

NORTH DAKOTA OUTDOORS

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GAME AND FISH DEPARTMENT

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MATTERS OF OPINION



Terry Steinwand
Director

In summer 1993, things changed. And as many of us in North Dakota remember, we were certainly ready for change.

In July of that year, a month that still remains the wettest month in our state's recorded history, the heavens opened up and kicked off what would be the end of a 5-year drought.

I remember it well. I remember the day when the drought was ushered out the door. I was driving back to Bismarck from Garrison where I was attending a rules meeting for the Governor's Cup fishing tournament. It was an absolute downpour on the entire drive home.

We didn't know it at the time, but that day, that month marked the beginning of a 25-year run where North Dakota would be more wet than dry. (*Note: For much more detail on this 25 year anniversary of sorts, read Craig Bihle's article in this issue of North Dakota OUTDOORS.*)

I was the Game and Fish Department's fisheries chief for much of the drought, and remember quite well the influence the dry weather had on fisheries across the state.

During the heat of the drought, all of our fisheries, no matter their size, suffered. On Lake Sakakawea, for example, our state's largest reservoir, the spawning habitat for both walleye and forage fish, was either quickly disappearing or nonexistent.

Due to the lack of forage, and a walleye population dominated by smaller fish with little to eat, we instituted a 14-inch minimum length limit on the big lake.

Three years later, we were able to eliminate the length restriction, as we had promised to the public, because the restriction was no longer meeting the

needs of the fishery. Plus, we said then as we say today, we free our books of unnecessary regulations whenever possible to make things as simple as possible for those using the resources.

When the water came back, inundating the spawning habitat and terrestrial vegetation left high and dry, our legacy fisheries, such as lakes Sakakawea, Oahe and Devils Lake, certainly flourished.

Yet, where we really saw change was the birth of many more new lakes. Over time, places where hunters once flushed pheasants and busted whitetails from head-high vegetation, started filling with all this wonderful precipitation, and some eventually became more than 20 feet deep.

What I told the fisheries staff then, and its the same thing I tell all Game and Fish staff today, that while you have to create some opportunities, you also have to be on the lookout for opportunities.

The opportunities were all these new fisheries, with the potential for angler access granted by willing landowners. In 1993, we had roughly 180 managed waters around the state. Today, that number has climbed to roughly 450.

To add, in a state where the majority of anglers focus on walleyes, North Dakota is now home to dozens of new prairie walleye fisheries. This reality was hardly thinkable during the drought of the late 1980s and early 1990s.

What a remarkable change in a 25-year stretch.

Of course, we live in an unpredictable environment, and it's uncertain what the next quarter-century will bring. What's for certain, though, is that the fishing opportunities are many in our great state, so get out and enjoy North Dakota's great outdoors.

Terry Steinwand

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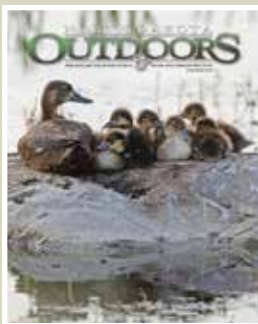
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Front Cover

A hen lesser scaup and her brood. *Photo by Craig Bihrl, Bismarck.*



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ON THE

WEIGHING IN RECORD WALLEYE



By Ron Wilson


While Game and Fish Department fisheries managers readily recognized the new state record walleye caught in the Missouri River May 18, news of the 15-pound, 13-ounce fish didn't necessarily come as a surprise.

"Given the recent history of good water conditions in lakes Sakakawea and Oahe, and the section of the Missouri River sandwiched between, I'm not surprised," said Greg Power, Department fisheries chief. "Drought kills us in North Dakota. Fortunately, we've had good water conditions for 10-plus years, which has resulted in good forage production and good growth of predator fish in the Missouri River System. In short, there are groceries out there for growing good fish."

Paul Bailey, Department south central fisheries supervisor, said the Missouri River System's diverse forage base – from gizzard shad to cisco and other prey in between – is suited to producing big fish.

"In comparison, the forage base in our prairie walleye lakes is typically fathead minnows," Bailey said. "With that kind of forage base, walleye in those waters, for the most part, are not topping 8 pounds."





Neal Leier of Bismarck with North Dakota's new state record walleye. By counting the age rings on the walleye's ear bone, or otolith, North Dakota Game and Fish Department fisheries biologists determined that Leier's record fish was 17 years old.

MIKE ANDERSON



"In the Missouri River System we're consistently seeing walleye in the 10- to 14-pound range, which has much to do with what the fish are eating," he added.

There was concern about the Missouri River's forage base following the 2011 flood that, for one, flushed the majority of rainbow smelt from Oahe downstream.

"There is no way the Missouri

congratulatory phone calls, Leier said his life hasn't changed any.

"I really haven't been out fishing that much since then," he said.

Leier's 32½-inch walleye was the fish that a lot of anglers had been waiting for. A fish heavy enough – by 1 ounce, it turns out – to best the 15-pound, 12-ounce walleye from Wood Lake in Benson County that stood as the state record for nearly

"THE CONDITIONS IN THE MISSOURI RIVER SYSTEM ARE SO GOOD."

– Greg Power, Fisheries Chief

River System could have produced the kind of walleyes we are seeing today following the 2011 flood," Bailey said. "A 27-inch walleye in 2013, for example, might have weighed 6-7 pounds, but now that fish weighs 9 pounds with the improved, diverse forage base."

Record Walleye

Neal Leier of Bismarck caught the record walleye on a rainy Friday near the Fox Island boat ramp. He jigged his plastic bait maybe five times before hooking into what felt like a log when he got the fish on the reel.

"The biggest walleye I ever caught before that was about 24 inches," he said. "I don't know how much it weighed."

Other than doing a number of interviews and fielding a lot of

60 years.

"I heard from a lot of people who were glad to see the record broken," Leier said.

It's been repeatedly reported that the Wood Lake walleye wasn't actually caught by Blair Chapman, but found dead, floating on the lake's surface.

Whatever the case, the Wood Lake walleye no longer tops the charts.

"For nearly 60 years it stood as the record fish and for nearly 60 years there has been controversy," Power said. "Today, both are gone."

While a new state record walleye makes for good conversation in the angling world, Bailey said there's more to it than that.

"This record walleye points to the fact the current fishing regulations are working and producing not only state record fish, but other big fish," Bailey said. "Under current Game

and Fish Department regulations, anglers are not over-harvesting big fish, but allowing for the trophy component of the Missouri River System to continue.”

New Standard

Of course, anglers in search of big walleyes know the standard – 15 pounds, 13 ounces – they must eclipse to set a new state record. And Power doubts, based on what Game and Fish Department fisheries crews are finding in their spawning nets in spring, teamed with continued help from Mother Nature down the road, it will take nearly 60 years to see a new mark set.

In spring 2017, Department fisheries crews netted a 15-plus-pound walleye from the Missouri River and a 16 pounder from Lake Sakakawea. Additionally, South Dakota Game Fish and Parks reported a couple of 17-pound walleye netted this spring in Lake Oahe.

“In the last few years, we’ve seen many 10-plus-pound walleyes in our nets in the Missouri River System in spring,” Power said. “Unless the midsummer high runoff conditions don’t get even higher, it might only be another year or two for a new state record because the conditions in the Missouri River System are so good.”

Then again, there are a number of factors that come into play, a little luck included, to put a record fish in the boat.

While not taking anything away from Leier’s accomplishment, the fact that the fish he caught was still heavy with eggs on May 18 was unusual.

“The peak of the walleye spawn in the Missouri River around Bismarck and the North Dakota portion of Oahe is April 20-25,” Bailey said. “Some fish didn’t spawn this year because of the late spring. The record walleye was one of them ... she should have spawned weeks earlier. She was likely in the process of absorbing her eggs.”

Power said there were reports of some walleyes that measured 33 inches or longer that were caught in the Missouri River in spring. Yet, all of those fish had already spawned.

“A walleye fat with eggs means two or three extra pounds,” Power said. “Any of those fish could have been a state record.”

Leier said he understands that his

record could be broken, and he’s OK with that. But it likely won’t be a fish caught in summer, but a prespawn female carrying the weight of thousands of eggs in spring.

“In the Missouri River, anglers can access prespawn females heavy with eggs,” Power said. “Typically, the river is open to fishing three or more weeks before the spawn.”

On Sakakawea, where the ice comes off later, getting on the water in that short window before the big walleyes drop their eggs is difficult.

“Certainly, because of the smelt numbers, habitat conditions, good growth and some good genetics, there are some walleyes in Sakakawea in that record range,” Power said. “Unfortunately, accessing those fish in early spring is many times tough to do.”



Dave Fryda, Game and Fish Department Missouri River System supervisor, with a 16 pound walleye that fisheries biologists caught in a trap net during spawning on Lake Sakakawea in 2017.

NDGFD PHOTO

Fish Responsibly

Power said if a record walleye isn't caught in spring, it could come from the depths of Lake Sakakawea in, say, October or November when anglers are targeting big fish that are holding deep.

He encourages anglers fishing in deep water – 25 feet and deeper – to keep what they catch. The reasoning, Power said, is because many fish caught from those

depths likely don't survive after they are released because of extreme changes in pressure on their journey to the net, causing swim bladders to expand.

(Editor's note: For more on fishing responsibly and catch-and-release tips when the situation supports a safe return to the water, see the May 2018 issue of North Dakota OUTDOORS on the Department's website, gf.nd.gov.)

"Some anglers are practicing catch-and-release under these circumstances and likely think they are doing the right thing," Power said. "Unfortunately, many of the fish caught in deep water and released aren't surviving."

RON WILSON is editor of North Dakota OUTDOORS.

Walleyes (right) taken during spring spawning on Lake Sakakawea. Brandon Kratz, district fisheries supervisor in Jamestown, with a big female walleye that was netted during spawning on Sakakawea.



NDGFD PHOTO



NDGFD PHOTO



DIARY OF A

Wet

Twenty five years ago this month, this magazine published a story outlining a new initiative in the Game and Fish Department's fisheries division called "Priority Lakes." It outlined a plan to "...redirect fisheries management efforts to lakes that have the most potential as long-term fisheries."

At the time, in early summer of 1993, North Dakota did not have very many lakes, outside of the Missouri River System res-

ervoirs, Devils Lake, a couple of dozen larger reservoirs and some larger natural lakes, that had solid potential as long-term fisheries.

Priority Lakes came about after an honest assessment of what 5 years of drought had done to the state's fishing resources. Of about 180 fishing waters in the state at the time, Game and Fish was going to focus its efforts on 60 of them, "...until water levels return to normal."

How many years it would take

for that to happen was anybody's guess.

And then, just as thousands of subscribers were pulling their July 1993 *North Dakota OUTDOORS* magazines from their mailboxes and reading about this new fisheries plan, it started raining. Not just one timely "boy-we-sure-needed-that" rain, but a series of multiple-inch downpours that flooded streets in many cities and creeks and rivers across the countryside.



Cycle

By Craig Bihrlé

In summer 2009, during the unofficial second phase of the wet cycle, water levels at Lake Sakakawea flooded trees that had grown up along dry shorelines for several years.

By the time July 1993 ended it was, and still is, the wettest month in North Dakota's recorded history. Bismarck had nearly 14 inches that one month, and other locales had even more.

In just 31 days, water levels in many existing fishing lakes across the state were well on their way back to normal. The Priority Lakes plan that was intended to focus on existing waters became more of plan

for developing revitalized and eventually new lakes. And no one in the fisheries division seemed to mind that at all.

Similarly, the state's waterfowl situation improved markedly almost overnight and kept building along with water levels. Starting in 1994, the Game and Fish Department's fall duck flight forecast of birds produced in the state, based on counts from the annual midsummer duck brood survey,

has come in above the long-term average in every single year since.

The North Dakota fall flight estimate went from a near-record low of just over 1 million birds in 1990, to an all-time high of about 8 million birds in 2002.

To put in perspective what this wealth of water meant, however, it's important to consider the dried-out landscape that desperately needed it.

Blowing dust from dry alkali wetlands sometimes looked like a snowstorm during the drought of the late 1980s and early 1990s.



CRAIG BIRHLE

Dire Straits From Drought

June 1988 was the hottest June ever recorded in North Dakota up until that time. Temperatures were 8-12 degrees above normal. Both prairie grass and crop fields turned brown.

That was probably the worst month and year in a 5-year stretch of dry years that got started in fall 1987. But the following summer, July 1989 was either the second or third hottest North Dakota July on record, depending on location.

A story in the August 1990 issue of *North Dakota OUTDOORS* chronicling the first two years of that drought noted: "During the drought, North Dakota had the distinction of leading the nation in the amount of land damaged by wind erosion."

Like the summer of 2017, the summer of 1988 was not kind to upland bird reproduction efforts. Pheasant, grouse and partridge harvests in 1988 all fell considerably from 1987.

On the other hand, better but still dry conditions over the next few years helped pheasants and partridge that were also

getting a boost from hundreds of thousands of acres of newly emerging Conservation Reserve Program grasslands that North Dakota landowners eagerly enrolled at a time when most crop prices were low and production was influenced by ongoing dry conditions.

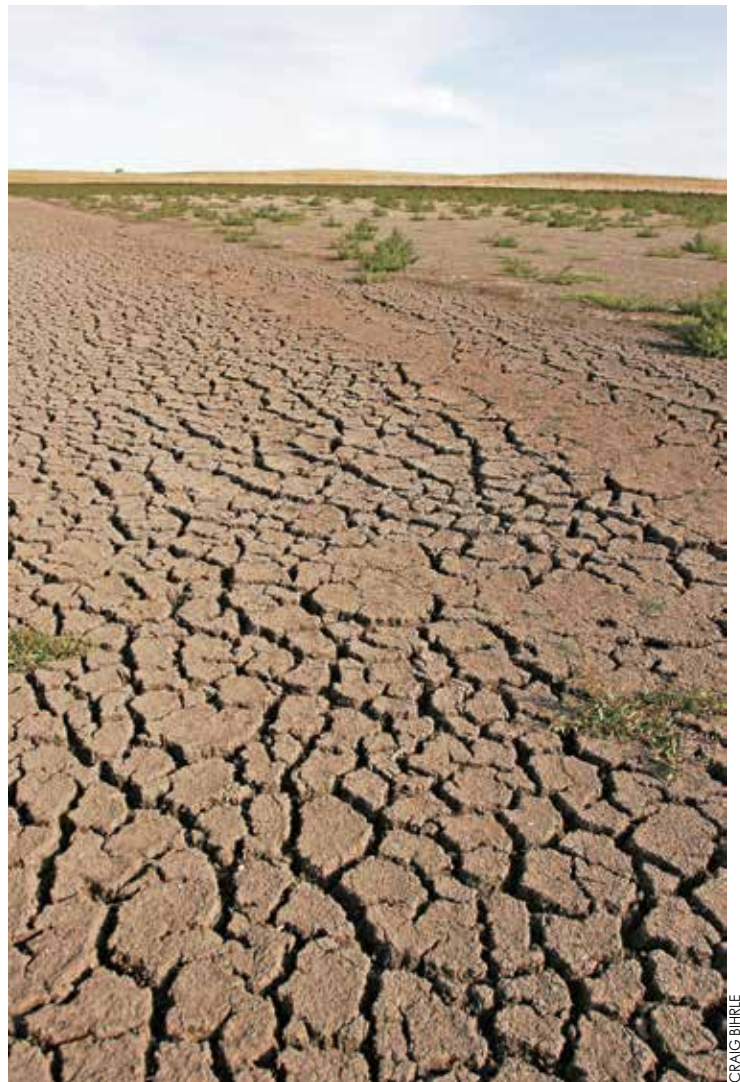
On the waterfowl side, the lowest wetland index ever in the Department's spring breeding duck survey, which started in 1948, occurred in 1990, and that still remains the record low.

The second lowest number of breeding ducks ever counted in the spring survey, occurred in 1991.

Starting in 1988, the daily duck limit was cut to three, and it stayed that way until 1994. The duck season was shortened to 30 days and shooting hours started at sunrise instead of a half-hour before. It was indeed a dire time for not just North Dakota, but continental duck populations.

On the fishing side of things, in spring 1989 Lake Sakakawea had only one useable boat ramp at ice-out, and Lake Oahe didn't have any.

Devils Lake was receding



CRAIG BIRHLE

When prairie wetlands go dry for extended periods, vegetation grows up, making for a more productive setting when water returns.

to a point where winterkill became a concern. Devils Lake was also at the time the most important source of walleye and pike eggs, and traditional areas where spawning nets were set were no longer available because of low water. In spring 1990, Game and Fish couldn't come up with enough walleye eggs to meet hatchery needs, and for the first time, received surplus eggs from Minnesota and South Dakota.

And here's an indirect influence of the dry times on some southern North Dakota fishing lakes, written by then southeast district fisheries manager Gene Van Eeckhout in his annual report in the January 1990 issue of *OUTDOORS*:

"But early in 1989, I recorded deteriorating water quality. Like 1988, there was very little runoff so why the difference? In the process of collecting water samples, my



CRAIG BIRLIE

This boat ramp at Beaver Bay on Lake Oahe was representative of most high water ramps on the Missouri River System in the early 1990s before the drought broke.

anchor dragged across the bottoms of several ponds. When lifted to the surface, there were large amounts of ‘kochia weed’ and ‘Russian thistles’ attached to the anchor. Recollect if you will the windy weather we had last spring and all the ‘tumble-weeds’ blowing around. Many tons of these obviously ended up in our lake basins, where, through decomposition, they have added nutrients and consumed oxygen.”

At least one small town in south central North Dakota that spring had to bring out a snow plow to push drifted tumble-weeds from its main street.

Hardly a magazine went by during the early 1990s that didn’t have some kind of negative report related to low water levels. Fisheries biologists netted game fish out of Crooked Lake in McLean County and moved them to Lake Audubon because of an anticipated fish kill in the 1990-91 winter.

Liberalized fish limits were implemented on other lakes that seemed destined to the same winter fate. In April 1990, then Game and Fish Director Lloyd Jones simply wrote: “We need water soon.”

But amidst all the negativity, there was hope. Dry shorelines became fertile growing grounds for vegetation, both on lakes and wetlands, and biologists knew that IF water ever came back to flood that new vegetation, the news would get better. “We’re poised for a population explosion when water levels returned to normal,” said one fisheries biologist in 1990.

No one expected that turn-around to come in such impressive fashion. Almost overnight, the tone changed. Stories reflected all the good things that were anticipated with the newly accumulating water. Most of them came true. Some of them exceeded anyone’s expectations.



CRAIG BIRLIE

From 1988 through 1992, the water level at Devils Lake fell more than 6 feet, leaving previously flooded trees high and dry, and putting part of the lake at risk for significant winterkill.

One Remarkable Day in a Memorable Month

In a month that is still the wettest in North Dakota recorded history, one day stands out – Thursday, July 15, 1993.

In mid-afternoon that day, from the south facing windows of the Game and Fish Department headquarters office building in Bismarck, you could see the low dark clouds approaching. At a time long before the internet provided real-time radar to allow people to assess the severity of approaching weather systems, it was obvious this one wasn't your run-of-the-mill thunderstorm.

It eventually dumped 2-3 inches of rain over Bismarck. This was on top of almost an inch from a storm that moved through after midnight that day. And then another round of storms moved in during the early evening and let loose another 2 inches or so.

By the time it was all over, Bismarck had a 24-hour rainfall record, and a record for rainfall in July with half the month still to go. Streets were flooded to the point that in places cars were half-submerged and teenagers rode air mattresses down streets turned into temporary river rapids.

And then it rained another inch the next day. By the time July 1993 was over, Bismarck had more than 13 inches of rain during a month when more than half the days produced measurable precipitation.

And it wasn't just Bismarck. Much of the state absorbed multiple inches of rain from that July 15 storm system in what was already a wet month.

Actually, pretty much the entire Missouri-Mississippi river drainages had epic summer floods that year.

By the end of the summer, a section of the state from Powers Lake to Ashley to Jamestown and points east were sitting at more than 10 inches above normal precipitation for that time of year.

By the time things started to dry out in September that year, much of prairie North Dakota was a different place. It still is, because of what got started on that one day.

Elsewhere in the world:

- Genetic link to homosexuality found (9A)
- Clinton to decide on gay ban (11A)
- Find out who calls radio talk shows (2A)
- Mighty rivers inch closer to converging (9A)
- Man sent to court in bedroom stabbing (1B)



'Fiddler on Roof' opens (1C)

Auto racing's new champ (1D)

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ALL WET!

- Images of the flooding disaster (3A)
- Mandan apartment building evacuated (1B)
- It really is 'crazy days' at the mall (5,14A)



Don Frohlich of Mandan carries a bucket filled with sand from his children's sandbox to help pack the window wells of his First Street Northeast home. It's too little too late.

Sandbags try to ease blow of downpour

Expect more rain today

By KRISTINE DONATIELLE
Tribune Staff Writer

There's a good chance rain-drenched Bismarck will receive more precipitation today – about a 50 percent chance, according to the National Weather Service.

Thunderstorms are likely today and Saturday, with the potential for a dry spell beginning Sunday, according to the Weather Service. Up to one-half and 1 inch of rain was expected to fall in southeastern North Dakota between Thursday evening and this morning.

The National Weather Service reported that rainfall amounts for the Bismarck-Mandan area Thursday helped break single-day and July precipitation records.

As of 7 p.m. Thursday, 3.61 inches of rain fell on the Bismarck-Mandan area during a 24-hour period that ended at 6 p.m., according to the Weather Service. That rainfall was on course to break a single-day record as of early Thursday night.

One batch of rain storms moved around Bismarck-Mandan at midnight and then just before noon Thursday the rain started again. A third storm pushed through at about 7-10 p.m.



These Mandan teens floated down the rapids of South Avenue N.W.

There were reports of 3.5 inches of rainfall on the north side of Bismarck and a lighter 2.15 inches at the southeast airport, according to the Weather Service. Thursday's rainfall helped smash a July precipitation record of 5.46 inches set in 1951.

A flash flood watch was issued for southeastern North Dakota, including Bismarck and Jamestown, through 7 this morning.

According to the Weather Service, Jamestown received 3.17 inches of rain during a 24-hour period ending at 7 p.m. Thursday.

No storm, wind or hail damage was reported as of early Thursday evening.

By FREDERICK SMITH, Tribune Staff Writer

"I was afraid of this," said City-County Planner Bill Wocken Thursday at 8:50 p.m., 50 minutes into Bismarck's second gully-washing thunderstorm downpour of the day.

Two inches of rain had fallen by 8:20 p.m. at the Bismarck airport, the National Weather Service reported. This was on top of 2.15 inches reported earlier in the day, mainly from a two-hour pounding the city received between about 2 p.m. and 4 p.m.

Up to 3.5 inches were reported in north Bismarck in the earlier thunderstorm. North Bismarck appeared to receive the brunt of the early flooding, which made ferds of such major intersections as Century Avenue and Washington Street.

However, when Wocken made his 8:30 p.m. report to a press briefing at the Combined Law Enforcement Center, runoff water had breached a sandbag wall by Zonta Park on Memorial Highway and was running into south Bismarck. Wocken urged residents below Memorial Highway to go to the Civic Center if they felt "uncomfortable."

The rains appeared to be lessening by 8:30 p.m., although the NWS said Bismarck should be alert until at least 10 p.m. from the current activity, with more rain possible in the night.

A big chunk of the state – Bismarck to Jamestown, Highway 281 to the South Dakota border – was under a flash flood warning until 7 a.m. today.

Wocken is communications director of the city-county emergency team assembled by Bismarck Mayor Bill Sorenson late Thursday afternoon. The team of city and county officers and department heads worked out of the Emergency Communications Center in the basement of the Law Enforcement Center.

Thursday seems to be Bismarck-Mandan's day for severe weather. It was two weeks ago to the day that Bismarck got pounded by hail to the tune of several million dollars in damages.

It has been raining almost daily ever since, and the Bismarck earth was saturated before the rain ever got busy on Thursday. In that condition, said Wocken, the rain was shed as quickly as it fell, filling the streets, storm sewers and culverts. He likened the problem to the "difference between pouring water on a carpet and pouring it on this table."

Storm sewer manhole covers popped, runoff water jetting 10 feet in the air in one place on the Bismarck Expressway. The 10th block of W. Ave. B was 2 feet deep in water spilling over from a culvert.

The city was urging none but emergency travel even before the second installment of rain began Thursday evening. There was plenty of travel anyway, necessary or not. Police blocked off Capital Avenue on the east side of town just to keep people from driving "to see how high Jay Creek is" and getting themselves in water trouble.

At 10 p.m., the emergency team said the gawkers would be cleared off the street. "It's an offense, and it will be cited," said Burlington County State's Attorney Patricia Burke.

Water overflowed many roads and streets in the Bay Creek watershed in east and north Bismarck, leading to a dozen street closings after 8 p.m.

A few streets were starting to show wear and tear. Broadway Avenue broke up at North Third Street, perhaps from a broken storm sewer underneath. Personnel from half a dozen city and county departments were keeping an eye on problem areas.

Someone also was sabotaging a stock dam just west of the junction of U.S. Highway 81 and state Highway 180. Saturated, it had begun to leak in the afternoon, but was still holding as the second storm hit. Residents in its runoff path were alerted.

A city call for volunteers to fill sandbags at the Public Works building on South Ninth Street drew a gratifying response, Wocken said. Among the volunteers: 23 minutes from the Missouri River Correctional Center, who went out at about 5:30 p.m. and were still working at 7 p.m., said Lt. Wendell Wetz, a supervisor at the center.

The sandbags were used at Zonta Park and at several smaller problem areas around the city. They also were available for the taking by residents, although Lana Olson, superintendent at the Combined Law Enforcement Center, also fielded phone queries. "Do you deliver?"

■ Mandan and Bismarck had plenty of notice the second storm was coming. It was pointed at them like a gun, dropping 1.3 inches of rain in Hebron in an hour, then getting Glen Ullin on its straight-east march.

The front page of the Bismarck Tribune on Friday, July 16, 1993 highlighted only a small portion of the stories generated from record rainfall the day before.

One of remarkable things about the current wet cycle is how high water levels have advanced in some locales. Some farmsteads and homes were flooded in places that had not experienced similar water levels in well over a century.



After the Rain: The First Cycle

By the end of summer 1993, Lake Sakakawea's water level rose 15 feet, immediately improving the access issues that were prevalent for 5 years.

Devils Lake came up 5 feet by September that year and kept rising, which eventually led to widespread flooding problems, but in that first year solved the winterkill threat and revitalized fish spawning grounds.

But one month, even one summer of record precipitation by itself wouldn't have been enough to make viable fishing waters out of dry alkali flats. The following winter of 1993-94 was cold and produced near-record amounts of snow in some places.

A few years later the winter of 1996-97 also brought record or near-record snow over much of the state, adding to the margins of wetland basins large and small.

Average annual precipitation for Bismarck is about 16.5 inches. Starting in 1993, that average was topped eight times

in 10 years. In addition to 1993, which was the third wettest year in North Dakota recorded history up until that time, 1998, 1999 and 2000 were also among the top 10 years of all time for precipitation measured at Bismarck.

Fast-forward to the end of that decade, and the Department's fisheries division was managing more than 300 lakes compared to around 180 10 years earlier. And those new lakes were incredibly productive fisheries for perch and northern pike. "Before the water came back, some of these perch lakes didn't exist," said Greg Power, now the Department's fisheries chief, back in 2003. "Dry Lake (McIntosh County) went from a deer meadow to a 30-foot-deep lake and, for a few years, was a world-class perch fishery."

That wasn't all. Power went on to say that during the winter of 1999-2000, four of the top five lakes hit by ice anglers pursuing perch were new waters that were mostly dry or shallow basins in spring 1993.

"We feel safe to say that, in geological time, we have never had so many pike and perch in the state," Power added. "There have never been so many fishing opportunities ..."

Not surprisingly, fishing license sales also perked up, peaking for that time at about 140,000 resident licenses in 2000, compared to about 100,000 in 1992, and Power said people who did fish were going out more, because the fishing was better.



Water gushing into Devils Lake via Channel A in September 1993 helped raise the lake level more than 5 feet at the time. In the 20 years after that, Devils Lake came up another 25 feet or so, flooding roads, home, cabins and farmland, but also establishing a world-class fishery.

Interestingly, Power also spoke of the progression of some of these new lakes to where they had reached a peak and were losing productivity.

On the other side of the water coin, biologists recorded the all-time peak in water areas during the spring breeding duck survey in 1999. Breeding duck numbers that year were about six times higher than in 1990. A lot of that was due to most wetland basins in the state having water again. But the CRP grassland in prairie pot-hole country was also a significant benefit. CRP provided hundreds of thousands of acres of large tracts of nesting cover, and the combination of water and grass jumpstarted North Dakota duck production potential.

"We had the recipe in place for ducks to be successful in North Dakota," now retired waterfowl biologist Mike Johnson said in 2003. "And since we get quite a bit of homing, the birds were surviving, and coming back year after year. We were able to build on that."

Resident Canada goose numbers also hit that new water running, so to speak. The new water provided habitat for muskrats, and muskrats built new houses, which provided countless nesting spots for resident geese. No longer did they mostly rely on nesting tubs and haybales placed near the few wetlands that held water.

The North Dakota breeding population has increased significantly since then.

Hard Times on Huns

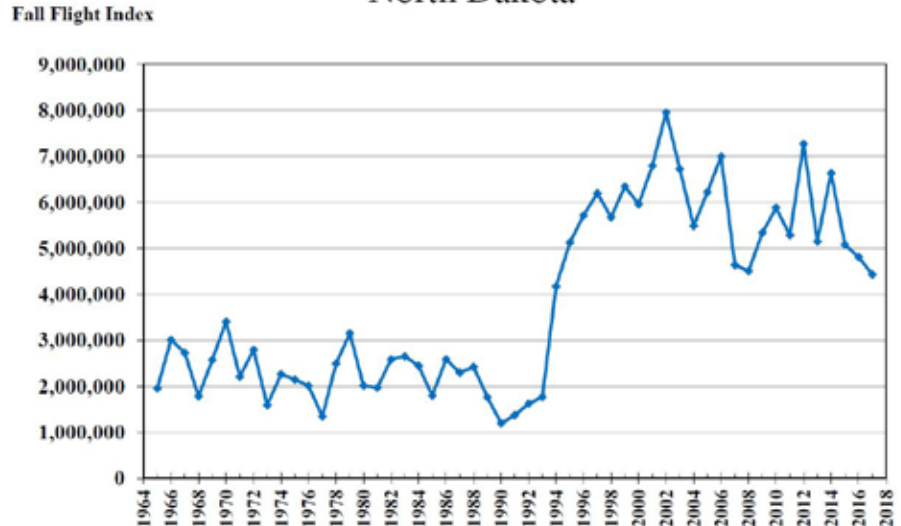
While a lot of good things happened with North Dakota wildlife and fisheries following July 1993, the state's Hungarian partridge population went the other direction, and it hasn't really recovered.

Like the pheasant, an introduced bird, partridge had reached somewhat of a peak population in the early 1990s as they took advantage of new CRP and the dry conditions. The fall harvest topped 200,000 in both 1991 and 1992, which were the highest statewide harvests since the early 1960s.

Along with the excessive rainfall that one month 25 years ago, it was also one of the coolest summers on record. In southwestern North Dakota night time temperatures dipped into the 40s on several occasions and even the 30s a few times. It was a disastrous scenario for newly hatched partridge chicks that need warmer temperatures during their first 10 days or so of life.

This outcome was reflected in brood observations later that summer that were down

Duck Fall Flight Forecast North Dakota



The difference in the fall duck flight forecast from North Dakota following the summer of 1993 is striking.



CRAIG BIRRE

It didn't take long for tremendous perch fishing to develop on revitalized or new fisheries. These nice fish from Dry Lake in McIntosh County were caught in winter 1997, just 4 years after the lake started refilling.



Duck production increased remarkably even in the first year that wetland basins started filling. From spring 1993 to spring 1994, the number of breeding ducks in North Dakota doubled, and then had doubled again by spring 1997.

CRAIG BIHRLE

70 percent from the previous year. Hunter harvest during the fall of 1993 fell more than 60 percent.

Partridge took another hit during the severe winter of 1996-97. By fall that year the harvest was just 27,000 birds, a decline of nearly 90 percent in just 5 years.

The Second Wave

Starting in 2001, things went the other direction for awhile. By 2003, many fishing waters around the state were starting to recede and winterkill became a concern again.

Eventually, some large “new” fisheries, like Horsehead Lake in Kidder County and West Lake near Napoleon in Logan County, did sustain heavy winter losses by about 2005 and 2006.

Lake Oahe pretty much dried up into the old Missouri River bed, and Sakakawea reached its lowest level since water filled up behind Garrison Dam in the early 1960s. Temporary low-water boat ramps were again the norm for several years.

In the second wave of the wet cycle, it wasn't so much record summer rains that got things going, but rather a long cold snowy winter. While the Missouri River System water levels had started to creep up earlier in 2008, winter 2008-09 started early and stayed late. Snowmelt produced formidable floods that spring all across

the state, but part of that runoff went into fishing lakes and wetlands.

Game and Fish Director Terry Steinwand wrote in his Matters of Opinion column in March 2009: “After we’ve fought floods and other fallout from winter, there is a bright side to the story. Low lakes will be replenished and those that were good fisheries in the past have the potential to regain that status.”

From a high point of about 325 managed lakes in 2003, that number had dipped to 285 by the spring of 2008 because of lowered water levels.

In spring of 2009, lake numbers started going the other direction, and then winter 2010-11 and the subsequent spring produced enough snow and rain to generate epic floods on many rivers and wetlands, overflowing roads in many places in the state.

It was more water than anyone would ever want to see at one time again, and by midsummer many fishing waters in the state reached historic high water levels.

In July 2013, 20 years following the first days of the wet cycle, fisheries chief Greg Power said, “Today, we have surpassed even where we were then ... Never in North Dakota has there been more water bodies, pike lakes, walleye lakes ... We might not be where we were in terms of perch, but that’s only because of predators like pike and walleye.”

Winter and spring 2013 were wet as well. Fisheries management section leader Scott Gangl added in that same article in 2013, “Through experience we have learned to take advantage of what Mother Nature provides. By the end of last summer as we lost 2 feet of water in some of our lakes, we thought, ‘Yep, it’s over ... it was good while it lasted.’ But this spring was terrifically wet and some of those lakes are higher than they’ve ever been.”

Those ups and downs are what makes a one-month phenomenon 25 years ago into a cycle.

In spring of 2018, the state now lists more than 425 managed fishing waters, an improvement of more than 100 in less than a decade and about 300 more viable fishing waters than in 1993. Water levels have come down from peak levels a few years ago, but that was the case 10 and 15 years ago, too.

The cycle, with its inherent peaks and valleys, is surpassing 25 years now. No one knows which direction we’ll go from here.

But we can look back and marvel at how much fishing and waterfowl hunting opportunities have improved since the skies first opened up in July 1993.

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

CANADA GOOSE



HUNTING ZONES REVISITED

By Ron Wilson

The North Dakota Game and Fish Department has restructured the state's Canada goose hunting zones.

According to Mike Szymanski, Department migratory game bird management supervisor, the move was made to further help address overabundant Canada geese and provide extra hunting opportunities in September, without taking away quality late-season hunting opportunities.

Under the new structure, there are now three zones

– Missouri River, western and eastern – instead of two. Early Canada goose hunting opportunities open August 15 in all zones, but close on different dates (see attached sidebar), the latest being September 21 in the eastern zone.

Also, the regular Canada goose season will close in the eastern zone earlier in December than the other two zones.

“Basically, our worst Canada goose-landowner conflicts are in the eastern half of the state and getting those extra days back in September gets some more harvest pressure on those birds,” Szymanski said. “At the same time, that part of the state doesn’t have reliable, consistent hunting opportunities late into December.”

Because the U.S. Fish and Wildlife Service allows North Dakota, which is located in the Central Flyway, a limited number (107) of days to hunt Canada geese starting September 1, waterfowl managers need to make adjustments on when to best

use those days on a goose population that is above management objectives, and provide good hunting opportunities.

“To get extra days of Canada goose hunting in September, you need to take them from December,” Szymanski said. “Plus, we know that folks in the northwestern part of the state want to hunt geese later toward Christmas, which is about the time Lake Sakakawea freezes over.

“That part of the state also has some pretty good hunting in September, so we needed to make sure we left ample

“So we lost a week and were cut back to September 15 because fewer little geese were shot before that date,” Szymanski said. “A little more than a decade later, there were more big geese, and the little geese were coming to the state later.

“We worked with USFWS to take another look at the harvest survey to see if we could move back to September 22,” he added. “Indeed we could, so in 2016, the Central Flyway passed a recommendation requesting for North Dakota to get that time period back.”

The Central Flyway later passed another recommendation to allow North Dakota to issue an additional goose zone to help administer harvest on problem geese without detriment to quality late-season hunting.

“And that’s where we are in 2018,” Szymanski said. “Our spring count on Canada geese in the state was 382,000, far above our objective, but lower than if we weren’t

administering additional, liberal harvest opportunities.”

Szymanski said that while Game and Fish tweaked the Missouri River zone last year in preparation to this year’s restructuring, changes such as these are not the norm.

“This is an uncommon occurrence,” he said. “We don’t plan to make changes to boundaries very often.”

RON WILSON is editor of *North Dakota OUTDOORS*.



A field hunt for Canada geese in early fall in North Dakota.

CRAIG BIRKLE

opportunities at that time of the year,” he added.

September Canada goose seasons started in the Central Flyway in 1999. There were concerns at the time that the seasons, which were intended for large geese, would hurt the migrant populations of small Canada geese.

Harvest surveys from 2000-02 did determine that more than 10 percent of the harvest during the September seasons in North Dakota did exceed 10 percent for small Canada geese.

CANADA GEESE 2018

EARLY SEASON

Zone 1 (Missouri River Zone)

- **Opens** – August 15
- **Closes** – September 7

Zone 2 (Western Zone)

- **Opens** – August 15
- **Closes** – September 15

Zone 3 (Eastern Zone)

- **Opens** – August 15
- **Closes** – September 21
- **Daily Limit:** 15
- **Possession Limit:** 45
- **Shooting Hours:** Half-hour before sunrise to sunset.

REGULAR SEASON

Zone 1 (Missouri River Zone)

- **Opens** – September 22 (residents), September 29 (nonresidents)
- **Closes** – December 28

Zone 2 (Western Zone)

- **Opens** – September 22 (residents), September 29 (nonresidents)
- **Closes** – December 21

Zone 3 (Eastern Zone)

- **Opens** – September 22 (residents), September 29 (nonresidents)
- **Closes** – December 16
- **Daily Limit:** 8 (Zones 2, 3); 5 (Zone 1)
- **Possession Limit:** 24 (Zones 2, 3); 15 (Zone 1)
- **Shooting Hours:** Half-hour before sunrise to: 1 p.m. CDT September 22 through November 3; 2 p.m. CST November 4 through end of season.

Extended shooting hours: Half-hour before sunrise to sunset on Saturdays and Wednesdays from September 22 through November 21; and on Saturdays, Sundays and Wednesdays from November 22 through end of season. Note: A hunter may take up to 8 Canada geese in a day, provided no more than 5 come from the Missouri River Zone.

Subsequently, a hunter may possess up to 24 Canada geese, provided not more than 15 come from the Missouri River Zone.

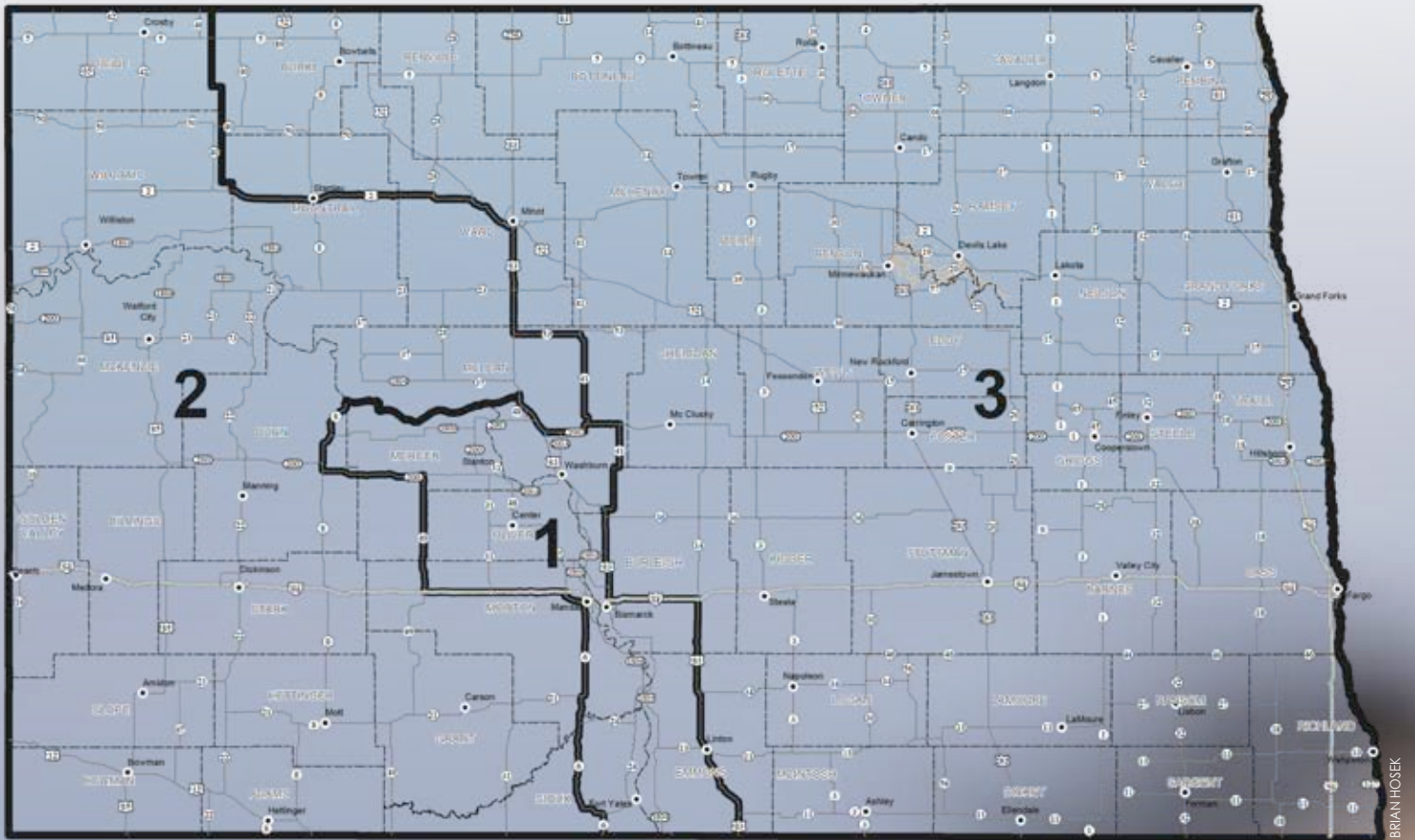
Zone 1 (Missouri River Canada Goose Zone)

– Starting where ND Highway 6 crosses the South Dakota border; then north on ND Highway 6 to Interstate 94; then west on Interstate 94 to ND Highway 49; then north on ND Highway 49 to ND Highway 200; then west on ND Highway 200; then north on ND Highway 8 to the Mercer/McLean county line; then east following the county line until it turns south toward Garrison Dam; then east along a line (including Mallard Island) along the south shore of Lake Sakakawea to U.S. Highway 83; then south on U.S. Highway 83 to ND Highway 200; then east on ND Highway 200 to ND Highway 41; then south on ND Highway 41 to U.S. Highway 83; then south on U.S. Highway 83 to Interstate 94; then east on Interstate 94 to U.S. Highway 83; then south on U.S. Highway 83 to the South Dakota border; then west on the South Dakota border to ND Highway 6.

Zone 2, (Western Zone) – Has the same boundaries as the High Plains Duck Unit, excluding the Missouri River Canada Goose Zone. Beginning at the South Dakota border, then north on U.S. Highway 83 and I-94 to ND Highway 41, then north on ND Highway 41 to ND Highway 53, then west on ND Highway 53 to U.S. Highway 83, then north on U.S. Highway 83 to U.S. Highway 2, then west on U.S. Highway 2 to the Williams County line, then north and west along the Williams and Divide county lines to the Canadian border.

Zone 3 (Eastern Zone) – Has the same boundaries as the Low Plains Duck Unit, excluding the Missouri River Canada Goose Zone. It is that portion of North Dakota east of Zone 2 (Western Zone.)

CANADA GOOSE HUNTING ZONES 2018



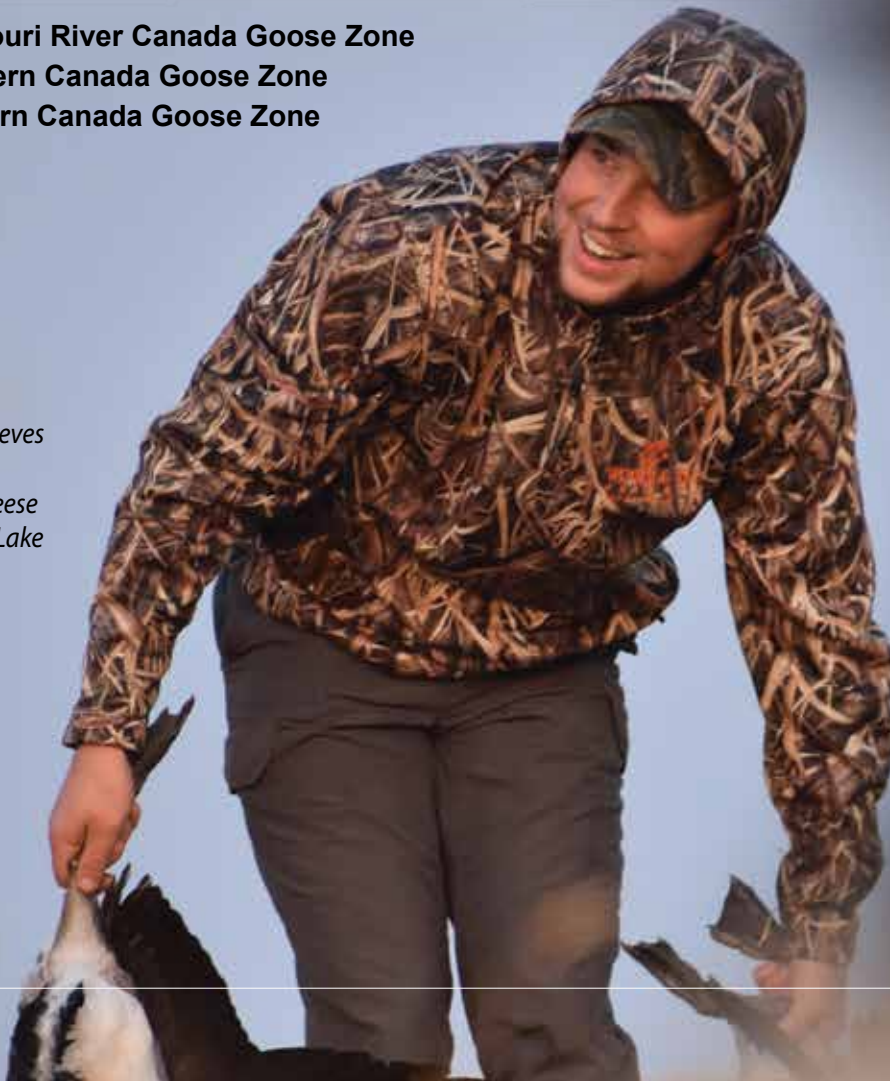
BRIAN HOSEK

ZONE 1: Missouri River Canada Goose Zone

ZONE 2: Western Canada Goose Zone

ZONE 3: Eastern Canada Goose Zone

John Palarski retrieves a couple of early season Canada geese shot in the Devils Lake area in 2017.



LAUREN WILSON



BUFFALOBERRY PATCH

By Greg Freeman, Department News Editor



LARA ANDERSON

Spring Mule Deer Survey

The North Dakota Game and Fish Department's annual spring mule deer survey indicated that western North Dakota's mule deer population is similar to last year, and 45 percent above the long-term average.

Biologists counted 2,540 mule deer in 245.8 square miles during this year's survey. Overall mule deer density in the badlands was 10.3 deer per square mile, compared to 10.9 in 2017.

Bruce Stillings, Department big game management supervisor, said mule deer in the badlands have recovered nicely

following the winters of 2009-11, which led to record low fawn production and a population index low of 4.6 mule deer per square mile in 2012.

"The population recovery is due to no antlerless harvest for four years, combined with milder winter conditions during 2012-16, which led to good fawn production since 2013," Stillings said. "However, the long-term health of the population will depend on maintaining high quality habitat."

The 2018 survey results show that hunting opportunities, according to

Stillings, can increase slightly in all badlands units except 4A, which has been slower to recover than the rest of the badlands units.

"There are localized areas that have very high mule deer densities and have exceeded landowner tolerance levels," Stillings said.

The spring mule deer survey is used to assess mule deer abundance in the badlands. Biologists have completed aerial surveys of the same 24 study areas since the 1950s.



NIDCF PHOTO

Two-Headed Whitetail

Earlier this spring, a female white-tailed deer was hit and killed by a vehicle in rural Morton County, which isn't uncommon.

What made the incident unusual was the two-headed male fetus that was expelled from the adult whitetail.

Bill Jensen, North Dakota Game and Fish Department

big game management biologist, said according to conversations with other big game biologists and Department staff, this is the first documented case of a two-headed deer in North Dakota, and is only the fourth conjoined white-tailed deer ever reported in the scientific literature that tracks such things.

Catchable Trout Stocked

More than 50 local fisheries throughout North Dakota received a fresh supply of catchable trout in spring, thanks to Game and Fish Department trout stocking efforts.

Jerry Weigel, Department fisheries production and development section leader, said while the number of fisheries statewide is at a historic high, many are not as easily accessible to youngsters, older adults and disabled anglers.

“The majority of these recently stocked waters are community fisheries that have fishing piers, and provide a great opportunity for first-time anglers to catch fish,” Weigel said. “These stockings put catchable fish in waters that are accessible.”

The trout were larger this year,

with many averaging more than one-half pound, Weigel said. More than 60,000 11-inch rainbow trout were stocked, along with 1,000 1- to 3-pound cutthroat and rainbow trout.

A complete stocking report is available on the Department's website, gf.nd.gov.

- Adams – North Lemmon
- Barnes – Blumers Pond, Hatchery Kids Pond
- Bottineau – Strawberry Lake
- Bowman – Lutz Dam
- Burleigh – McDowell Dam, OWLS Pond, Wilton City Pond
- Burke – Northgate Dam
- Cass – Brooks Harbor, Casselton Pond, North Woodhaven Pond
- Cavalier – Langdon City Pond
- Divide – Baukol-Noonan Dam, Baukol-Noonan East Mine
- Golden Valley – Beach City Pond, Camels Hump Lake
- Grand Forks – Ryan Park Pond, Turtle River
- Grant – Sheep Creek Dam
- Hettinger – Castle Rock Dam, Mott Watershed Dam

- McIntosh – Blumhardt Dam
- McKenzie – Watford City Park Pond
- McLean – Custer Mine, Lightning Lake, Riverdale City Pond
- Mercer – Harmony Lake, Hazen Creek
- Morton – Gaebe Pond, Harmon Lake, Krieg's Pond, Little Heart Pond, Nygren Dam, Porsborg Dam
- Mountrail – Stanley Pond
- Oliver – Oliver County Sportsmen's Pond
- Ransom – Mooringstone Pond
- Renville – Glenburn Pond
- Richland – Mooreton Pond
- Rolette – Hooker Lake
- Slope – Davis Dam
- Stark – Belfield Pond, Dickinson Dike
- Stutsman – Streeter Lake
- Ward – State Fair Pond, Velva Sportsmen's Pond
- Williams – Kettle Lake, Kota-Ray Dam, McGregor Dam, West Spring Lake Pond.

Spring Pheasant Count Down From 2017

North Dakota's spring pheasant population index is down 30 percent from the same time last year, according to the state Game and Fish Department's 2018 spring crowing count survey.

R.J. Gross, Department upland game management biologist, said the number of roosters heard crowing in spring was down statewide, with decreases ranging from 15 to 38 percent in the primary regions holding pheasants.

“We entered spring with a lower than average number of adult birds,” Gross said. “Last year's production was

far below average due to the statewide drought conditions.”

However, Gross said the past winter was good for bird survival, so hens should be in good physical shape for the nesting season. In addition, most of the state received much-needed precipitation in spring.

“If the trend continues, a good hatch should be expected, but it will take a few years of good reproduction to get the population back to where it was before the drought,” Gross said.

While the spring number is an indicator, Gross said it does not predict what the fall population will look like.

Brood surveys, which begin in late July and are completed by September, provide a much better estimate of summer pheasant production and what hunters might expect for a fall pheasant population.

Pheasant crowing counts are conducted each spring throughout North Dakota. Observers drive specified 20-mile routes, stop at predetermined intervals and count the number of roosters heard crowing over a two-minute period during the stop.

The number of pheasant crows heard is compared to previous years' data, providing a trend summary.



Spring Breeding Duck Numbers Tallied

The North Dakota Game and Fish Department's 71st annual spring breeding duck survey conducted in May showed an index of 2.8 million birds, down 5 percent from last year.

Mike Szymanski, Department migratory game bird supervisor, said even though the index is below 3 million for the second consecutive year, it still stands 16 percent above the long-term average (1948-2017) and is the 25th highest on record.

"Duck numbers are still hanging on, but are certainly better in some local areas," Szymanski said.

Survey results indicate only shovelers (up 10 percent) and wigeon (up 7 percent) increased from their 2017 estimates. Mallards were stable (down 1 percent), while green-winged teal showed the largest decrease (down 20 percent). All other ducks were 3-17 percent below last year's numbers. However, most species, with the exception of pintails, blue-winged teal and ruddy ducks, were well-above the 70-year average.

An interesting observation during the survey, Szymanski noted, was the lack of breeding effort for Canada geese. "We can attribute that to the late spring and overall dry conditions," he said.

The number of temporary and seasonal wetlands was down from last year, as figures show the spring water index was down 34 percent.

"That was mostly felt in the shallow waters," Szymanski said. "Similar to last year, there were a lot of wetlands that weren't in good shape and were close to drying up."

However, Szymanski said spring rains since the survey improved wetland conditions in some regions, making those waters conducive to raising broods.

Szymanski said concerns about habitat remain, as overall conditions weren't very good with expiring Conservation Reserve Program acres, and habitat conversion to other uses.

The water index is based on basins with water, and does not necessarily represent the amount of water contained in wetlands or the type of wetlands represented.

The July brood survey provides a better idea of duck production and insight into expectations for this fall, Szymanski said, though hunting success is also influenced by bird movements before and during hunting seasons, and weather patterns during the fall migration.

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.



Todd Caspers, Game and Fish Department fisheries biologist in Devils Lake, secured a Fish Responsibly sign at Devils Lake in June. This sign is one of dozens Game and Fish personnel have set in place at some of the state's higher-use boat ramps on the Missouri River System, Devils Lake and other waters. The message the signs impart is: "Fish Responsibly. Only Keep What You Will Use. Fish Are Too Valuable to Waste." Greg Power, Department fisheries chief, said the signs are a reminder to anglers to pause and think about the value of North Dakota's fisheries and natural resources that belong and are enjoyed by everyone."

CRP Enrollment Open

For the first time since last fall, the U.S. Department of Agriculture is accepting applications for the voluntary Conservation Reserve Program. Eligible farmers, ranchers, and private landowners can sign up at their local USDA Farm Service Agency office until August 17.

For this year's signup, limited priority practices are available for continuous enrollment. They include grassed waterways, filter strips, riparian buffers, wetland restoration and others.

Approximately 30,000 acres are available in these various practices in North Dakota.

In addition to the continuous CRP enrollment, producers in portions of Adams, Billings, Bowman, Burleigh, Dunn, Emmons, Grant, Golden Valley, Hettinger, McKenzie, Mercer, Morton, Oliver, Sioux, Slope and Stark counties have an opportunity to enroll eligible cropland along riparian areas into the Conservation Reserve Enhancement

Program. Producers enrolling land into CREP will receive annual rental payments with incentives and cost share from FSA. Game and Fish can work with producers on other lands not eligible for CREP.

Approximately 20,000 acres are allocated for CREP.

Kevin Kading, North Dakota Game and Fish Department private land section leader, said landowners interested in either of these programs could also qualify for additional financial incentives and cost-share from Game and Fish.

"These practices in the right spots can improve the bottom line for a landowner," Kading said. "Anyone who's interested in seeing how Game and Fish can help add to that, can contact a private land biologist in their area."

- Bismarck – Levi Jacobson – 527-3764 (Burleigh, Emmons, Kidder, Morton, Oliver)
- Devils Lake – Andrew Ahrens – 204-5227 (Bottineau, Cavalier, Grand

Forks, Nelson, Pembina, Ramsey, Rolette, Towner, Walsh)

- Dickinson – Jaden Honeyman – 260-3546 (Adams, Grant, Hettinger, Sioux)
- Dickinson – Curtis Francis – 227-7431 (Bowman, Golden Valley, Slope, Stark)
- Harvey – Terry Oswald, Jr., – 399-9958 (Benson, Eddy, Foster, Pierce, Sheridan, Wells)
- Jamestown – Renae Schultz, Jamestown – 320-4695 (Barnes, Cass, Dickey, Griggs, LaMoure, Logan, McIntosh, Ransom, Richland, Sargent, Steele, Stutsman, Traill)
- Riverdale – Ryan Huber – 527-8963 (McHenry, McLean, Mercer, Renville, Ward)
- Williston – Todd Buckley – 770-3815 (Burke, Divide, McKenzie, Mountrail, Williams)



CRAIG BIRKLE



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 gear.
- 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.



Walleye Fingerlings Stocked

North Dakota Game and Fish Department fisheries personnel stocked nearly 10 million walleye fingerlings earlier this summer in more than 140 waters across the state.

"Considering not many went into Lake Sakakawea, this was one of the largest stockings of more than 8 million fingerlings into the smaller fishing waters across the state," said Jerry Weigel, Department fisheries production and development supervisor.

With more than 50 new walleye lakes in North Dakota, Weigel said the demand to stock these waters, along with the larger, traditional fisheries, has greatly increased the demand from the hatcheries.

"Valley City and Garrison Dam national fish hatcheries contributed to make this happen," Weigel said. "Both hatcheries have been outstanding in helping address our demand for walleye fingerlings."

The unusual spring and progression into summer caused variable fish sizes.

"We had some of the largest and smallest fish ever shipped, even though all were about the same age," Weigel said.

Conditions at the lakes were very good with cool water temperatures and in some cases, Weigel said, newly flooded vegetation from rainfall.

"They should find lots of food and good survival conditions, which bodes well for future fishing opportunities," Weigel added.

Later this fall, fisheries personal will sample walleye lakes to assess success of this year's walleye stocking, as well as what Mother Nature provided.

"It's a great time to fish for walleye," he added. "Statewide, there are a lot of opportunities, and a good chance of success."

For a complete list of all fish stockings, visit the fishing link at the Game and Fish Department's website, gf.nd.gov/fishing.

HUNTING GUIDE AND OUTFITTER TEST SET

The next guide and outfitter written examination is August 18 at 1 p.m. at the North Dakota Game and Fish Department office in Bismarck. The test is given periodically to anyone interested in becoming a hunting guide or outfitter in the state.

In addition to passing a written exam, qualifications for becoming a guide include a background check for criminal and game and fish violations; certification in cardiopulmonary resuscitation and standard first aid; and employment by or contract with a licensed hunting outfitter.

Hunting outfitter eligibility requirements include the guide qualifications, as well as an individual must have held a hunting guide license for two years; and must have proof of liability insurance.

Interested individuals are required to preregister by calling the Game and Fish Department's enforcement office at 701-328-6604.

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 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 yet 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.

Drain Water from Boats

North Dakota anglers and water recreationists are reminded that all water must be drained from boats before leaving a water body.

This regulation, intended to help prevent the spread of aquatic nuisance species, includes all watercraft and associated bilges, livewells, baitwells and motors. However, anglers can transport fish on ice in a separate container.

In addition, all drain plugs that may hold back water must be removed, and water draining devices must be open on all watercraft and recreational, commercial and construction equipment bilges and confined spaces, during any out-of-water transport.

Other ANS regulations require:

- All aquatic vegetation must be removed from boats, personal watercraft, trailers and fishing equipment such as fishing rods, bait buckets, lures and waders before leaving a body of water. That means "vegetation free" when transporting watercraft and/or equipment away from a boat ramp, landing area or shoreline. Time out of the water

needed to remove aquatic vegetation at the immediate water access area is allowed.

- All legal live aquatic organisms used by anglers, including legal baitfish (fathead minnows), amphibians (salamanders and frogs), invertebrates (crayfish and leeches) and insects must be purchased and/or trapped in North Dakota. Anglers can transport live bait in water in containers of five gallons or less in volume. The only exception is that anglers may not transport live bait in water away from the Red River (Class I ANS infested waters). At Class I ANS infested waters, all water must be drained from bait buckets as anglers leave the shore, or remove their boat from the water. Anglers must properly dispose of unused bait away from the river, as dumping bait in the water or on shore is illegal.
- Transportation of live white suckers, other than within Richland, Cass, Traill, Grand Forks, Walsh and Pembina counties, is illegal.

New Combination Guide for 2018-19

The state's waterfowl, small game and furbearer regulations will have a new look this fall.

No longer printed as separate documents, North Dakota's 2018-19 Hunting and Trapping Guide includes three main sections – upland game, migratory game birds and furbearers/trapping.

The 52-page document offers much of the same information hunters and trappers rely on, but in a much more user-friendly format. In addition, the guide also features a four-page colored duck identification guide, aquatic nuisance species information, boating safety for hunters and Tom Roster's Nontoxic Shot Lethality Table.

Hunters and trappers can find the guide in mid-August by visiting the Department's website, gf.nd.gov, Game and Fish district offices and at the usual vendor locations.





Agency Pays \$621,000 in Property Taxes

The North Dakota Game and Fish Department recently paid more than \$621,000 in taxes to counties in which the Department owns or leases land. The 2017 in-lieu-of-tax payments are the same as property taxes paid by private landowners.

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

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

COUNTY	TAX DUE	COUNTY	TAX DUE	COUNTY	TAX DUE
Adams	\$ 182.33	Grand Forks	\$14,129.07	Pierce	\$ 2,815.44
Barnes	5,644.02	Grant	1,131.83	Ramsey	15,390.45
Benson	4,596.45	Griggs	82.08	Ransom	1,495.39
Billings	300.78	Hettinger	4,718.98	Richland	18,136.88
Bottineau	5,218.40	Kidder	10,315.27	Rolette	38,642.11
Bowman	2,097.65	LaMoure	9,812.72	Sargent	17,627.17
Burke	1,200.12	Logan	336.07	Sheridan	62,021.67
Burleigh	27,957.99	McHenry	1,609.79	Sioux	232.35
Cass	7,054.45	McIntosh	9,466.17	Slope	1,585.08
Cavalier	28,619.90	McKenzie	33,447.76	Stark	5,383.98
Dickey	12,964.84	McLean	94,341.96	Steele	8,245.29
Divide	1,873.65	Mercer	17,137.90	Stutsman	4,563.95
Dunn	5,892.05	Morton	19,720.35	Towner	2,267.82
Eddy	5,749.63	Mountrail	7,736.86	Walsh	10,871.86
Emmons	3,802.69	Nelson	5,560.39	Ward	115.79
Foster	978.75	Oliver	2,919.94	Wells	61,796.96
Golden Valley	146.55	Pembina	17,862.28	Williams	5,243.55



Watchable Wildlife Photo Contest

The North Dakota Game and Fish Department's annual Watchable Wildlife Photo Contest is open, and the deadline for submissions is October 1.

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.

Contest entries are limited to digital files submitted via email only. 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, gf.nd.gov.

Photographers can send emailed digital photos to photocontest@nd.gov, with individual photo file sizes limited to 5 MB or less. Game and Fish may contact photographers for original full resolution images if needed for publication.

All entries must be accompanied by the photographer's name, address, phone number and email address. Other information such as photo site location and month taken are also useful.

For more information contact contest coordinator Patrick Isaakson at 701-328-6300, or email Pat at ndgf@nd.gov.



Doug Howie, North Dakota Game and Fish Department assistant private land coordinator.

WAFWA Recognizes Howie

The Western Association of Fish and Wildlife Agencies recently honored conservation professionals from several western states with awards commending their work to conserve fish and wildlife resources, including Doug Howie, North Dakota Game and Fish Department assistant private land coordinator.

Howie was recognized with WAFWA's 2018 Professional of the Year Award for his consistent

professionalism and resourcefulness in administering North Dakota's Private Lands Open To Sportsmen program. PLOTS is one of the Department's highest profile programs, and Howie is a critical player in its success. PLOTS is widely recognized as one of the most successful access programs in the country, and Howie's dedication has impacted thousands of sportsmen and women.

back cast



By Ron Wilson

It's been said that bashing the weather is a waste of words, considering many of us couldn't start a conversation if it didn't change now and again.

True enough.

The weather, like it does in our lives here on the Northern Plains, plays a central role in this issue of *North Dakota OUTDOORS*, as Craig Bihrlé recounts the sudden, yet long-awaited end of a drought that gut-punched the state for five years in the late 1980s and early 1990s.

My wife and I moved to Garrison near the end of the drought in the early 1990s, and for a number of months lived in a rental on Garrison Bay.

Saying that we lived "on" Garrison Bay was mostly a stretch, but sounded cool to friends who lived elsewhere and didn't know any better.

To get to the water from the front door of our rental wasn't a long hike, but it wasn't something you did on a whim, either. It helped to have a reason, like a couple hours of shore-fishing, to muster the want to bushwhack through a tangle of chest-high vegetation left high and dry by drought that swallowed our young bird dog and tangled strung-up fishing rods.

Our neighbors, with far-off looks in their eyes, recalled when Sakakawea was flush with water and getting to the lake's edge wasn't such an adventure, and we believed them.

Meanwhile, we adapted. I hung a bell from my dog's collar to help me keep tabs and waited until our feet were wet at water's edge to run monofilament through the fishing rod's guides and tie on a lure.

The common chorus is that since 1993, when the drought

of the late 1980s and early 1990s was eagerly ushered out of the state, North Dakota has been more wet than dry.

There have been hiccups, of course, 2017 being one of them.

Last year at this time, upland game bird hunters were anxiously thumbing worry stones because of the fallout drought conditions would have on reproduction and the fall population was mostly unknown.

Turns out, fear of poor nesting and brood habitat, and an equally dismal insect hatch needed to fuel young birds, was realized. With fewer birds in the fall hunting population, and fewer hunters in the field (down 24 percent from 2016), hunters shot roughly 309,000 roosters in 2017, or nearly 192,000 fewer than in 2016.

Fast forward to spring and summer 2018, and the conditions, thanks to ample rains (sometimes more than ample, depending on where you live) are improved.

Given the prospect of good pheasant reproduction (knock on wood), the state's pheasant population isn't expected to magically rebound overnight, but will likely take a few years. The next big if, of course – and there is always an if on the Northern Plains – is

the course the coming winter will take.

Will North Dakota experience a mostly mild, open winter, or revisit, say, 2016-17 when our run of below average snowfall came to an end with record amounts of snow in December in parts of the state?

No matter how it plays out, everybody will continue to talk about the weather, as the old refrain goes, but nobody will be able to do anything about it.

RON WILSON is editor of *North Dakota OUTDOORS*.



CRAIG BIHRLE



NORTH DAKOTA GAME AND FISH DEPARTMENT PHOTO

Gerald Kobriger, retired upland game biologist, weighs a sage grouse harvested during the 1964 season. The hunters in the background were from the Regent area.

A LOOK BACK

By Ron Wilson

You've read in these pages before about the continued work to strengthen a sage grouse population in southwestern North Dakota that has experienced its share of struggles over time.

While concerns today center around making sure sage grouse don't disappear from the North Dakota landscape, what you won't read much about is hunting this large upland game bird.

North Dakota had its first sage grouse hunting season in 1964 and it was closed just once, in 1979, before being shut down indefinitely in 2008, following the die-off of a number of birds from West Nile virus.

"Hunters in North Dakota were privileged to participate in the first

regulated sage grouse season in the state in many years ... Hunting pressure was very light, in fact exceptionally so. Probably less than 200 birds were harvested from a population that numbers between four and five thousand," according to the November 1964 issue of *North Dakota OUTDOORS*.

To get a feel for how things used to be, according to Game and Fish Department records, nearly 300 male sage grouse were counted on leks in spring 1964. This year, by comparison, fewer than 10 strutting males were counted on leks in southwestern North Dakota.

"All in all, most hunters contacted in the field were greatly interested in the hunt and pleased with the privilege of

hunting sage grouse," according to the November 1964 issue of NDO. "Indeed, one party had traveled from Dumas, Texas to shoot sage hens, and to partake in the other fine hunting found in North Dakota."

Wildlife managers at the time called the 1964 sage grouse hunting season experimental, and guessed it would remain as such for the next few years.

"As more data is accumulated, and census techniques refined, we feel that the sage grouse will take its place alongside the sharptail, Hun and pheasant as a popular game bird," from the November 1964 issue of NDO.

RON WILSON is editor of *North Dakota OUTDOORS*.