



MATTERS OF OPINION



Terry SteinwandDirector

he 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."

I've written these words before in this space and it's a good bet you've read them elsewhere in *North Dakota OUT-DOORS* over the years.

Here at Game and Fish, those 30 words guide us. We take them very seriously.

We also take seriously the safety of those individuals while they hunt, fish and recreate in North Dakota's outdoors.

While proper instruction from parents and mentors goes a long way in readying new hunters – armed for the first time with shotguns and high-powered rifles – for the field, much of the credit falls into the hardworking and tolerant hands of our volunteer hunter education instructors.

More than 700 hunter education instructors volunteer their valuable time annually to teach proper gun-handling and other safety measures, ethics and conservation to students who, for the most part, have designs on becoming hunters.

Those 700-plus volunteer hunter education instructors devote thousands of hours per year. In 2018, for example, more than 4,000 students were certified in the standard classroom setting, while another 300-plus passed the online hunter education course.

While fall, and the many hunting opportunities available to new and veteran hunters alike in North Dakota, is still weeks away, summer is upon us. Which means anglers and many other people will be recreating on or near the many waters found across North Dakota.

Things can go wrong quickly on the water, which is why this agency will forever remind boaters to follow the law and have enough life jackets on board to accommodate all passengers. Also, remember that North Dakota law requires all kids ages 10 and younger to wear a personal flotation device while in boats less than 27 feet in length.

While things can go south on the water under the best of circumstances, accidents are more likely to happen if those people operating boats are impaired.

In an effort to help throw water on any accidents from happening, while educating boaters on the dangers of boating under the influence, Department wardens and other law enforcement will again participate in Operation Dry Water this summer on waters across the state.

During this boating under the influence campaign, water recreationists will see more law enforcement officials on the water. To learn more about the program, a story on Operation Dry Water is featured in this issue of NDO.

Be safe out there in North Dakota's great outdoors this summer, and mindful of those people with whom you are sharing the resources. Be courteous at boat ramps and help those who need it.

Terry Steinward

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JUNE 2019 • NUMBER 10 • VOLUME LXXXI

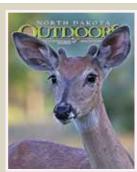
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Front Cover

A whitetail buck showing the first signs of antler growth in early summer. Photo by Craig Bihrle.



Official publication of the North Dakota Game and Fish Department (ISSN 0029-2761) 100 N. Bismarck Expressway, Bismarck, ND 58501-5095

Website: gf.nd.gov · email: ndgf@nd.gov

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North Dakota OUTDOORS is published 10 times a year, monthly except for the months of April and September. Subscription rates are \$10 for one year or \$20 for three years. Group rates of \$7 a year are available to organizations presenting 25 or more subscriptions. Remittance should be by check or money order payable to the North Dakota Game and Fish Department. Indicate if subscription is new or renewal. The numbers on the upper right corner of the mailing label indicate the date of the last issue a subscriber will receive unless the subscription is renewed.

Permission to reprint materials appearing in North Dakota OUTDOORS must be obtained from the author, artist or photographer. We encourage contributions; contact the editor for writer and photography guidelines prior to submission.

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> Periodical Postage Paid at Bismarck, ND 58501 and additional entry offices. Printed in the United States

POSTMASTER: Send address changes to: North Dakota OUTDOORS

100 North Bismarck Expressway Bismarck, ND 58501-5095

Report All Poachers (RAP) 701-328-9921

In cooperation with North Dakota Wildlife Federation and North Dakota State Radio.

Big Lake LLEYE SPAWN Fuels State Fisheries







By Ron Wilson

What triggers walleye to bite on any given day is sometimes a head-scratcher for anglers.

Untangling the inherited drive for these fish to migrate to cobblestudded back bays on Lake Sakakawea to spawn is straightforward.

"Walleye spawning is driven by two things – water temperature and photoperiod (daylight)," said Dave Fryda, North Dakota Game and Fish Department Missouri River System fisheries supervisor. "Especially in Lake Sakakawea, which is a big body of water, there is warmer water in many of the bays, while the water is still cold out in the lake."

While those two environmental ingredients spur walleye reproduction, Fryda said in the Van Hook Arm area of Sakakawea, photoperiod likely plays a bigger role.

"Today (May 4), we are spawning in 43- to 44-degree water, which the textbooks will tell you is colder than walleye like," Fryda said. "But we know the fish are ready to go the first week of May ... it's just like clockwork and you can predict when it's going to be, especially in this portion of the reservoir."



Erica Sevigny (left) and Mattea Bierman (right), Game and Fish Department seasonal personnel, hold nice North Dakota walleye during the spring spawn.

Greg Power, Department fisheries chief, said that while other areas of Sakakawea attract spawning walleye, the Van Hook Arm, Parshall Bay in particular, offers easy access and a bit of shelter for fisheries personnel.

More importantly: "Van Hook Arm and Parshall Bay has one of the highest concentrations of fish

... this is the epicenter," Power said.

The fish are not only attracted to the area because of creeks flowing into back bays and warming water temperatures, but because of the abundance of cobble substrate spawning

habitat walleye need to reproduce successfully in the wild.

Some of the fish that don't pull off this timeless cycle in Sakakawea's shallows, as you might guess, end up in Game and Fish Depart-

ment nets.

"It's a fairly simple process, really," Fryda said. "We collect fish and bring some males and those females back to the

weeks before hatching into fry, and then stocked by the millions into hatchery rearing ponds for one month.

boat ramp that are easily expelling their eggs. We mix eggs from the females and milt from the males at the ramp and then transport the fertilized eggs to Garrison Dam National Fish Hatchery."

June 2019 4 ND Outdoors

Eggs are placed in incubation jars for three

According to Jerry Weigel, Department fisheries production/development coordinator, the eggs are placed in incubation jars for three weeks before hatching into fry, and then stocked by the millions into hatchery rearing ponds for one month. At this stage, the immature fish, measuring about an inch in length and wanting to eat other fish, are considered fingerlings and ready for introduction into North Dakota waters.

What's important in this entire process of spawning and raising walleye in North Dakota, and so often goes unnoticed, is the working relationship between the federal fish hatchery and the state Game and Fish Department. Both agencies bring expertise to the operation, with the goal of raising healthy fish, and several different species of fish, for North Dakota anglers.

"While most states have state-owned hatcheries, in North Dakota we have a partnership with the Fish and Wildlife Service and it works really well," Fryda said. "We primarily handle the field end of the process by collecting eggs and fertilizing them ... At the hatchery, they hatch the eggs, stock the ponds, raise the fish to fingerlings and then we come back and distribute them across the state to our fishing waters."

The goal going into the spring spawning season was to collect enough eggs as easily and quickly as possible, no matter where in the state, to raise 10 million walleye fingerlings to be



(Top) Walleye eggs from females and milt from males are mixed with a feather in a bowl. The fertilized eggs are then hauled to the hatchery and placed in (bottom) incubation jars.





During the walleye spawn on Lake Sakakawea, there is little time for pause as fisheries biologists from both the Game and Fish Department and the U.S. Fish and Wildlife Service work to remove eggs and milt from spawning fish.

distributed to 100-plus North Dakota fisheries, Sakakawea included, in summer.

Over the years, Devils Lake and Lake Oahe have been the go-to waters, but it's not surprising Sakakawea was the choice in 2019

"The walleye population in Sakakawea the last few years has been so good ... lots of big fish, lots of fish of all sizes that are in really good condition," Fryda said. "When the condition of the fish is good, they produce

fingerlings went into Sakakawea, it was one of the largest stockings of more than 8 million fingerlings into smaller state fisheries.

The demand to stock more than 70 prairie walleye lakes that have little or no natural reproduction continues.

"We've certainly seen a growth in the number of walleye fisheries on North Dakota's landscape in the last 10-20 years," Fryda said. "The vast majority of those fisheries get their start

Untangling the inherited drive for these fish to migrate to cobble-studded

back bays on Lake Sakakawea to spawn is straightforward.



In 2018, Game and Fish Department personnel stocked nearly 10 million walleye fingerlings in more than 140 waters across the state. Weigel said at the time that considering not many

right here on Sakakawea because a lot of those bodies of water do not have natural reproduction. Sakakawea is in such great shape that's it's not only maintaining its own fishery, but driving other walleye fisheries across the state."

RON WILSON is editor of North Dakota OUTDOORS.



YEARS OF EGGS AND CHANGE



Greg Power, North Dakota Game and Fish Department fisheries chief, with a walleye during the spring spawn on Lake Sakakawea.

While things have changed in Game and Fish Department walleye spawning operations in the last 40 years, the aim remains the same.

"Gathering enough eggs to meet hatchery requests," said Greg Power, Department fisheries chief.

When Power went to Lake Sakakawea's Parshall Bay in early May to help fisheries staff with the walleye spawn, his attendance marked a milestone of sorts.

"1979 – 40 years ago – was the first year I spawned fish at this location," Power said. "At the time, there was a spawning shack here, but very few trees and there weren't many anglers to speak of back in those days. In the 1970s, the walleye fisheries across the state were just coming on, especially the Missouri River System."

Power said fisheries biologists collected as many eggs as they could back then (about one-third as many as today), which required more effort and certainly personnel.

In 1979, and some years to follow, Department fisheries staff netted fish and hauled them to the spawning shack where those fish that were not quite ready to give up their eggs were moved from water tank to water tank that were heated.

There were instances, Power said, when the fish were handled several times before they were willing to give up their eggs.

"I'd say the one big difference today is that we're so much more efficient because of the equipment, scheduling, manpower and all that stuff, so we are able to do a lot more with less," he said. "Today's fisheries staff, of course, will tell you that they do much better than the old times."

Power said there's some truth to that, considering the load fisheries staff must bear again and again.

"We're either the lowest staffed agency in all 50 states or the second lowest," he said. "And there is a lot more on our plates today than there used to be. I mean, it's quadruple of what we used to do and it's getting done. All the credit goes to our field staff and the efficiencies we've built in to what we do."





N DRY WATER

watercraft in the state, it's a certainty when the sun pops, weather warms and the wind dies, that not all water enthusiasts are playing it smart.



orth Dakota Game and Fish Department wardens will participate in the nationally coordinated effort, Operation Dry Water, the weekend of July 5-7 to educate boaters about the dangers of boating while under the influence of alcohol or drugs.

The mission of Operation Dry Water, national organizers say, is to reduce the number of alcohol- and drug-related accidents and fatalities on the water.



Jackie Lundstrom, Game and Fish Department enforcement operations supervisor, said boaters will see heightened enforcement on waters across the state during the weekend of the BUI awareness campaign.

"This is a statewide effort and boaters will see enforcement officers on the Missouri River, Lake Sakakawea, Jamestown Reservoir, Lake Metigoshe and elsewhere," Lundstrom said. "Any contact officers make at boat ramps, for example, they will remind boaters that if they are going to have some alcoholic beverages out on the water that day that they should have a

designated driver, a sober driver. I will encourage boaters to be mindful of eating, and drinking plenty of water, just kind of planting the seed of being safe and getting their family and friends home safe."

Lundstrom said that recreational boating is an activity enjoy by people and families across North Dakota and nationwide. The goal of the campaign is to not only educate boaters on the dangers of drinking alcohol and boating, but also to remind them of other safe boating practices, such as enrolling in a boater education course and having enough life jackets on board for all passengers.

North Dakota law requires all children

ages 10 and younger to wear a personal flotation device while in boats of less than 27 feet in length. The law also requires all personal watercraft users to wear a life jacket, as well as anyone towed on skis, tubes, boards or other similar devices.

One of the leading citations in North Dakota most years is an inadequate number of personal floatation devices on board. In 2017, Game and Fish Department wardens wrote 255 citations for this offense.

"Alcohol impairs judgment and reaction time on the water even more so than it does in a car because of the added stressors of sun, heat, wind, noise and the vibrations of the boat," Lundstrom said. "The Game and Fish Department wants everyone to have a great summer on the water, and to do that boaters must remain sober and alert while underway."

Lundstrom said this is the fourth year Department wardens are participating in Operation Dry Water.

"The last couple years, awareness about the campaign has grown," she said. "We are getting a lot more comments back to officers even outside the Missouri River and Bismarck area from people who are glad we're out on the water checking for those things a little more frequently."

In 2017, Lundstrom said alcohol was a factor in four boating-related fatalities in North Dakota.

"That's alarming," Lundstrom said. "A lot of times when I see groups go out in boats, I rarely see something to eat in their boats. If you're not eating something, drinking plenty of water on a hot day, the alcohol is going to impair you a lot faster, affecting your judgment, affecting your balance, affecting everything about driving a boat."

On several occasions Lundstrom has stopped intoxicated boaters who said they had rides homes once they reached shore.

"That's the part I don't understand because they believe it's Ok to drive intoxicated on the water, yet they understand it's not the right thing to do in a car on the road," she said. "And when I ask them to explain that, they never have an answer."



Lundstrom said if alcohol is going to be involved in an outing on the water, it's best to plan ahead.

"A lot of times people get caught up in the moment, but you need to make sure that you have somebody available to operate the boat," she said. "There are instances when you may be taking your neighbors who don't have a boat or have never operated a boat, but you are responsible for getting them back safely to shore and home. So, if you are the only person able to operate the boat, you should abstain from drinking."

RON WILSON is editor of North Dakota OUTDOORS.

TAGGING STUDIES COUNTIES APART

By Ron Wilson Photos by Ashley Salwey

The waters are separated by a handful of counties and roughly 100 miles as the crow flies. While they are certainly not a world apart, it can feel that way.

Yet, what ties Lake Sakakawea, arguably the top walleye fishery in the state, and Alkaline Lake, a Kidder County fishery that's become more and more popular with walleye anglers for its quality fishing, are jaw tags.



In spring, North Dakota Game and Fish Department fisheries personnel caught and fit thousands of walleyes from both waters with silver, metal tags for study purposes.

At Alkaline Lake, the goal was to mark between 1,000 and 2,000 fish for the one-year tagging project.

Paul Bailey, Department district fisheries supervisor, said fisheries personnel set trap nets

in spring because that's when fish move into the shallows to spawn, making them more susceptible to trapping gear.

"That's a good time for us to be able to target a large number of fish," Bailey said.

At Lake Sakakawea, the timing and method of catching walleye was the same, but the goals were

ATTENTION
ANGLERS

PLEASE REPORT
TAGGED FISH

JAW
TAG
AREAS

NORTH BAKOTA GAME AND FISH DEPARTMENT

Please of the state of

different for a body of water significantly bigger than Alkaline.

"We'll probably be tagging for four years and targeting about 3,000 walleyes per year," said Dave Fryda, Department Missouri River System fisheries supervisor. "We divided the lake by region – upper, middle and lower – and we'll tag about 1,000 fish each year in each region."

Bailey said what fisheries managers hope to learn from the one-year study is an estimate of exploitation, or a better understanding of the proportion of fish that anglers harvest every year from the walleye population.

"Alkaline has become a very popular walleye fishery and receives a lot of attention from anglers," Bailey said. "Given the attention and its use as a walleye fishery, we want to make sure we've got the most effective regulations in place for maintaining good fishing at Alkaline Lake for years to come."

Fryda added: "Tagging studies allow us to look at a few things, such as natural mortality, angling mortality and movements. Where are the fish at certain times of the year, where do they move and their tendencies to home back to the same spawning grounds year after year?"

Tagging study data also allows fisheries managers to monitor the size of fish being harvested, determine if more fish of a certain size are being exploited, or if the exploitation is higher for males than females, or vice versa.



Mattea Bierman, Department seasonal employee (left), and Russ Kinzler, Department fisheries biologist, tag a walleye at Lake Sakakawea.

"The reason we initiated the tagging study on Sakakawea now is because the walleye population is exceptional," Fryda said. "It gives us a snapshot of the fishery with a high abundance of fish, with an excellent size structure."

Both Bailey and Fryda said it's imperative Alkaline and Sakakawea walleye anglers report tagged fish, no matter if they end up in livewells or back in the lake.

"When it comes to reporting these tags, we'd like anglers to treat the tagged walleye just as they would treat any other fish they might have caught," Bailey said. "So, if it's a fish an angler was planning on harvesting, go ahead and harvest that fish. If it's a fish an angler was planning on releasing, go ahead and release that fish. Just record the tag number and leave the tag on the fish."

By doing so, Fryda said, this information gives fisheries managers a good idea what is going on with anglers and the fisheries.

"Also, what we are looking for from anglers, and

this is important, is that they please report any tagged fish encounters back to the North Dakota Game and Fish Department," Bailey said.

Fryda added: "We will see some of these tagged fish in Game and Fish nets time and again, but we rely on anglers reporting these fish to give us the information we need. In return, anglers will receive information on the fish they caught."

To report tagged fish from Sakakawea and Alkaline, anglers can click on the tag reporting feature on the Department's website, gf.nd.gov, or call the Game and Fish Department's main office in Bismarck at 701-328-6300.

"Also, if anglers look around the lakes where we're conducting these tagging studies, they'll find some signs that feature a QR code," Bailey said. "If anglers simply scan that code with their phones, it will take them right to the Department's tag report site on our website."

RON WILSON is editor of North Dakota OUTDOORS.

Dam to Dam Study

From 2013 to 2016, fisheries biologists tagged more than 34,000 walleyes in a multi-year study on the Missouri River System from Garrison Dam to Oahe Dam in South Dakota.

The study is a shared effort between biologists and researchers form North Dakota Game and Fish, South Dakota Game, Fish and Parks, and South Dakota State University.

While the effort to fit fish with metal law tags is complete for this

particular study, Game and Fish Department fisheries managers still want anglers to report the tag information as the study is ongoing.

"We are still getting returns on those tags and we absolutely want anglers to keep reporting them," said Paul Bailey, district fisheries supervisor.

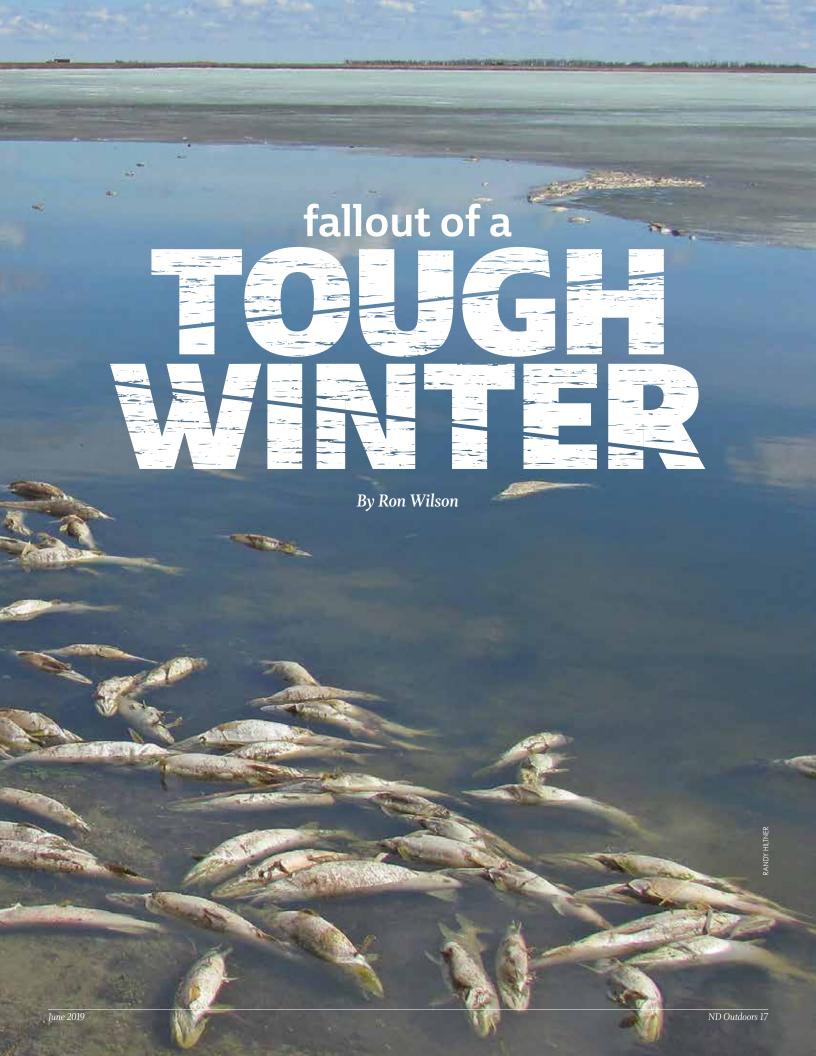
Tag information can be registered on the tag reporting page on the Game and Fish Department's website (gf.nd.gov), or by calling 701-328-6300.

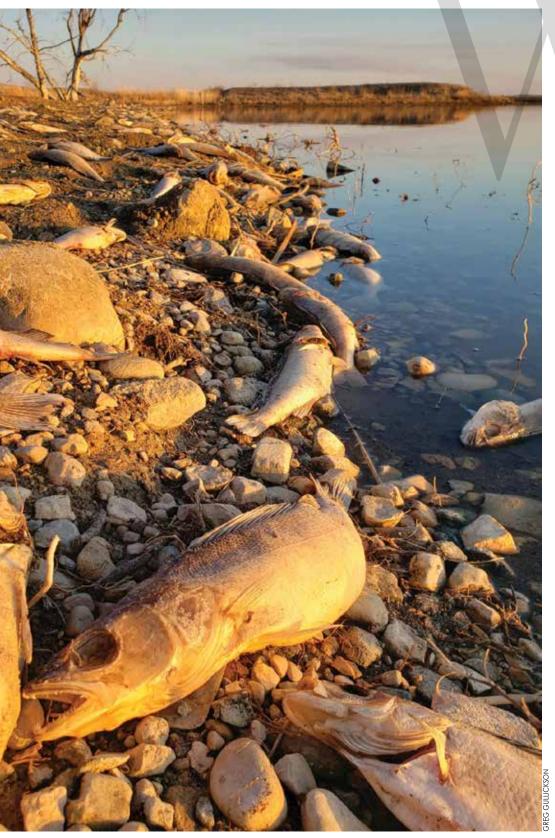
Signs are posted at a number of access sites along the Missouri River and Lake Oahe to remind anglers to report the tag information. The signs also feature a QR code that anglers can scan with their phones to take them directly to the Department's tag reporting site.

The same signs are posted at Lake Sakakawea and Alkaline Lake where similar studies were initiated in spring.









Going into spring, Game and Fish Department fisheries managers knew that winterkill of varying degrees would be an issue on some North Dakota waters.

Winterkill happens.

The fallout of long winters and snow-covered lakes during North Dakota's leanest months is that some fish die in some waters.

It's just that some winters are harder on the resources than others. Winter 2018-19 was a hard winter.

"Winterkill is something we deal with every winter, it's just that this past winter was a little worse than most," said Scott Gangl, North Dakota Game and Fish Department fisheries management section leader.

Gangl said Game and Fish manages a select number of lakes, mostly those shallower community fisheries, that winterkill every year. Understanding this, fisheries biologists stock those waters with adult fish annually so anglers, when the weather gets nice, have the opportunity to catch something.

"They get stocked every spring, with rainbow trout from the hatchery, and adult bluegill, crappie, catfish and northern pike that our staff traps and transports into these waters," Gangl said. "I suspect most anglers don't even know that they winterkilled. By the time they show up in spring, the waters have fish again."

Going into spring, fisheries staff had dozens of lakes on their radar for potential winterkill of varying degrees. In early May, Game and Fish ran a news release listing those waters and the severity of the fish kills.

"There may be others that our fisheries staff haven't gotten to, or that the public hasn't run across," Gangl said. "We've asked Game and Fish fisheries staff to keep the information as current as possible on our website (gf.nd.gov). The last thing we want to do is direct anglers to waters than don't have fishable populations."

Some of the lakes that suffered winterkill will be stocked with adult fish trapped from other waters or fingerlings from the hatchery. Fish species such as yellow perch, bluegill

and bass, which all spawn naturally in North Dakota lakes, were trapped and transported before spawning.

"We treat those waters with total winterkill that are receiving the adult fish like they are new lakes," Gangl said. "While the adult fish aren't stocked in huge numbers, what anglers will be catching down the road in a few years is the offspring."

RON WILSON is editor of North Dakota OUTDOORS.



Adult yellow perch, and other fish species, are trapped and transported to waters that had winterkill issues.

Winterkill Waters

North Dakota Game and Fish Department fisheries biologists investigated winterkills at several lakes in spring, and some were considered significant enough to affect the quality of fishing.

Biologists continued to monitor suspect lakes and other fisheries throughout the spring.

A total fish kill means all fish died, a significant kill is when the game fish population is greatly reduced and a partial kill means dead fish were observed, but catchable numbers of game fish are still present.

Some lakes that were sampled that showed partial winterkill include Pipestem and Jamestown reservoirs (Stutsman County), Green Lake (McIntosh County), Woodhouse Lake (Kidder County), Patterson Lake (Stark County), Crooked Lake and Scooby Lake (McLean County).

Minor winterkills were noted in some other lakes, but weren't significant enough to affect fishing. Information of all waters actively managed by Game and Fish is available by visiting the Game and Fish website, gf.nd.gov. This page will be updated as other lakes are surveyed.

Confirmed lakes with total or significant winterkill are listed by county. For more information on individual lakes, or to report fish kills that may not be on the list, anglers can contact the local Game and Fish district office.

Burke - Powers Lake (significant) and Short Creek Dam (significant).

Burleigh - Mitchell Lake (total).

Eddy - Battle Lake (significant).

Emmons – Baumgartner Lake (total) and Jake's Lake (total).

Foster – Juanita Lake (significant).

Griggs – Carlson-Tande Dam (significant).

Hettinger - Larson Lake (total) and Mott Watershed Dam (total).

Kidder – Etta-Alkaline Complex (significant), Leno Lake (total), Rafferty Lake (total) and Remmick Lake (significant).

Logan – Logan (Mueller) WMA (significant).

McInstosh - Lehr WMA (total).

McKenzie – Leland Dam (significant) and Sather Dam (significant).

McLean - Coal Lake (total).

Morton - Crown Butte Dam (total).

Pierce – Buffalo Lake (significant).

Richland - Grass Lake (significant).

Rolette - School Section Lake (significant).

Sargent – Bergh Slough (significant) and Fiala Lake (significant).

Stutsman - Gaier Lake (significant) and Sunday Lake (significant).

Walsh - Matejcek Dam (significant).

Wells - Harvey Dam (significant).

Williams – Cottonwood Lake (significant), McGregor Dam (significant) and Tioga Dam (significant).



BUFFALOBERRY PATCH

By Greg Freeman, Department News Editor

Bighorn Population Up from Last Year

The North Dakota Game and Fish Department's 2018 bighorn sheep survey, completed by recounting lambs in March, revealed a minimum of 283 bighorn sheep in western North Dakota, up 7 percent from 2017 and equal to the five-year average.

Altogether, biologists counted 84 rams, 161 ewes and 38 lambs. Not included are approximately 20 bighorns in the North Unit of Theodore Roosevelt National Park.

Brett Wiedmann, Department big game biologist, was pleased to see an increase in the survey, following a decline in 2017.

"The increase in the 2018 count reflects lessening effects of bacterial pneumonia that was detected in 2014." Wiedmann said.

The northern badlands population increased 9 percent from 2017 and was the second highest count on

record. The southern badlands population declined again to the lowest level since 1999.

"The total count of adult rams declined in 2018, but adult ewes increased," Wiedmann said. "Most encouraging was the significant increase in the lamb count and recruitment rate following record lows in 2016 and 2017."

Game and Fish 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.

"Fortunately, annual survival rates of adult bighorns are similar to those prior to the die-off and lamb survival is improving, which could indicate the population is becoming somewhat resilient to the deadly pathogens first observed in 2014." Wiedmann said.

"The next few years will be important in determining if the state's population shows signs of recovering from the disease outbreak, or if the pathogens are likely to persist and cause a longterm population decline."

Dr. Charlie Bahnson, Game and Fish wildlife veterinarian, said that four of 15 adult bighorns tested for the deadly pathogens last winter were positive.

A bighorn sheep hunting season is tentatively scheduled to open in 2019, unless there is a recurrence of significant adult mortality from bacterial pneumonia. The status of the bighorn sheep season will be determined September 1, after the summer population survey is completed.

Game and Fish issued three licenses in 2018 and all hunters were successful in harvesting a ram.

BE COURTEOUS AT BOAT RAMPS

North Dakota boaters are reminded to exercise patience and plan accordingly when heading to a lake or river this summer.

The state Game and Fish Department receives a number of complaints every year about overly aggressive behavior at boat ramps. A few simple reminders will help ensure a fluent transition when launching and loading a boat.

Launching

- Don't pull onto the ramp until your boat is ready to launch.
- Prepare for launching in the parking area. Remove covers, load equipment, remove tie downs, attach lines and put in drain plug, before backing onto the ramp.
- When ready, pull into line to launch. Wait your turn. Be courteous.
- It takes at least two people to efficiently and courteously



launch a boat: one to handle the boat and one to take care of the tow vehicle.

Loading

- Don't block the loading area with your boat until your tow vehicle is ready to load. Wait until you are clear of the launch area to unload
- As soon as your trailer is in the water, load and secure your boat

to the trailer.

- Remove boat and trailer from the water as quickly as possible.
- Get clear of the ramp. Pull into the parking area to finish securing your boat, unloading gear, draining all water and inspecting for and removing any vegetation. Remember to leave plugs out when transporting boat.



Leave Baby Animals Alone, Watch for Deer

The North Dakota Game and Fish Department offers a simple message to well-intentioned humans who want to pick up and rescue what appear to be orphaned baby animals this time of year – don't touch them. Whether it is a young fawn, duckling, cottontail rabbit or a songbird, it is better to just leave them alone.

Often, young animals are not abandoned or deserted, and the mother is probably nearby. Young wildlife are purposely placed into seclusion by their mothers to protect them from predators.

Anytime a young wild animal has human contact its chance for survival decreases significantly. It's illegal to take wild animals home, and captive animals later returned to the wild will struggle to survive because they do not possess learned survival skills.

The only time a baby animal should be picked up is if it is in an unnatural situation, such as a young songbird found on a doorstep. In that case, the young bird could be moved to the closest suitable habitat.

People should also steer clear of adult wildlife, such as deer or moose that might wander into urban areas. Crowding stresses animals, and this could lead to a potentially dangerous situation.

In addition, motorists are reminded to watch for deer along roadways. During the next several weeks young animals are dispersing from their home ranges, and with deer more active during this time, the potential for car deer collisions increases.

Preventing the Spread of Aquatic Nuisance Species

North Dakota anglers, water recreationists and anyone working in lakes or streams are reminded to follow these simple regulations to help prevent the spread of aquatic nuisance species.

Know the laws, as each state and province has its own rules and regulations. North Dakota regulations include:

- Do not import live aquatic bait.
- Use only legal bait species.
- Transport live bait in containers of five gallons or less.
- Properly dispose of unused bait.
- Drain water and remove vegetation from all equipment when leaving a waterbody.
- Remove drain plugs and keep out or open during transport.

Clean, drain and dry any equipment (recreational or commercial) that is used in any waterbody.

- Clean: remove plants, animals and excessive mud from trailers, hulls, motors and other equipment such as fishing rods.
- Drain: drain all water, including bilges, livewells and bait buckets.
- Dry: allow all equipment to dry completely or disinfect before using again. If necessary, use sponges or towels to remove excess water and allow compartments to dry.

Report any plant or animal that seems out of place.

- Visit the online reporting form at the North Dakota Game and Fish Department website, qf.nd.gov.
- Call Jessica Howell, Game and Fish ANS coordinator, at 701-368-8368.

Pronghorn Hunting Season Statistics

Hunter success during last fall's pronghorn hunting season was 81 percent, according to the North Dakota Game and Fish Department.

Game and Fish issued 1,081 licenses (701 lottery and 380 gratis), and 976 hunters took 792 animals, consisting of 761 bucks, 28 does and three fawns. Each hunter spent an average of 2.7 days afield.

Two percent of the harvest occurred during the archeryonly portion of the season.

The 2019 pronghorn hunting season will be determined in July.





CATCHABLE TROUT, CATFISH, PIKE STOCKED

North Dakota Game and Fish Department fisheries personnel stocked dozens of local community fisheries in spring with catchable trout, catfish and pike.

Approximately 10,000 11-inch rainbow trout, 600 2- to 4-pound rainbow trout, 1,200 adult catfish, 1,100 adult pike and 1,100 1- to 3-pound cutthroat trout were stocked in community fisheries around the state.

Jerry Weigel, Department fisheries production/development section leader, said the catchable fish were stocked in waters that are easily accessible, and in or near communities throughout North Dakota.

"Many have fishing piers and are a great opportunity for a first-time angler to catch fish," Weigel said.

- Adams Mirror Lake (catfish)
- Barnes Hatchery Kids Pond (rainbow)
- Burleigh Cottonwood Park Pond (pike), OWLS Pond (cutthroat, rainbow), Wilton City Pond (rainbow)
- Cass Brooks Harbor Pond (rainbow, cutthroat), Casselton Pond (rainbow, cutthroat), Casselton Reservoir (pike), North Woodhaven Pond (rainbow)
- Eddy New Rockford Pond (pike)
- Golden Valley Beach City Pond (rainbow)
- Grand Forks Turtle River (rainbow)

- McKenzie Arnegard Dam (catfish), Watford City Park Pond (catfish, rainbow)
- McLean Camp Loop Pond (rainbow, catfish, pike), Custer Mine (rainbow), Painted Woods Pond (rainbow), Riverdale City Pond (rainbow)
- Morton Gaebe Pond (catfish, rainbow), Krieg's Pond (catfish), Porsborg Dam (cutthroat, rainbow)
- Mountrail Stanley Pond (catfish)
- Ransom Mooringstone Pond (rainbow)
- Renville Glenburn Pond (catfish)
- Richland Mooreton Pond (cutthroat)
- Stark Belfield Pond (catfish, rainbow), Dickinson Dike (catfish, rainbow)
- Stutsman Little Britches Pond (rainbow, cutthroat)
- Ward State Fair Pond (rainbow, catfish)
- Williams East Spring Lake Pond (pike), West Spring Lake Pond (catfish, rainbow)

In addition, further stocking efforts took place at numerous trout lakes, including Glenburn Pond (Renville), Hazen Creek (Mercer), Lightning Lake (McLean), Little Heart Pond (Morton), Langdon City Pond (Cavalier), Oliver County Sportsmen's Pond (Oliver), Ryan Park Pond (Grand Forks) and Stanley Pond (Mountrail).

Summer Safety on the Water

The North Dakota Game and Fish Department urges boaters to keep safety in mind when enjoying time on the water.

A boat should have enough life jackets on board for all passengers. North Dakota law requires all children ages 10 and younger to wear a personal flotation device while in boats of less than 27 feet in length. The law also requires all personal watercraft users to wear a life jacket, as well as anyone towed on skis, tubes, boards or other similar devices. However, state law allows an individual who is at least 16 years of age to windsurf or boardsail without wearing a PFD.

Water users should make sure to wear life jackets that are the appropriate size, and in good condition. Water skiers and tubers should wear a life jacket with four nylon straps rather than one with a zipper, because straps are stronger than zippers upon impact with water. Anglers or anyone paddling a canoe should opt for a PFD that is comfortable enough to wear for an entire outing.

It is also important that children wear a PFD while swimming. Swimmers should know the water's depth, as serious injuries can occur from diving into water where large objects are hidden below the water's surface.

Failure to wear a personal flotation device is the main reason people lose their lives in water recreation accidents.

North Dakota boaters also are reminded that marine VHF radios are an important part of boat safety that should not be improperly used by operators. These radios are intended for boat operators who are in distress and facing an emergency.

Regulations to help ensure safe boating this summer are found in the 2018-20 North Dakota Fishing Guide. A more comprehensive listing is available in the North Dakota Boat and Water Safety Guide or the Boat North Dakota education book.

North Dakota Archers Place at NASP Nationals

North Dakota archers placed in the top 10 in every category at the National Archery in the Schools Program Western National Tournament in Salt Lake City, Utah.

Jeff Long, state Game and Fish Department NASP coordinator, said North Dakota's young archers had a great showing, particularly the elementary kids.

"We took first place in both boys and girls for individuals, and the team took first place as well," Long said.

Danica Onchuck of Hankinson claimed the top spot in both elementary girls 3-D and bull's-eye competitions, while Alex Weisenburger of New Rockford took first place in the elementary boys 3-D category and third in bull's-eye.

Other elementary girls place winners were Matilda Moch, Edgeley, third in bull's-eye; Kiara Fredrick, Wilton, third in 3-D; Jourdyn Bucholz, Griggs County Central, sixth in 3-D; and Claire Wehsler, North Sargent School, ninth in 3-D.

Also placing in the elementary boys division were Tucker Schacher, Wilton, second in 3-D and ninth in bull's-eye; William Bergquist, Wilton, second in bull's-eye and third in 3-D; Brady

Hanson, Edgeley, fourth in bull's-eye; Jayson Schlenker, Barnes County North, fifth in 3-D; and Hayden Risty, Wilton, eighth in bull's-eye.

Place winners in the middle school girls division were Zoey Bohnenstingl, Lidgerwood, fourth in 3-D; Rylee Suhr, Griggs County Central, sixth in 3-D and seventh in

bull's-eye; and Ariana Onchuck, Hankinson, 10th in bull's-eye.

In the middle school boys division, Brady Sand of Mayville-Portland-Clifford-Galesburg placed fourth in 3-D and ninth in bull's-eye.

In high school girls, Gracie Gunderson of Medina finished fifth in 3-D and seventh in bull's-eye, while Edgeley archer Sydni Berg placed fifth in bull's-eye.

In the high school boys competition, Joshua Wiebusch of Wahpeton placed fourth in bull's-eye and sixth in 3-D, and Andrew Hill from Oakes was



seventh in 3-D.

Wilton's elementary team took first place in 3-D and second in bull's-eye. And Hankinson's high school team finished second in bull's-eye and third in 3-D.

Some North Dakota archers went to Louisville, Kentucky for eastern nationals and two students finished in the top 10.

Oakes elementary students Braysen Sagert finished in eighth place in the 3-D boys competition, and Shayle Zimbelman took ninth place in the 3-D girls division.

WHITE SUCKERS ONLY LEGAL IN BOIS DE SIOUX, RED RIVERS

The state Game and Fish Department reminds anglers that live white suckers are



not legal baitfish anywhere in North Dakota, except in the Bois de Sioux and Red rivers.

Although anglers can use live white suckers on the Bois de Sioux and Red rivers, and tributaries up to the first vehicular bridge, they are illegal elsewhere. Fathead minnows, sticklebacks and creek chubs are the only legal live baitfish outside of the Bois de Sioux and Red rivers. Dead white suckers preserved by freezing, salting or otherwise treated to inactivate reproductive capabilities are legal bait.

The transportation of live white suckers, other than in Richland, Cass, Traill, Grand Forks, Walsh and Pembina counties, is illegal.

ANGLERS MAY NOT BRING AQUATIC BAIT INTO NORTH DAKOTA

Anglers are reminded that it is illegal to import all forms of live aquatic bait into North Dakota. This includes minnows, suckers, leeches, waterdogs (salamanders) and frogs.

Anglers should buy bait from a licensed North Dakota retail bait vendor. Bait vendors can properly identify species and have taken steps to ensure all bait is clean of any aquatic nuisance species.

For more information, refer to the 2018-20 North Dakota Fishing Guide, available at license vendors or online at the state Game and Fish Department website, gf.nd.gov.



Put Garbage Where it Belongs

The North Dakota Game and Fish Department reminds outdoor recreationists to keep it clean this summer by packing out all trash.

All garbage, including used fireworks, should be placed in a proper trash receptacle. If trash cans aren't available, or are full, take the trash and dispose of it at home.

It is not uncommon to see garbage piling up around full trash containers. Styrofoam containers are not biodegradable, but are often found wedged in cattails, drifting or washed up on shore.

Tires, mattresses and kitchen appliances have found their way to public use areas. This illegal dumping is costly to clean up and takes a significant toll on the environment. Not only does it spoil the beauty of the land, it destroys habitat, has the potential to pollute North Dakota waters and can injure wildlife.

Littering violations should be reported by calling the Report All Poachers hotline at 701-328-9921.

Workshops for Educators Scheduled

The North Dakota Game and Fish Department is sponsoring workshops in Dickinson, Valley City and Bismarck for teachers, environmental educators and anyone else who works with youth.

Pollinators in the Classroom is June 12-13 from 8:30 a.m. to 4:30 p.m. at Dickinson State University in Dickinson, and June 25-26 from 8 a.m. to 5 p.m. at Valley City State University in Valley City.

Participants will examine different animal species, receive the new Urban Pollinator curriculum with three distinct sections, and explore urban pollinator gardens and learn how to develop one in a local community or near a school.

The fast-paced workshop offers a hands-on approach that educators can use in their classrooms and on field trips, and in discussing classroom and curriculum integration. All supplies are provided.

Curriculum materials are suitable for both elementary and secondary teachers.

Herpetology and Citizen Science in the Classroom is June 20 from 8 a.m. to 12 p.m. at the Game and Fish Department's main office in Bismarck.

Participants will learn about reptiles and amphibians of North Dakota, including species identification, basic biology, life history and territories.

In addition, participants will learn how to incorporate Citizen Science in the Classroom, specifically the HerpMapper platform, and will spend time outdoors looking for species of interest.

More information on the workshops, including registration, fees and graduate credits, is available by visiting the Game and Fish website, gf.nd.gov.



Watchable Wildlife Photo Contest

The North Dakota Game and Fish Department's Watchable Wildlife Photo Contest has a new look. The contest guidelines are the same as in previous years, but the process for submitting photos has changed.

Photographers who want to submit photos to the contest will now go the Department's website at gf.nd.gov/photo-contest. Then it is a matter of providing some pertinent information about the photo and uploading it.

The changes were put in place to help both with ease of submitting photos for the photographer and managing those images for Department staff.

The contest is now open and the deadline for submitting photos is October 1. For more information or questions, contact Patrick Isakson, Department conservation biologist, at pisakson@nd.gov.

The contest has categories for nongame and game species, as well as plants/insects. An overall winning photograph will be chosen, with the number of place winners in each category determined by the number of qualified entries.

Contestants are limited to no more than five entries. Photos must have been taken in North Dakota.

By submitting an entry, photographers grant permission to Game and Fish to publish winning photographs in North Dakota OUTDOORS, and on the Department's website.

STAFF NOTES



joined the agency as the Department's photographer/assistant videographer. She has a bachelor's of science degree in communications from the University of Mary in Bismarck.

Rugby native Ashley Salwey has

Ashley Salwey

back cast



By Ron Wilson

The nature of the 200-mile stretch of Missouri River changed when construction of Oahe Dam was completed in 1962, nine years after Garrison Dam, its upstream equivalent.

A river that once ran unchecked, rising and falling following the seasonal whims of Mother Nature, was now harnessed by two enormous dams.

Eventually, regulated flows out of Garrison Dam created a cooler, clearer river environment and a top-shelf walleye fishery between the two impoundments.

Nearly lost with the disappearance of the once warm, turbid river environment are native species such as blue suckers and pallid sturgeon. Not lost,

but largely forgotten for years, is a fish species that, if for no other reason than its age-old ties to the river, brings value to its surroundings.

Since 2006,
following just one
effort in 1994 to
sample this population,
North Dakota Game and Fish
Department fisheries biologists have
netted and tagged thousands of paddlefish that swim mostly unmolested in the
Garrison reach, save for the occasional
fish snagged by unsuspecting anglers or
hit by recreational boaters.

"Over the last decade or so, we've devoted quite a bit of effort to try and learn more about this paddlefish population that exists between Garrison and Oahe dams," said Paul Bailey, Department district fisheries supervisor.

"Paddlefish are a species of conservation priority for us, and throughout most of their range in North America, they're not doing very well. So, it's important to learn more about this paddlefish population to

make sure we're doing what we can to manage them appropriately."

Bailey said it's estimated that paddle-fish number anywhere from 9,000 to 12,000 during spring sampling north of Bismarck. Yet, because not all male or female paddlefish point their rostrums, or paddles, upstream every year to make ineffective spawning runs out of the Oahe headwaters, the 9,000 to 12,000 fish surprisingly represent about half the population.

These spring paddlefish spawning runs are deemed ineffective in the Garrison reach because fisheries biologists

lowstone rivers. This naturally reproducing population supports North Dakota's only snag fishery.

Paddlefish, no matter where they swim in the Missouri River System, are an interesting fish. They are long-lived, have a mostly cartilaginous anatomy and, of course, sport an elongated, flat, paddleshaped rostrum.

Paddlefish also grow to impressive sizes. The state record, snagged near the confluence of the Yellowstone and Missouri rivers, measured 71 inches and weighed 131 pounds. Fisheries biologists have netted paddlefish over 120 pounds in the Garrison reach.

"Paddlefish are North Dakota's largest fish

and they feed on
zooplankton, the
smallest of prey
at the bottom of
the food chain,"
Bailey said.
"They are a
great indicator
species for the
overall health of
the upper portion of

Lake Oahe where they spend most of the year.

When times are good in Oahe, zooplankton is abundant and the paddle-fish are pretty fat and happy. On the flip side, when you go through events like the 2011 flood or a period of drought, zooplankton productivity drops of and the paddlefish become much skinnier."

What remains to be seen, as other paddlefish populations in North America continue to struggle because of the degradation of habitat, is how long these ancient fish swimming in North Dakota will endure.

have yet to find any evidence of natural reproduction. Paddlefish sandwiched between the dams are primarily fish that passed through Garrison Dam over time.

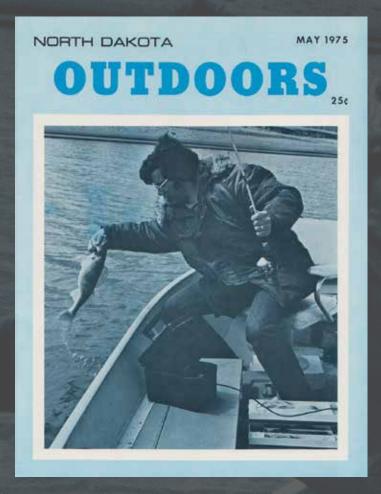
"These fish are attempting to spawn,

but likely not having any success at it because of cold water temperatures and highly altered flow regimes out of Lake Sakakawea," Bailey said.

While paddlefish that inhabit the cool waters downstream of Garrison Dam aren't reproducing, those that exist above the dam and into the headwaters of Lake Sakakawea do successfully spawn in spring in the Missouri and Yel-

RON WILSON is editor of North Dakota OUTDOORS.





A Look Back By Ron Wilson

The walleye hasn't always been the fish of choice in North Dakota. Anglers of a certain age, however, wouldn't know any differently.

What follows are excerpts from the August 1989 issue of North Dakota OUTDOORS that chronicles the shift in angler interest in a feature on the fishing industry in the state:

- The years 1960-75 were years of change for the fishing industry in North Dakota. In a general sense, the average North Dakota angler was evolving from a shore-fishing northern pike fisherman to a boatfishing walleye angler.
- There were a couple reasons for the change. First, pike fishing tailed off by the early 1970s. Second, innovations in tackle and fishing techniques made walleyes a more desirable target.
- Dale Henegar, Game and Fish Department fisheries chief wrote in 1968 that "Walleyes are becoming increasingly important to the sport

fishing of North Dakota. In both Sakakawea and Oahe, the walleye is becoming relatively more abundant each year and the frequency of catch is becoming higher."

- Henegar added later: "If one were to ask what the most significant sport fishery development has been during 1969, the answer would be the improved walleye fishing at Lake Sakakawea ... there has been a decided trend to use a boat and motors for trolling."
- One of the first articles on the shift toward walleye fishing, the author wrote: "Although lots of fish are taken from shore, a boat is a necessary prerequisite to a serious walleye fisherman working on our large lakes and reservoirs."
- In 1972, for the first time, more whopper walleyes than pike were recorded in the Department's Whopper Club.
- In January 1974, Henegar discussed the change: "Walleye

fishing has continued to be good for many anglers. Many of our anglers, however, are still trying to catch pike and have not changed their methods to take advantage of the walleye potential."

- By 1975, walleye anglers were soaking in all the information they could get. Tackle stores were selling out on things like Lindy Rigs and Rapalas. Terms like backtrolling, boat control and structure were entered in the walleye angler's dictionary.
- According to one pike fisherman of the 1960s who turned into a walleye angler in the 1970s: "On many trips out limits (of northerns) would average a weight of around 15 pounds ... We are having just as much fun nowadays catching walleyes."

RON WILSON is editor of North Dakota OUTDOORS.