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**Front Cover** A male ruffed grouse drums on a well-used drumming log in the Pembina Hills. Photo by Jim Job.



# Fighing Options

#### **By Greg Power**

When it comes to fishing North Dakota, most anglers automatically think of chasing walleye at lakes Sakakawea, Oahe and Devils Lake, or on the many prairie waters that hold the state's most popular fish. Then again, maybe they consider casting to northern pike found most everywhere or jigging for yellow perch in winter through the ice.

But North Dakota offers so much more. Diverse fishing opportunities abound from paddlefish in northwestern North Dakota to trophy cats in the Red, to dandy white bass in Devils Lake. For years, North Dakota Game and Fish Department fisheries biologists and other staff have shared many of these somewhat hidden jewels with the inquiring fishing public. Yet, North Dakotans generally target only walleye, pike and/or perch.

In an effort to diversify one's angling portfolio, perhaps it's time to search out other prospective fisheries. To that end, the following eight narratives provided by Department fisheries biologists introduce readers to some of these "other" fish species and highlight the many opportunities that await a bobber, Daredevil or jig. Give them a try

Give them a try.

GREG POWER is the Game and Fish Department's fisheries chief.



Buegi

I grew up with bluegills. When I was young, I would often get up early on summer mornings and quietly sneak out of our lake home down to the dock, always to be greeted by sunfish. Though bass were my main sight-fishing quarry, it was bluegill, with their curiosity and pet-like behavior, that passed the time and provided entertainment between marauding schools of bass.

Bluegills prefer the company of one another and typically congregate in schools from as few as three or four fish, to more than 50. They are largely insect eaters, though bigger fish occasionally will take small minnows. Larger fish can be found occasionally in open water suspended some distance from cover. During these times they are usually actively feeding on plankton. However, most often bluegills can be found in less than 6 feet of water near aquatic vegetation, particularly during the warm water period. It is here that they are most adapted as their laterally compressed bodies allow them unique maneuvering capabilities within weed beds where they find food, shade during the hottest days of summer and cover from predators such as pike and bass.

Bluegills (aka brim, sunfish, sunnies) typically don't exceed 10 inches in length in North Dakota, but they are scrappers, and a mess of bluegills make fine table fare. Although, there aren't a lot of lakes in the eastern half of the state that harbor just the right ingredients to make for prominent bluegill fisheries. Yet, as you travel west, bluegill fishing opportunities increase considerably.

Good bluegill lakes typically contain great amounts of aquatic insects, good water quality (lower salinities), with moderately high densities of vegetation. Additionally, a thermal refuge (with cover) during the cold winter months is important. Young bluegills are most vulnerable to a lack of any of the aforementioned and most of the young simply do not survive their first winter in North Dakota.

Where abundant, bluegills are one of the easiest freshwater fish to catch. An angle worm suspended on a hook below a bobber is one of the best presentations and has likely accounted for more bluegill than any other method. Simply put a worm (or just a piece) on a No. 10 hook attached to 6- to 8-pound test line with a split shot weight 2-3 inches below a small bobber. Cast near shore to pockets in weed beds, or a shady spot along the shoreline on a warm summer day. In winter, focus on deeper water, using a small, weighted hook tipped with a maggot or "spike." Use light line (2- to 4-pound test) for easier deployment. Mornings are usually best in summer and afternoons during the winter.

Brandon Kratz, district fisheries supervisor, Jamestown

Trannel Catt

Channel catfish are a riverine fish native to the Missouri and Red rivers in North Dakota. They are also common in some larger tributaries such as the Sheyenne River and Heart River. They have been stocked in many smaller lakes, especially community fisheries throughout North Dakota.

The Red River population gets the most attention as



many very large catfish are caught there every year. The farther north you are, the better the fishing, with Drayton Dam being a popular spot in North Dakota. There is a daily limit of five with only one over 24 inches in the Red River. There are many catfish baits, but most anglers in the Red River use cut bait or live white sucker.

Catfish can be found everywhere in the Missouri River. The Garrison Dam Tailrace is a popular spot for catfishing and there aren't many large catfish caught here, but you can catch them up to 10 pounds and you could easily catch over 100 a day from boat or shore. There is no limit to the number you can keep in the Missouri River. Popular and effective baits for catching catfish in the Tailrace are rainbow smelt or night crawlers.

The state record channel catfish isn't from any of the native populations. That honor belongs to Moon Lake (Barnes County) where Tina Willis caught a 42-pound monster in 2009. Dickinson Reservoir is also known to produce 20-plus-pound catfish. Heart Butte Reservoir has abundant catfish up to 10 pounds and many community fisheries get stocked annually and provide shore-fishing opportunities for anglers of all ages. Catfish are aggressive, will bite on many

baits and put up a good fight, which makes them a popular fish for these small lakes. Check the Game and Fish Department website for catfish stocking near you.

Jeff Hendrickson, retired district fisheries supervisor, Dickinson



rappie

North Dakota is home to two crappie species. Populations of black crappie are most common and have a wider distribution than white crappie. Like other members of the sunfish family, males provide parental care to offspring. In May, mature males use their fins to make shallow circular nests, often in water less than 8 feet deep. After spawning, males provide protection to the eggs and newly hatched fry until they swim off to start their own lives. By winter, youngof-the-year can reach 3 inches in length.

Crappies are omnivores and feed on a wide variety of aquatic macroinvertebrates, small fish and even zooplankton. Fine comb-like projections attached to the gills, called rakers, filter zooplankton out of the water, providing a source of food.

North Dakota crappies will often reach lengths of 12 inches. Occasionally, larger fish, 14-17 inches, are present. It is not uncommon for crappies to reach 10 inches after four or five years. In some North Dakota waters, crappies have been reported to live 14 years.

North Dakota is near the northern extent of the black crappies' continental range. It is not uncommon for youngof-the-year crappies to die in their first winter if subjected to a long period of extreme cold temperatures. However, crappies can be quite resilient to low oxygen conditions, which frequent some North Dakota lakes. Through dissolved oxygen monitoring, we have found that crappie populations can survive short durations of low oxygen stress.

Fishable crappie populations are found in many impoundments throughout the state. Commonly, in these waterbodies, crappies can be found congregated in schools suspended in the stream channel or relating to structure such as submerged trees and vegetation. Several natural lakes,



especially in the southern half of the state, are also home to crappies.

Crappies are fun to catch and taste excellent. In spring, they can be targeted in shallow water during spawning. In summer, crappies can be found relating to structure or suspended. Electronics can aid greatly in locating crappie schools during the ice fishing season. Crappies are most active during low light periods of early morning and evening. A night bite can also be quite successful. Crappies can commonly be caught with a vertical presentation such as a small minnow beneath a bobber or jigging small plastics. A slow presentation with a small (1/16-ounce jig) and twister tail can be quite effective at times as well. Jamestown Reservoir has a robust crappie population and several public access locations, making it a good location to target these fish.

Mike Johnson, district fisheries biologist, Jamestown



Walleye receive the most attention from North Dakota's anglers by a wide margin. However, when looking at the entire United States, there is no denying largemouth bass are king; and with good reason.

Largemouth bass are widely distributed from coast to coast and border to border, making them a familiar species to many anglers. More importantly, they are known for powerful strikes, a fantastic fight that frequently clears the water's surface, and can be caught with



a multitude of techniques, from twitching top-waters, to deeply retrieved crankbaits and everything in between.

North Dakota lies along the northern range of largemouth bass, leading to slower growth rates and smaller maximum sizes in comparison to our more southerly neighbors. Many of our state's natural lakes lack gravel bottoms that largemouth bass utilize to build nests for reproduction and/or have salinity levels that are too high for their eggs to survive. Despite these limitations, North Dakota has numerous quality largemouth bass fisheries spread throughout the state.

Nelson Lake in Oliver County is a powerplant cooling

reservoir near Center that maintains much warmer water temperatures than other North Dakota water bodies. These warmer waters give the lake's largemouth bass the opportunity to grow quickly and reach larger maximum sizes, including our current state record largemouth of 8 pounds, 8 ounces.

While the topic of largemouth bass fishing in North Dakota certainly begins with Nelson Lake, it definitely does not end there. Other excellent largemouth fisheries can be found, primarily in smaller impoundments.

Paul Bailey, district fisheries supervisor, Bismarck

Muskie

Muskie management in North Dakota would fall on the lower end of the scale when looking at the number of overall fish stocked compared to other species, such as walleye and northern pike. However, in several North Dakota lakes scattered around the state, muskie management has been occurring for many decades.

During the past two decades, both tiger and/or pure muskies have been stocked in 17 North Dakota waters. In recent years, Lake Audubon, Lake Ashtabula and Garrison Diversion Lakes (New Johns Lake and East Park Lake) have received the bulk of the stocked fish.

Most of the muskies stocked in North Dakota water bodies in recent years are tiger muskie. Tiger muskie are a cross between a female pure muskie and male northern pike and are usually unable to reproduce. Tigers are stocked in lakes where fisheries managers want to better control the number of fish in the system, since they typically can't reproduce on their own.



For muskie to reach a large size, they need goodsized forage, such as cisco, white sucker or carp. In the right environment, muskie can grow fast and reach very large sizes compared to many other fish species in North Dakota. In Lake Audubon, cisco provide a good, largersized prey item. Larger reservoirs, such as Lake Audubon, have fairly deep, cool summer water that muskie can move to since they can't tolerate very warm temperatures.

The current state record muskie was caught in New Johns Lake in 2007 and weighed 46 pounds, 8 ounces. Fishing regulations require a muskie to be 48 inches or longer for an angler to keep the fish and the daily limit is one. Anything less than 48 inches must be released, however, many avid musky anglers practice catch-and-release, even if the fish is over 48 inches long. Lakes that are managed for muskie are restricted from darkhouse spearfishing. The reason being that it could be difficult for spearers to tell the difference between a muskie and northern pike, especially in cloudy water.

The muskie has been an exciting addition to fishing opportunities in some North Dakota lakes. With the recent expansion of muskie opportunities, anglers don't have to travel as far for a chance to catch one. I was fortunate enough to tie into a 45-inch muskie on light tackle, while casting crankbaits for smallmouth bass in Lake Audubon a while ago and found the experience to be exciting and one I won't forget for a long time.

Jason Lee, district fisheries supervisor, Riverdale

Sucienouthe Bass

Smallmouth bass are members of the sunfish family, which in North Dakota also includes largemouth bass, rock bass, two species of crappie and several species of sunfish. Smallmouth bass are also commonly called "smallies" and most closely resemble largemouth bass but are distinguished by a more streamlined body, bared markings on the side, red eye and a mouth that does not extend beyond the eye.

Smallmouth bass are native to the upper and middle Mississippi River drainages but have been introduced to various waters in North Dakota and throughout the United States. While a very popular sportfish throughout much of their range, smallies fall far down the preference list among most North Dakota anglers.



Smallmouth bass generally prefer clearer waters, with an abundance of gravel, rock and boulder substrates. In North Dakota they are most abundant

in larger reservoirs and streams with better water quality. Smallmouth bass are carnivorous and feed primarily on crayfish, insects and small fishes. They are aggressive and can be caught using a wide variety of techniques. They are also scrappy fighters, making them a very sporting fish to pursue.

In North Dakota, most smallmouth bass are caught incidentally by anglers targeting walleye and most techniques used for walleye work well for smallmouth. Additionally, at certain times of the year smallmouth readily take small topwater presentations, which is an especially exciting way to pursue them.

One of the great things about most smallmouth bass waters in North Dakota is that they are readily accessible to shore-bound anglers. Considering their affinity to rocks means they are often found near shore habitat along windblown rocky shorelines, rip-rapped areas near developments and lake access sites, bridge abutments and the faces of dams.

Management of smallmouth bass in North Dakota has reached a level of what could be considered "mature." They have been introduced to most of our suitable water bodies over time. In many locations, smallmouth bass have done well and established good self-sustaining, natural reproducing populations. As such, the Game and Fish Department no longer has the need to produce smallmouth bass fingerlings for supplemental stocking.

While North Dakota has many high-quality smallmouth fisheries, relatively few anglers target them and even fewer harvest those that they catch. For example, creel surveys on Lake Sakakawea have shown that anglers release over 90% of all smallmouth bass they catch. Given our excellent populations and virtually no harvest of caught fish, we've been able to increase the daily limit of smallmouth bass allowed to anglers with no risk to the fisheries.

Dave Fryda, Missouri River System supervisor, Riverdale

For many years, anglers fishing North Dakota waters have been fortunate to have excellent fishing for a variety of sportfish species, such as walleye, northern pike, yellow perch, trout, the list goes on. Of course, walleye, perch and pike get most of the attention, but the other species round out what are some very desirable and diverse fishing opportunities for all anglers. Now throw in the hard-fighting, beautiful trout species and you have the frosting on the cake.

Trout are not native to North Dakota and belong to the salmon family of fishes. Trout species are a coldwater sportfish species that are most comfortable in cooler waters, so they are most active and bite best in fall, winter and spring. Since trout species do not reproduce naturally in North Dakota, they are stocked annually in many of our lakes, rivers and reservoirs to provide more fishing opportunities.

As far as habitat types, trout are stocked in a large river like the Missouri as well as a small river like the Turtle. Trout are also stocked in natural lakes and smaller reservoirs, along with many community fishing ponds. Rainbow trout, brown trout and cutthroat trout have all been stocked in recent years. In 2021, rainbow trout were stocked in 56 different waters, compared to seven waters for brown trout and seven waters for cutthroat trout.

In some cases, trout stockings are on a put-and-take basis. Meaning: they are stocked to provide spring through fall fishing opportunities but likely will not overwinter due to winterkill caused by low dissolved oxygen levels. This applies to many of our community ponds and other shallow water bodies. Since trout are stocked at a larger size in the spring, they are immediately of catchable size. This bodes well for kids who ride their bikes to the pond for some fishing. Ryan Pond, North Woodhaven Pond, Dickinson Dike, Owls Pond, Little Britches Pond and Watford City Pond are examples



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of some community fishing ponds. Other trout stockings are in waters that can overwinter fish during less severe winters. Hooker and Strawberry lakes in the Turtle Mountains are good examples and can produce larger trout if they live 3-plus years. Sheep Creek, Blumhardt Dam and Northgate Dam are a sample of other waters that can overwinter trout at times. The Missouri River consistently produces the largest rainbow trout (and other trout species) with a fish over 17 pounds reported in 2021.

Rainbow trout have a special place in my fishing past. As a high school kid from Langdon in the 1970s, there were not a lot of fishing opportunities in the local area. Fortunately, Mt. Carmel Dam was constructed nearby and was stocked with rainbow trout. The fish grew rapidly and soon became beautiful 3- to 5-pound fish. My friend and I would wake up at 5 a.m. and drive there to fish for several hours. We would cast spinners from shore and caught many nice trout. I was very appreciative of the Game and Fish Department's stocking program. These trout fishing experiences played a big part in deciding to go to college and study fish and wildlife management, which ultimately led to me becoming a long-time Department fisheries biologist.

Randy Hiltner, district fisheries supervisor, Devils Lake



White bass are commonly known as temperate bass and includes species such as the white bass, yellow bass and striped bass. White bass are usually silver in color, with prominent black stripes along their sides, and their eyes are yellow.

White bass spawn in spring in the middle to upper part of the water column as opposed to many other fish that spawn on or near the bottom. White bass can breed prolifically, so populations can withstand harvest, which is partially why daily bag and possession limits in North Dakota and other states tend to be higher for white bass than some other fish species.

White bass can be found in Lake Oahe, Lake Sakakawea and Lake Audubon and the Yellowstone River. They can also be found in a few smaller waters including Lake Ashtabula, Bowman-Haley Dam, Buffalo Lake, Heart Butte Reservoir and Trenton Lake. The most famous white bass water in North Dakota is the Devils Lake system, which also includes Lake Irvine and Stump Lake.



White bass are not native to Devils Lake. The fish in that original stocking found Devils Lake to their liking, survived and reproduced. Devils Lake in particular has a history of producing large white bass in good numbers and is home to the current state record (4 pounds, 10 ounces) caught in 2012.

White bass are a predatory fish, so baits that mimic a small fish or some type of aquatic insect can be effective, as well as live bait, such as a minnow. When actively feeding, they often aren't picky and strike most any lure small enough for them to eat. However, when they aren't actively feeding, a more subtle approach, such as a minnow on a small hook, may tempt them into biting.

White bass are a schooling fish, so when one fish is caught, it is likely that more are in the area. On calm days, simply looking for a school of feeding white bass making ripples and splashes on the water's surface can be a good tactic for locating fish. Fishing along wind-blown shorelines can also produce good catches.

For successful anglers, white bass can provide good table fare. They do have some red meat that can have a strong taste, but this can be easily trimmed from the fillets or left on the skin by "cheating" the fillet knife up above the skin a bit during filleting. The rest of the meat is white and flakey like many other fish and has good flavor.

Todd Caspers, district fisheries biologist, Devils Lake

## aces to Try

What follows is not a comprehensive list of waters that hold the fish species detailed in this piece. Rather, it's a sampling of lakes scattered around the different regions of the state that North Dakota Game and Fish Department fisheries biologists recommend anglers give a shot if they're enticed to fish for smallmouth bass, rainbow trout, and so on.

**Smishek** (ake and Northgate Dam (Burke County) – Both lakes have good populations of bluegill and the potential for big fish.

**Sheep Creek Dam** (Grant County) – Small reservoir near Elgin where bluegill are mostly in the 8-inch range, but usually abundant.

**Camels Hump Lake** (Golden Valley County) – Small reservoir near exit 10 on I-94. Bluegill abundant and 9-inch fish common.

**Lake Metigoshe** (Bottineau County) – Supports an abundance of bluegill, with a wide range of sizes. Anglers have the potential to catch a large bluegill.

**Nelson Lake** (Oliver County) – Has warmer than normal year-round lake temperatures compared to other lakes in North Dakota because it's located adjacent to a power plant. The warm temperatures provide a good environment for bluegill, a warmwater species. Bluegill can be caught along the shoreline in many areas, as well as from the two metal fishing piers.

Harmon Lake (Morton County) – A fast-action bluegill fishery known more for numbers of fish than sizes.
Wood Lake (Benson County) – A smaller, natural lake, with a good population of fish up to about 9 inches. This is a good lake to entertain anglers of all ages, with various baits and lures being effective.

**Lake Upsilon** (Rolette County) – Located in the Turtle Mountains, another natural lake with a good bluegill population.

**Pheasant Lake** (Dickey County) – Based on the last five years of electrofishing and netting data, this lake has one of the higher bluegill populations in the southeast fisheries district, with decent mean size. **Deadcolt Creek** (Ransom County) – Classic water where oftentimes you can sight-fish for the many quality-sized bluegills that inhabit the reservoir where shore fishing-opportunities abound.



**Trenton Lake** (Williams County) **and the Little Muddy River** – The best two options besides Lake Sakakawea and the Yellowstone and Missouri rivers. Both are connected with the Missouri River, especially during high water events, and can produce good numbers of channel catfish.

**Dickinson Reservoir** (Stark County) – Large reservoir near Dickinson. Channel catfish at lower abundance but some exceed 20 pounds.

**Heart Butte Reservoir** (Grant County) – Channel catfish abundant in this large reservoir and can exceed 10 pounds.

**Lake Oahe** – Possibly North Dakota's premier channel catfish fishery in terms of numbers. Most of Oahe's catfish are 2-4 pounds, but larger fish are present.

**Braddock Dam** (Emmons County) – Catfish up to 13 pounds present in good numbers.

**Red River** – One of the best channel catfish fisheries in the country, with good opportunity for catching keepersized fish as well as good trophy potential

**Sheyenne River** – Contains an underutilized population of channel catfish, particularly in the middle reaches.

r appie

**Trenton Lake** (Williams County) – A very shallow, old oxbow connected with the Missouri River. The crappie fishery has thrived during high water years on the Missouri River System and there is a good population of nice-sized black and white crappie.

**Heart Butte Reservoir** (Grant County) – Black and white crappie moderately abundant in this large reservoir and 1.5-pound fish caught on occasion.

**Dickinson Reservoir** (Stark County) – Black crappie moderately abundant and 1-pound fish common.

**Nelson Lake** (Olive County) – Has both black and white crappie, with a good number of larger fish. The warm water in the lake provides a good environment for these warmwater species.

**Lake Oahe** – Crappie numbers have declined in recent years, but any of Oahe's large bays still offer an opportunity to land a whopper crappie.

**Homme Dam** (Walsh County) – A perennial, consistent crappie fishery, with typically high numbers of fish. **Jamestown Reservoir** (Stutsman County) – Best crappie fishery in the State.

**Lake Elsie** (Ransom County) – Crappie tend to be abundant where good shore-fishing opportunities exist.

argemouth Bay

**Bauko** Noonan East Mine Pond (Divide County) – A good population of largemouth bass up to 3 pounds. Kota-Ray Dam (Williams County) – Good population of largemouth bass, with the potential for a fish over 5 pounds.

**Sheep Creek Dam** (Grant County) – Small reservoir near Elgin. Largemouth bass common and there are some 4- to 5-pound fish.

**North Lemmon Lake** (Adams County) – Small reservoir near Lemmon, S.D. Largemouth bass common and there are some fish that exceed 5 pounds.

**Nelson Lake** (Oliver County) – Largemouth bass abundant and provide a unique opportunity in the central portion of North Dakota since they are not found in many other lakes in the area. The current state record largemouth bass was caught in Nelson Lake in 1983 and weighed 8 pounds, 8 ounces. This warmwater species is well suited for the warmer than average water temperatures found in Nelson Lake year-round.

**Fish Creek Dam** (Morton County) – Good number of largemouth bass and fish surpassing 5 pounds are often present.

Wood Lake (Benson County) – Best largemouth bass lake in the northeast fisheries district. Various sizes present, with good numbers of adult bass over 15 inches.
Larimore Dam (Grand Forks County) – Good number of bass, but fish are typically on the smaller side.
Clausen Springs (Barnes County) – Good number of bass and ample shore-fishing opportunities.
Deadcolt Creek (Barnes County) – Classic water (stumps, points, coves) where oftentimes you can sight-fish individual bass where shore-fishing opportunities abound.

**Lake Audubon** (McLean County) – During the past 12 years, stocking efforts to establish a fishable muskie population in Lake Audubon increased with stockings occurring annually. Now that muskie up to 12 years of age inhabit the lake, chances of catching larger fish are improved. Muskie are managed as a trophy fishery in North Dakota, with a minimum length of 48 inches for a keeper.

**McClusky Canal** – The McClusky Canal, including New Johns Lake (Burleigh County), Heckers, East Park and West Park lakes (McLean County), has been managed to include muskie since 1980, with stocking occurring in many years. Therefore, there is potential to catch a trophy muskie in the McClusky Canal or any of the canal lakes. Many shore-fishing areas are available, along with a few metal fishing piers scattered along the canal lakes.

**Wood Lake** (Benson County) – Has produced the most muskie catches in recent years. Recent stockings have produced fish over 36 inches. While far from a guarantee, this lake provides the highest odds of catching a muskie in the northeast fisheries district.

**Red Willow Lake** (Griggs County) – Has a small population of pure muskies. **Lake Ashtabula** (Barnes County) – Only fishery in the southeast fisheries district with an established muskie population.

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Smalmouth Bass

Heart Butte Reservoir (Grant County) – Smallmouth bass abundant and 3-pound fish are common. Bowman-Haley Dam (Bowman County) – Large reservoir 10 miles south of Bowman. Smallmouth bass common and some are near 2 pounds.

Lake Audubon (McLean County) – Has an excellent smallmouth bass population, with a wide range of sizes, including a good number of trophy-sized fish. Anglers can find bass scattered around the lake, especially around islands and rocky shorelines during the open water fishing season. Many locations around boat ramp sites are available for shore-fishing along the northern portion (wildlife management area) of the lake.

**McClusky Canal** – Smallmouth bass numbers have increased in the last several years, with a good number of trophy-sized fish. Boats are a good option since the majority of the canal has steep, rip-rapped shoreline. A couple of metal fishing piers provide good shore access.

**Lake Williams** (Kidder County) – This small lake has some big smallmouth bass.

**Missouri River** – Portions of the river near Bismarck contain good numbers of smallmouth bass.

**Tolna Dam** (Nelson County) – While few opportunities exist for this species in the northeast fisheries district, Tolna Dam has some bigger bass.

**Spiritwood Lake** (Stutsman County) – Contains robust numbers of quality-sized smallmouth bass and classic (rocky) shoreline structure that tends to generally keep fish shallow.

**Lake Ashtabula** (Barnes County) – Large expanse of water featuring all different types of structure where small-mouth bass are extremely abundant.

#### Northgate Dam (Burke County) and McGregor Dam

(Williams County) – Both lakes are stocked annually with rainbow trout and have the potential for larger carryover fish that often exceed 3 pounds.

**Dickinson Dike** (Stark County) – Small reservoir in Dickinson where rainbow trout are abundant and stocked

annually. Some larger trout from Wyoming stocked most years.

**Sheep Creek Dam** (Grant County) – Small reservoir near Elgin where rainbow and brown trout stocked most years. Common to find 2- to 3-pound rainbow.

**Strawberry Lake** (Bottineau County) – Stocked annually with rainbow trout. High water during the last several years has allowed for good winter water quality and reduced the risk of winterkill, allowing trout to survive several years, resulting in a good number of larger trout. Metal fishing pier available for shore-fishing opportunities. **Fish Creek Dam** (Morton County) – Rainbow and brown trout stocked regularly and fish over 2 pounds occasionally present.

**Hooker Lake** (Rolette County) – Rainbow trout are currently doing very well. This beautiful Turtle Mountain lake has fish from 1 pound to well over 5 pounds.

**Turtle River** (Grand Forks County) – Rainbow trout stocked several times annually to provide some stream fishing opportunities.

**Mooreton Pond** (Richland County) – Each year this is a popular destination (with great shore-fishing opportunities) for trout anglers who capitalize on spring and fall stockings of trout.

**Blumhardt Dam** (McIntosh County) – Located in the heart of the prairie coteau, this scenic little reservoir contains both rainbow and brown trout. Some large trout sampled in fisheries surveys

Heart Butte Reservoir (Grant County) – White bass abundant and grow to 1-2 pounds in this large reservoir. Bowman-Haley Dam (Bowman County) – Large reservoir south of Bowman. White bass common and grow to 1 pound most years.

**Lake Oahe** – White bass don't get a lot of attention from Oahe anglers but can offer great angling opportunities during summer months.

**Devils Lake** (Ramsey County) – Provides good opportunities to catch white bass and there should be a good number of large bass in 2022

**Lake Ashtabula** (Barnes County) – Contains the greatest number of white bass per acre of water in the southeast fisheries district.

"The grouse will walk up and down those logs, get to a spot where they can sit and beat their wings. That sound makes an echo that reverberates through forests."

## IDRUMMING In a deciduous forest

#### **By Ron Wilson**

orth Dakota has four species of grouse, three of which live in mostly open habitat that offers something of an unhindered view. From sage grouse in the southwest, to greater prairie chickens on the state's eastern shoulder, to sharp-tailed grouse in every county, these birds when flushed, can, and will, fly without interruption to the neighboring township if the mood strikes.

The fourth, the ruffed grouse, is a forest species that has turned its feathered back on North Dakota's wide open because it must. Its dependence on mix-aged aspen woodlands and brushy undergrowth means its choices of accommodating habit is limited to the Turtle Mountains and Pembina Hills on the state's northern tier.

You could argue that what links this grouse foursome is spring, the time of year males strut, stomp and drum in a singleminded effort to persuade mature female onlookers to breed.

"Male ruffed grouse find big, dead, downed aspen logs that end up being the perfect drumming sites," said Jesse Kolar, North Dakota Game and Fish Department upland game management supervisor. "The grouse will walk up and down those logs, get to a spot where they can sit and beat their wings. That sound makes an echo that reverberates through forests."

That sound signals to other males to stay away and alerts females to head thisaway.

"They'll pace that specific log day after day, morning after morning, and display each day from the end of March all the way through the middle of June," Kolar said.

Ruffed grouse are likely the one grouse species most North Dakotans are unfamiliar with. While these birds will certainly wander out to gravel roads and two-tracks in the evening at whatever time of the year and show themselves to passersby, they're not as conspicuous as our other grouse species that will, at times, sit in the mostly wide open where they can see danger coming from afar.

This inconspicuousness certainly translates during the breeding season when ruffed grouse drum in cover thick enough to provide protection from aerial predators.

"When they're on a log displaying, they're not going to be as easy to find as going out and finding sharp-tailed grouse dancing on a lek. They're going to be in thick forest. It's going to be in an area that's surrounded by cover and well protected," Kolar said. "You'll hear them drumming, which sounds like an old tractor trying to start before dying down, but it's difficult to tell if they are 100 yards away or a half-mile. But if you do figure it out and get sort of close, you still might not be able to see them."

Kolar said male ruffed grouse are habituated to one or two primary drumming logs. And you know when you've found one by the grouse scat scattered across the log.

"Also, the log itself eventually gets wore down and you'll see where they've been pacing back and forth, back and forth," he said.

Game and Fish Department personnel, with the help this year from one North Dakota Parks and Recreation employee, survey ruffed grouse in the Turtle Mountains and Pembina Hills from April 1 through May 15.

Those conducting surveys run eight fixed routes where they stop and listen for drumming grouse for 5 minutes before moving on to the next stop.

"During their stops, they count how many drums they hear and then also try to estimate how many different males they think they hear," Kolar said. "So, if it's a drum over here and a drum behind them, it might be two males versus just the same male drumming over and over."

While the survey results for this spring weren't completed at the time of this writing, Kolar said drumming counts last spring were down in the Turtle Mountains and were up, or about average, in the Pembina Hills.

Ruffed grouse are noted for cyclic fluctuations in population levels, which start high, decrease, then rise again every decade or so.

Even when North Dakota ruffed grouse populations are closer to boom than bust, bird numbers here never compare to those found in, say, Minnesota.

"We do have boom years where you

go to the Turtle Mountains or the Pembina Hills and people see a lot more, but it's never been like what you'll see farther east," Kolar said. "North Dakota is right on the periphery of the ruffed grouse range and that's usually what happens with most species. When you're near the periphery of a species' range, there's just fewer of them."

Like it is with any animal species, the limiting factor for not having a robust ruffed grouse population in North Dakota has much to do with habitat.

In northern latitudes, ruffed grouse are tied to aspen woodlands for both food and cover. Biologists say several age classes of aspen are needed for good grouse populations. Young aspen trees up to 10 years of age are used by broods, and in these young forests, ground cover and associated insects are found in abundance.

Middle-aged aspen stands (10-25 years) are used for food and winter cover. Older trees (25-40 years) are needed for nesting, drumming and feeding. In these older areas, brushy undergrowth is available for protection and the aspen produce good quantities of buds used as food.

In northern latitudes, ruffed grouse are tied to aspen woodlands for both food and cover. Biologists say several age classes of aspen are needed for good grouse populations.



"Ruffed grouse are specifically focusing on eating buds of aspen trees," Kolar said. "That's their primary source of food, particularly in winter when there's no other food sources, no insects and not a lot of green vegetation for them to nip at."

> Biologists attribute long-term declines in North Dakota's ruffed grouse population to the loss of aspen trees being cleared and converted to farmland.

For years, the Game and Fish Department, in cooperation with the North Dakota Forest Service, has worked to preserve remaining aspen forest habitat and manage what's left standing to provide a diversity of aspen age classes for ruffed grouse and other animals.

"The work being done to allow those young aspen shoots to come up is not only good for grouse, but elk have been using those areas," Kolar said. "We've also had a lot of songbirds that utilize that young, new growth of aspens." The pressure ruffed grouse in North Dakota feel from hunters in fall is likely insignificant. While it's difficult to get a handle on the number of hunters who walk the wooded, public trails and bushwhack through thick cover to flush a bird, Game and Fish Department biologists feel the number is certainly low, especially when compared to those who hunt the state's more celebrated upland game bird species.

For those who hunt this forest grouse, scarce competition is likely just how they like it. Whether ruffed grouse in the Turtle Mountains or Pembina Hills are climbing out of a low in the cycle or are at a high, it's been said the ruffed grouse hunters fall isn't complete without at least a trip or two to the grouse woods.

"For years we had wing envelope barrels in the Turtle Mountains and Pembina Hills and we'd get a lot of hunters submitting their ruffed grouse wings. The past five years we haven't been getting enough to do much with that data, but we still get some," Kolar said. "They usually write a note on that envelope, and many of the hunters say, for example, they hunted four days, flushed one bird and shot zero, but still enjoyed being up there."

RON WILSON is editor of North Dakota OUTDOORS.

Releasing a tagged, trophy northern pike on the Missouri River System. Tagging for the study began in 2017 and continued through spring of 2021.

## **MANAGING TROPHY**

**PIKE** IN THE MISSOURI RIVER SYSTEM

#### By Paul Bailey and Dave Fryda

When the set of the se

Targeting large northern pike on North Dakota's two Missouri River System reservoirs, Lake Sakakawea and Lake Oahe, presents one of our state's most unique and spectacular angling opportunities. Construction of Garrison Dam was completed in 1953, followed by Oahe Dam in 1958, and as these reservoirs filled throughout the 1960s, they provided the environmental conditions northern pike need to grow to trophy sizes.

#### RECIPE FOR TROPHY PIKE

Our shallow prairie lakes support many excellent pike fisheries. However, northern pike tend to have a live-fast and die-young life history in these environments. Warm summer water temperatures and forage dominated by aquatic insects, fathead minnows and yellow perch can lead to fast growth of young pike, but these conditions seldom result in pike living beyond 5 or 6 years or surpassing 8 to 10 pounds.

Conversely, the deeper waters of lakes Sakakawea and Oahe offer cooler summer water temperatures that large female pike prefer, as well as a diversity of forage necessary to support pike of all sizes. This combination allows pike to live long and grow big.

In fact, the Missouri River System has accounted for approximately 80% of the 20-pound and larger northern pike submitted to the North Dakota Game and Fish Department's Whopper Club since the program's inception in 1960. Many dedicated Sakakawea and Oahe walleye anglers have encountered a whopper pike whether they wanted to or not. Fish of 25 pounds are reported with some regularity and several 30-plus-pound pike have been confirmed over the years.

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Justen Barstad, Department fisheries technician, with the largest pike tagged during the study on Lake Oahe. The nearly 48-inch pike weighed 29 pounds, 7 ounces.

**AIKE ANDERSON** 



#### By Ron Wilson

We know the fish tagged in a years-long study to recognize how anglers utilize trophy northern pike in the Missouri River System are big.

To be study worthy, and receive a blue, metal jaw tag, pike had to measure 39.4 inches, or 1 meter. What we didn't know, as anglers casting dead smelt from shore after ice-out or fishing from a boat, is the age of these fish that are all big enough to swallow small mammals.

"It typically takes these fish 10 to 11 years to hit that 1-meterlong size," said Paul Bailey, Department fisheries supervisor in Bismarck. "We're estimating the maximum age of a pike in Lake Oahe to be about 15 years old."

For perspective, that means a trophy northern pike that lives to that maximum age and goes belly-up today was hatched in 2007. For more perspective, and if you can hark that far back, that was the year the first smartphone was made available to the public.

Also of note, of the nearly 700 pike from lakes Sakakawea and Oahe netted and tagged for the study, more than 40 were later caught and released by anglers with the tag still attached.

Dave Fryda, Department Missouri River System supervisor in Riverdale, said 19 pike were caught and released by anglers with the tags still attached. Of those, six were caught a second time by anglers.

For Oahe, Bailey said 26 were caught and released by anglers with the tags still attached, and five of those were caught a second time by anglers.

Also of interest, eight of the hundreds of study pike were found dead, washed up on shore by passersby.

"These fish were found by people walking the shoreline while fishing or recreating on Lake Oahe and Sakakawea," Bailey said. "They were simply just walking along and found a big, dead pike that still had a tag in its jaw and reported it to us. This indicates that a fair number of these fish are simply dying of old age."

RON WILSON is editor of North Dakota OUTDOORS.

Department fisheries personnel weigh a female pike. To receive a jaw tag for the study, pike had to measure at least 39.4 inches, or 1 meter.

These pike fisheries are clearly something special. They have a dedicated following among our resident anglers and have become destination fisheries for many nonresidents as well. Anglers are understandably interested in maintaining the angling opportunity for these trophy fish and we, as both fisheries biologists and passionate pike anglers ourselves, feel the same.

The amount of water that Mother Nature provides and how that water is managed by the U.S. Army Corps of Engineers is the primary factor governing the quality of the Lake Sakakawea and Lake Oahe fisheries, northern pike included. However, angler use of these pike through angling harvest, spearing and catch-and-release are also important considerations. We undertook a northern pike tagging study to gain a better understanding of how anglers are utilizing these fish and to ensure that suitable regulations are in place to maintain this opportunity for years to come.

#### **ANGLER USE**

Both Lake Sakakawea and Lake Oahe have frequently been used as sources of northern pike and walleye eggs to produce fingerling fish at Garrison Dam and Valley City national fish hatcheries to meet stocking needs around the state. We use trap nets to collect fish for spawning purposes each spring and frequently encounter trophysized northern pike when doing so. This provided us with the opportunity to tag many trophy northern pike without adding significantly more work to our very busy spring schedules. For the purpose of this study, we defined a trophy northern pike as a fish 1 meter in length (39.4 inches) or longer.

Tagging began in the spring of 2017 and continued through the spring of 2021. In total, we tagged 665 trophy northern pike in the Missouri River System (341 in Lake Sakakawea and 324 in Lake Oahe). Every pike collected was a female with the largest being a 29.7-pound fish from Lake Oahe.

Fisheries biologists generally assess fish harvest as an annual rate in much the same way you may be interested in the annual interest rate of a home or auto loan from your bank or annual rate of return from your retirement savings. Thus, assessing the number of pike harvested within the first year of being tagged provided us the annual rate of harvest, which is one of the most important pieces of information from this study.

Anglers reported harvesting 33 tagged northern pike on Lake Sakakawea within their first year of tagging and nine additional fish were reported as speared. This yields an annual harvest rate of 12.3%. Anglers also reported catching and releasing 15 of these big pike within their first year of being tagged.

For Lake Oahe, anglers reported harvesting 23 tagged

northern pike within their first year of tagging and one additional fish was reported as speared. This yields an annual harvest rate of 7.4%. Anglers also reported catching and releasing 31 of these fish within their first year of being tagged.

#### ACCEPTABLE HARVEST LEVEL?

Anglers have enjoyed using the Lake Sakakawea and Lake Oahe trophy northern pike fisheries for 60-plus years and any reasonable angler is likely to agree that some use of those fish is acceptable, whether that use is through angling harvest, spearing, or catch-and-release (which certainly kills some additional fish). We have identified that anglers are harvesting 12.3% of Lake Sakakawea's trophy northern pike and 7.4% of Lake Oahe's trophy northern pike annually, but are these harvest rates sustainable?

Unfortunately, little research has been conducted on sustainable harvest rates for trophy northern pike populations. However, more extensive research has been conducted on muskellunge, a close relative. In a study of muskellunge populations across their entire North American range, researchers suggested that the annual harvest rate should not exceed the natural mortality rate (rate of mortality from everything other than angler harvest such as old age, disease and predation) to ensure sustainability of trophy muskellunge fisheries. This is reasonable guidance to apply to our trophy Missouri River System northern pike fisheries given their similarities to trophy muskellunge fisheries.

Information collected by the North Dakota Game and Fish Department indicates that Lake Sakakawea's northern pike have a natural mortality rate of 15.7%, a number the current harvest rate (12.3%) falls comfortably below. Likewise, Lake Oahe's northern pike have a natural mortality rate of 20.3%, a number the current harvest rate (7.4%) also falls well below.

Together, this information indicates that the ways in which anglers are currently using the Lake Sakakawea and Lake Oahe trophy northern pike fisheries are compatible with their long-term sustainability. This also indicates that our current northern pike harvest regulations (5 fish daily; 10 in possession) are appropriate for these fisheries.

This is great news for these trophy northern pike fisheries and for the anglers who enjoy the opportunities that they provide.

PAUL BAILEY is a Game and Fish Department district fisheries supervisor in Bismarck, and DAVE FRYDA is the Department's Missouri River System supervisor in Riverdale.

Mattea Bierman, with the Game and Fish Department in Riverdale, with the largest pike tagged during the study on Lake Sakakawea. The pike weighed more than 27 pounds.

## **BUFFALOBERRY** PATCH

#### **CWD Results Released**

The North Dakota Game and Fish Department reported 26 deer tested positive for chronic wasting disease during the 2021 hunting season.

Fourteen were from hunting unit 3F2, eight from unit 3A1, and one was found in unit 3B1. Single positive deer were also found in three units (3C, 3D1 and 3E2) where the disease had not been previously detected.

CWD is a fatal disease of deer, moose and elk that can cause long-term population declines as infection rates climb.

The estimated infection rates in unit 3F2 were 4.9% in mule deer and 3% in whitetail deer. In unit 3A1, the estimated infection rate in mule deer was 6.9%. Approximately 4.9% of hunters turned in heads for testing in units where the Department was focusing surveillance efforts.

Game and Fish will use its 2021 surveillance data to guide its CWD management strategy moving forward. More information about CWD can be found at gf.nd.gov/cwd.

#### Electronic Posting System for Private Land Available

Landowners interested in posting private land electronically for the 2022-23 hunting season can log into My Account on the North Dakota Game and Fish Department website, gf.nd.gov. The deadline for landowners to digitally post land is July 1, which is necessary to produce print material and digital content prior to hunting seasons that begin in August.

The 2021 state legislature passed a bill to allow electronic posting of private land, giving landowners another option for posting private property.

Landowners who enrolled land electronically last year can renew, add or modify posting designations during the enrollment period. Others posting for the first time might need to create a profile. To post land, proceed to the "Land Parcels/Electronic Posting" section at the bottom of the page and click "Search/Renew Land parcels." The electronic posting system is linked to land descriptions based on county tax parcel information.

The Game and Fish website has complete instructions for landowners, along with frequently asked questions for both landowners and hunters.



#### **Tagging Walleye at Dry Lake**

Department fisheries staff initiated a walleye tagging project this spring at Dry Lake in McIntosh County to assess how anglers are using the lake's walleye population. Trap netting is their main tool for collecting walleye to tag. A historic blizzard, followed by record low temperatures, led to some difficult working conditions but crews managed to eventurally tag 1,920 walleyes over the course of the project. Anglers who catch a tagged fish can report it at gf.nd. gov/contact/tagged-fish-reporting.

#### Second Consecutive Record Count of Bighorn Sheep

The North Dakota Game and Fish Department's 2021 bighorn sheep survey, completed by recounting lambs in March, revealed a record 335 bighorn sheep in western North Dakota, up 4% from 2020 and 15% above the five-year average. The count surpassed the previous record of 322 bighorns in 2020.

Altogether, biologists counted 99 rams, 175 ewes and 61 lambs. Not included are approximately 40 bighorn sheep in the North Unit of Theodore Roosevelt National Park and bighorns introduced to the Fort Berthold Indian Reservation in 2020.

Brett Wiedmann, Department big game biologist, was pleased to see an increase in the survey for the fourth consecutive year.

The northern badlands population increased 6% from 2020 and was the highest count on record. The southern badlands population declined again to the lowest level since bighorns were reintroduced there in 1966.

"We were encouraged to see the count of adult rams increase to near record levels, and adult ewes were at record numbers," Wiedmann said. "Most encouraging was a record lamb count corresponding with a record recruitment rate."

Department biologists count and classify all bighorn sheep in late summer, and then recount lambs the following March as they approach one year of age to determine recruitment.

Department staff, in conjunction with biologists from the Three Affiliated Tribes Fish and Wildlife Division, also reported the bighorn sheep translocated in January 2020 from Rocky Boy's Reservation in Montana to the Fort Berthold Reservation performed exceptionally well their second year in the state. The population has nearly doubled in just two years, which is exceptional population performance for bighorn sheep.

There are currently almost 450 bighorn sheep among populations managed by the Game and Fish Department, National Park Service and Three Affiliated Tribes Fish and Wildlife Division. Wiedmann said the next benchmark is 500 bighorns in the state, which seemed improbable just a few years ago.

Dr. Charlie Bahnson, Department veterinarian, added that although the Department was pleased to see a low prevalence rate of Mycoplasma during last winter's disease monitoring, biologists did observe several bighorns coughing during the 2021 survey, which indicates the population has not completely cleared the deadly pathogen first documented in 2014.

A bighorn sheep hunting season is tentatively scheduled to open in 2022. The status of the season will be determined Sept. 1, following the summer population survey.

Game and Fish issued five licenses in 2021 and four hunters were successful in harvesting a ram.



#### **Fishing for a Challenge**

When it comes to outdoor pursuits, North Dakota Game and Fish Department R3 coordinator Cayla Bendel has always been a generalist.

She said it started early, spending afternoons in Dad's boat fishing for simply whatever was biting. She was just happy to catch something. She believes that even today avid anglers can relate to still feeling a little giddy the moment they hook into a fish, for a brief second, they can feel what it's like to be a kid again.

As the R3 coordinator, Bendel is tasked with the responsibility of recruiting, retaining and reactivating hunters, anglers and recreational shooters in state. While license sales are certainly a component of that, it's her hope to ensure a future where everyone has an opportunity to experience giddy moments like that if they wish. Yet, it's her fear that in today's seemingly infinitely busy and competitive world, there's less and less of it. "People who have never fished don't think they have time to learn a whole new hobby, don't have the ability or desire to own a boat and think they need one, and sometimes just simply don't know what they're missing," Bendel said. "And some may become so laser-focused on a certain species or expectations of success they have forgotten how cool it is to just catch a fish."

Cue the Game and Fish Department's 2022 North Dakota Fish Challenge, an initiative designed to get more people fishing, trying to catch a new species, exploring new waters, and learning (or remembering) how much fun just fishing can be.

"I can see myself now on a dock somewhere this summer begging for a 4-inch perch to bite my hook to help complete the challenge and the excitement I'll feel when a fish bites," Bendel said.

So, what's the challenge? Catch a channel catfish, northern pike, yellow perch and smallmouth bass of any size in North Dakota from May 1 through August 15. Submit each or all of your catches on the "offishial" landing page and once you've completed the challenge, you'll receive a sticker, certificate, and be listed on the page as a challenge winner.

Not sure where to catch these? Check out the Department's Where to Fish page to locate a lake or river with these species near you.

Too easy? Consider forming a friendly competition with fellow anglers for catching the largest of each species or limit the challenge to a certain weekend or lake. Make it your own and have fun fishing.

For contest rules, to take the challenge, or submit a catch visit gf.nd.gov/fish-challenge.

#### **New Licenses Needed**

North Dakota anglers, trappers and hunters are reminded that new licenses are required beginning April 1.

Licenses can be purchased online by visiting the North Dakota Game and Fish Department website, gf.nd.gov. Once the license is processed, hunters and anglers will have the option to print a hard copy and/or download the license to a smart phone or mobile device, which is helpful when asked to show proof while hunting or fishing in rural areas that lack cellular service.

Licenses can also be purchased at more than 140 vendor locations throughout the state. The 2022-23 small game, fishing and furbearer licenses are effective April 1, 2022 to March 31, 2023.

#### **Red River Angler Survey Slated**

The North Dakota Game and Fish Department and Minnesota Department of Natural Resources will conduct an angler survey on the Red River this summer.

The survey is important because the information collected is used to estimate the time anglers spend fishing as well as the number of the various fish species caught and harvested. Two survey clerks, one based in Grand Forks and the other in Fargo, will survey the entire Red River from its origin in Wahpeton to the Canadian border near Pembina. The Fargo clerk will also survey a site on the Ottertail River downstream of Orwell Dam.

The survey will run from the beginning of May until the end of September. Clerks will travel to various access sites and count anglers and conduct in-person interviews about their fishing trips.

A new twist to the survey is the use of an electronic survey in combination with the in-person interviews. Clerks will distribute cards to shore anglers and leave cards on the vehicles of boat anglers. Anglers can then either scan the QR code on the card or visit the website listed to access an online survey. These online surveys should only take a few minutes to complete and will help provide more information than the clerks would typically collect during their normal work activities.

The cards and electronic survey will allow shore anglers to complete the interview started by the clerk, since shore anglers generally are not done fishing when initially interviewed. Boat angler interviews are hard to get on the river since the clerks can't spend a lot of time waiting at any one site for boats to come in, so the cards will allow these anglers to participate without being interviewed by a clerk.

Anglers who receive multiple cards from clerks over the course of the survey are encouraged to complete the survey each time as each day's fishing provides unique and useful information.

#### **ANS Awareness Week Slated**

Governor Doug Burgum declared May 15-21 Aquatic Nuisance Species Awareness week in North Dakota to raise the public's understanding of the preventative steps recreationists need to follow to stop the introduction and spread of aquatic nuisance species in the state's waterways.



Knowing the fallout of aquatic nuisance species, the North Dakota Game and Fish Department has long steered communication efforts that focus on the dangers of unwanted exotics once established.

"Aquatic nuisance species are nonnative plants, animals or pathogens that can affect the ecology of our lakes and rivers and can affect the economic and recreational value of those waterways," said Ben Holen, ANS coordinator in Jamestown. "Aquatic nuisance species can really change the ecology of a lake and upset the food web and can be very hard on recreation." North Dakota currently has low numbers of aquatic nuisance species. Other than zebra mussels, just a few invasive plants and animals – curly leaf pondweed, Eurasian watermilfoil, and bighead, silver and common carp – are found in some state waters.

To fight the introduction and spread of unwanted invasives, Holen said some of the shared burden falls on water users. The Game and Fish Department encourages anglers, pleasure boaters and others to clean, drain and dry all equipment after every use. Clean and remove all plants or animals from watercraft or equipment prior to leaving any recreational area. Drain and remove water from all equipment prior to exiting designated access points. Not draining water can be extremely hazardous and may cause negligent transportation of ANS to various locations. Afterwards, verify that all equipment is completely dry before using again.

For more information on aquatic nuisance species, visit the Department's website at gf.nd.gov.

#### 2021 Bighorn Sheep, Moose and Elk Harvests

Harvest statistics released by the North Dakota Game and Fish Department show overall hunter success during the 2021 season for bighorn sheep was 80%, 90% for moose and 65% for elk.

The Department issued four bighorn sheep licenses and auctioned one. Four of the five hunters harvested a bighorn ram.

The 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	125	56	45
M11	108	67	92	90

The Department issued 532 elk licenses last year. Of that total, 462 hunters harvested 301 elk – 158 bulls and 143 cows/calves. Harvest for each unit follows:

Unit	Hunters	Bulls	Cow/Calf	Success Rate
E1E	74	24	23	64
E1W	54	20	25	83
E2	123	39	40	64
E3	177	57	52	62
E4	22	15	0	68
E6	12	3	3	50

#### ANS Sticker Required for Nonresident Boaters

Boaters with watercraft registered outside of the state who do not have a 2022 aquatic nuisance species sticker need to purchase a current sticker before operating watercraft on North Dakota waters.



State law requires a \$15 ANS fee for motorized watercraft not licensed in North Dakota to be paid for each

calendar year, and the ANS sticker must be displayed on the watercraft.

In addition, Minnesota anglers launching boats on the North Dakota side of the Red River must have a current ANS sticker displayed on the watercraft.

The ANS sticker can only be purchased by logging into the North Dakota Game and Fish Department website, gf.nd.gov.

#### **Game and Fish Volunteers Recognized**



Jeb Williams (left), Department director, congratulates Wayne Stanley.



Jeb Williams (left), Department director, congratulates William Bahm. Volunteer instructors for the North Dakota Game and Fish Department were recognized in February at the annual event in Bismarck.

Wayne Stanley, Minot, was recognized as Hunter Education Instructor of the Year and William Bahm, Almont, received the International Hunter Education Association 50 for 50 Award.

Longtime volunteers were also recognized for their service:

• 30 years – Douglas Bolte, Regent; Neil Dockter, Horace; Gerard Goldade, Hague; Alan Klatt, Grand Forks; Bruce Messmer, Dickinson; Glenn Lemier, Oakes; Daryl Simmons, Garrison; and Rodney Stark, Kennedy, Minn.

- 25 years Wayne Andersen, Bismarck; Clint Baxter, Minot; Scott Fasteen, Lincoln; Glen Fuhrman, Bismarck; Tony Aman, Center; Mark Hunt, Minot; Marty Liesener, Ray; Larry Nagel, Shields; Brad Olson, West Fargo; and Dale Patrick, Bismarck.
- 20 years Adnan Aldayel, New Rockford; Lee Bratlie, Drayton; Harry Capaci, Minot; Corinne Engen, Anamoose; Jeremy Haugen, Minot; Darrell Kersting, Kindred; Randel Sand, Tuttle; Grant Johnson, Almont; and Wayne Stanley, Minot.
- 15 years Paul Goldade, Wishek; Ruth Johnson, Belfield; Nadine Kassian, Wilton; Suzanne Kersting, Kindred; Calvin Leyendecker, Marion; Levi Reese, Hillsboro; Roger Norton, Kindred; Dennis Schlenker, Bismarck; Sam Theurer,

Mandan; Rick Tischaefer, Butte; Justin Hughes, Minot; and Charles Wilkinson, Garrison.

• **10 years** – Scott Norton, Mandan; Jordan Woroniecki, Bismarck; and Melanie Nelson, Harvey.

#### Game Warden Exam Scheduled

Individuals interested in taking the exam to select candidates for the position of a full-time temporary district game warden must register no later than May 24. The test is at 10 a.m., May 27, at the North Dakota Game and Fish Department's main office in Bismarck.

Applicants must register by submitting an online application through the North Dakota State Job Openings website.

Applicants must be at least 21, have a bachelor's degree at time of hire or an associate degree with either 2 years of law enforcement or wildlife experience, have a valid driver's license and a current North Dakota peace officer license, or be eligible to be licensed. Candidates must successfully complete a comprehensive background check and must not have a record of any felony convictions.

Salary through training is \$4,400 per month. For more information, see the district game warden job announcement on the Game and Fish website, gf.nd.gov.



Bob Frohlich, Department fisheries development supervisor (far right), with members of the Tri-Cities Joint Job Development Authority. (Back row, left to right) Aaron Levorsen, LeAnn Hoherz, Rodney Staiger and Bruce Tietz. (Front row, left to right) Jade Seibel, Diana Dillon and Shannon Wangsvick.

#### **Tri-Cities Group Recognized**

The North Dakota Game and Fish Department has honored the Tri-Cities Joint Job Development Authority for its ongoing efforts to develop and maintain public use facilities used and appreciated by anglers.

"The JDA was selected from a long list of candidates throughout the state and is a very worthy recipient of what this award stands for and is an outstanding example of the difference that entities can make on their local fisheries and public recreation areas," said Bob Frohlich, Game and Fish Department fisheries development supervisor.

Over the years, the group has become more active in the construction, management and maintenance of public use facilities ranging from courtesy docks to boat ramps to fish cleaning stations. In just the last two to three years alone, the Department has partnered and cooperated on seven new courtesy docks and a new vault toilet at Heart Butte Dam. In addition, the JDA is involved in the all-important role of ongoing operations and maintenance of public use facilities.



Both anglers and fisheries biologists often view black bullheads as undesirable due to their habit of overpopulating fisheries, not reaching large sizes, and competing with other sportfish. However, when present in low numbers, this native species can reach an impressive size. Scott Gangl, Game and Fish Department fisheries management section leader, encountered one such bullhead during a spring netting operation in southern North Dakota that surpassed our state's current anglercaught record in both length and weight. Who wouldn't want to land this 18-inch, 4-pound, 3-ounce beauty?

#### Staff Notes



**Greg Link** 



**Kevin Kading** 

#### **Agency Duo Earn Special Recognition**

The North Dakota Chapter of the Wildlife Society recognized Greg Link and Kevin Kading in February with the chapter's Special Award.

Link, Department conservation and communication division chief, and Kading, Department private land section leader, were honored for their effort in spearheading the Meadowlark Initiative, a new statewide strategy that will team landowners, conservation groups, scientists and others to enhance, restore and sustain native grasslands in North Dakota.

"This year the board decided special recognition was deserved for two individuals who have gone above and beyond for the natural resources of our state, specifically our prairie grasslands," wrote chapter leaders. "These individuals had the vision to promote and create healthy, thriving grasslands that provide biodiversity and prosperity for wildlife, pollinators, ranching operations and communities."

The benefit this initiative will bring to the state is immense, chapter leaders added, with an estimated outcome of converting 20,000 acres of marginal cropland to diverse native perennial vegetation; enhancing 50,000 acres of existing and reconstructed native grasslands and restoring and enhancing 10,000 acres of wetlands within reconstructed grassland complexes.



#### **Bailey Earns Fisheries Society Award**

Paul Bailey, the Department's south central district fisheries supervisor in Bismarck, earned the award for Best Professional Paper Presentation at the annual meeting of the Dakota Chapter of the American Fisheries Society in Sioux Falls, S.D. Bailey's presentation titled "Angler Use of Trophy Northern Pike in Lake Oahe, N.D." provided information and results from the recently completed tagging study on this trophy pike fishery.

The Dakota Chapter of the American Fisheries Society is a professional organization comprised of fisheries

professionals in North and South Dakota. The award is given to the professional who delivers the best oral presentation at the annual meeting. Presentations are judged on subject matter, scientific merit, speaker style and delivery, and the quality of visual aids.



#### **Hendrickson Retires**

Longtime employee Jeff Hendrickson retired in February after 31 years with the North Dakota Game and Fish Department.

Hired by the agency in 1991 as the Missouri River System fisheries biologist, Hendrickson was the Department's southwest fisheries district supervisor in Dickinson at the time of his retirement.



#### Longtime Warden Retires

Jeff Violett retired after 34 years with the North Dakota Game and Fish Department. At the time of his retirement, Violett was the longtime district game warden stationed in Mandan. Hired by the agency in 1987, Violett acted as a weapons instructor and field training officer during his enforcement career.



his is what I see when I look at this issue's cover photograph and accompanying images deeper in the magazine. I see a male ruffed grouse drumming in spring to attract female onlookers; a log partially marred with scat yet worn clean of bark in places from the bird pacing back and forth; and surrounding dense forest cover preferred by the grouse to safeguard it from predators during its spring preoccupation.

What I don't see, invisible to all of us, is the effort it took Jim Job, Game and Fish Department outreach biologist, to capture the images in 2021 of a bird that is far more often heard in spring by passersby than seen.

#### Here's a taste.

To get the photos, Job would leave Grand Forks at unreasonable hours to drive to the Pembina Hills so he could be in his photo blind by 3:30 a.m. or earlier, with the hope of beating the grouse to its drumming log.

But let's back up for a minute.

Finding The Log, not just any log, the grouse preferred to drum from was nearly as difficult as eventually photographing the bird.

So, I heard the grouse drumming in the woods and tried sneaking in through trees that are so thick that most of the time you cannot see over 10 to 15 feet. When I'm sneaking in, I probably get to within 50 to 60 yards of him and I hear him scurry off the log. I gave him about a half-hour and then I continued walking in and flushed him.

#### Job didn't find the bird's drumming log on that trip, but he returned a couple days later to continue the search.

It was pretty loud going because of the trees, sticks and dead leaves. I heard him drumming, but he heard me coming and would quit drumming. I'd wait anywhere from 10 to 30 minutes until he started up again, sneaking about 10 yards at a time, just trying to spot him. Finally, when I was about 25 yards from the log, I started seeing flashes of the bird drumming through little pieces of openness between the trees ... now I have the log pinpointed. I walk in there, flush him off, and his log is what looked to me like the Holy Grail of drumming logs ... covered in scat, bark worn off. This was it.

Job then hiked back to his vehicle to retrieve his photo blind and trail camera to monitor the bird's comings and goings.

I put up the blind and trimmed a bunch of brush around it and put the trail camera up to see if he was coming every morning and every evening, or every other morning or every third morning. I really didn't know. Being 110 to 120 miles away from where I live, my commute was getting a little long, so I wanted to know when it was best to come back.

Job returned four days later in the middle of the afternoon when he figured the grouse was away from the log. He was excited to check his trail camera, knowing without question he captured the bird doing its thing.

I flushed the grouse about 10 yards from the log, which got me even more excited because I knew I got him on the trail camera.

#### Or not.

I grab the camera, check the card and there is no grouse on the card. The grouse never used the log in the last four days, but I knew he was there because I flushed him within 10 yards of the drumming log. I figured he must have moved logs, so I start going through the brush, sometimes on my hands and knees, and I come across another log that had really fresh droppings on it only about 5 yards from the original log.

So, Job moved the blind, trimmed more brush, and knew exactly where he'd be long before sunup the following day.

When I get out of the car at about 3:30 a.m., I hear boom, boom, boom, boom, boom ... I sneak down there, and I hear the grouse run off the log. He never flew, he just ran through the leaves. I get set up in the blind and about 5 minutes later I hear him walk back and start drumming again.

Job listened to the bird drum for 2 hours as he waited for enough light to finally filter through the trees and brush to put his camera to use.

I honestly couldn't believe that after two years of trying to get this bird on my camera, and after all the miles of driving and listening and watching, it was about to happen. When it was probably sunrise, I needed about 10 more minutes for good light to filter through the trees, and then he jumps off the log, goes about 5 yards into the heavy sticks and starts drumming on another log. I wait for him for 3 hours, listen to him drum, and I can't see him at all. Eventually, he gets off the log and walks away. I sat in the blind for about 7 hours and didn't get any useful photos or video.

Job returned that afternoon, only to hear the grouse drum out of sight until dark. He moved the blind one more time, thinking the next morning might be his last chance at photographing the bird.

I get there the next morning, same time, he leaves, then comes back. There's just getting to be enough light, and he jumps off the log and races downhill. And I thought that my luck was just that bad.

Turns out, the grouse exited its perch to pursue a female grouse that was attracted to the drumming. About 10 minutes later the grouse slowly made its way through the trees and returned to the log.

I got him jumping up on the log and immediately fluffing up. And he went right back to drumming. I got him going up into a tree and eating aspen buds, so that was neat to see. I think I took 700 photos and lots of video.

#### Finally.

Trying to photograph this grouse was challenging. I would put it up there with chasing a 6.5-year-old whitetail buck. I wouldn't say due to the smartness of the bird, but because the thickness of the habitat. It's so hard to see in there and you understand quickly why they have to drum to advertise themselves.

RON WILSON is editor of North Dakota OUTDOORS.

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