota is two – instead of one, or a closed season altogether. While that might not equate to a substantially greater interest in canvasback hunting or harvest, both Johnson and Szymanski think it could lead to a greater interest in diver duck hunting in general.

“With the new regulations,” Szymanski said, “it’s not so much that hunters can shoot two canvasbacks, but now they don’t have to worry about shooting more than one.”

This year, for the first time in a long time, no duck species in North Dakota has a daily limit of one. And with diver ducks, that’s a significant issue, as differentiating between species on the wing is sometimes difficult, even for experienced hunters.

Johnson says the canvasback daily limit increase may not create much new interest, as in hunters switching their focus to divers, but it will take the pressure off duck hunters who are out there anyway and maybe were holding off from shooting divers. “Having two is just one of those things that helps hunters,” Johnson said.



Redheads are the second-most harvested diver duck in North Dakota.

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“They don’t have to be quite as careful when they’re out hunting, although cans are one of the ducks that are more easily identified.”

Migration Changes

North Dakota’s diver migration pattern has changed somewhat in the past 20 years, particularly for scaup. The eastern third of the state was once the primary corridor, with Devils Lake as the centerpiece. Scaup eat amphipods and Devils Lake is known for its abundant supply of them.

Johnson once did an aerial count of scaup on Devils Lake in the early 1980s and estimated a minimum of 175,000 birds. Today, he thinks it was probably closer to a half-million birds. “They were spread across the entire lake, from one end to the other,” he remembered.

Scaup still frequent Devils Lake, but they are much more spread out during their migration. Since the current wet cycle began in 1993, there is a lot more deep water in eastern and central North Dakota where scaup and other divers can find food and rest.

On the other hand, Johnson says that some of that influx of water over the last 20 years has actually hurt some traditional diver lakes, making them deep enough to support fish like perch, which also eat the amphipods, leaving less food for the ducks.

Some historic canvasback staging and breeding marshes have also expanded to a point where favored food such as sago pondweed has flooded out. “When we got all that water back in 1993,” Johnson said, “it raised the water level in a lot of those lakes in Kidder, Wells and Stutsman counties that had sago. There used to be some real traditional sago lakes over there that had canvasbacks and swans on them, and the birds are not there any more.”

Another migration change over the past two decades is that more scaup are stopping to nest in North Dakota than was historically the case. Johnson attributes that to Conservation Reserve Program grasslands in prairie pothole country. Scaup primarily nest in grass surrounding good wetland complexes, and apparently found good conditions in North Dakota in recent years.

For instance, from 2001 through 2010, North Dakota averaged nearly 350,000 scaup, according to the Game and Fish Department’s spring survey. That’s more than double the average for the 1990s and 1980s, and several times higher than the 1970s and earlier.

What that means for hunters, Johnson said, is that North Dakota has a lot more scaup in the state early in the season than was previously the case.

Redhead numbers have also increased dramatically in the Game and Fish breeding duck survey since the early 1990s, while canvasback numbers are up slightly.



CRAIG BIHRLE

Canvasbacks are sometimes attracted by hunters with floating mallard decoys, but to increase your odds, add some diver decoys to your spread.

From 2001–2010, redheads averaged about 200,000 breeding birds a year, while canvasbacks averaged about 46,000.

With continental populations of redheads and canvasbacks at or close to all-time highs at some point in the last 10 years, and scaup making a modest comeback after a long-term downward trend that started in the 1980s, it’s not a stretch to assume that diver duck hunters might follow that same comeback trail.

But such is not the case.

“I know lots of duck hunters today who not only don’t own big spreads of diver duck decoys and duck boats, they don’t even own chest waders,” says John Devney, Bismarck, who is vice president of U.S. policy for Delta Waterfowl, and an avid diver hunter. “There’s been a massive shift with waterfowl hunting in the last 15 years or so.”

Some of that might have to do with a significant reduction in the scaup limit that started in 1999. Some of it could relate to the advent of motorized spinning-wing duck decoys and quality layout blinds that made field hunting for ducks a more popular, comfortable and productive option than it once was.

“I think there’s at least a generation of duck hunters in North Dakota, including the nonresidents who come to North Dakota, who haven’t come to appreciate the duck hunting opportunities that we have here,” Devney said. “It’s a resource that probably doesn’t get the attention that it deserves.”

CRAIG BIHRLE is the Game and Fish Department’s communications supervisor.



BUFFALOBERRY PATCH

By Greg Freeman, Department News Editor



DAPHNE KINZLER

BIGHORN SHEEP SURVEY SHOWS MIXED RESULTS

Even though results from this summer's survey indicated the bighorn sheep population in western North Dakota remains steady, State Game and Fish Department biologists are concerned about a significant decline in the number of adult rams.

Brett Wiedmann, Department big game biologist in Dickinson, said the July-August survey showed a minimum of 299 bighorn sheep, unchanged from last year and only 17 percent below 2008's record summer survey.

"Although the female segment of the population remained stable, we are concerned about another substantial decline in the number of rams, which was 11 percent below last year and 21 percent below the record observed in 2009," Wiedmann said. "Annual survival of adult rams is typically very high, so we need to figure out why our

ram population is continuing to decline despite reductions in hunting licenses."

Survey results revealed 79 rams, 155 ewes and 65 lambs – a record 258 in the northern badlands (an increase of seven from last year's record) and 41 in the southern badlands (down seven). "Bighorn sheep numbers increased again in the northern badlands, but continue to struggle south of the Interstate," Wiedmann said, while noting that a record 64 lambs were observed in the north, but only one in the south. "However, despite poor results in the southern badlands, the total number of lambs observed this summer surpassed the previous record of 60 in 2008."

North Dakota's bighorn sheep hunting season opens October 25 and continues through November 7. Game and Fish issued four licenses this year, the same as in 2012.

PLOTS Regulation Reminder

Before venturing on to Private Land Open To Sportsmen tracts this fall, here are some reminders.

Activities besides hunting, and public access when a hunting season is not open, are not covered in the Game and Fish Department's agreement with the landowner; thus, they require written permission from the landowner.

Activities such as riding horses for hunting purposes or for pleasure on PLOTS require written permission from the landowner. Permission from the landowner is always required for motorized vehicle access such as for setting decoys in a field, unless specially designated on the PLOTS sign.

In addition, leaving equipment or other provisions in a PLOTS area overnight, for example tree stands or blinds, decoys, firearms and archery equipment, trail cameras, or any type of bait used to attract big game animals, is not allowed without written permission from the landowner.



CRAIG BIRHLE

Motorists Warned to Watch for Deer



RON WILSON

Motorists are reminded to watch for deer along roadways, especially this time of year, because juvenile animals are dispersing from their home ranges.

October through early December is the peak period for deer-vehicle accidents. Motorists are advised to slow down and exercise caution after dark to reduce the likelihood of encounters with deer along roadways. Most deer-vehicle accidents occur primarily at dawn and dusk when deer are most often moving around.

Motorists should be aware of warning signs signaling deer are in the area. When you see one deer cross the road, look for a second or third deer to follow. Also, pay attention on roadways posted with Deer Crossing Area caution signs.

Deer-vehicle accidents are at times unavoidable. If an accident does happen, a new law passed by the 2013 state legisla-

ture eliminates the need for the driver of a vehicle involved in an accident that results in property damage only to the vehicle to notify law enforcement authorities.

However, a permit is still required to take parts or the whole carcass of a road-killed deer. Permits are free and available from game wardens and local law enforcement offices.

A few precautions can minimize chances of injury or property damage in a deer-vehicle crash.

- Always wear your seat belt.
- Don't swerve or take the ditch to avoid hitting a deer. Try to brake as much as possible and stay on the roadway. Don't lose control of your vehicle or slam into something else to miss the deer. You risk less injury by hitting the deer.
- If you spot deer ahead, slow down immediately and honk your horn.



SPORTSMEN AGAINST HUNGER ACCEPTING DEER, SNOW GOOSE MEAT

North Dakota's Sportsmen Against Hunger program is accepting donations of deer and snow geese taken during this fall's hunting season.

Participating processors will not accept deer shot in the hind quarters, and donated deer will be processed individually or only with other donated deer.

Hunters can clean their snow geese at home prior to delivery to a processor, but breast meat brought from home without a wing or head attached to the meat, must be accompanied by written information that includes the hunter's name, address, signature, hunting license number, date taken and



RON WILSON

species and number taken.

Hunters may also deliver snow geese directly from the field to a processor, but identification must remain attached to the bird until in possession of the processor.

The list of participating processors is

available on the NDCAP website at <http://www.capnd.org/>.

Hunters interested in donating snow geese are encouraged to call processors to have a clear understanding of how goose breasts will be accepted.



WHOOPING CRANE MIGRATION

Whooping cranes are in the midst of their fall migration and sightings will increase as they make their way through North Dakota. Anyone seeing these birds as they move through the state is asked to report sightings so the birds can be tracked.

Whoopers stand about 5 feet tall and have a wingspan of about 7 feet from tip to tip. They are bright white with black wing tips, which are visible only when the wings are outspread. In flight they extend their long necks straight forward, while their long, slender legs extend out behind the tail. Whooping cranes typically migrate singly, or in groups of 2-3 birds, and may be associated with sandhill cranes.

Other white birds such as snow geese, swans and egrets are often mistaken for

whooping cranes. The most common misidentification is pelicans, because their wingspan is similar and they tuck their pouch in flight, leaving a silhouette similar to a crane when viewed from below.

Anyone sighting whoopers should not disturb them, but record the date, time, location and the birds' activity. Observers should also look closely for and report colored bands which may occur on one or both legs. Whooping cranes have been marked with colored leg bands to help determine their identity.

Whooping crane sightings should be reported to the U.S. Fish and Wildlife Service office at Lostwood, (701) 848-2466, or Long Lake, (701) 387-4397, the North Dakota Game and Fish Department's main office in Bismarck at (701) 328-6300, or to local game wardens across the state. Reports help biologists locate important whooping crane habitat areas, monitor marked birds, determine survival and population numbers, and identify times and migration routes.



Whooping cranes inhabited North Dakota in prehistory, certainly as the glaciers receded from this region. The first written record of whooping cranes in North Dakota is provided by Lewis and Clark. They observed the big birds at the mouth of the Little Missouri River in Dunn County April 11, 1805.



Make the Call to Report Violators

The North Dakota Game and Fish Department encourages hunters, anglers and landowners who witness a fish or wildlife violation to file a report with the Report All Poachers program.

RAP is a cooperative project between the Game and Fish Department, State Radio Communications and the North Dakota Wildlife Federation. The RAP line offers

rewards – from \$100 to \$1,000 depending on the nature and seriousness of the crime – for information that leads to conviction of fish and wildlife law violators. Reports can also go directly to game wardens or other law enforcement agencies. Callers can remain anonymous.

Witnesses should note vehicle description, including make, color, license plate

number and state issued. Description of the violator should also be considered.

Witnesses should report a violation by calling the RAP telephone number at (800) 472-2121. RAP will then contact the local game warden immediately. If the witness gives the RAP operator a phone number, the witness will be contacted right away.

Archery and Shooting Range Grants

The Game and Fish Department has limited funding available for nonprofit organizations interested in starting a new archery or shooting range or enhancing current facilities.

To request a complete application packet, send a request to North Dakota Game and Fish Department, Shooting Range Application Packet, 100 N. Bismarck Expressway, Bismarck, North Dakota 58501.

The packet will contain a step-by-step checklist and paperwork to be completed. Nonprofit applicants will be contacted by March 2014 with results of the evaluation process.

The deadline for project proposals

is December 1. Proposals are evaluated on a number of criteria including clubs that provide free and public access, those that have not received funding before, as well as those that are working on tasks that actually put shooters on the ground. These priority items include dirt berms, target hangers, target throwers, storage buildings, sanitary facilities and lighting.

This will be the last time application packets will be mailed. In the future, application information will be found on the Department's website at gf.nd.gov.

For more information about the process, call John Mazur, Department hunter education coordinator, at (701) 328-6316.



VERIFY DEER LICENSE

Now is the time to locate your deer license and check it for accuracy.

Every year the Game and Fish Department's licensing section receives last-minute inquiries from hunters who can't find their license. When that happens, it's difficult to try to get a replacement license in time for the season opener.

Another reason to check the license now is to make sure the unit and species is what was intended.

Deer hunters in need of a replacement license can print out a duplicate (replacement) license application from the Game and Fish website, gf.nd.gov, or can call (701) 328-6300 to have an application mailed or faxed.

The form must be completely filled out and notarized, and sent back in to the Department with a fee.



CHECK FOR ANS WHEN REMOVING STRUCTURES

While the fall fishing bite will eventually fade, efforts to monitor the presence of aquatic nuisance species in North Dakota waters continue.

The North Dakota Game and Fish Department urges local entities and water recreationists to check for new aquatic nuisance species infestations when pulling and storing fishing piers, boat docks and lifts prior to ice up.

Fred Ryckman, Game and Fish ANS coordinator, said it is especially important to look for zebra mussels during this winter prep work. Zebra mussels will attach to hard surfaces,

such as fishing piers, boat docks and lifts. Inspecting these structures when pulled from the water is important to determine if mussels are present.

To date, adult zebra mussels have not been found in any North Dakota waters.

If mussels are found, citizens are requested to leave the suspicious mussel attached, take a digital picture, and report findings immediately to a local Game and Fish Department district office. Pictures of zebra mussels are available on the 100th Meridian Initiative website at 100thmeridian.org/.



Order 2014 OUTDOORS Calendars

The North Dakota Game and Fish Department is taking orders for its *North Dakota OUTDOORS* calendar, the source for hunting season and application dates for 2014. Along with outstanding color photographs of North Dakota wildlife and scenery, it also includes sunrise-sunset times and moon phases.

To order, send \$3 for each, plus \$1 postage, to: Calendar, North Dakota Game and Fish Department, 100 N. Bismarck Expressway, Bismarck, ND 58501-5095. Be sure to include a three-line return address with your order, or the post



office may not deliver our return mailing.

The calendar is the *North Dakota OUTDOORS* magazine's December issue, so current subscribers will automatically receive it in the mail.

CONTEST TO DETERMINE PLOTS COVER

The deadline is months away, but now is the time to frame the perfect photograph for a contest that will determine the cover of the 2014 Private Land Open To Sportsmen guide.

From end-of-day hunting shots, to scenic action or landscape shots, the Game and Fish Department wants to feature hunter photos on the 2014 PLOTS cover and elsewhere that showcase North Dakota's strong hunting heritage.

The Department's free PLOTS guide, which highlights walk-in hunting areas across the state, was first published in the late 1990s.

The only real contest guideline is that photos must include a PLOTS sign, front-facing or silhouette.

The contest deadline is April 30, 2014. Log on to the Game and Fish Department's website, gf.nd.gov, to learn more about contest prizes, rules and entry information.



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ANS

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Remove plants and plant fragments from decoys, strings and anchors.

Remove plant seeds and plant fragments from waders, other equipment and dogs before leaving hunting areas.



Remove all aquatic plants from boats and trailers before leaving a marsh or lake. (Does not include cattails or bulrushes used for camouflaging boats.)

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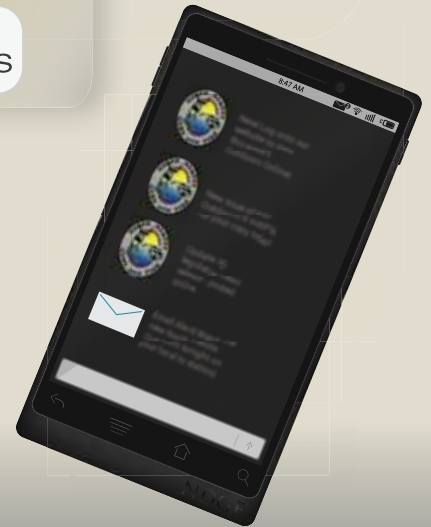
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back cast

By Ron Wilson



This late September morning is a gift – sunny, calm, long-sleeves-over-a-T-shirt weather. Perfect.

The wind is expected to pick up later, but we'll worry about that when and if. For now, we can hear an oak leaf helicopter 20 feet to the ground, brushing other leaves in its fall. The *yank-yank* of nuthatches, little forest visitors that comically run bill first down the bark of trees, call noisily to one another from up high.

This forest, a mix of oaks, ash, elms and others, acts as an open-air amphitheater, magnifying even the most innocuous sounds. A shuffling hunter not accustomed to picking up his feet sounds like a flock of turkeys on the move in thick understory, and the loud snap-pop of a fallen tree branch under a heavy foot is kin to slamming a library door.

I'm sitting with my youngest, Jack, on a log that rests in the woods like a teeter totter, with one end 4 feet off the ground. My oldest, Nate, is 30 yards west, and I can just make out his blue sweatshirt through the brush. Nearly a decade older than Jack, he understands the importance of sitting still, moving only when necessary. Then again, he's a college student, stayed up late last night, so he could be asleep.

The last we saw grandpa was at the vehicle before we parted and split up in the woods. But we have a pretty good idea where he is, about 100 yards north, because he's pulled the trigger on his shotgun a handful of times already, each blast coming loudly unannounced, making us flinch.

We're hunting fox squirrels on public land along a pretty stretch of the Missouri River not far from home. I've been hunting squirrels with

my boys for years and we continue to get a kick out of it every time we step into the woods.

There was a time I felt compelled to not really apologize, but justify our willingness to wander around in the woods and shoot an animal that's not highly regarded in these parts, but celebrated in others. But like a lot of things, I've gotten over it and am always on the lookout for good squirrel recipes or pieces of public land that are loaded with fox squirrels.

In a perfect world, Jack will shoot a squirrel this morning, but I'm not holding my breath. The kid just won't sit still, but for good reason. Grandpa bought him a new shotgun for his birthday and every minute or so, he throws it up to his shoulder for practice, aiming at trees or imaginary game. Every animal in this chunk of woods, even the nuthatches that flit from tree to tree, searching for whatever it is they eat, knows that we're here.

The kid just needs to pull the trigger and feel the kick of his shotgun for the first time, so we decide to hike out of the woods, maybe bump into grandpa and let Jack shoot at an empty pop can.

Grandpa beat us back to the vehicle and piled at his feet are four dead fox squirrels, a limit, his first, he says, in maybe 50 years. He grew up in southern Illinois where hunters take squirrel hunting far more seriously, where bagging a limit fattened by hickory nuts means something.

My sons and I get it, and we're just a touch jealous, to tell you the truth.

RON WILSON is editor of *North Dakota OUTDOORS*.



GAME AND FISH DEPARTMENT PHOTO

A Look Back

By Craig Bihrlé

Some people called them “tennis shoe” zones.

Whether anyone ever actually wore tennis shoes while hunkering in grass next to a refuge boundary fence, waiting for geese to fly from “protected” to “not protected” air space, is the basis for urban legend.

As the story goes, if a flock of geese came over a collection of hunters like those in the accompanying photo, it was seldom a sure thing as to who shot a bird, so the hunter who got to the bird first – tennis shoes providing more speed than hunting boots – was the one who got to take it home.

Scenes like this are, for the most part, gone from the hunting landscape in North Dakota. Not that hunters won't individually try to pass shoot geese coming off a refuge or other protected area, but defined areas where hunters could gather have been largely phased out over the past 20 years.

In their time, though, many hunters shot geese in these situations.

Former North Dakota Game and Fish Department Director Lloyd Jones worked at J. Clark Salyer

National Wildlife Refuge, where this photo was taken, in the mid-1970s. Situated in McHenry and Bottineau counties, Salyer NWR was a major migration stopover for snow geese, and pass shooting as the birds went off the refuge to feed in the morning was popular.

Jones remembers the scene well. He says the fenceline pictured is just south of the Willow City road on the east side of the refuge, and it was one of the more popular spots around the refuge because the boundary was close to the water, where the birds were roosting. On certain days, usually with clouds and wind, Jones said hunters could have some pretty good shooting as the geese left for the fields to feed.

As a refuge officer, Jones said he would often work that line because there was a “no retrieval zone” on the refuge, which meant hunters could only retrieve birds that fell outside the refuge boundary. “But temptation would often override caution,” Jones remembered, “and hunters would dash across the fence and retrieve a downed bird and be subject to a refuge trespass fine.”

The popularity of refuge boundary pass shooting waned over the years. Jones said when he was at Salyer in the mid-70s, the refuge would often hold several hundred thousand geese for several weeks. Today, snow goose migration patterns have changed so much that birds don't show up in North Dakota until much later in the fall, and they aren't nearly as loyal to refuges as staging areas as they once were.

Current J. Clark Salyer refuge manager Gary Williams says that within the last 20 years, many NWRs across the state have added public hunting areas and have phased out retrieval zones because hunters were no longer using them.

But for a time, they were a popular option for hunters who wanted a decent chance at bagging a goose without having to invest a lot in equipment or scouting time.

CRAIG BIHRLE is the Game and Fish Department's communications supervisor.