2025 HOUSE ENERGY AND NATURAL RESOURCES

HB 1236

2025 HOUSE STANDING COMMITTEE MINUTES

Energy and Natural Resources Committee
Coteau AB Room, State Capitol

HB 1236
1/24/2025

Relating to use of hunting license and permit application fees.

9:00 a.m. Chairman Porter called the meeting to order.

Members Present: Chairman Porter, Vice Chairman Anderson, Vice Chair Novak, Representatives: Dockter, Hagert, Headland, Heinert, Johnson, Marschall, Olson, Conmy, Foss

Members Absent: Representative Ruby

Discussion Topics:

- Chronic Wasting Disease (CWD)
- Federal grants for game and fish
- Infection rates of North Dakota deer
- Disposal of animal carcasses

9:01 a.m. Representative Bill Tveit, North Dakota Representative for District 33, introduced the bill and provided testimony #31215.

9:06 a.m. Dwight Grosz, Independent, testified in favor and provided testimony #31338.

9:23 a.m. Dusty Backer, Center, North Dakota, testified in favor and provided testimony #30823.

9:24 a.m. Andy Buntrock, North Dakota Resident, testified in favor.

9:31 a.m. Jermey Dinius, Bismarck, North Dakota, testified in favor and provided testimony #30954.

9:40 a.m. Casey Anderson, Wildlife Division Chief at North Dakota Game and Fish Department, testified in opposition and provided testimony #31129.

9:55 a.m. Dr. Charlie Bahnson, Wildlife Veterinarian for North Dakota Game and Fish Department, testified in opposition.

10:06 a.m. Brock Wahl, Chairman of North Dakota Backcountry Hunters and Anglers, testified in opposition and provided testimony #31343 and #31228.

10:16 a.m. John Bradley, Executive Director of the North Dakota Wildlife Federation, testified in opposition and provided testimony #31249.

10:17 a.m. Phil Mastrangelo, Lobbyist for North Dakota Chapter of The Wildlife Society, testified in opposition and provided testimony #31222.

Additional written testimony:
In favor:
#30125, #30542, #30548, #30555, #30657, #30663, #30669, #30725, #30818, #30864, #30958, #31047, #31049, #31053, #31069, #31084, #31126, #31136, #31138, #31140, #31148, #31179, #31184, #31185, #31198, #31206, #31212, #31217, #31237. #31132
In opposition:
#30633, #30733, #30810, #30879, #31008, #31011, #31073, #31120, #31177, #31196, #31210, #31221, #31269

10:20 a.m. Chairman Porter closed the hearing.

Wyatt Armstrong for Leah Kuball, Committee Clerk

My name is Travis Martinson and i support HB1236. I would like to see the money that has been used for CWD spent elsewhere. Habitat and EHD is where our focus should be.
Thank you

I am in favor of HB 1236. License and application fees should ONLY be used for department programs and administration, NOT to push the CWD narrative.

I am in favor of HB 1236. License and application fees should ONLY be used for department programs and administration, NOT to push the CWD narrative.

I support HB 1236 the game and fish receives plenty of federal money to push CWD. I do not approve of them using over $900k in hunting and fishing license fees to further push the CWD hypothesis and propaganda.

Thanks
Trent Schatz

HB 1236

This bill is a way to bypass CWD in the state of North Dakota. Your job as legislator is to be responsible for our state's trusts. Wildlife belongs to the state and it is your job to protect them and do what is best for them. Passing this bill would be undermining the North Dakota Game and Fish and deer, moose and elk in the North Dakota. Trusting the North Dakota Game and Fish to do their job might upset some hunters in our state but passing this bill could devastate wildlife in the state of North Dakota for decades.

The North Dakota Game and Fish has nothing to gain by creating laws to protect wildlife, the hunters who propose this bill are trying to sidestep these laws so they can hunt over bait. I ask you to put the wildlife in the state of North Dakota first and oppose HB 1236

Please Oppose HB 1236

Dear Committee members,

I ask for a do pass on HB1236

As a lifelong sportsman and conservationist I am asking for your support on this bill. Our family has committed 10s of thousands of dollars into habitat and feed for wildlife and we are seeing the benefits. I would be interested to see the changes that the department could have made if they invested these dollars into habitat rather than pushing their CWD narrative.

With the federal dollars that the department is received for this “narrative”, I would much rather see my license and permit dollars go to something that’s going to protect deer in the here and now rather than hypothetically down the road in 20 years. If we don’t have a deer herd to protect then, what good would the money spent now do.

Our department in the last 20 years has saw a decrease of roughly 200% of herd numbers in North Dakota. That fact is backed by license numbers that have decreased. Sportsmen are losing opportunity all while the department is asking you, the legislature, to increase license fees for North Dakotans. Fewer opportunities at a higher cost. Save the sportsmen’s dollars to “protect the herd” now, by having the department invest this money into something like habitat, or supplemental feed to help the deer survive the winter.

Thank you, and I ask for a due pass

Wyatt Thompson

Committee members

My name is Gabe Thompson I farm and ranch by Antler ND

Today I am asking you to support HB 1236 blocking the use of license fees for the NDGF CWD agenda

ND sportsmen are facing a possible increase to license fees as opportunities to hunt deer have decreased by roughly 200% as tag numbers declined from 149,000 to 55,000 NOT due to the CWD narrative the NDGF is pushing, but their mismanagement through clear disregard of what those farmers and ranchers actually living on the lands seeing what is happening have been telling these " experts"

What job would allow you to keep your position if you oversaw a 200% decline in what you were suppose to be protecting????

CWD…..1 dead deer in the wild in 25 years of monitoring

Starvation….. 40-50,000 dead deer (NDGF admission) in ONE year

And the NDGF spends sportsmen dollars on CWD instead of partnering with sportsmen orgs to provide supplemental feed in hard winters …..

Hold the NDGF accountable as we sportsmen can not when no one is elected in the agency

Please vote yes on HB 1236

01/22/2025

Dear Energy and Natural Resources Committee members

I am writing my testimony to support HB1236

I prefer my license dollars be spent on improving habitat and food plots, acquiring PLOTS land for public hunting opportunities and improving outdoor programs such as boat ramps, cleaning stations, installation of vault toilets, etc, rather than to be used on testing kits, Bill Boards and TV commercials all for a disease that has almost no prevalence here in North Dakota and has not been proven to be the epidemic they are claiming it to be in any state.

If dollars are needed for CWD promotions, there are plenty of funds available through grants at the federal level, with up to $240,000,000 up for grabs and allocated over a six year period for CWD surveillance and monitoring. We don’t need to use our states sportsmen's dollars to fund this, there are far more important issues within our states borders to allocate our tax dollars to.

Please vote yes on HB1236

Respectfully submitted,

Matt Williamson
Minot, ND

I support this bill and ask that you reccomend a Do Pass.

I am in strong opposition of HB 1236 and encourage a Nay vote on this bill. As legislature representatives, this bill brings no value to the North Dakota Department of Game and Fish (NDGF).

Chronic Wasting Disease (CWD) oversight, management and mitigation are critical for healthy ecosystems and wildlife in North Dakota. HB 1236 would essentially remove important funding from NDGF for mitigation efforts of CWD.

As an avid hunter and outdoorsman, CWD mitigation is very important to me, helping to ensure healthy wildlife herds for future generations.

I encourage you to reject HB 1236 for further consideration.

Josh G.

Grand Forks, ND

HB 1236

I am writing in opposition to HB 1236. Politics have no place in wildlife science and should not dictate how the North Dakota Game and Fish manages wildlife in North Dakota. If passed, HB 1236 would deliver a huge blow to the North Dakota Game and Fish being able to manage CWD, if they would have any money and resources at all to manage it. We need to let wildlife scientists and managers make the decisions that are best for our wildlife, not let politics and feelings decide wildlife management.

For the future of wildlife and hunting in North Dakota, please oppose HB 1236.

Thank you.

Andy L.

1/22/25

House Energy and Natural Resource Committee
RE: HB 1236

IN SUPPORT

The federal government to the tune of over $1billion seems to be in control of the financing and narrative for CWD, therefore, I feel it completely unnecessary for the people of North Dakota to continue to finance a hypothesis that the North Dakota Game and Fish has chosen to follow.

October 2022 Federal Grant

"*Shifting Behaviors to Lower the Risk of CWD; a multi-media approach"*= $96,300

A campaign of HUMAN DIMENSIONS that were focused on the people of North Dakota to believe what the Agency is reporting them to believe.

October 2024 Federal Grant

"Cultivating Long Term Engagement with a Long Term Issue" = $168,723

Social media, email marketing, display ads, search engine marketing, content marketing, video webcast, podcast, print advertising, magazines, billboards, television, radio, direct mail, public meetings, vendor events, NDSU bison game in game feature.

Another campaign of HUMAN DIMENSIONS focusing on the people of North Dakota instead of the deer. North Dakota was one of 16 states that was approved from this pocket of funds.

Imagine what all this money ($265,023) could have been invested in FOR the deer of North Dakota to provide habitat, flourish food sources, and promote well being.

North Dakota hunting and fishing license and application fees totally $919,612 since 2007 has been used towards CWD.

It is apparent that the NDGF has abundant grant writing abilities therefore, are capable to acquire funds that they feel need be used for the CWD narrative. It is quite concerning the amount of money that is being expended on HUMAN DIMENSIONs to convince the people of North Dakota to think a certain way about CWD.

That is an average of $54,094 a year of NORTH DAKOTA sportsmen money spent on CWD. What is this being used for? Testing? Wages? More human dimensions?

This spending seems to convey undermining and leads to distrust.

HB 1236 should be an easy **IN SUPPORT** as you support the wishes of the people of North Dakota.

Respectfully,

Pat Backer

House Energy and Natural Resource Committee
RE: 1236

IN SUPPORT

25 years of testing for CWD
50,000 deer tested.
ONE confirmation

It is time for the hunting and fishing license and fees to be used on projects that benefit the wildlife of North Dakota.

- Dusty Backer

Support In Favor of HB 1236

Chairman Porter and members of House Energy and Natural Resouces Committee

My name is Christopher Jorde and I am a lifelong resident and sportsman of North Dakota. I am asking you to please support that hunting and fishing license fees and application fees may be used only for department programs and administration unrelated to CWD. I do believe CWD is a real disease but due to its very low positives found in North Dakota that our sportsman dollars would be better invested in EHD research or habitat development for the sportsman and the wildlife of North Dakota. Thank You for your consideration.

I am asking for a DO PASS vote on HB 1236

Christopher Jorde

Towner, ND

701-240-8696

A cold day in hell when politicians and arm-chair biologists seek to micro-manage our deer herd. I want my legislator managing my deer herd about as much as I want my priest giving me sex advice. End this nonsense and let Game and Fish do their job. Theodore Roosevelt would be ashamed of what has befallen North Dakota. Oppose HB 1236.

I fully support passing HB-1236. The amount of time money and energy wasted on CWD is becoming an insult to all taxpayers and citizens of ND. Considering only 1 deer has died from CWD in the last 50 years and there is little to no evidence of bait spreading cwd, banning it for hunting purposes only is nothing more than a government control attempt in the private property of the citizens of ND. We watch as thousands of deer perish every year in ND due to harsh winters and EHD yet nothing is done about either by our wildlife officials. The amount.m of money wasted that could be used to help with access and habitat should alarm anyone. Please recommend a do-pass for HB-1236 Thank you

Jeremy Dinius.

Members of the ENR committee.

I am in support of HB 1236. Its time for our license fees and application fees to be put towards projects in this state that make a difference. With the game and fish using 919,612$ on testing, restrictions, and human dimensions. This funding can be used in countless other areas. I ask for a DO PASS on HB1236

To:	Honorable Members of the House Energy and Natural Resources Committee
Re:	House Bill 1236 – Use of Huning Licenses and Permit Application Fees
Position:	Oppose
Date:	January 24, 2025

Honorable Members of the House Energy and Natural Resources Committee,

On behalf of the Congressional Sportsmen's Foundation (CSF), I respectfully ask that you oppose House Bill 1236 (HB 1236), a bill that would strip the North Dakota Game and Fish Department (GFD) of their ability to use funds from the sale of hunting and fishing licenses to create management plans for chronic wasting disease (CWD). In North Dakota, the GFD is the entity best suited to make science-based wildlife management decisions and should accordingly retain the ability to use funds from hunting and fishing licenses to create management plans for wildlife.

Founded in 1989, CSF is the informed authority across outdoor issues and serves as the primary conduit for influencing public policy. Working with the Congressional Sportsmen's Caucus (CSC), the Governors Sportsmen's Caucus (GSC), and the National Assembly of Sportsmen's Caucuses (NASC), CSF gives a voice to hunters, anglers, recreational shooters, and trappers on Capitol Hill and throughout state capitals advocating on vital outdoor issues that are the backbone of our nation's conservation legacy.

CWD is a progressive, fatal, degenerative neurological disease that occurs in farmed and free-range deer, elk, caribou, and moose. CDW is a slow and progressive disease that has a long incubation period. Cervids infected with CWD may not present any visible signs of the disease for up to two years after they become infected and for state fish and wildlife agencies, like GFD, the primary objective is to prevent its spread into new areas. Retaining the ability of our fish and wildlife management experts to develop and execute wildlife management plans to stem the spread of CWD is therefore essential to preventing its introduction into new areas.

Additionally, the North Dakota Game and Fish Department is funded by the sale of hunting and fishing licenses, along with revenue generated from self-imposed excise taxes through the Pittman-Robertson Act and Dingell-Johnson Act with Wallop-Breaux Amendments. The American System of Conservation Funding (ASCF) serves as one of the primary sources of revenue for GFD's fish and wildlife conservation efforts, including CWD management. Deer hunting makes up approximately 80% of our nation's hunting economy, providing a significant economic impact. If CWD were to significantly spread to a point

110 North Carolina Ave. SE • Washington, DC 20003 • 202-543-6850 • 202-543-6853 Fax • congressionalsportsmen.org
Federal Tax ID • 52-1686163

where hunters no longer pursue deer, it would have a devastating impact on conservation funding, and the economy.

CSF respectfully asks the honorable members of the House Energy and Natural Resources Committee to oppose the passage of House Bill 1236, thereby retaining the Game and Fish Department's authority to use the funds from hunting and fishing licenses to practice sound science-based wildlife management. Thank you for the opportunity to provide comments on this issue. Should you require additional information on this, or other sportsmen's-related topics, please feel free to contact me at any time.

Sincerely,

Jake Gould
Coordinator, Great Plains States
Congressional Sportsmen's Foundation
jgould@congressionalsportsmen.org | 202-594-7973

I am writing you in regards to HB 1236. I am opposed to this bill and offer the following reasons for this opposition. First as a long time hunter in North Dakota in excess of 55 years, I have always respected and relied on the North Dakota Game and Fish (G&F) to manage and protect our fish and wildlife resource.

It is so wrong and misguided for the legislature to tell the Game and Fish that they cannot use license sales to manage a scientifically proven wildlife disease. It would be equivalent to telling the North Dakota Health Department that they cannot exercise their authority and expertise to protect public health. This is an egregious legislative overreach and speaks volumes of a legislature trying its best to disable a state agency which is constitutionally required to protect our game and fish resources.

I am asking you to please consider opposing HB 1236 and allow the Game and Fish Department to do is statutory duty of wildlife management. Thank you for the opportunity to comment on this proposed legislation.

Dear committee members I am asking that you recommend a DO PASS.

Thank you

I am writing this to ask that you please pass this bill.

Dear committee members I urge you to pass this bill.
Thank you

Testimony for HB 2137 authored by House Representative Bill Tveit 1/23/2025

The hearing is scheduled for 9 AM Friday 24 January in the House Energy and Natural Resources Committee

To: Members in the House Energy and Natural Resources committee

I would like to request a yes vote for HB 2137. It doesn't make sense for us to purchase the same license multiple times to hunt our own land. It's fundamentally unfair. The current law is excessive. Perhaps there needs to be a definition of the difference between nonresident who "**does not** "pays taxes and the nonresident land owner "**who pays state income tax and property taxes**".

In regard to our families there are 5 siblings that own approximately 4,000 acres plus of farmland in the medina area. 3 of the siblings are non-resident. All of us own more than a section of land. All the siblings were born in North Dakota and raised in Medina. We contribute the same state and property taxes as everyone else.

I attended the Dec. 17th meeting "Habitat Hunting Access Summit" some of you were present. Gov. Armstrong spoke to the value of family hunting together and further the bonds that develop in the traditions of family hunting.

By voting yes for HB 2137 helps to achieve that goal.

Thank you for addressing this matter. If I can be of any assistance, please let me know?

Peter Bingham

21564 100th Ave

Randall, MN. 56475

Email: kp.bingham@gmail.com

320-493-9437

I am strongly opposed to HB 1236. Wildlife disease management is a complicated enough topic that how its funded should be best left to professionals, not activists. I understand the controversy surrounding CWD at the moment, but restricting funding for even simple things like monitoring disease prevalence isn't solving any issues, merely restricting information. Thank you for your time.

Mike Bush

Fargo, ND

I am asking the committee members to recommend a Do Pass on this bill as it has my full support

Thanks
Grant Meyer

Energy and Natural Resource Committee,

Please DO NOT PASS HB 1236.

I am a lifelong hunter, angler and outdoorsman. Hunting, Fishing and outdoor pursuits are my extracurricular activity of choice. Honestly, it's all that keeps me in North Dakota. We have something truly special in this state and I do not want to see it disappear. It's unfortunate that there is a coalition of individuals that are deliberating looking to strip the North Dakota Game and Fish Department of their ability to apply sound science to the management of our deer populations. State Agencies all over the country have established that CWD is a real threat to the future of our deer and elk populations. North Dakota has been fortunate that this disease, which is 100% lethal, has not yet had a significant impact on our deer or elk populations. There is no mistake that the disease is here in North Dakota, but either the disease has not had time to fully manifest, or the prevalence and exposure has not yet reached a level that has had a direct impact on populations. It brings me peace of mind knowing that the professionals at the North Dakota Game and Fish Department have the expertise and resources to monitor this disease.

The North Dakota Game and Fish Department is 100% funded by license fees. Those fees not only allow the ND Game and Fish to monitor the disease, but also provide this service for no additional charge to all resident deer hunters. All hunters are encouraged to submit the head of their harvested deer, or use the free kit (the Department will even mail it out upon request) to provide lymph node samples. The results of this test are usually available within a few weeks, which then provides the hunter with important information to make the determination if they can safely consume the meat of the deer they harvested. Although there is no current evidence that CWD is contagious to humans, there is always the chance that it could eventually make a species leap. Taking away the ability of the ND Game and Fish to provide this free monitoring service makes it impossible for residents of this state to make informed decisions that could have a direct impact on their health, the health of their families, or anyone else that could potentially consume CWD infected meat.

I implore you to please DO NOT PASS HB 1236.

Thank you,
Kerry Whipp

I support HB 1236 and would ask you to recommend a do pass

More than enough money has been spent on cwd and the funds from ND Hunting and fishing licenses would be better spent on wildlife habitat and managing the other wildlife resources other than cwd.

Thank You, Emery Duben

NORTH Dakota | Game and Fish
Be Legendary.™

House Energy and Natural Resources Committee
Testimony on HB 1236

North Dakota Game and Fish Department
Casey Anderson, Chief Wildlife Division
January 24, 2025

Chairman Porter and members of the House Energy and Natural Resources Committee, my name is Casey Anderson, and I serve as the Wildlife Division Chief for the North Dakota Game and Fish Department (Department). I am here today to testify in opposition to HB 1236.

The mission of the Department is to protect, conserve, and enhance fish and wildlife populations and their habitats for sustained consumptive and nonconsumptive use. This bill seeks to limit our ability to do that by essentially forcing the Department to ignore a wildlife disease that, when present, does negatively affect deer, elk, and moose in the state. Understanding and managing wildlife diseases is just as important as population counts in understanding a populations health and sustainability for public use. There are a couple facts about Chronic Wasting Disease (CWD) that I want us all to realize when considering this bill. CWD is a fatal disease within the deer family. CWD is a relatively new disease to wildlife management. This bill would eliminate the Department's ability to manage this disease in any way or even to have conversations about the disease. Putting these kinds of restrictions on the Department's ability to understand population health of any species only reduces our ability to manage North Dakota's wildlife for the benefit of its citizens. For these reasons the Department asks the committee for a do not pass recommendation on HB 1236.

Thank you for the opportunity to testify, and I am happy to answer any questions you may have.

Please support this bill and reccomend a Do Pass.

Please support this bill and reccomend a Do Pass.

Please support this bill and reccomend a Do Pass.

Please support this bill and reccomend a Do Pass.

I fully support this bill I ask that the committee members reccomend a Do Pass.
Thanks

Dear House Committee,

I am writing in opposition to HB 1236. License fees are paid by sportsman for to manage North Dakota's wildlife populations and health. The expectation from the sportsman is that game and fish will manage utilizing the best available science and management techniques. This bill seeks to remove funding for a fundamental component of wildlife management. Disease outbreak and increased infections can be catastrophic to wildlife populations and managing the spread following the best science is paramount. Taking funding away from the Department is short sighted and will only lead to declines in the health of our State's wildlife.

Please vote DO NOT PASS on HB 1236

Sincerely,

Curt Francis

Dear committee members I ask you to reccomend a Do Pass on HB 1236 as i would like to see my money be put to use in other ways since the game and fish gets plenty of federal funding for cwd.

1/23/24

House Energy and Natural Resource Committee,

I am Marty Beard from rural Burleigh County and I am in support of HB 1236. This bill is long over due and needs a DO PASS.

First off thank you for your consideration of this bill and your service to the people of ND in your respective districts. I am a lifelong resident of ND, I am also a landowner and outdoorsman. I understand ND Game and Fish is asking for an increase in license fees this session. While I understand the cost of almost everything has risen over the last few years I feel ND residents are not getting the best bang for our buck so say. Talk to hunters and you will hear many are disappointed with deer numbers which is directly related to opportunity. We have heard numerous times this session that we must trust the experts and legislative action would handicap ND Game and Fish. I ask you to consider what other avenues the people of ND have in this matter since the ND Game and Fish director is not an elected position so the people have no recourse for accountability except to reach out to our legislature. Contrary to what these same groups would like you to think you are our voice and I feel have a duty through legislation to create direction for the department. As an outdoorsman and landowner I feel we are not being heard unless we are part of a larger group, many who oppose any action from the legislature to create some control in regards to ND game and fish. I am passionate about the outdoors and the success of our wildlife populations, over the years my reason for that passion has changed . As a father of 2 I want the ability to pass the outdoor traditions most of us value down to my kids which currently drive my passion for the outdoors and opportunities we have. We have spent an enormous amount of money on CWD and as we have heard during testimony on other bills we have little to no research data of value in ND, much that has been presented has been from other states. I feel this money should be spent on other things besides CWD such as habit or more private partnerships like PLOTS that have been proven to have value. These things help our wildlife population and also create opportunity for people. I ask you to support this bill because at the end of the day we must trust money being allocated to ND game and fish is being spent with some responsibility to the people. Furthermore I ask you not be fooled into thinking your involvement is not needed or will create a hinderance. Current leadership with ND game and fish has shown they are unwilling to listen to the people so I ask you be our voice and ensure fiscal responsibility. Again thank you for your dedication and service to the people of ND. Sincerely, Travis Jensen

My name is Dirk McWhorter and I am asking you to vote no on HB 1236. I read many comments that call CWD a narrative, it is not a narrative but a reality. We as sportsman can't just ask what can be done for me now, but need to look to the future. If we don't spend money now for prevention, there may not be a deer herd for future generations.

Again, I urge you to vote no on HB1236

Thank you

Dirk McWhorter

HB 2137- In Support

Andrew Mittleider

I am in favor of this bill and how it limits what funds are allowed on this CWD hoax. Please considering supporting this bill.

HB 1236- In Support

Reggie Luhmann

I am in favor of HB1236. The wasteful spending by this department is sad. There are too many funds thrown at the elusive CWD for the actual number of CWD that our state has confirmed. Please consider supporting HB1236.

I am in opposition of HB 1236 and urge a no pass vote on this bill. This bill falls in line with ballot box biology. I strongly oppose legislators determining what is best for the wildlife of this state. Let the game and fish do their job and not take control from them on what they can and can't spend money on if they determine it is best for the wildlife. Please oppose HB 1236

Cody Hilliard
280 102nd St NW
Souris, ND 58783
(701) 460-7295

Chairman and members of the committee, thank you for the opportunity to submit testimony in support of HB 1236. My name is Cody Hilliard, and I am a lifelong North Dakotan and dedicated outdoorsman. I urge you to give this bill a "Do Pass" recommendation as it strengthens the integrity of our state's wildlife management efforts while aligning with federal guidelines.

HB 1236 ensures that hunting and fishing license fees remain exclusively dedicated to supporting wildlife restoration and departmental programs, unrelated to chronic wasting disease. This measure helps maintain a transparent and focused use of funds, promoting North Dakota's long-standing commitment to responsible conservation practices.

I respectfully ask for your support of HB 1236 to uphold our state's conservation priorities and ensure the sustainable use of our natural resources for future generations. Thank you for your time and consideration.

Representative Bill Tveit
House District Intro to HB 1236 House Energy and Natural Resources Committee 24 January 2025

Chairman Porter, committee members,
For the record, I am Representative Bill Tveit from Hazen, representing District 33, which consists of all of Mercer County, all of Oliver County and the best parts of McLean and Morton Counties.
HB 1236 is straightforward, short and simple. North Dakota Sportsmen and Women are tired of the narrative surrounding the subject of Chronic Wasting Disease. More over, the ND Sportsmen are convinced that the CWD narrative has little or no credible basis, nor is CWD a significant threat to the ND deer population.
These men and women are no longer interest in helping pay for further studies concerning CWD with their user/license fees.
While Section 1 of the bill acknowledges the involvement, partnership, and direction of the federal government in certain wildlife restoration projects, etc, the entirety of HB 1236 is in Section 2 of this bill:
2. Hunting and fishing license fees and application fees assessed under section 20.1-03-12.2 may only be used only for departmental programs and administration unrelated to chronic wasting disease.

If ND Game & Fish are required to and/or intent on future Cronic Wasting Disease research, with the passage of HB 1236, the Department will have to source research money from somewhere other than user fees.

Mr Chairman, Committee members, others will follow me to answer your questions and share statistics on the past research of CWD projects.

I urge a Do Pass on HB 1236.

Testimony for HB 1236

HB 1236- In Support

KariAnn Buntrock

I stand in support of HB1236 and hope that you consider supporting it as well. Here are my points in a concise manner as I know you are very busy:

- Our licensing and permit dollars should not be spent to help "convince" sportsmen and woman that CWD is a major issue. The reason that people are questioning this tells you that something doesn't add up here.
- Barely any money was or is spent on EHD which is the killer of our whitetail herd, but the NDG&F doesn't seem to worry about that. There are federally dollars associated with CWD and hence the main reason they are so infatuated with it.
- If we are having to spend massive amounts of money to convince people of an epidemic, that should tell you something. We have only had one single deer die of CWD in ND and they have spent almost a million dollars on CWD. That is an expensive deer with little to show for it.

Please support HB1236

Opposition to HB1236

Hello. My name is Adam Miller, a North Dakota resident and hunter. My opposition to this bill is simple. The NDGF's job is to manage our natural resources and this bill is aimed at preventing them from doing so. Stop trying to hamstring the people working for the good of the resource.

Testimony of the North Dakota Chapter of The Wildlife Society
By Phil Mastrangelo (#1571)
HB 1236
HOUSE ENERGY and NATURAL RESOURCES COMMITTEE
January 24, 2025

Chairman Porter and Members of the House Energy and Natural Resources Committee:

For the record, I'm Phil Mastrangelo representing the North Dakota Chapter of The Wildlife Society. The Chapter is a professional organization comprised of over 320 members who are employed throughout North Dakota as wildlife biologists, land managers, educators, wildlife law enforcement officers, and natural resource administers.

The Chapter is in opposition to HB 1236 for the following reasons:

The North Dakota Game and Fish Department (NDGFD), which is charged with the management of all of North Dakota's wildlife resources, relies on science as its guiding doctrine. Science is fact and facts should prevail in the decisions made regarding the management of all our wildlife resources.

The NDGFD's management plan for chronic wasting disease (CWD) follows a science-based template used by other state wildlife management agencies. Application of the CWD management plans are supported by a number of non-government entities including the National Deer Association, the Boone and Crocket Club, the Mule Deer Foundation, and the Theodore Roosevelt Conservation Partnership which states "CWD is the biggest threat to the future of deer hunting."

The NDGFD are the wildlife experts, as such they should be allowed to make science-based decisions which are in the best interest of our statewide deer population. Passage of HB 1236 would severely restrict the NDGFD's ability to properly manage CWD. Therefore, the Chapter respectfully requests a "Do Not Pass" vote on SB 1236.

Thank you for the opportunity to provide testimony in opposition to SB 1236.

Phil Mastrangelo
Lobbyist #1571
North Dakota Chapter of The Wildlife Society

BACKCOUNTRY HUNTERS & ANGLERS
NORTH DAKOTA

TESTIMONY OF BROCK WAHL
NORTH DAKOTA BACKCOUNTRY HUNTERS AND ANGLERS
HOUSE BILL 1236
HOUSE ENERGY AND NATURAL RESOURCE COMMITTEE
January 24, 2025

The North Dakota Chapter of Backcountry Hunters & Anglers urges a Do Not Pass for HB 1236.

The department has spent approximately $900,000 in hunter license dollars on CWD management within the state of North Dakota since 2007. That's an 18-year period and translates to an average of roughly $50,000 per year on CWD management. That figure represents a fraction of a percent of their biennial budget. Despite the claims by bill proponents, $240 million is not "up for grabs", as the CWD Research and Management Act (Sponsored by ND Senator John Hoeven) has not been funded and monies for CWD research and Management continue to be allocated via competitive grants through the U.S. Department of Agriculture Animal & Plant Health Inspection Services (APHIS).

We view this bill, as well as the other CWD and baiting related bills, as ballot box biology. The authors are severely misinformed on the subject of chronic wasting disease and its impacts to cervid health and cervid populations across the continent. Passing this bill would be irresponsible.

We strongly oppose HB 1236.

Brock Wahl
Chairman
Board of Directors
North Dakota Chapter of Backcountry Hunters and Anglers
northdakota@backcountryhunters.org

Dear Committee members,
I ask for a do pass on HB1236.
North Dakota has experienced a dramatic decline in deer numbers over the past few years. Some due to circumstances that could have been prevented with the use of the funding used for CWD. I do not argue that CWD is on the landscape but somehow our Game and Fish has bought into the narrative The Sky is Falling. The money they receive from the federal level earmarked for CWD could be used to monitor the current situation. The money that we spend as sportsmen on tags and fees should go to better uses. These are things that we can see as results and be proud of. Habitat, and wildlife food plots in wintering areas just to name a couple. These things will benefit all sportsmen and they will see positive results that will build each year.
Thank you for your time.
John Arman

TESTIMONY OF JOHN BRADLEY
NORTH DAKOTA WILDLIFE FEDERATION
HOUSE BILL 1236
HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE
JANUARY 24, 2025

Chairman Porter and Members of the Energy and Natural Resources Committee:

For the record, I am John Bradley, Executive Director of the North Dakota Wildlife Federation (NDWF).

NDWF respectfully ask that you oppose House Bill 1236, a bill that strips the North Dakota Game and Fish Department (NDG&F) of their ability to use funds from the sale of hunting and fishing licenses to create management plans for chronic wasting disease. The NDG&F is the entity best suited to make science-based wildlife management decisions around wildlife disease and should accordingly retain the ability to use funds from hunting and fishing licenses to create management plans for wildlife.

Chronic Wasting Disease is a progressive, fatal, degenerative neurological disease that occurs in farmed and free-range deer, elk, caribou, and moose. It is a slow and progressive disease that has a long incubation period. The NDG&F's primary objective is to prevent its spread into new areas and keep prevalence low in areas where it already has been found. Retaining the ability of our fish and wildlife management experts to develop and execute wildlife management plans to stem the spread of Chronic Wasting Disease is therefore essential to preventing its introduction into new areas.

We ask that you reject this bad idea and allow the Game and Fish Department to do its duty to protect, conserve and enhance fish and wildlife populations and their habitat for sustained public consumptive and nonconsumptive use. We urge a Do Not Pass on HB 1236.

House Energy and Natural Resource Committee

Testimony in OPPOSITION of HB1236

My name is Steve Goroski, and I am a long-time North Dakota resident, avid sportsman and conservationist of ND for almost 50 years. I am writing to express my opposition for House Bill 1236.

The ND Game and Fish sole purpose is to protect the wildlife in the state of North Dakota, and they have nothing to gain other than protecting our wildlife. It is so wrong and misguided for the legislature to tell the Game and Fish that they cannot use license sales to manage a scientifically proven wildlife disease.

The ND Game and Fish does a great job with limited resources already, so I urge your opposition to HB1236 with a DO NOT PASS from the committee. Thank you for this opportunity to comment on this piece of legislation.

Sincerely,

Steve Goroski

MEMBERS OF THE ASSOCIATION OF FISH & WILDLIFE AGENCIES

Governmental Members

U.S. State and Territorial Fish and Wildlife Agencies

Alabama Division of Wildlife and Freshwater Fisheries
Alaska Department of Fish and Game
Arizona Game and Fish Department
Arkansas Game and Fish Commission
California Department of Fish and Wildlife
Colorado Division of Parks and Wildlife
Connecticut Bureau of Natural Resources
Delaware Division of Fish and Wildlife
Florida Fish and Wildlife Conservation Commission
Georgia Wildlife Resources Division
Hawaii Department of Land and Natural Resources
Idaho Department of Fish and Game
Illinois Department of Natural Resources
Indiana Division of Fish and Wildlife
Iowa Department of Natural Resources
Kansas Department of Wildlife and Parks
Kentucky Department of Fish and Wildlife Resources
Louisiana Department of Wildlife and Fisheries
Maine Department of Inland Fisheries & Wildlife
Maryland Wildlife and Heritage Service
Massachusetts Division of Fisheries & Wildlife
Michigan Department of Natural Resources
Minnesota Division of Fish and Wildlife
Mississippi Department of Wildlife, Fisheries and Parks
Missouri Department of Conservation
Montana Department of Fish, Wildlife & Parks
Nebraska Game and Parks Commission
Nevada Department of Wildlife
New Hampshire Fish and Game Department
New Jersey Division of Fish and Wildlife
New Mexico Game and Fish Department
New York Division of Fish and Wildlife
North Carolina Wildlife Resources Commission
North Dakota Game and Fish Department
Ohio Division of Wildlife
Oklahoma Department of Wildlife Conservation
Oregon Department of Fish and Wildlife
Pennsylvania Fish and Boat Commission
Pennsylvania Game Commission
Rhode Island Department of Environmental Management
South Carolina Department of Natural Resources
South Dakota Game, Fish and Parks Department
Tennessee Wildlife Resources Agency
Texas Parks and Wildlife Department
Utah Division of Wildlife Resources
Vermont Department of Fish and Wildlife
Virginia Department of Wildlife Resources
Washington, DC Fisheries/Wildlife Division
Washington Department of Fish and Wildlife
West Virginia Division of Natural Resources
Wisconsin Department of Natural Resources
Wyoming Game and Fish Department

Contributing Members

American Bird Conservancy
American Clean Power Association (ACP)
American Fisheries Society
American Sportfishing Association
Archery Trade Association
BASS LLC
Backcountry Hunters & Anglers
Bat Conservation International
Boone & Crockett Club
Canadian Wildlife Federation
Delta Waterfowl Foundation
Ducks Unlimited Canada
Ducks Unlimited, Inc.
Fur Institute of Canada
Fur Takers of America, Inc.
Island Conservation
Jack H. Berryman Institute
Mule Deer Foundation
National Audubon Society
National Bowhunter Education Foundation
National Marine Manufacturers Association
National Rifle Association
National Shooting Sports Foundation, Inc.
National Trappers Association
National Wild Turkey Federation
National Wildlife Federation
NatureServe
The Nature Conservancy
North American Grouse Partnership
North Dakota Natural Resources Trust
Outdoors Tomorrow Foundation
The Peregrine Fund
Pheasants Forever
Pope and Young Club
PERC: The Property and Environment Research Center
Recreational Boating and Fishing Foundation
Renewable Energy Wildlife Institute
Resource Management Service, LLC
Rocky Mountain Elk Foundation
The Ruffed Grouse Society
Safari Club International
Theodore Roosevelt Conservation Partnership
The Wildlife Society
Wild Sheep Foundation
Wildlife Management Institute

U.S. Federal Members

Bureau of Land Management
National Oceanic and Atmospheric Administration - Fisheries Service
National Park Service
U.S. Department of Agriculture - APHIS/Veterinary Services
U.S. Department of Agriculture - APHIS/Wildlife Services
U.S. Department of Agriculture - Forest Service
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
U.S. Geological Survey

AFWA Best Management Practices for Prevention, Surveillance, and Management of Chronic Wasting Disease (CWD):

First Supplement 2019

A Report of the Association of Fish and Wildlife Agencies

AFWA Best Management Practices for Prevention, Surveillance, and Management of Chronic Wasting Disease: *First Supplement*

A Report of the Association of Fish and Wildlife Agencies

Report Editors: Colin Gillin, Oregon Department of Fish and Wildlife, and Jonathan Mawdsley, Association of Fish and Wildlife Agencies

Contributors and Reviewers:

Charlie Bahnson, North Dakota Game and Fish Department
Johnathan Bordelon, Louisiana Department of Wildlife and Fisheries
Chris Cook, Alabama Department of Conservation and Natural Resources
Merril Cook, North Carolina Wildlife Resources Commission
Doug Cottam, Oregon Department of Fish and Wildlife
Mark Cunningham, Florida Fish and Wildlife Conservation Commission
Scott Durham, Louisiana Department of Wildlife and Fisheries
Matthew Eckert, Colorado Division of Parks and Wildlife
Colin Gillin, Oregon Department of Fish and Wildlife
Daniel Grove, University of Tennessee
Jeremy Hurst, New York State Department of Environmental Conservation
Lane Kisonak, Association of Fish and Wildlife Agencies
Gabriel Jenkins, Kentucky Department of Fish and Wildlife Resources
Anne Justice-Allen, Arizona Game and Fish Department
Jim LaCour, Louisiana Department of Wildlife and Fisheries
Jonathan Mawdsley, Association of Fish and Wildlife Agencies
Brandon Munk, California Department of Fish and Wildlife
Members of the North Carolina Chronic Wasting Disease Task Force
Kenny Ribbeck, Louisiana Department of Wildlife and Fisheries
Mark G. Ruder, Southeastern Cooperative Wildlife Disease Study
Sherri Russell, Missouri Department of Conservation
Charles Ruth, South Carolina Department of Natural Resources
Krysten Schuler, Cornell University College of Veterinary Medicine
Southeastern Association of Fish and Wildlife Agencies Cervid Working Group
Jonathon Shaw, North Carolina Wildlife Resources Commission
Kelly Straka, Michigan Department of Natural Resources
Jeb Williams, North Dakota Game and Fish Department
Peregrine Wolff, Nevada Department of Wildlife
Mary Wood, Wyoming Game and Fish Department
Chuck Yoest, Tennessee Wildlife Resources Agency

Citation: Gillin, C. M., and Mawdsley, J. R. (eds.) 2019. AFWA Best Management Practices for Surveillance, Management and Control of Chronic Wasting Disease (CWD): First Supplement. Association of Fish and Wildlife Agencies (AFWA), Washington, D. C. 24 pp.

Introduction

Chronic wasting disease (CWD; Williams and Young 1980), is considered by many North American wildlife managers and administrators as the most important disease threatening North American cervids. A fatal, transmissible, and degenerative disease of deer, elk, moose, and other species of the family Cervidae, CWD affects all native North American cervids. At this writing there are no effective therapies or vaccines for the disease, and no carcass- or animal-side test that can be readily deployed by hunters or state and provincial agency personnel. Furthermore, the causative agent of CWD – a misfolded protein or "prion" – is not easily degraded and causes persistent environmental contamination that contributes to the epidemiology and maintenance of the disease. Together, these unique circumstances leave state and provincial wildlife management agencies with relatively few options to mitigate the spread or effects of this disease (Gillin and Mawdsley 2018).

Between March, 2017, and September, 2018, the Association of Fish and Wildlife Agencies' (AFWA) Fish and Wildlife Health Committee developed the best management practices (BMPs) for prevention, surveillance, and management of CWD (Gillin and Mawdsley 2018). This guidance document represents contributions from more than 30 wildlife health specialists, veterinarians, biologists and agency leaders who are engaged in CWD management and prevention across North America. The document is built on peer-reviewed science and field-tested methods or professional opinion based on science and authors experience and designed to inform decisions regarding the prevention or management of CWD. The BMPs are presented in a format that provides AFWA Directors with topical summaries accompanied by "best practices" or guidance based on science, along with appropriate literature cited and other resources. Where appropriate, the document also provides agencies with options or alternatives, including those that may not be feasible or practical for all jurisdictions or under every scenario for any number of reasons including those involving agency authority, or because of legislative, statutory, regulatory, or policies currently in place which may limit suggested practices or actions.

Because our knowledge of this disease continues to evolve, the BMPs are meant to be a dynamic, living document that can be updated when new information is available. This first supplement to the original AFWA CWD BMPs presents information about four additional thematic areas (taxidermist and meat processor guidance, quarantine of infected facilities, interstate communication of positive CWD testing results, and responding to hunter inquiries regarding CWD testing) which were not addressed in the original set of BMPs released in September 2018. These topics were suggested as priority themes by AFWA member agency managers and Fish and Wildlife Health Committee members during subsequent discussions with AFWA staff and

Best Management Practices

Waste parts or tissues from taxidermy or meat processors should not be disposed of where they can be accessed by cervids and scavengers. Develop recommendations and educational materials for taxidermists and meat processors as well as hunters or others that handle or dispose of cervid carcasses or meat by-products. Some states/provinces may have (or want to consider) laws requiring taxidermists and meat processors to use approved waste tissue and carcass disposal protocols.

- **Meat processors should process carcasses individually and avoid mixing meat from multiple carcasses into ground meat products.** This practice is specifically related to public health concerns including but not limited to CWD. Although CWD-associated prion disease has never been documented in humans, minimizing risk and limiting human exposure to CWD prions by minimizing the mixing of potentially CWD-contaminated carcasses from untested animals is a food safety practice and should be considered a best management practice.

- **Meat processors and taxidermists should clean and sanitize equipment between animals.** If present, CWD prions from infected animals could contaminate processing equipment. Preventing contamination of uninfected carcasses through meat processing is important for limiting human exposure. Recommendations for proper cleaning of equipment can be found in Chapter 15- Recommended Decontamination and Disinfection Methods for Equipment of this document (Gillin and Mawdsley 2018). And though this practice will add inconvenience, time, and expense, this may be considered a best practice.

- **Minimize the handling of higher risk tissues from potentially infected cervid carcasses (e.g. brain, eyes, spinal cord, lymphatic tissues, etc.)** Specific guidelines should be tailored to the practices of taxidermists and meat processors or hunters. Individuals handling carcasses should wear disposable gloves, wash hands before and after handling carcasses and carcass parts, and disinfect equipment that may have been contaminated. [see Chapter 15 on Recommended Decontamination and Disinfection Methods for Equipment (Gillin and Mawdsley 2018)]

- **Develop regulations, policy, or administrative rule promoting acceptable waste disposal practices for hunting-based businesses such as taxidermists and meat processors.** Provide policy or administrative rule for meat processors and taxidermists to regulate transport, handling, and/or disposition of tissue waste from cervids. This guidance may be generic to include states or provinces where CWD has not been detected in tested animals. Provide regulatory direction for the types of carcass waste allowed into rendering or other disposal facilities using methods specific for waste from CWD endemic areas. Rendering and landfill facilities are often regulated through other agencies (State Department of Agriculture, county government, etc.) requiring coordinated policy/regulation development.
- **Request that taxidermists take part in programs that provide heads or samples to wildlife agencies for CWD surveillance including samples from older-age class males and captive cervid facilities.** Some states developed a cash incentive program for the collection of samples, while other states have developed training programs for taxidermists willing to collect samples.

- **State/Provincial wildlife agencies should provide information regarding in-state/province taxidermists and meat processors to hunters to reduce the potential for transportation of potentially infected carcasses or parts.** Wildlife agencies should promote the use of local taxidermy and meat processing services in the area the animal was harvested, prior to movement of the carcass out of the area.

- **Prohibit or specifically regulate taxidermy or meat processing businesses from having captive cervids (farmed, exhibit, or rehabbed animals) susceptible to CWD infection on the same premises at the business to limit exposure of live cervids to potentially contaminated tissues or environments.**

- **Prohibit feeding of taxidermy or meat processor cervid waste tissues or scraps to pets, livestock, zoo animals, or wildlife.**

Alternative strategies supporting these Management Practices include:

- Require permitting/license registration by administrative rule or statute for taxidermy and meat processing as regulated industries. As part of permitting/licensing of taxidermists and meat processors, require reporting of client and carcass harvest location when a CWD sample has been collected.

- Provide animal waste dumpsters to taxidermists or meat processors and on public lands to hunters for purposes of carcass disposal. Dumpster locations should be available and prioritized by proximity to CWD management areas or jurisdictional border crossings, and dumpster contents disposed of in a manner that minimizes risk of further CWD transmission.
- Hunters desiring a European mount from their harvested cervid should use a taxidermist in the state/province/area of harvest or remove all potentially infective tissue in the field or in the state/province of animal harvest.
- Develop a registry of taxidermy and meat processor businesses and provide information and updates to the business owners regularly.
- Develop an agency-approved Identification Program for taxidermists and meat processors that follows best management practices for prevention, surveillance, management, and control of CWD. Provide hunters location and contact information of taxidermy and meat processing businesses certified as following CWD best practices.

Supporting Strategies and Evidence

Many states and provinces regulate taxidermy or meat processing businesses. For all agencies, identification of these important hunting-based businesses and facility locations can simplify contact and cooperation with agency staff to better facilitate education and surveillance. Managers should develop practical recommendations for biosecure practices for taxidermists, meat processors, and hunters to help reduce the potential for transportation and spread of CWD. Taxidermist and meat processor businesses may receive animals from a large multi-state/province geographic area including areas where CWD has been detected in tested animals or as yet undetected foci of CWD. Due to the broad client-base these businesses service, increasing agency communication and cooperation with this business community can lead to better wildlife biosecurity and surveillance.

An initiative that many states and provinces have yet to explore is to actively engage hunting-based businesses to build stronger and more positive relationships through education and cooperatively working with business owners to encourage them to serve as ambassadors for surveillance and testing and appropriate carcass disposal within their industry and with their hunter clientele. Providing a program that includes training, education and a cooperative relationship between CWD staff, district biologists, and education staff with hunting-based business owners can improve the state/province's capacity for prevention, surveillance, management, and control of CWD.

Literature Cited

New York State Department of Environmental Conservation. 2013. CWD Surveillance. https://www.dec.ny.gov/animals/86782.html. Accessed 6 May 2019.

Tennessee Wildlife Resources Agency. 2018. TWRA CWD Response Plan, Appendix A: Tennessee CWD Risk Assessment and Surveillance Plan. https://www.tn.gov/content/dam/tn/twra/documents/15-12_TWRA_CWD_Response_Plan.pdf. Accessed 6 May 2019.

Xu, S., T. Reuter, B. H. Gilroyed, G. B. Mitchell, L. M. Price, S. Dudas., S. L. Braithwaite, C. Graham, S. Czub, J. J. Leonard, A. Balachandran, N. F. Neumann, M. Belosevic, and T. A. McAllister. 2014. Biodegradation of prions in compost. Environmental Science and Technology 48(12):6909-18. doi: 10.1021/es500916v.

Quarantine of Infected Facilities

Best Management Practices

- **In an area where CWD has not been detected in tested free-ranging cervids with no prior CWD detection, animal containment areas (facilities, fenced fields or pastures, paddocks, pens, structures, trailers, etc.) which have housed captive animals known to be infected with CWD should be quarantined with fences and barriers maintained so that contaminated areas are made inaccessible to free-ranging susceptible animals until such time as:**

    1. the cessation of CWD prion viability in contaminated areas/surfaces is verified through validated testing (which is currently not available), or

    2. approved decontamination methods are developed and applied to the infected areas/facilities and soils and demonstrate the destruction, elimination, inactivation, or denaturing of CWD prions and elimination of associated risk of infection to susceptible animals.

- **All uninfected cervids (free-ranging and captive) should be prohibited/restricted from access to previously-infected CWD areas (facilities, fenced fields or pastures, paddocks, pens, structures, trailers, etc.) until either condition 1 or 2 as listed above has been demonstrated.**

- **In states/provinces where CWD has been detected in tested animals, the level of risk for maintaining fences on previously infected areas should be evaluated on a case-by-case basis to determine the risk of infection to free-ranging wildlife.**

Supporting Strategies and Evidence

Infectious prion proteins may persist in soils, paddocks, structures, and other contaminated environments for many years (Johnson et al. 2006; Seidel et al. 2007; Saunders et al. 2008; Saunders et al. 2012; Kuznetsova et al. 2014). Prions of the sheep disease, scrapie, remained infectious for at least 16 years in a sheep-house in Iceland (Georgsson et al. 2006). Mule deer (*Odocoileus hemionus*) became infected in two of three paddocks where infected deer carcasses had decomposed in situ ≈1.8 years earlier and in one of three paddocks where infected deer

resided 2.2 years earlier (Miller et al. 2004). Presently, the environmental contamination risk over time, or period CWD prions remain infective in soils and on other surfaces in the environment, is not known.

Methods and products have been proposed for the decontamination of equipment and surfaces exposed to infectious prions (see Chapter 15 in Gillin and Mawdsley 2018). However, these products generally rely on chemicals that are themselves toxic to the applicator at the prescribed concentrations (e.g. highly concentrated sodium hydroxide, NaOH or sodium hypochlorite, NaOCl) without appropriate protective equipment. Current recommendations for inactivation of prions on non-disposable materials are based on the use of bleach (NaOCl), soda or caustic lye (NaOH) and the moist heat of autoclaving with the combination of heat and chemicals being most effective (Rutala and Weber, 2010, Taylor and Woodgate 2003, WHO, 2000, and Hughson et al. 2016). Hypochlorous acid (HOCl) has also been considered as a relatively nontoxic alternative (Hughson et al. 2016), although it is not likely practical to apply on a large landscape scale. However, some of these methods warrant further evaluation (Sohn et al.2019).

The products/methods above are neither practical nor appropriate (or may not be legally permissible) for application at larger scales to treat contaminated facilities such as fields, paddocks, pens, structures, and transport vehicles. It is also unrealistic and impractical to expect that these methods would be applied to the habitat of free-ranging cervids. Given the demonstrated persistence of the infectious prion proteins in the environment over years and even decades, the best management practice is to assume that all contaminated facilities will remain contaminated until effective, feasible, and less toxic methods for facility decontamination is demonstrated and available. Therefore, if legally permissible for agencies to implement, CWD contaminated facilities should be placed under indefinite quarantine with fences maintained to restrict ingress and exposure of susceptible free-ranging cervids. Captive cervids should not be introduced or placed in previously infected areas (facilities, fenced fields or pastures, paddocks, pens, structures, trailers, etc.) which have housed animals or parts of animals or urine or feces known to be infected with CWD. Quarantine should be maintained until such time as methods become available for decontaminating these facilities and that can demonstrably eliminate prion infectivity and contamination.

Literature Cited

Georgsson, G., Sigurdson, S., and Brown, P. 2006. Infectious agent of sheep scrapie may persist in the environment for at least 16 years. Journal of General Virology 87:3737-3740.

Gillin, C. M., and Mawdsley, J. R. (eds.). 2018. AFWA Technical Report on Best Management Practices for Surveillance, Management and Control of Chronic Wasting Disease. Association of Fish and Wildlife Agencies, Washington, D. C. 111 pp.

Hughson, A. G., Race B., Kraus A., Sangaré L.R., Robins L., Groveman B.R.. (2016) Inactivation of Prions and Amyloid Seeds with Hypochlorous Acid. PLoS Pathogens 12(9): e1005914. https://doi.org/10.1371/journal.ppat.1005914 http://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1005914.

Johnson, C. J., Phillips, K. E., Schramm, P. T., McKenzie, D., Aiken, J. M., Pedersen, J. A. 2006. Prions Adhere to Soil Minerals and Remain Infectious. PLoS Pathogens 2(4): e32. https://doi.org/10.1371/journal.ppat.0020032

Kuznetsova, A., McKenzie, D., Banser, P., Siddique, T., and Aiken, J. M. 2014. Potential role of soil properties in the spread of CWD in western Canada. Prion 2014:8.

Miller, M. W., Williams, E. S., Hobbs, N. T., and Wolfe, L. L. 2004. Environmental Sources of Prion Transmission in Mule Deer. Emerging Infectious Diseases 10(6):1003-1006.

Rutala, W. A., and Weber, D. J.. 2010. Guidelines for disinfection and sterilization of prion-contaminated medical instruments. Infection Control and Hospital Epidemiology 31(2):107–117.

Saunders, S. E., Bartelt-Hunt, S. L., and Bartz, J. C. 2008. Prions in the environment. Prion 2(4):162-169. DOI: 10.4161/pri.2.4.7951

Saunders, S. E., Bartz, J. C., and Bartelt-Hunt, S. L. 2012. Soil-mediated prion transmission: is local soil-type a key determinant of prion disease incidence? Chemosphere 87(7):661-7. DOI: 10.1016/j.chemosphere.2011.12.076.

Seidel, B., Thomzig, A., Buschmann, A., Groschup, M. H., Peters, R., Beekes, M., et al. 2007. Scrapie Agent (Strain 263K) Can Transmit Disease via the Oral Route after Persistence in Soil over Years. PLoS ONE 2(5): e435. https://doi.org/10.1371/journal.pone.0000435

Hyun-Joo Sohn, Kyung-Je Park, In-Soon Roh, Hyo-Jin Kim, Hoo-Chang Park & Hae-Eun Kang (2019) Sodium hydroxide treatment effectively inhibits PrPCWD replication in farm soil, Prion, 13:1, 137-140, DOI: 10.1080/19336896.2019.1617623

Taylor D. M., and Woodgate, S. L.. 2003. Rendering practices and inactivation of transmissible spongiform encephalopathy agents. Revue Scientifique et Technique-Office International des Epizooties 22:297–310.

World Health Organization. [http://www.who.int/en/]. Geneva (Switzerland): The Organization; 2000. WHO Infection Control Guidelines for Transmissible Spongiform Encephalopathies. Report of a WHO Consultation, Geneva, Switzerland, 23–26 March 1999.Availablefrom: http://www.who.int/csr/resources/publications/bse/WHO_CDS_CSR_APH_2000_3/en/.

Inter-State/Province Communication of Positive CWD Test Results

Best Management Practices

- **States/provinces should make a concerted effort to educate their resident hunters, many who likely also hunt as nonresidents in other states/provinces, regarding carcass regulations in their resident/home state/province.** Non-resident hunters in any state/province have a likely probability of buying resident hunting and fishing licenses and taking part in those activities in their home state or province. States and provinces desiring to implement carcass or carcass parts import restrictions directed at resident citizens can most easily and cost effectively educate the highest number of sportsmen/women by notifying their own residents.

- **State/Provincial wildlife agencies in CWD-positive states/provinces should notify or remind non-resident hunters to check regulations of their home jurisdictions when purchasing their non-resident hunting licenses.** A website (e.g. AFWA or CWD Alliance) could serve as the repository for all state and provincial CWD regulations with carcass transport regulations. Regulatory language should be concise with agency-specific regulations hyperlinked from the central repository for the hunter to refer to his/her home state/province regulations. States/provinces should provide updated regulations to the repository website annually or biannually.

- **As state/provincial privacy laws permit, CWD-positive state and provincial agencies should notify (or acquire written permission if required) the hunter purchasing an out-of-state/province license, that the hunter's resident state/provincial agency will be contacted if their harvested animal tests positive for CWD.** When the hunter is notified of the status of their animal, the hunter's name and contact information will be provided to the hunter's home state/provincial wildlife agency to facilitate agency-hunter communication and collection and proper disposal of carcass parts and meat as needed, desired, or required. Hunters may also choose to retain and consume their CWD positive meat as permitted by state or provincial law.

Specific guidance for different harvest and testing scenarios and as state/provincial privacy laws and laboratory confidentiality policy permits

Regardless of state/province CWD status, all testing of harvested animals should be conducted as quickly as possible (in days/weeks versus months) to allow opportunity for hunters to properly dispose of CWD infected carcasses if necessary and provide hunters and agency staff better control and maintenance of transported and waste carcass tissues. Immunohistochemistry (IHC), typically has a 5-10 day turn-around and enzyme-linked immunosorbent assay (ELISA) requires 1-3 days to complete results depending on the capacity of the diagnostic laboratory (see Chapter 8 of Gillin and Mawdsley, 2018).

For animals tested in states/provinces other than where the animal was harvested :

- If the sample tests positive, the state/province submitting a sample for testing should ensure the results have been confirmed by IHC if CWD has not been detected in the harvest state/province/area and according to testing protocols established by USDA-APHIS and the National Animal Health Laboratory Network or Canadian National Animal Health Laboratory networks. Confirmation by IHC of an ELISA positive test may not be required in a CWD endemic area.

- Following documentation/confirmation of positive test results and as permitted by privacy laws, the submitting state/province should contact the wildlife health, game, wildlife management program, or state animal health official of the state/province where the animal was harvested to provide the test results and any available and legally permissible information concerning hunter data, hunt unit, animal data, harvest location, and date of harvest.

- The state/provincial wildlife agency where the animal was harvested should notify the hunter regarding the CWD positive test result and determine the location of the carcass or carcass parts. The hunter should be advised of CDC recommendations regarding consumption of meat from CWD positive animals.

- Meat or carcass parts of the test positive animal should be collected and disposed of by the state/provincial wildlife agency as appropriate and permissible by the hunter and state/provincial statutes or regulations.

Supportive Strategies and Evidence

The CWD agent can be present in nervous system tissue, lymphoid tissue, bones, muscle, and other tissues of infected cervids (Angers et al. 2006, Kramm et al. 2017). High risk tissues from cervids harvested in CWD-positive states/provinces are occasionally transported by non-resident hunters to their home state/province, potentially in violation of regulations prohibiting this practice. If infected tissues are discarded onto the landscape by hunters, taxidermists, or meat processors, environmental contamination may occur resulting in the possible introduction of CWD into new areas if a susceptible animal comes in contact with contaminated surfaces (Miller et al. 2004). Infectious prion proteins may persist in the environment for many years (Miller et al. 2004; Seidel et al. 2007; Saunders et al. 2008). Accordingly, native cervids could become infected if they are exposed to CWD prions in the environment. Although environmental sources of infectivity of CWD into a cervid population is difficult to confirm, it is suspected to be an important epidemiologic factor in the maintenance of this disease and CWD epidemics in natural populations (Miller et al. 2004). Because of this risk, most states/provinces have regulations prohibiting the importation of intact cervid carcasses from other states or provinces or, for some states/provinces, specifically from CWD-positive regions (Gillin and Mawdsley, 2018). All states/provinces allow limited and restricted tissues from harvested carcasses to be imported including deboned meat, clean skull cap and antlers, cleaned hide, and taxidermied products.

State/provincial agencies should provide carcass importation information to their resident hunters, fisherperson, and other sportsmen/women groups as many of these residents are also non-resident hunters in other states and provinces. This communication will provide the most cost effective and efficient effort. There will be fewer hunters that only hunt as non-residents in other states. Communicating with this population of non-resident hunters can be challenging and requires collaboration and hunter notification by the state/province the non-resident hunter has harvested his/her animal in and as state privacy laws allow. In addition to many of the other BMPs presented in Gillin and Mawdsley 2018, inter- state/province sharing of CWD detection results and communication between states and hunters regarding carcass transport regulations, may help in slowing the spread CWD by human activities.

There may be concern by some states/provinces managing CWD that strategies focusing on sharing personal contact information of hunters and identifying hunters harvesting a positive animal could erode trust between some hunters and management agencies. This may reduce opportunities to partner with hunters to address chronic wasting disease in free-ranging populations. For further discussion on this topic, please refer to the BMP discussion on Agency Response to Hunters Inquiries Regarding CWD Testing in this supplemental document.

Literature Cited

Angers, R. C., S. R. Browning, T. S. Seward, C. J. Sigurdson, M. W. Miller, E. A. Hoover, and G. C. Telling. 2006. Prions in skeletal muscles of deer with chronic wasting disease. Science, 311(5764), 1117-1117.

Gillin, C. M., and Mawdsley, J. R. (eds.). 2018. AFWA Technical Report on Best Management Practices for Surveillance, Management and Control of Chronic Wasting Disease. Association of Fish and Wildlife Agencies, Washington, D. C. 111 pp.

Kramm, C., S. Pritzkow, A. Lyon, T. Nichols, R, Morales, and C. Soto. 2017. Detection of prions in blood of cervids at the asymptomatic stage of chronic wasting disease. Science Reports, 7(1), 1–8.

Miller, M. W., Williams, E. S., Hobbs, N. T., and Wolfe, L. L. 2004. Environmental Sources of Prion Transmission in Mule Deer. Emerging Infectious Diseases 10(6):1003-1006.

Saunders, S. E., Bartelt-Hunt, S. L., and Bartz, J. C. 2008. Prions in the environment. Prion 2(4):162-169. DOI: 10.4161/pri.2.4.7951

Seidel, B., Thomzig, A., Buschmann, A., Groschup, M. H., Peters, R., Beekes, M., et al. 2007. Scrapie Agent (Strain 263K) Can Transmit Disease via the Oral Route after Persistence in Soil over Years. PLoS ONE 2(5): e435. https://doi.org/10.1371/journal.pone.0000435

Agency Response to Hunter Inquiries Regarding CWD Testing

(Adapted from the Southeastern Wildlife Health Technical Group's "Guidance for State Wildlife Agencies Regarding Hunter Inquiries into Testing Harvested Cervids for Chronic Wasting Disease")

Best Management Practice

- **State/provincial agencies should have one or more options available for hunters to test their harvested animal for CWD.**

  Agencies may need to employ multiple strategies, dictated by the unique challenges such as surveillance program and sampling requirements, population density, and resources available to each state/province. For example, some states/provinces may incorporate hunter testing requests into their surveillance/ monitoring program, whereas others may choose to address requests through a separate program.

- **Public health recommendations should come from public health officials and state/provincial wildlife agencies should include their public health agency in addressing these recommendations.**

- **The CWD status message provided by state/provincial wildlife agencies should not be that a particular herd or area or jurisdiction is "free" of CWD, rather CWD has not been detected in tested animals.** This message is important for hunters to make informed decisions and includes an understanding of CWD as well as the limitations to surveillance and testing and acknowledging inherent uncertainty in any agency's CWD surveillance effort. Wildlife agencies should provide comprehensive information on CWD to hunters and on their website as the foundation of public outreach.

- **Wildlife agencies should establish CWD testing guidance for hunters in relation to the agency's current surveillance/monitoring program which may include proximity to known CWD-positive areas among other risk factors.** The CDC recommends testing for public health surveillance and risk assessment in areas where CWD is known to be present but does not define the extent of the area.

- **Wildlife agencies should present a clear message that CWD tests are used primarily as tools for surveillance and monitoring programs and are not approved as assuring or certifying food safety.** CWD has not been documented in humans or

been shown to pass the blood-brain barrier in humans from consumption of CWD positive animals. CDC recommendations are guidance toavoid consuming CWD positive animals [see Chapter 22, CWD and Public Health, in Gillin and Mawdsley 2018]. Testing can be considered an effective, but relative, tool when used at the individual or herd/population level to inform hunters that their risk of consuming meat from a CWD infected animal is likely low depending on where the animal was harvested, animal age, sex, and other factors. However, no test is 100% accurate or provides a guarantee and a NOT DETECTED test result does not eliminate the possibility an animal carries CWD at a low and undetectable level.

Frequently asked questions associated with best practices include:

Who collects the tissue samples?

***Wildlife agency personnel*:** Staff training on sample collection, storage, and shipment is a requirement of any agency CWD program. Collection site options include staffed game check stations and agency offices, or un-staffed agency sites such as coolers or barrels where heads are dropped off by hunters.

Hunters: Several state agencies allow hunters to collect their own CWD samples. Increased sample size is the primary benefit with this sampling method but an increase in the number of non-diagnostic samples and incomplete records may also be anticipated. State/provincial wildlife agencies must provide proper oversight, education, and outreach if allowing hunters to collect samples.

Veterinary diagnostic laboratories: Agencies may consider cooperative agreements with veterinary diagnostic laboratories involving protocols for hunters to directly deliver heads of harvested animals to the laboratory. Diagnostic laboratories may also assist in disposal of carcasses or carcass parts.

***Approved CWD sample collectors*:** State/provincial wildlife agencies may utilize partnerships with meat processors, taxidermists, and other non-wildlife state/provincial/federal agency personnel for CWD sample collection. The basic requirements of this surveillance method include training and certification/approval of non-agency personnel and sample collection and delivery protocols. The state/provincial wildlife agency can publish a list of approved collectors available to hunters. The associated costs and data ownership are considerations in the development of a program utilizing non-agency sample collectors.

Who delivers/ships the samples to the lab for testing?

State/provincial wildlife agency personnel will generally be responsible for submitting CWD samples from wild cervids harvested in the state/province. However, if non-agency sample collectors are utilized, the wildlife agency should provide oversight and protocols to ensure accurate and complete records throughout the diagnostic process.

Which lab(s) can be used?

Wildlife agencies should identify CWD testing laboratories appropriate for sample submissions if non-agency sample collectors submit samples. States/provinces without diagnostic capabilities should direct hunter-collected sample submissions to appropriate state/provincial laboratories and communicate with the laboratory to facilitate communication of results back to the state/provincial wildlife agency. Specific instructions on proper shipping techniques should be supplied to the shipper. The list of USDA-approved CWD laboratories can be found at (https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/lab- info-services/sa_approved_labs/ct_approved_labs)

Who pays?

Sample testing costs and payment source will vary and will be determined by agency/jurisdictional policy, funding resources, demand by hunters and requirements of the agency's surveillance or monitoring program. Cost may include collection of the sample, shipping supplies, diagnostic test fee, and associated administrative costs. Payment sources may include the agency funding, grants, the hunter, or in combination. Information regarding the purpose, objectives, and procedures should be included in public outreach. Hunters paying for some or all of the sample collection and testing can lead to potential data ownership issues and test results may not be reported directly to the appropriate wildlife agency.

Who receives results?

State/provincial wildlife agencies should directly receive the CWD test results on all cervids tested in their jurisdictions. Similarly, hunters harvesting animals in CWD management areas must receive test results as quickly as possible accounting for data processing time limitations due to shipping, diagnostic processing, number of samples submitted, etc.. Many states/provinces have web-based systems allowing hunters to

access test results online after receiving an identification number for their sample. Agencies may also call individual hunters when their harvested animal tests positive.

Agencies must communicate with hunters the expectations and time limitations involving testing and potential delays receiving test results. Meat may need to be frozen if the hunter choses to wait on the result before consumption.

Supporting Strategies and Evidence

Public Health Communications with Hunters

On August 17, 2017, the U. S. Centers for Disease Control and Prevention (CDC) updated their recommendations on minimizing human exposure to CWD based upon research findings from an ongoing study documenting experimental CWD transmission to macaques by ingestion of skeletal muscle from pre-clinical CWD-positive cervids. Although other experimental CWD prion transmission attempts in macaques have failed to repeat the results (Race et al. 2018) and no CWD infections have been reported in humans, these findings prompted the CDC to make minor modifications to their recommendations, which can be accessed online at: https://www.cdc.gov/prions/cwd/prevention.html.

The relevant Canadian food safety recommendations can be found at:

https://www.inspection.gc.ca/animals/terrestrial-animals/diseases/reportable/cwd/eng/1330143462380/1330143991594

http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/reportable/cwd/fact-sheet/eng/1330189947852/1330190096558

Current CDC recommendations should be used by wildlife agencies to coordinate with their state/provincial public health agencies. A Frequently Asked Questions document and talking points should be developed for hunters and other members of the public.

Throughout the CDC language, there is an emphasis on "areas with CWD." However, the strength of CWD surveillance data is variable across the country and these BMPs recommend all states/provinces implement testing protocols to provide hunters a voluntary program to determine CWD status (detected or not detected) of their harvested animal, regardless of CWD status in the state or province.

Some additional thoughts on wildlife agency communications with hunters

Agencies should consider strategies that focus on positive interaction and communication with hunters to facilitate improved mitigation of the biological, economic, and social impacts of CWD. Programs focused on providing tools and resources to hunters with a positive emphasis could provide hunters with critical education and information and help to provide incentive for compliance with regulations. Similarly, jurisdictions can work to foster communication and collaboration across jurisdictional lines to identify areas that may benefit from improved hunter contact, improved information/education/signage, or improved access to appropriate tools to help hunters in surveillance and testing and to comply with carcass transport and other regulations. For example, programs that provide easy access to carcass disposal options placed strategically along critical access points may offer hunters an opportunity to comply with carcass transport regulations and appropriately dispose of carcass parts when they are hunting in areas where they may be unfamiliar with appropriate disposal locations.

Programs focused on building partnerships with hunters may promote greater efficacy in mitigating concerns over carcass movements than regulations that create a penalty or disincentive to having an animal tested. These programs may help to garner support from hunters to address chronic wasting disease and provide better information/education to hunters on how they can be a part of the solution. Building positive relationships with hunters related to the unpleasant concept of disease related to the wholesomeness of hunting may encourage hunters to serve as ambassadors for surveillance and testing and appropriate disposal of carcass parts as well as better compliance with regulations.

Current management recommendations suggest that harvest may be an important component of CWD management in free-ranging populations (WAFWA 2017). The best available science as it relates to the prevention, surveillance, management and control of CWD maintains a strong foundation in human dimensions (see Chapter 17, Human Dimensions, in Gillin and Mawdsley, 2018) and in maintaining positive relationships and interactions between agencies and hunters to support CWD control strategies as well as those that help in prevention. Jurisdictions must weigh the relative benefits of any strategy in testing for prevention and surveillance or to mitigate risk and determine what strategies may prove most effective in addressing CWD in their jurisdiction.

Literature Cited

Gillin, C. M., and Mawdsley, J. R. (eds.). 2018. AFWA Technical Report on Best Management Practices for Surveillance, Management and Control of Chronic Wasting Disease. Association of Fish and Wildlife Agencies, Washington, D. C. 111 pp.

Western Association of Fish and Wildlife Agencies. 2017. Recommendations for Adaptive Management of Chronic Wasting Disease in the West. WAFWA Wildlife Health Committee and Mule Deer Working Group. Edmonton, Canada and Fort Collins, USA. https://www.wafwa.org/Documents%20and%20Settings/37/Site%20Documents/Committees/Wildlife%20Health/docs/CWDAdaptiveManagementRecommendations_WAFWAfinal_approved010618.pdf

Congressional Sportsmen's Foundation

fliphtml5.com/ainum/hvhv

Wild Cervid Chronic Wasting Disease Management and Response Activities 2024 Cooperative Agreements

Fiscal Year (FY) 2024 Funding Opportunity Announcement

Funding Opportunity Number: USDA-APHIS-10028-WSNWRC00-24-0004

Publication Date: Tuesday, April 9, 2024

Application Due Date: Monday, June 10, 2024, at 11:59 PM Eastern Daylight Savings Time

Funds may also be provided for applied research[4] to further develop and evaluate; tools, techniques, and strategies for preventing and controlling CWD in wild cervids.

A.2 FUNDING PRIORITIES

Eligible applicants are encouraged to develop project proposals that directly support at least one of the five funding priorities described below:

1. **Improve the management of CWD-affected wild cervid populations.** For the purpose of this priority, management means effectively **controlling** CWD in affected cervid populations or **preventing** the introduction or spread of CWD from affected or endemic populations to non-affected wild cervid populations by implementing or improving upon current guidance, such as the Association of Fish and Wildlife Agencies (AFWA) Best Management Practices.

   *Examples of activities that may be included under this priority are: detection and prevention of CWD in wild cervid populations not currently affected with CWD; **increasing capacity and reporting for CWD testing in wild cervids**; increase disease detection, investigation, and/or response; the development and use of novel CWD tests in wild cervids; epidemiology and risk analysis; wild cervid movement monitoring and control (traceability); identification and investigation of treatment options for CWD; wild cervid population management; sample collection training programs for personnel collecting samples; surveillance of CWD in wild cervids; prevention of CWD in wild cervid populations currently affected with CWD; or test result reporting to APHIS.*

2. **Improve the management of wild cervid CWD-affected areas.** For the purpose of this priority, management means managing the environment to effectively control CWD in wild cervid affected areas (CWD endemic areas) to control or prevent the spread of CWD by implementing or improving upon current guidance, such as the AFWA Best Management Practices.

   *Examples of activities that may be included under this priority are: development and **use of novel CWD tests for environmental testing; environmental decontamination**; wild cervid carcass and waste management; identification and investigation of treatment options for CWD; or investigating the role of scavengers or predators in CWD transmission to or within wild cervid populations and/or managing these risks.*

3. **Conduct research on amplification assays in wild cervids and other new test methods.** Amplification assays are test methods that identify CWD by amplifying small amount of prion protein to levels that are detectable [e.g., Protein Misfolding Cyclic Amplification (PMCA), real-time quaking induced conversion (RT-QuIC)]. Specifically, this funding opportunity is interested in novel proposals which further the use of amplification assays as diagnostic or environmental tests.

[4] Applied CWD research attempts to find practical solutions to solve a specific problem(s) such as the ability to detect, prevent, or manage CWD.

Wildlife Health Committee

Last Updated: 1/10/2025

Name	Rep State	Email	Position
Anne Justice-Allen	AZ	ajustice-allen@azgfd.gov	Chair
Jeb Williams	ND	jwilliam@nd.gov	Leadership Sponsor
Margo Pybus	AB	margo.pybus@gov.ab.ca	Member
Chris Krenz	AK	chris.krenz@alaska.gov	Member
Kimberlee Beckmen	AK	kimberlee.beckmen@alaska.gov	Member
Caeley Thacker	BC	caeley.thacker@gov.bc.ca	Member
Brandon Munk	CA	brandon.munk@wildlife.ca.gov	Member
Brian Dreher	CO	brian.dreher@state.co.us	Member
Mary Wood	CO	mary.wood@state.co.us	Member
Rick Ward	ID	rick.ward@idfg.idaho.gov	Member
Shane Hesting	KS	shane.hesting@ks.gov	Member
Jennifer Ramsey	MT	jramsey@mt.gov	Member
Charlie Bahnson	ND	cbahnson@nd.gov	Member
Alicia Hardin	NE	alicia.hardin@nebraska.gov	Member
Elin Crockett	NM	elin.crockett@dgf.nm.gov	Member
Brett Elkin	NT	brett_elkin@gov.nt.ca	Member
Jerry Shaw	OK	jerry.shaw@odwc.ok.gov	Member
Colin Gillin	OR	colin.m.gillin@odfw.oregon.gov	Member
Steve Griffin	SD	steve.griffin@state.sd.us	Member
John Kanta	SD	john.kanta@state.sd.us	Member
Iga Stasiask	SK	iga.stasiask@gov.sk.ca	Member
Sara Wyckoff	TX	Sara.Wyckoff@tpwd.texas.gov	Member
Ginger Stout	UT	vstout@utah.gov	Member
Kristin Mansfield	WA	kristin.mansfield@dfw.wa.gov	Member
Samantha Allen	WY	samantha.allen@wyo.gov	Member
Jane Harms	YK	jane.harms@yukon.ca	Member
Nate Lahue	NV	nate.lahue@ndow.org	Vice-Chair
Noelle Thompson	WAFWA	noelle.thompson@wafwa.org	WAFWA Rep

BACKCOUNTRY HUNTERS & ANGLERS
NORTH DAKOTA

TESTIMONY OF BROCK WAHL
NORTH DAKOTA BACKCOUNTRY HUNTERS AND ANGLERS
SENATE BILL 2137
HOUSE ENERGY AND NATURAL RESOURCE COMMITTEE
January 17, 2025

The North Dakota Chapter of Backcountry Hunters and Anglers recommends a **Do Not Pass** on Senate Bill 2137 of the 69th legislative assembly. This bill would strip authority from the North Dakota Game and Fish to implement their CWD Management Plan by prohibiting the Game and Fish from banning baiting practices. Just like the 2023 baiting bill (HB1151) we view this as ballot box biology.
While our chapter does not have a stance on baiting ethics, we do have a stance on legislation or ballot initiatives that seek to restrict or control the ability of the wildlife professionals to fulfill their statutory and constitutional duties. Duties that require them to manage for sustainable populations of wildlife for current and future generations, and as stated in Article XI, Section 27 of the North Dakota Constitution,
"**Hunting, trapping, and fishing and the taking of game and fish are a valued part of our heritage and will be forever preserved for the people and managed by law and regulation for the public good**."

The public trust doctrine, supported by over a century of federal case law, makes it clear that all North Dakotans own the wildlife. This is codified in North Dakota Century code Section 20.1-03-03,
"The ownership of and title to all wildlife within this state is in the state for the purpose of regulating the enjoyment, use, possession, disposition, and conservation thereof, and for maintaining action for damages as herein provided." and **"The state has a property interest in all protected wildlife. This interest supports a civil action for damages for the unlawful destruction of wildlife by willful or grossly negligent act or omission."**

Our fellow North Dakotans at the Game and Fish act as our trustees and it is their responsibility to manage the public's trust assets (the wildlife), for the benefit of the trust corpus and all beneficiaries, both alive and unborn. With that in mind, this is not a private property rights issue; this is about publicly owned wildlife, making this a public property rights issue. And the hunting practices of a single user group do not outweigh what is beneficial for the entire public resource or the beneficiaries. Allowing baiting practices to continue in the face of a contagious and 100% fatal disease is not responsible care of our wildlife assets. We believe it is not only responsible, but necessary for the department to ban baiting practices where chronic wasting disease is found.
This bill would effectively undo over 15 years of management by the North Dakota Game and Fish to slow the spread of CWD. Since the first CWD positive deer was found in 2009, the department has spent 6 million dollars on 500 hay yard projects for landowners, to help keep animals from congregating on silage piles, hay yards, and other alternative food sources.

There is no doubt that baiting practices contribute to the spread of chronic wasting disease. Infectious prions can be found in man placed mineral licks, in the soil around those mineral licks, on feeders, and in bait piles. Research efforts have repeatedly demonstrated horizontal and environmental transmission in animals that have prolonged and repeated contact with infectious materials. Research in Saskatchewan, Michigan, and Mississippi has found that man placed food sources represent by far, the largest aggregation of cervids and leads to the most focal contact with their environment. In other words, there is no activity that congregates deer more, putting them in direct contact with other deer and potentially contaminated environments, than artificial food sources. More than natural winter herding, natural food sources, bedding, and even breeding behaviors. Additionally, there are no examples of high prevalence rates of CWD within a deer herd not having negative impacts to that population. Some are less significant, others more severe and dramatic, but all impacts are negative. This is backed up by multiple population studies GPS collaring thousands of deer.

While we sympathize with the hunters this change affects, and we understand changing long held practices can be difficult, the resource must come first. With over half the states in the nation having banned baiting and feeding of wildlife, we are confident that North Dakota hunters will adapt and overcome to be successful in the field just like the other states. We understand that baiting bans alone will not stop CWD, that deer do naturally congregate, and some of those natural occurrences will never be a variable managers can control in wild animals. But we also believe it is disingenuous to suggest that hundreds of bait piles and feeders on the landscape, being replenished repeatedly throughout the year, does not directly exacerbate the spread of CWD.

While we were disappointed to see the Department's concessions over the 2023 baiting bill, we understand their desire to try and work with hunters as best they can. While the ND Game and Fish department cannot ban feeding, unless for purposes of hunting, we agree that banning baiting where CWD is found removes the incentive to feed and will also lead to a reduction in feeding. It is our stance that the department does have the legal authority to ban feeding, and we would support joining a majority of the states in the nation and implementing a feeding ban in the units that are under baiting restrictions.

This bill is not in the best interest of the deer held in public trust, or the North Dakota public hunters who are beneficiaries of that trust. The North Dakota Chapter of Backcountry Hunters and Anglers finds S.B. 2137 to be in direct violation of the North Dakota constitution, the North Dakota century code, the North American Model of Wildlife Conservation, the mission of the North Dakota Game and Fish, and a breach of the public trust doctrine.

We strongly oppose S.B. 2137

Board of Directors
North Dakota Chapter of Backcountry Hunters and Anglers
northdakota@backcountryhunters.org

Non-infectious vs infectious Prions

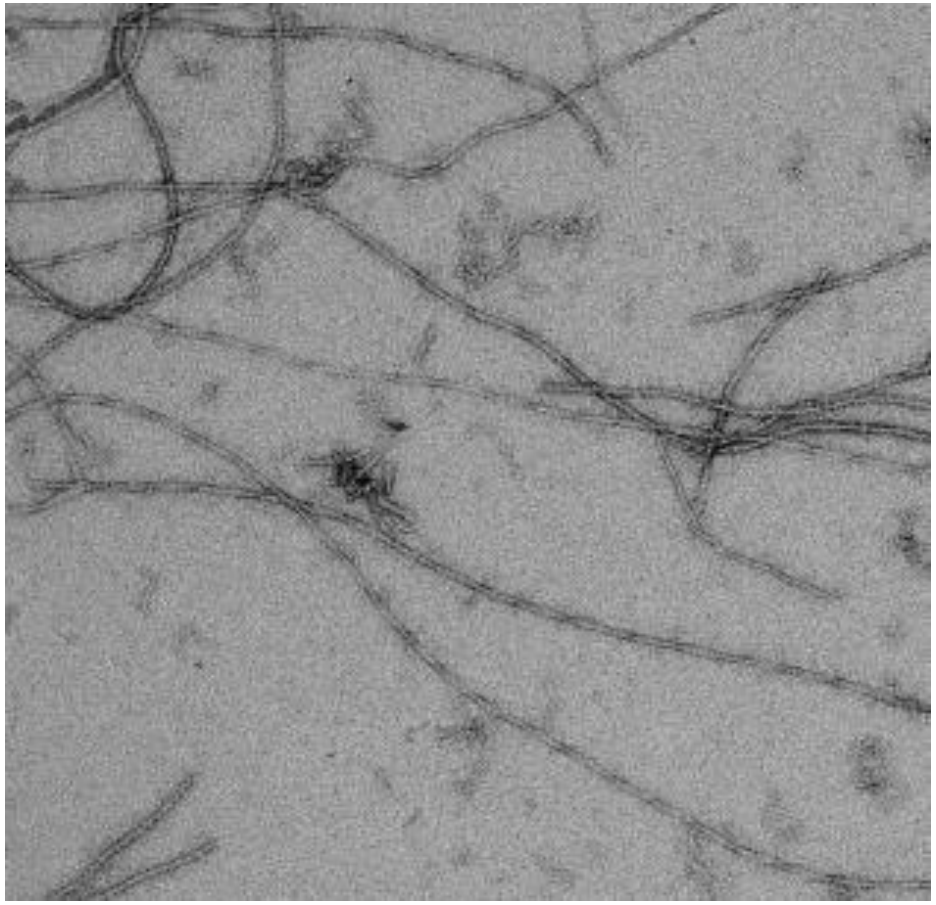
No human or animal has ever recovered from, or survived, a prion disease. Ever.

Case Western Formal Paper click link

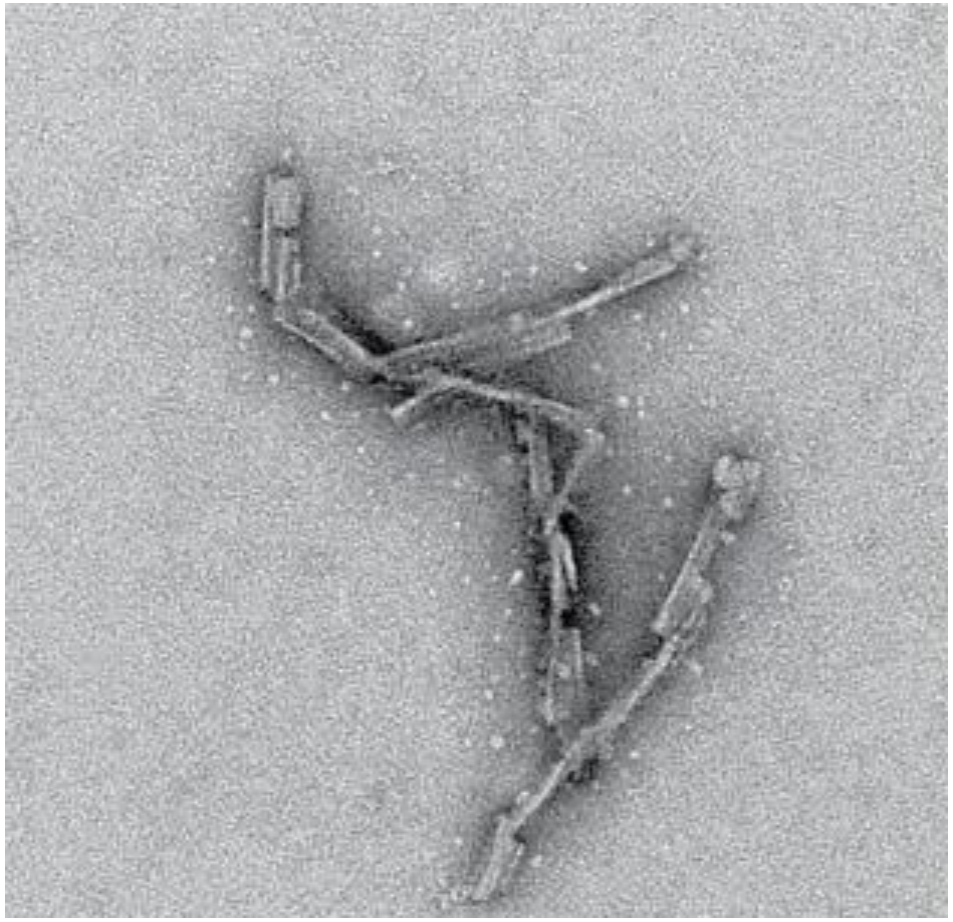
Case Western Atomic imaging of Prion click link

Non-infectious vs Infectious Protein Click link

Non-infectious Cellular Prion Protein (Required for prion infection) converted by infectious proteins.



Infectious Prion Protein



Wisconsin GPS Collar Research Project

- Doe
- Captured on 1/09/2017, 6 ½ years at capture
- CWD- at capture
- 165 lbs at capture, body condition score 5/10
- Recaptured on 2/04/2019
- CWD+ at recapture
- 164 lbs at capture, body condition score 7/10
- Died on 3/25/2019
- 90 lbs at death
- Lost 74lb, 45% body weight in 49 days
- 1.5 lbs per day
- CWD+ at death
- Lab necropsy
  - Severe emaciation, pneumonia

Wisconsin GPS Collar Research Project

- Doe
- Captured on 2/27/2017
- CWD+ at capture
- Est. 170 lbs at capture, body condition score 7/10
- Died on 5/29/2017
- Fell down hill
- 4 years of age at death
- 106 lbs at death
- Lab necropsy
  - Severe emaciation, pneumonia
  - Mummified fetus

Wisconsin GPS Collar Research Project

- Doe
- Collared 12/28/2017 ~3 ½ years of age
- CWD negative at capture
- 118 lbs at capture, body condition score of 0/10
- Died 02/14/2018
- CWD-positive at death
- Lab necropsy:
  - Severe emaciation
  - "The rumen contains a large amount of feed material…"
  - "Severe emaciation with adequate feed intake."
- 78 lbs at death
- Loss of 40 lbs, ~33% body weight

- Doe
- Captured on 3/13/2017
- CWD+ at capture
- Died on 8/12/2017
- Carcass consumed

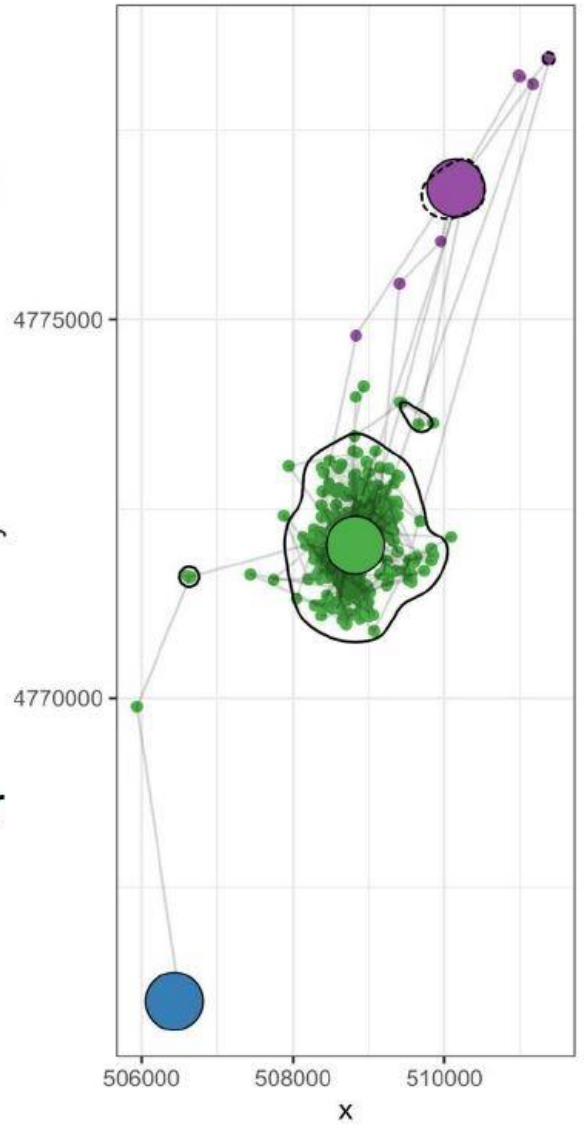
Wisconsin GPS Collar Research Project

Wisconsin GPS Collar Research Project

- Doe
- Collared 12/19/2019 as ~20 months old
- 129 lbs at capture, body condition score of 10/10
- CWD-negative at capture
- Died 7/06/2022
- 50 yards from house; Landowner saw “extremely skinny and sick looking” days prior to death
- 76 lbs at death
- 53 lb, 41% loss
- CWD-positive at death
- Lab necropsy:
  - Severe emaciation
  - Mild pneumonia

Wisconsin GPS Collar Research Project

- Born spring 2018
- Collared January 2020 as ~20 months old (20mo age class)
- CWD-positive at capture
- Died 9/29/2020
- Emaciated
- CWD-positive at death
- No necropsy as landowner did not want carcass removed



Wisconsin GPS Collar Research Project – CWD positive doe

Hunter reported end stage white tailed deer

Arkansas end stage 2 yr old elk

Arkansas end stage doe

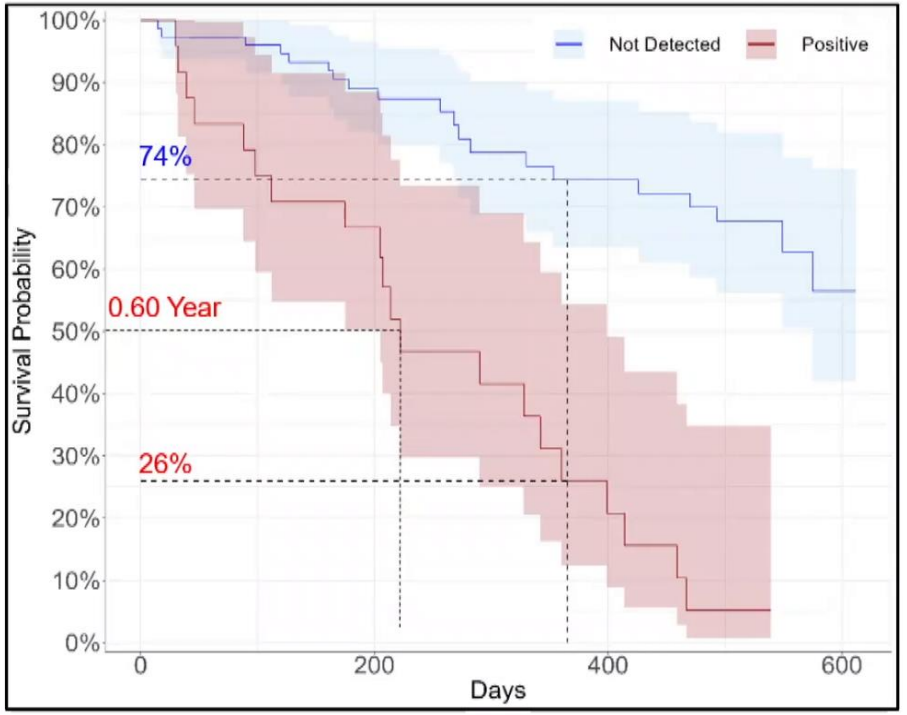
Arkansas end stage doe

Arkansas Research – GPS Collared Deer

"34% of positive animals dying of no other cause other than late stage CWD."

-Dr. Jenn Ballard, Arkansas Veterinarian

Survival



CWD-Cause-Specific

CWD	Coyote	Bobcat	Bear	Harvest	CWD	Disease	Abnormal	Other
Positive	13%	7%	0%	24%	34%	4%	10%	7%
Not Detected	28%	10%	3%	28%	0%	10%	0%	21%

= 100%

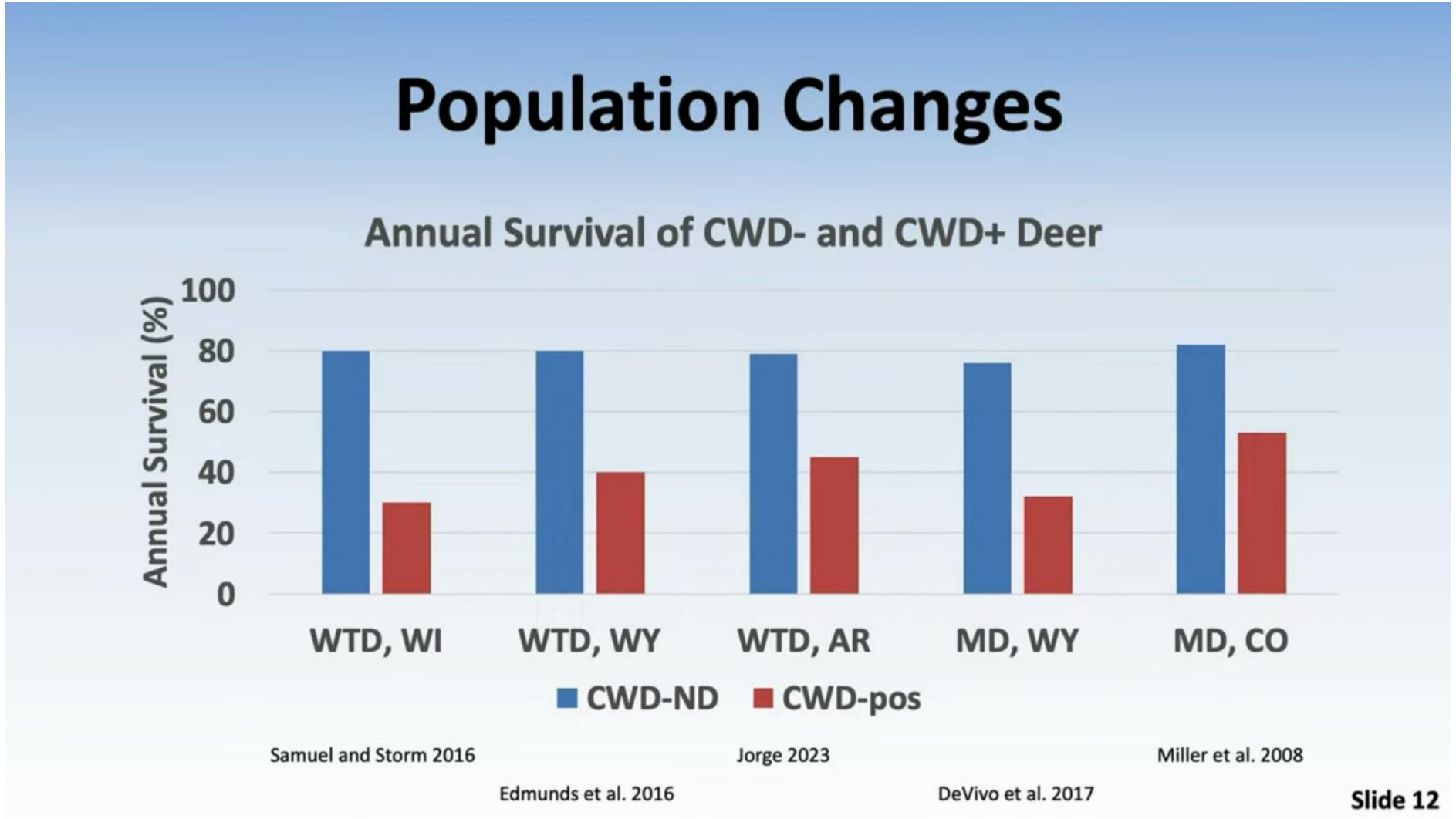
= 100%

At 1 year, positive animals are half as likely to be alive, with a 26% chance of survival.

By 500 days, ~5% chance of survival for positive animals vs negative animals at ~70%

Population impacts

Negative impacts to populations at high prevalence…. ALWAYS!



Wyoming Outfitter gives up on Deer outfitting due to CWD

Riverton-area outfitter Ken Metzler in September 2022. (Mike Koshmrl/WyoFile)

"Based on hunter observation, landowner observation and [Game and Fish] personnel observation," Gregory said, "we're not seeing the deer that we used to."

Ken Metzler had a front-row seat to the crash. When WyoFile first discussed CWD's impacts with the Riverton-area outfitter in late 2021, he estimated that his deer hunting operation had fallen off by 80%. Virtually every animal his paid hunters killed on leased agricultural hunting grounds — 98%, he estimated — tested positive for the disease.

Nearly three years later, Metzler reported that he's given up on his commercial deer hunting operation altogether.

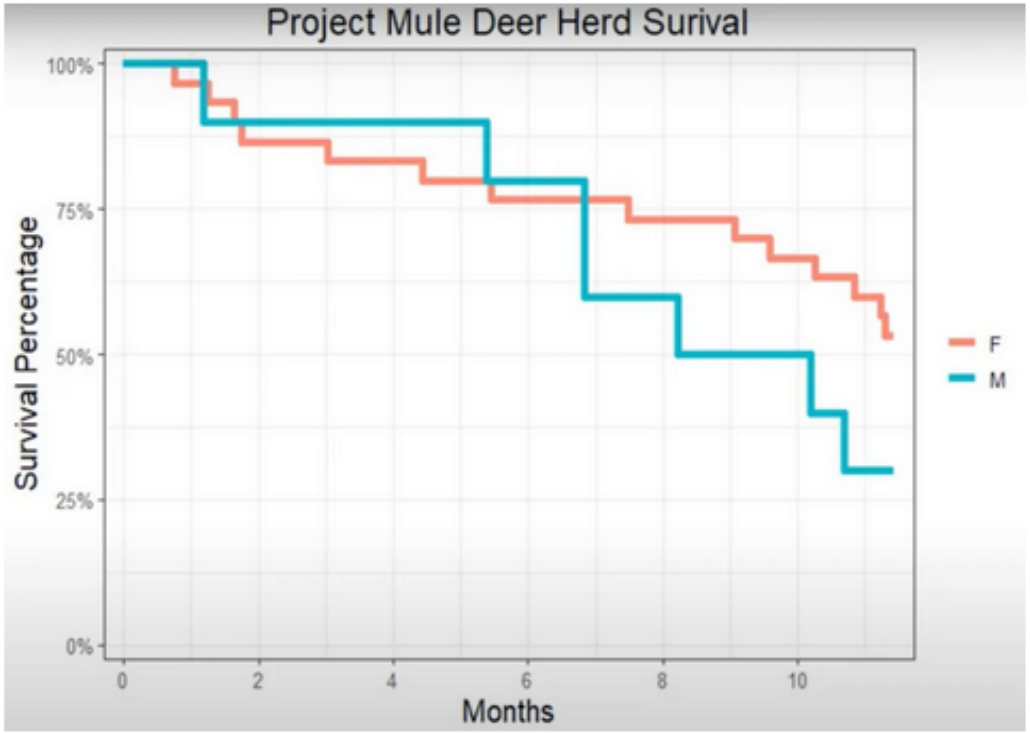
"We're pretty well shut down," he said. "I'm not booking any deer hunters. I can't promise something that isn't there."

The 67-year-old outfitter has witnessed the Project Herd cycle in the past, and he retains some hope that it'll bounce back.

"It's getting worse right now, but it'll turn around a little bit," Metzler said. "If it comes back, it comes back — but it's not looking too good right now, that's for sure."

Wyoming Outfitter gives up on Deer outfitting because of CWD cont…

horrendous rates that threaten to wipe out the herd. Typically, adult doe mule deer have about an 85% chance of surviving any given year. In the Project Herd, however, only half of the first cohort of 30 GPS-collared does lived through their first 12 months as a research deer. The bucks, more prone to CWD, fared worse. Three out of the 10 tracked males were still breathing after one year, but by the time WyoFile rendezvoused with Russell some 15 months into the study, 90% were dead. A single buck remained.



(Wyoming Game and Fish Department)

At 12 months

15 out of 30 does dead from
3 out of 10 collared bucks dead

At 15 months

9 out of 10 bucks dead

Infectious Prions in the Saliva and Blood of Deer with Chronic Wasting Disease

Article *in* Science · November 2006
DOI: 10.1126/science.1132661 · Source: PubMed

Prions in Saliva

Animal cohort	*n*	Inoculum	Route (*n*)	Amount	No. of inoculations
1	3	Blood	IV (1), IP (2)	250 ml	1
2	3	Saliva	PO (3)	50 ml	3
3	3	Urine and feces	PO (3)	50 ml + 50 g	3 to 14
4	4	Brain	IC (2), PO (2)	1 g (IC), 10 g (PO)	1 (IC), 3 (PO)
5	2	All of the above	PO (2)	All of the above	1 to 14

Table 1. CWD prion bioassay inoculation cohorts. Cohort 1 fawns received either a single intraperitoneal (IP) inoculation of 250 ml of frozen citrated blood ($n = 2$) or an intravenous (IV) transfusion with 250 ml fresh citrated whole blood ($n = 1$) each from a single CWD+ donor. Cohort 2 fawns received a total of 50 ml saliva, each from a different CWD+ donor, orally (PO) in three doses over a 3-day period. Cohort 3 fawns received a total of 50 ml urine and 50 g of feces PO, each from a different CWD+ donor, in divided doses over a 3- to 14-day period. As positive controls, cohort 4 fawns were inoculated with a 10% brain homogenate from a CWD+ donor deer through either a single intracranial (IC) injection of 1 g equivalent of brain ($n = 2$) or PO with a total of 10 g equivalents of brain ($n = 2$) divided over a 3-day period. Cohort 5 fawns ($n = 2$) were inoculated with equivalent amounts of each of the above materials from a single CWD-negative donor deer to serve as negative controls for the study.

Table 2. PrP^{CWD} detection by longitudinal tonsil biopsy and necropsy of deer exposed to body fluids or excreta from CWD+ deer. PrP^{CWD} assay results for tonsil (T), brain (B) (medulla oblongata at obex), and retropharyngeal lymph node (RLN) are shown. The number of deer in which PrP^{CWD} was detected (*8*) is shown over the total number of deer in the cohort. One of the three original animals inoculated with urine and feces was euthanized prematurely 61 days pi due to a bacterial infection. The deer in cohorts 1, 2, and 3 were terminated at 18 months (mo.) pi. Two of the four cohort 4 deer were terminated at 20 and 21 months pi. The two cohort 5 deer were terminated at 22 months pi.

Animal cohort	Inoculum	Biopsy collection			Termination		
		3 mo. (T)	6 mo. (T)	12 mo. (T)	T	B	RLN
1	Blood	0/3	0/3	2/3	3/3	2/3	3/3
2	Saliva	0/3	0/3	2/3	3/3	2/3	3/3
3	Urine and feces	0/2	0/2	0/2	0/2	0/2	0/2
4	Brain	1/4	2/4	4/4	2/2	2/2	2/2
5	Negative samples	0/2	0/2	0/2	0/2	0/2	0/2

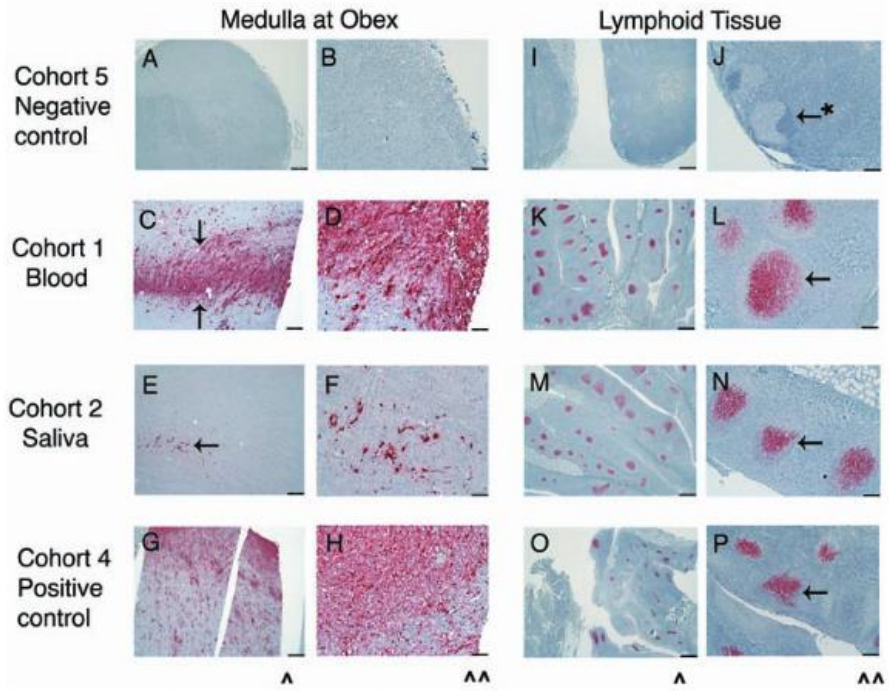


Fig. 1. PrP^{CWD} demonstrated by immunohistochemistry in tonsil, brain (medulla oblongata at obex), and retropharyngeal lymph node of deer receiving saliva or blood from CWD-infected donors. CWD immunohistochemistry is shown in the medulla at obex (**A** to **H**) and either tonsil or retropharyngeal lymph node (**I** to **P**) (*8*). Arrows indicate PrP^{CWD} staining (red) within brain and lymphoid follicles. Arrow with asterisk indicates lymphoid follicle negative for PrP^{CWD}. ^, scale bar = 550 μm; ^^, scale bar = 110 μm.

Very low oral exposure to prions of brain or saliva origin can transmit chronic wasting disease

Nathaniel D. Denkers[1], Clare E. Hoover[2], Kristen A. Davenport[3], Davin M. Henderson[1], Erin E. McNulty[1], Amy V. Nalls[1], Candace K. Mathiason[1], Edward A. Hoover[1]*

Dosage Dependent Prolonged and repeated Exposure to infect deer

- **Study done on white-tailed deer**
- **Cohort 4,5,6 – Saliva inocula**
  - **Cohort 4** – **3 X 10ml** dose of Saliva from a Positive Animals
    - Approx. 1 shot glass divided into 3 doses
  - **Cohort 5** – **10 X 1.65 ml** doses of saliva
    - **½ Shot glass divided into 10 doses**
  - **Cohort 6** – **One concentrated 16.5 ml** dose
  - **Cohort 7** – Negative control (Negative brain or saliva)

Cohort 4 (n = 4): 300 ng brain pool equivalent saliva (SP1+), administered as 3, 100 ng doses in 3 consecutive weeks. Each dose was contained in 10 ml of pooled saliva (total dose = 300 ng contained in 30 ml).

Cohort 5 (n = 4): 300 ng brain pool equivalent saliva (SP2+), administered as 10, 30 ng doses over 12 weeks. 30 ng doses were given once a week for 5 consecutive weeks, followed by a 4-week interval to ensure anesthesia safety, then resumed as weekly 30 ng doses for 5 consecutive weeks. Each dose was contained in 1.65 ml of pooled saliva (total dose = 300 ng contained in 16.5 ml).

Cohort 6 (n = 4): 300 ng brain pool equivalent saliva (SP2+), administered as a single 16.5 ml dose (total dose = 300 ng contained in 16.5 ml)

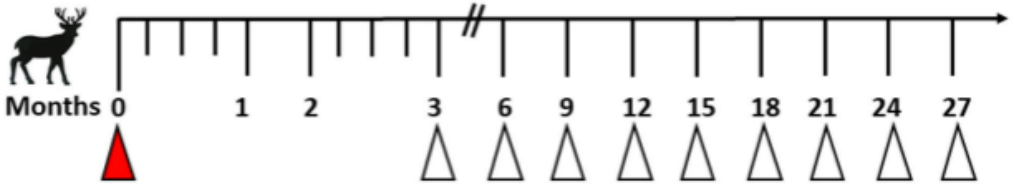
Cohort 7 (n = 2): 300 ng CWD-negative brain and 300 ng CWD-negative saliva, administered together as 10, 60 ng doses (30 ng each) over 12 weeks. 60 ng doses were given once a week for 5 consecutive weeks, followed by a 4-week interval to ensure anesthesia safety, then resumed as weekly 60 ng doses for 5 consecutive weeks. Each dose contained 30 ng CWD-negative brain contained in 3 ml - 1XPBS and 30 ng negative saliva contained in 1.65 ml (total dose = 600 ng contained in 46.5 ml).

Very low oral exposure to prions of brain or saliva origin can transmit chronic wasting disease

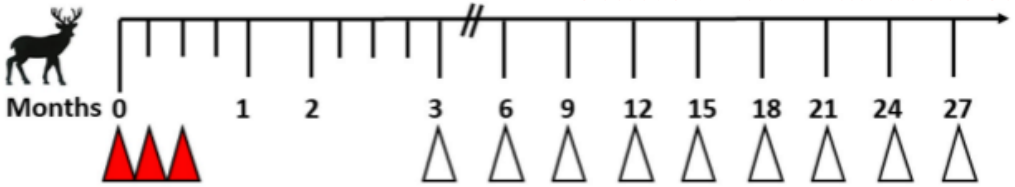
Nathaniel D. Denkers[1☯], Clare E. Hoover[2☯], Kristen A. Davenport[3], Davin M. Henderson[1], Erin E. McNulty[1], Amy V. Nalls[1], Candace K. Mathiason[1], Edward A. Hoover[1*]

Dosage Dependent
Prolonged and repeated
Exposure to infect deer

Cohort 1: 1 mg brain (CBP6)
Cohort 6: 300 ng saliva equivalent (SP2+) **Cohort 6 = 1 x 30ml doses saliva**



Cohort 2: 3 x 100 ng brain (CBP6)
Cohort 4: 3 x 100 ng saliva equivalent (SP1+) **Cohort 4 = 3 x 10 ml doses saliva**



Cohort 3: 10 x 30 ng brain (CBP6)
Cohort 5: 10 x 30 ng saliva equivalent (SP2+) **Cohort 5 = 10 x 1.65 ml doses saliva**
Cohort 7: 10 x 30 ng (-) brain/saliva equivalent (SP3-)

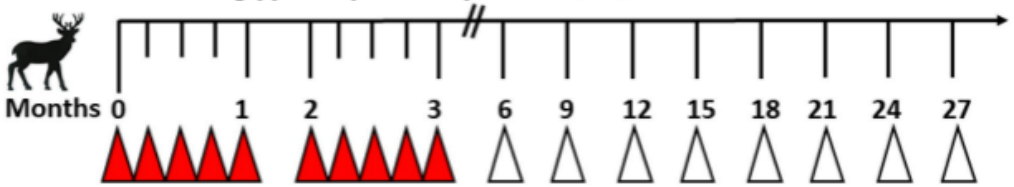


Fig 2. **Experimental design of the current cohorts in this study.** Solid triangles represent inoculation timepoints (0–12 weeks); open triangles represent longitudinal tissue biopsy collections to monitor for CWD (3–27 months).

Cohort (Source)	Dose (Regimen)	Months Post Exposure (MPE): 3 6 9 12 15 18 21 24 27
1 (Brain)	1 mg (single)	
2 (Brain)	300 ng (100 ng x 3)	
3 (Brain)	300 ng (30 ng x 10)	
4 (Saliva)	300 ng (100 ng x 3)	
5 (Saliva)	300 ng (30 ng x 10)	
6 (Saliva)	300ng (single)	
7 (Brain/Saliva)	300 ng each (60 ng x 10)	

= IHC (-) = IHC (+) = Deceased

Fig 3. Longitudinal profile of tonsil biopsy results indicating when each deer in all 7 cohorts became IHC+ (purple box) or deceased (black box).

Cohort 3,5,7 small doses - All remain negative

Infectious Prions in Pre-Clinical Deer and Transmission of Chronic Wasting Disease Solely by Environmental Exposure

Candace K. Mathiason[1], Sheila A. Hays[1], Jenny Powers[2], Jeanette Hayes-Klug[1], Julia Langenberg[3], Sallie J. Dahmes[4], David A. Osborn[5], Karl V. Miller[5], Robert J. Warren[5], Gary L. Mason[1], Edward A. Hoover[1]*

Saliva (cohort 2). Each of the 3 deer in this cohort received saliva from pre-clinical CWD+ donors that were 6 to 13 months pi (Tables 1, 2). PrP^{CWD} was detected in tonsil of 1 of the 3 inoculated deer at 12 months pi, but not at earlier time points. By 19 months pi, study termination, a second animal was CWD+, by detection of PrP^{CWD} in brain and lymphoid tissue. The remaining deer was of necessity terminated at 16 months pi due to unmanageable aggressive behavior. This animal was CWD negative as determined by extensive western blot and IHC analysis (Figs. 1, 2).

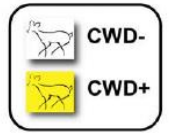
Environmental exposure (cohort 4). The two animals in this cohort were exposed to daily introductions of feed buckets, water, and bedding removed from pens housing deer transitioning from pre-clinical to clinical phases of the disease (Table 1, 2). One of 2 exposed deer became tonsil biopsy PrP^{CWD}-positive at 15 months pi. At study termination, 19 months pi, both animals were CWD+ (Figs. 1, 2).

Table 1. CWD bioassay inoculation cohorts.

Animal cohort	*n*	Inoculum	Route of inoculation	Dosage (total volume)	No. of inoculations
1	3	Whole blood	IV	1 (225 ml)	1
2	3	Saliva	PO	10 ml/day for 5 days (50 ml)	5
3	3	Urine and Feces	PO	90 daily doses (85 ml+112.5 gr)	90
4	2	Environmental contact[a]	PO	19 mos. continuous exposure	Refreshed daily for 570 days (19 mos.)
5	4	Brain	PO	1 gr/day for 5 days (5 gr)	5

[a]Water, feed buckets and bedding from CWD+ deer suites.

doi:10.1371/journal.pone.0005916.t001



Cohort	3 mo.	6 mo.	T^e 12 mo.	T^eB^f RLN^g Terminal[h]	n+/ total n
Blood (cohort 1)	0/3	0/3	2/3	3/3	3/3
Saliva (cohort 2)	0/3	0/3	1/3	2/3	2/3
Urine/Feces (cohort 3)	0/3	0/3	0/3	0/3	0/3
Environment only (cohort 4)	0/2	0/2	0/2	2/2	2/2
Pos. control (cohort 5)	0/4	2/4	4/4	4/4	4/4

T^e=tonsil, B^f=Brain at obex, RLN^g=Retropharyngeal lymph node, [h]= euthanasia dependent upon clinical disease progression or space availability, X= animal euthanized for reason other than CWD.

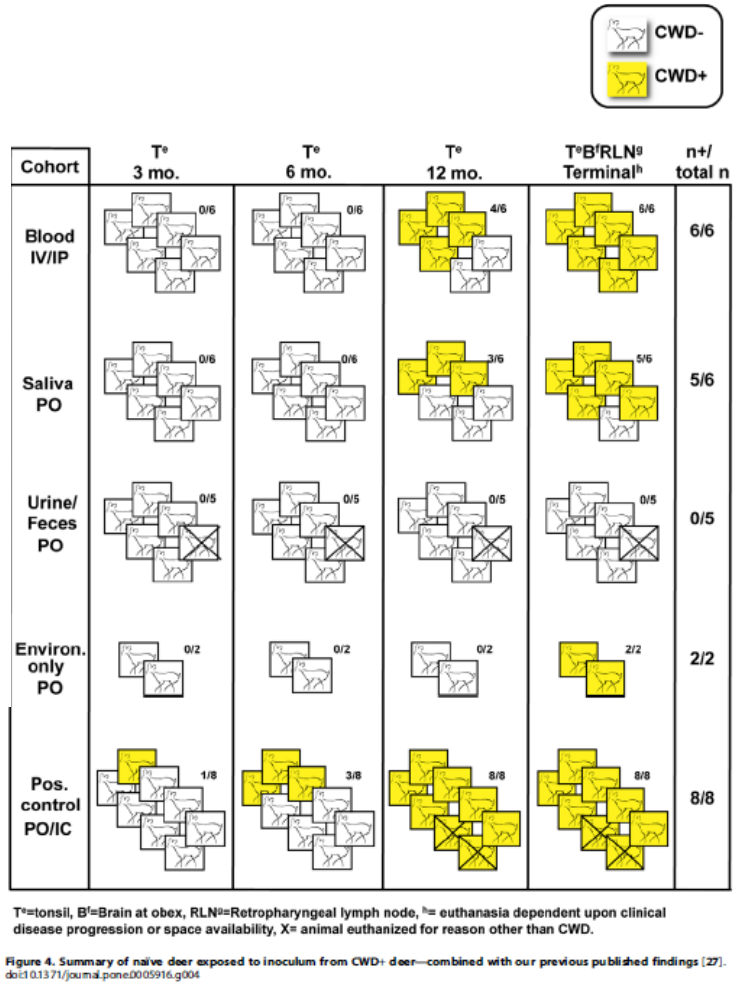
Infectious Prions in Pre-Clinical Deer and Transmission of Chronic Wasting Disease Solely by Environmental Exposure (cont.)

In summary, the results reported here reconfirm that blood and saliva are sources of infectious CWD prions, consistent with previous findings [27], and further support a mechanism for efficient CWD transmission in nature. We also show that infectious prions shed into the environment by CWD+ deer are sufficient to transmit the disease to naïve deer in the absence of direct animal-to-animal contact. These observations reinforce the exposure risk associated with body fluids, excreta, and all tissues from CWD+ cervids and suggest that similar dynamics may exist in other prion infections.

two years. The presence of infectious CWD prions in the environment therefore strongly suggests that natural prion infection occurs by routes additional to direct animal-to-animal contact. Based on the present and our previous findings [27], we speculate that saliva may harbor the greatest concentration of CWD prions available for horizontal transmission and environmental contamination, but recognize that other routes of excretion at lower concentration and greater volume still remain plausible.

Environmental sources of CWD infection

Previous studies have confirmed direct animal-to-animal contact—horizontal transmission—as an efficient mode for prion disease transmission [9,66]. Moreover, Miller and colleagues [9,67,68] have provided substantial evidence for environmental contamination as a source of CWD infection. Our bioassay study inocula doses (50 ml saliva/deer), while efficient in establishing the infectious nature of saliva, are likely unrealistic doses to be acquired in a natural setting. To emulate a more feasible natural environment-associated dose, while negating direct animal-to-animal contact, we exposed naïve deer to repeated exposures to fomites from the suites of CWD-infected deer. The study design was meant to mirror the daily habits and movements of a deer in its natural setting in which it may return to an area contaminated with small amounts of infectious prions over time. Here we provide the first report that under controlled indoor conditions CWD-naïve deer can acquire infection by exposure to fomites from the environment of CWD-infected deer, supporting the



T[e]=tonsil, B[f]=Brain at obex, RLN[g]=Retropharyngeal lymph node, [h]= euthanasia dependent upon clinical disease progression or space availability, X= animal euthanized for reason other than CWD.

Figure 4. Summary of naïve deer exposed to inoculum from CWD+ deer—combined with our previous published findings [27].
doi:10.1371/journal.pone.0005916.g004

Prolonged and repeated exposure to infect deer

Deer are not becoming positive in brief or short term encounters

This is why bait piles are high risk. Daily exposure = prolonged and repeated exposure

Environmental Sources of Prion Transmission in Mule Deer

Michael W. Miller,* Elizabeth S. Williams,† N. Thompson Hobbs,‡ and Lisa L. Wolfe*

Materials and Methods

We conducted a replicated experiment to compare CWD transmission from three infection sources: naturally infected captive mule deer (one infected deer/paddock), carcasses from naturally infected captive mule deer that had decomposed in situ ≈1.8 years earlier (one carcass/paddock), or undisturbed paddock environments where infected mule deer had last resided 2.2 years earlier. Each exposure source was replicated in three separate paddocks; two clean paddocks served as unexposed controls. Control paddocks and paddocks where live infected deer were

Prolonged and repeated exposure to infect deer

Deer are not becoming positive in brief or short term encounters

This is why bait piles are high risk. Daily exposure = prolonged and repeated exposure

Table. Chronic wasting disease arising in mule deer exposed to environments contaminated by residual excreta, carcasses, or other infected deer

	Exposure source			
Replicate	Infected deer	Infected carcass	Residual excreta	Unexposed
1	1/4[a]	0/3	1/3	0/2
2	0/2	2/4	0/3	0/2
3	1/4	1/5	0/3	NA[b]
Total	2/10	3/12	1/9	0/4

[a]Number positive/number exposed (not including infected source deer).
[b]Not applicable; controls included only two replicate paddocks.

1 year of exposure minimal positive animals

Chronic wasting disease model of genetic selection favoring prolonged survival in Rocky Mountain elk (*Cervus elaphus*)

A. L. Williams,[1,†] T. J. Kreeger,[2,3] and B. A. Schumaker[1]

NO animals were artificially inoculated.
No injections, no transfusions, no brain homogenate, no forced saliva intake.
Prolonged eating and drinking out of the same containers that CWD+ elk did.

CWD inoculation studies have been conducted there. The TWWRU has eight, 0.2-ha elk holding pens, all of which held CWD-infected elk previous to and during this study. Elk were rotated randomly among all eight pens annually to maximize PrP^{CWD} exposure, but were never intermingled with non-study, CWD-infected elk. Captive elk were fed alfalfa hay supplemented with a pelleted ration and provided water and a trace mineral block ad libitum. Husbandry, care, diagnostic techniques, and method of euthanasia

annually for PrP by rectal mucosa biopsy using ELISA (Spraker et al. 2009). During the analysis, 37 of 39 elk died, all of which were positive for CWD. Of those that had been examined for PrP^{CWD} by rectal mucosa biopsy

all elk were 27 M/M_{132} (69.2%), 11 M/L_{132} (28.2%), and 1 L/L_{132} (2.6%). The genotypes of the last surviving elk were M/L_{132} (which died in 2012) and L/L_{132}. In 2014, the L/L_{132} is still alive and has remained negative for PrP^{CWD} by rectal

The previously cited infectivity and dosage research clearly shows its large unnatural doses OR prolonged and repeated exposure that make animals positive. Deer aren't becoming positive from brief encounters or single small exposures.

Winter herding is temporary, baiting and the incentive to hunt over bait, leads to year round bait sites that bring deer into contact with those same exact sites every day, sometimes multiple times a day. Prolonged and Repeated exposure.

The more infected deer using a bait site, the larger the accumulation of prions at the site will be and the larger the contact dose will become.

Winter Herding

We CAN stop this….

We can't stop this…but they are obviously not the same.

This is not the same…

As this…

or this…

RESEARCH ARTICLE

Mineral licks as environmental reservoirs of chronic wasting disease prions

Ian H. Plummer[1], Chad J. Johnson[2], Alexandra R. Chesney[3], Joel A. Pedersen[4]*, Michael D. Samuel[1]*

Here, we test the hypothesis that mineral licks used by deer harbor CWD prions, thus serving as potential environmental reservoirs for these infectious agents. During 2012–2015 we collected soil and water samples from 11 mineral licks (10 man-made and one natural) frequented by free-ranging white-tailed deer in a large CWD enzootic zone west of Madison, Wisconsin, USA [6] (Fig 2). We adapted a 96-well microplate variant of PMCA that

likely due in part to co-extracted inhibitors of the PMCA reaction and incomplete extraction from soil particles. The detection of prions at 9 of 11 sites sampled, however, demonstrates widespread contamination of mineral licks in the CWD outbreak zone. The generally higher

At the mineral lick site with the highest detection of CWD prions in environmental samples (Site 6), we opportunistically sampled white-tailed deer fecal pellets. We detected CWD prions in six of the 10 fecal samples after three rounds of amplification by mb-PMCA. Of eight

Discussion

Our results demonstrate that CWD-infected white-tailed deer deposit prions at mineral licks they visit. Although the mechanism of prion deposition is unknown, we suspect deposition of saliva by infected deer during ingestion of soil and water at mineral licks has the highest potential to facilitate indirect transmission to susceptible deer. Saliva from white-tailed deer infected with CWD contains on the order of 1–5 infectious doses (ID_{50}) per 10 mL as quantified by real-time quaking-induced conversion, where an ID_{50} is the dose of CWD prions capable of infecting half of the transgenic mice expressing cervid prion protein [48]. Frequent visitation by infected cervids could allow mineral licks to become potential "hot spots" for indirect trans-

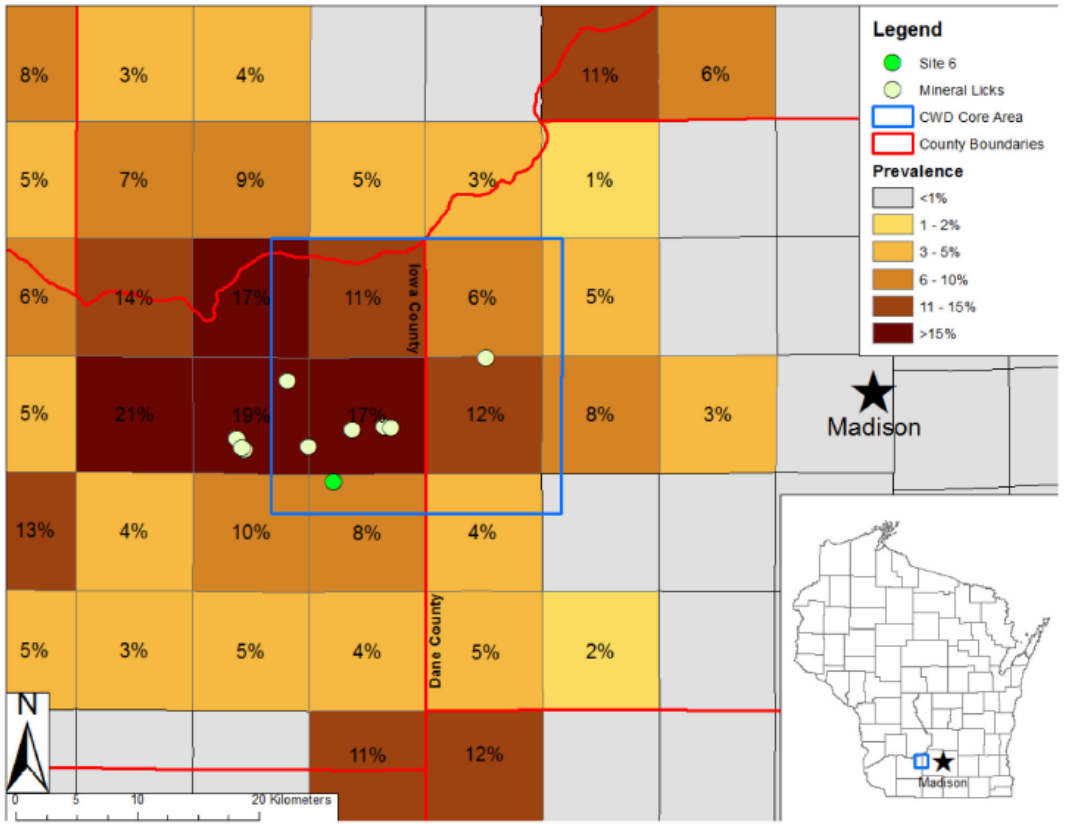
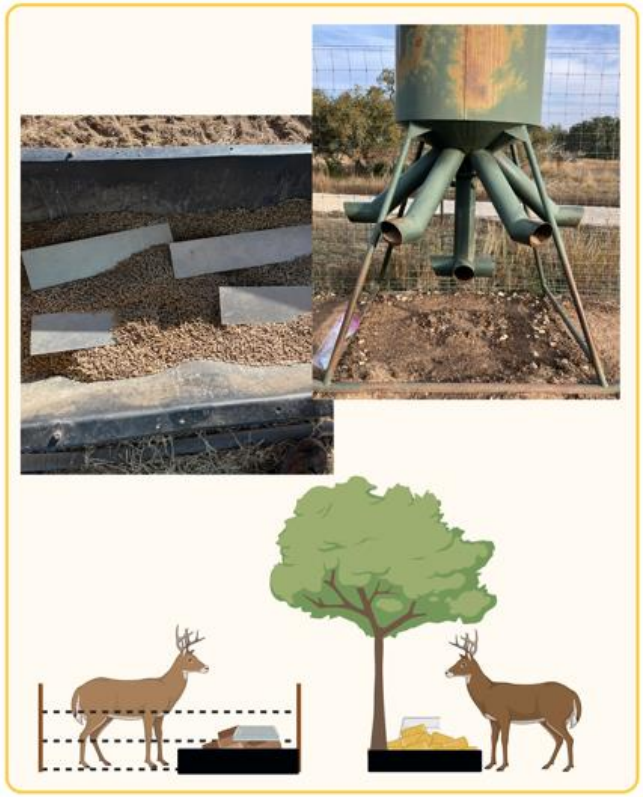


Fig 2. Mineral licks and chronic wasting disease prevalence. Locations of sampled mineral licks and prevalence of chronic wasting disease (CWD) in hunter-harvested white-tailed deer from 2010–2013 in south-central Wisconsin, USA. Squares are townships of 9.66 km per side. Inset shows state of Wisconsin, USA. Site 6 denotes the mineral lick with CWD-positive fecal samples.

CWD Sentinels: detecting environmental prion protein (ePrP) via surfaces for the early discovery of CWD

Marc D. Schwabenlander[1], Catalina Picasso-Risso[1], Gage Rowden[1], Qi Yuan[2], Erik Hildebrand[3], Patrick Hagen[3], Shannon L. Bartelt-Hunt[4], Jason C. Bartz[2], Tiffany M. Wolf[5], and Peter A. Larsen[1]



INFECTIOUS PRIONS FOUND IN BAIT AND ON FEEDERS

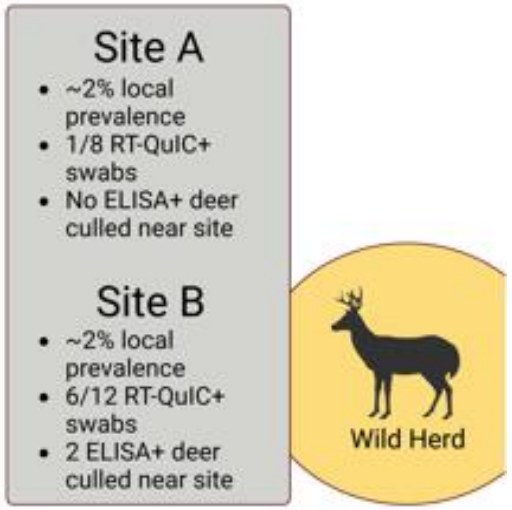


Figure 1. A. Sentinel surfaces placed for one week in captive deer facilities and areas with wild deer feeders/baits. **B.** Sentinels collected/swabbed. **C.** Swabs tested via RT-QuIC for CWD.

Laboratory controls of clean/unused surfaces and feed/bait components were analyzed via RT-QuIC (negative controls). Some locations had additional samples collected (e.g., water tank swabs, feeder swabs, oral swabs). Locations had variable levels of CWD prevalence.

INTRODUCTION

Scientists are developing highly sensitive chronic wasting disease (CWD) detection methodologies that utilize non-tissue samples.

Real-time quaking-induced conversion (RT-QuIC) is one such assay proven to be a more sensitive tool for CWD prion detection than current antibody-based methods (e.g., ELISA and IHC).

Similar to environmental DNA (eDNA) detection methods in aquatic and terrestrial environments, we investigated a rapid method for extracting prions from swabs of environmental surfaces to detect CWD when paired with RT-QuIC.

Laboratory investigation demonstrated that RT-QuIC detection of CWD prions recovered from surfaces (e.g., stainless steel, glass) via swabs was similar to the original CWD prion load applied to the surface.[1]

AIM

We deployed surfaces shown to effectively bind misfolded prions as environmental prion protein (ePrP) sentinels in food sources of captive and free-ranging herds.

METHODS

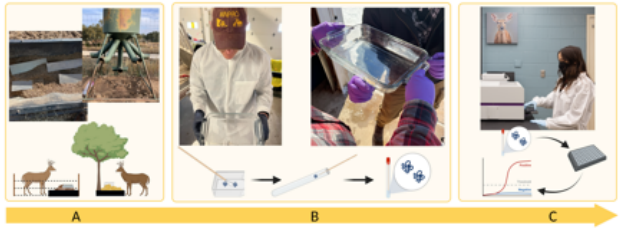


Figure 1. A. Sentinel surfaces placed for one week in captive deer facilities and areas with wild deer feeders/baits. **B.** Sentinels collected/swabbed. **C.** Swabs tested via RT-QuIC for CWD.

Laboratory controls of clean/unused surfaces and feed/bait components were analyzed via RT-QuIC (negative controls). Some locations had additional samples collected (e.g., water tank swabs, feeder swabs, oral swabs). Locations had variable levels of CWD prevalence.

All data are being analyzed for detection performance (e.g., run time, sample dilution) and association between environmental sample detection and CWD prevalence.

RESULTS

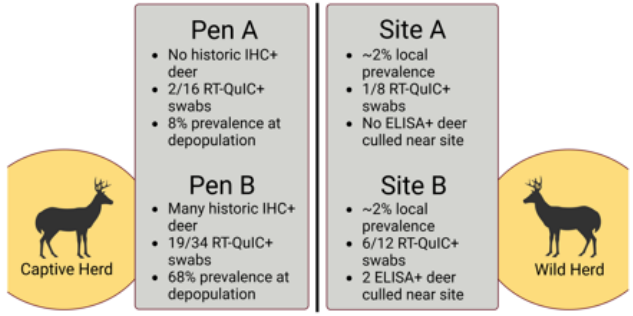


Figure 2. Representative pens and sites demonstrating the preliminary assessment of the relationships between CWD results from sentinal swabs via RT-QuIC and associated deer tissues via ELISA and/or IHC.

DISCUSSION

- Data collection and analysis are still in progress for all locations.
- Captive facility swab results have generally aligned with location/pen prevalence.
- Wild herd sentinel swab results and CWD positive culled deer near bait sites have been less clearly aligned, likely due to seasonal local migration patterns in the wild herd, potential for infected deer visiting multiple sites, and culling processes.
- Research indicates that low levels of prions are excreted in saliva from CWD positive deer.[2] Therefore, even with promising prion recovery based on the seminal laboratory swabbing method development[1], it is likely in deer with early CWD infection, detection via sentinels may be limited. Additionally, deer may not test positive via IHC or ELISA on tissues but may be excreting prions in saliva at some level detectable via sentinel swabs.

CONCLUSIONS

- ePrP detection through non-invasive methods may be used for surveillance and discovery of CWD, informing management.
- Surface sentinel surveillance may be an applicable practice for other prion and prion-like diseases in settings such as meat processing facilities and hospitals.
- Environmental factors, such as feed type, may affect results.

ACKNOWLEDGMENTS

We thank the facility owners and regulatory bodies for access to the research locations, collection of sentinels, and providing official CWD testing results. Figures 1 and 2 and this poster were created with BioRender.com.

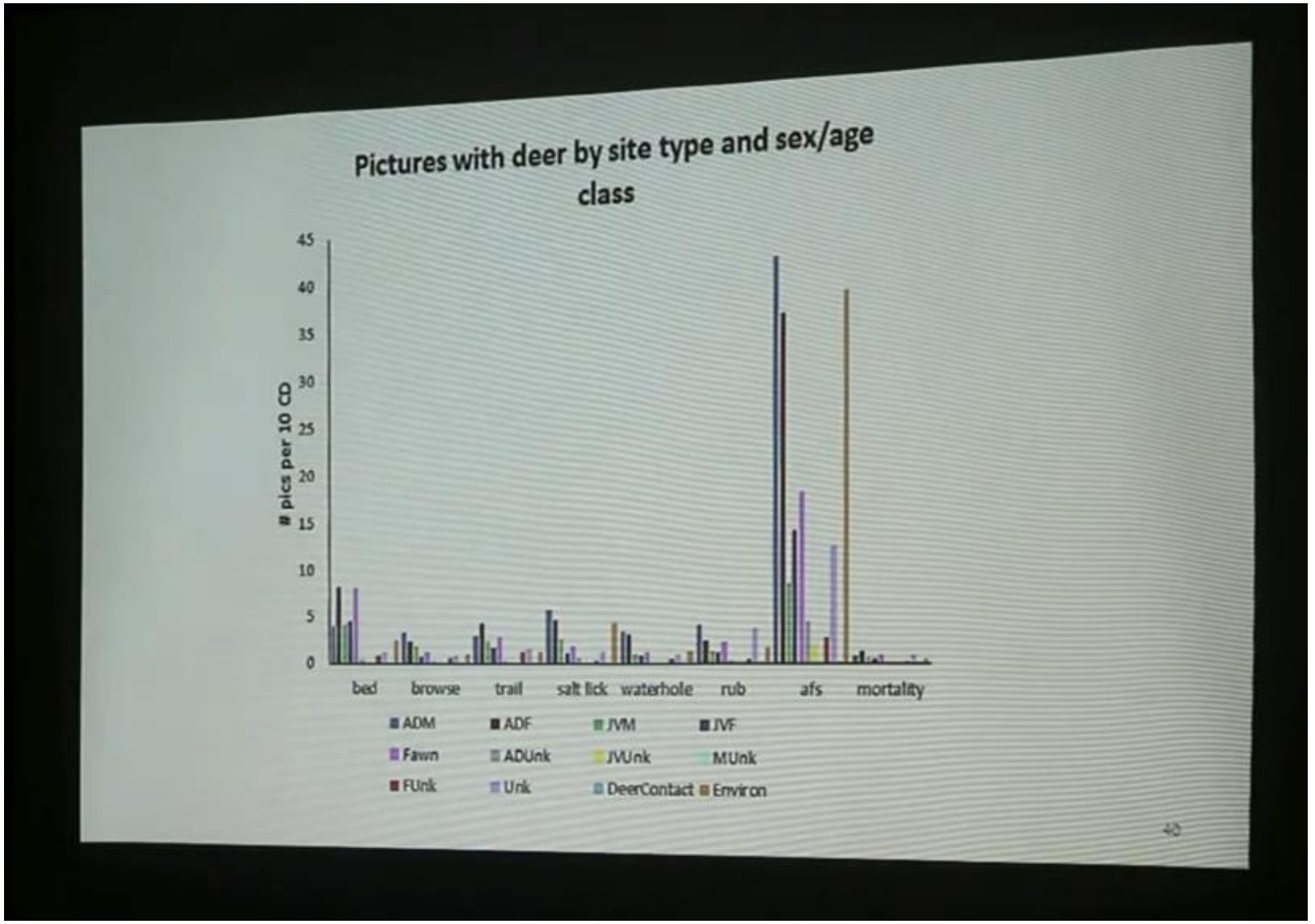
ENVIRONMENT AND NATURAL RESOURCES TRUST FUND

LITERATURE CITED

1. Yuan Q, Rowden G, Wolf TM, Schwabenlander MD, Larsen PA, Bartelt-Hunt SL, Bartz JC. Sensitive detection of chronic wasting disease prions recovered from environmentally relevant surfaces, Environment International, Volume 166, 2022.
2. Henderson DM, Manca M, Haley NJ, Denkers ND, Nalls AV, Mathiason CK, et al. (2013) Rapid Antemortem Detection of CWD Prions in Deer Saliva. PLoS ONE 8(9): e74377.

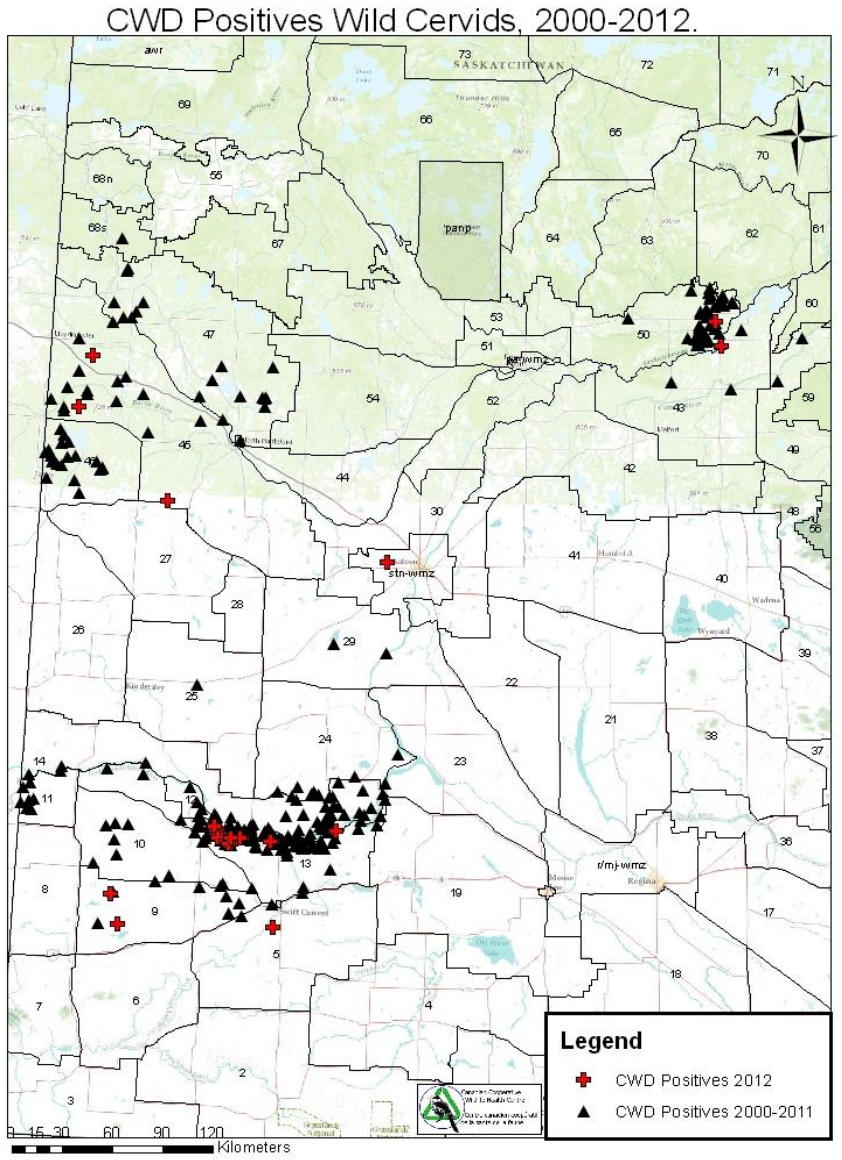
Alternative Food sources are highest incident rate for contact with other deer and environmental sites.

Even higher than natural winter herding.



Saskatchewan vs North Dakota

Same number of years with disease



Saskatchewan – 2000-2012

<u>Did not</u> follow best management practices (i.e. baiting bans)

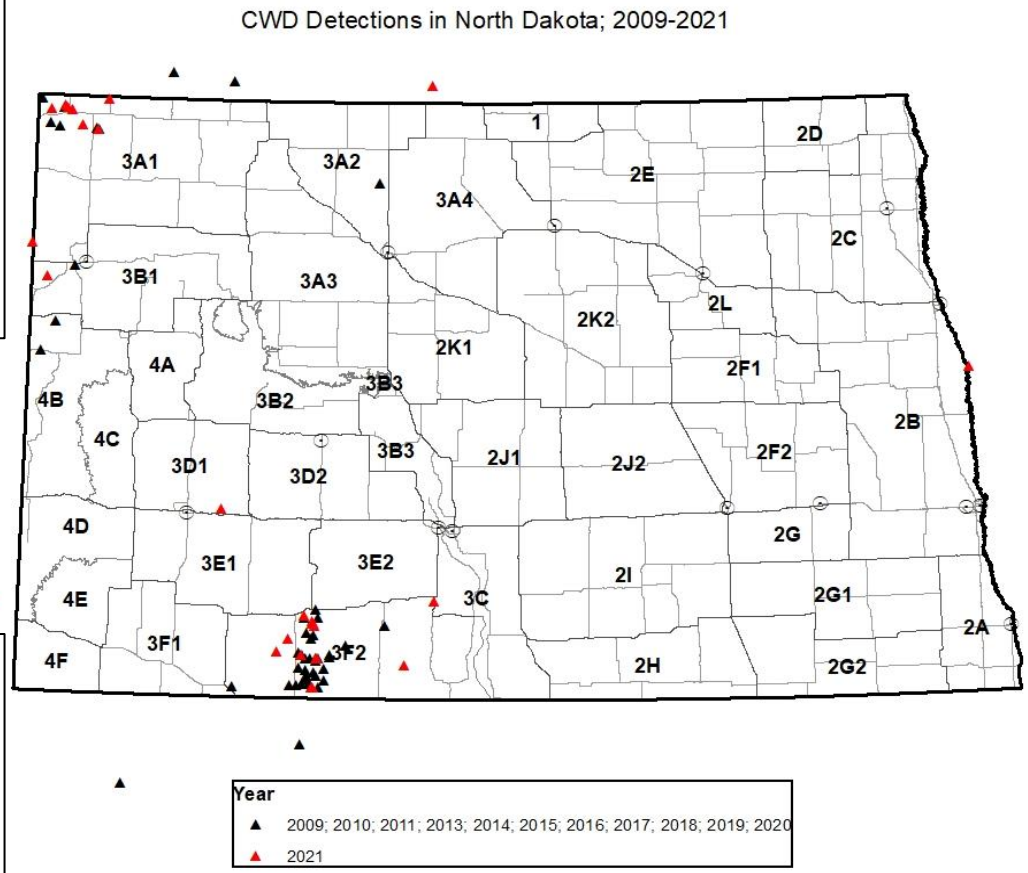
TOTAL CWD positives = 397

Significantly more Geographic Spread with larger and denser hot spots

North Dakota – 2009-2021

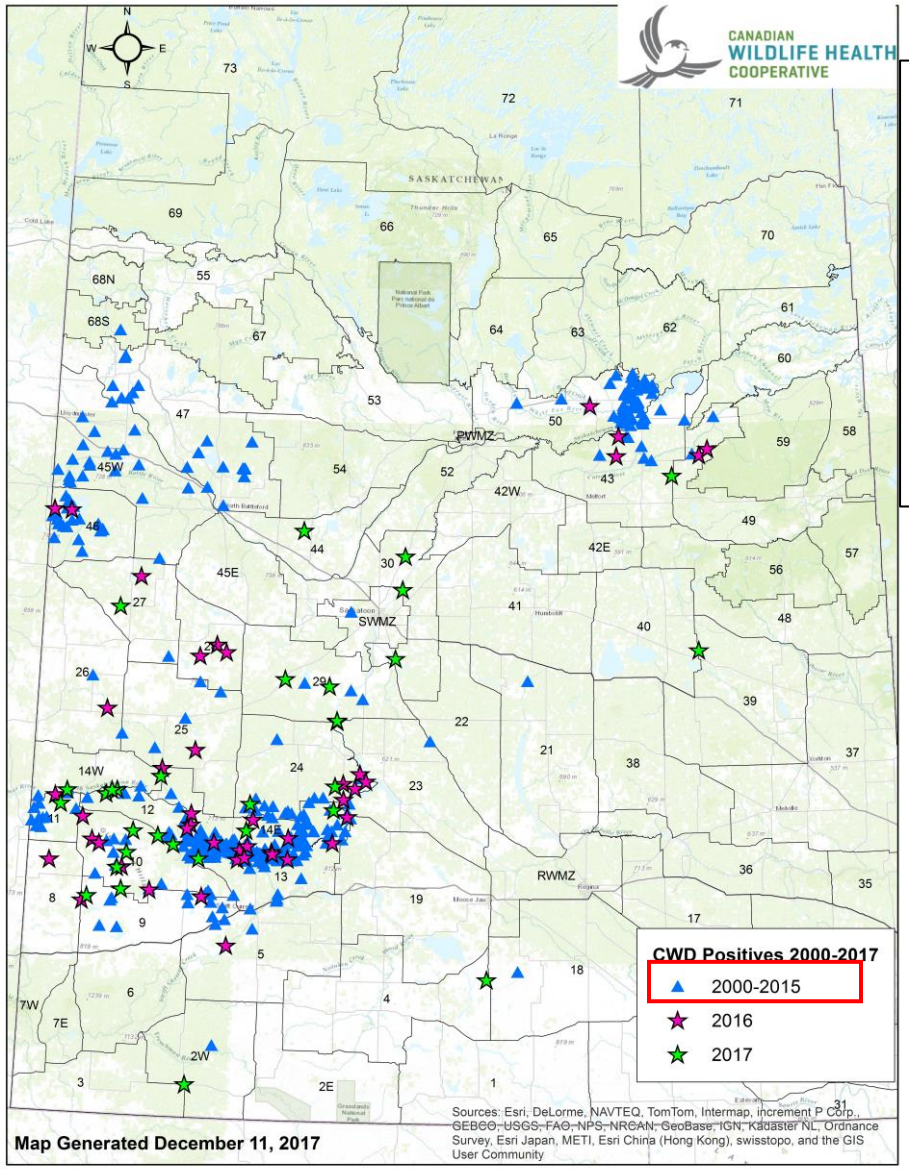
Followed best management practices (i.e. baiting bans) and spent hundreds of thousands of dollars spent on depredation measures

TOTAL CWD positives = 70



Saskatchewan vs North Dakota

Same number of years with disease



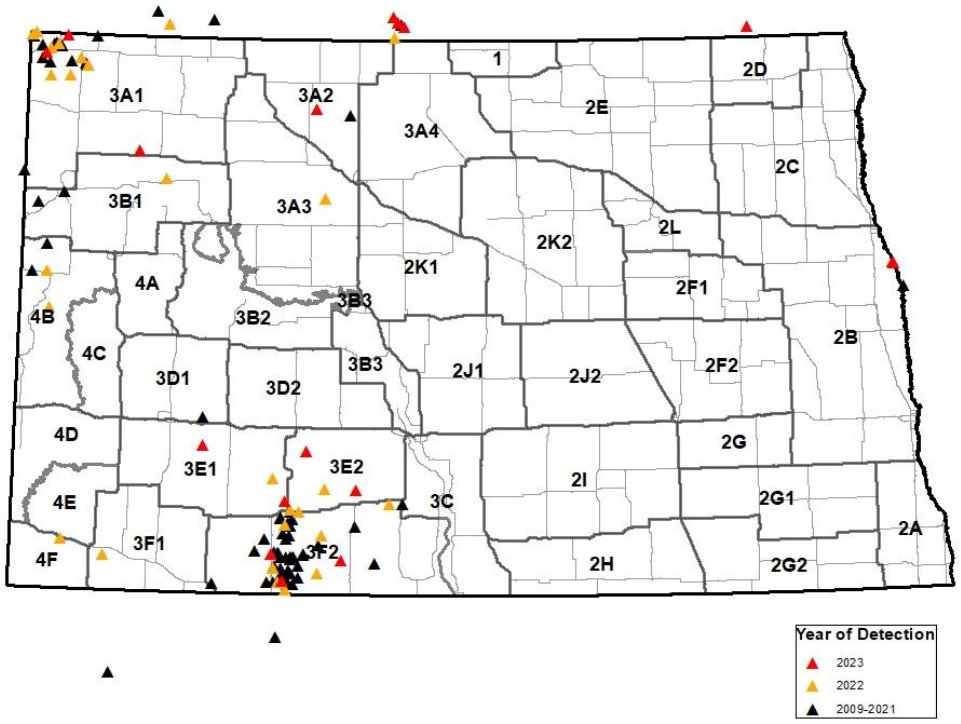
Saskatchewan – 2000-2015

<u>Did not</u> follow best management practices (i.e. baiting bans)

TOTAL CWD positives = 458 even with multi-year gap In Surveillance funding (2010-2016)

145 miles of linear distance in Southern Saskatchewan outbreak

CWD Detections in North Dakota; 2009-2023



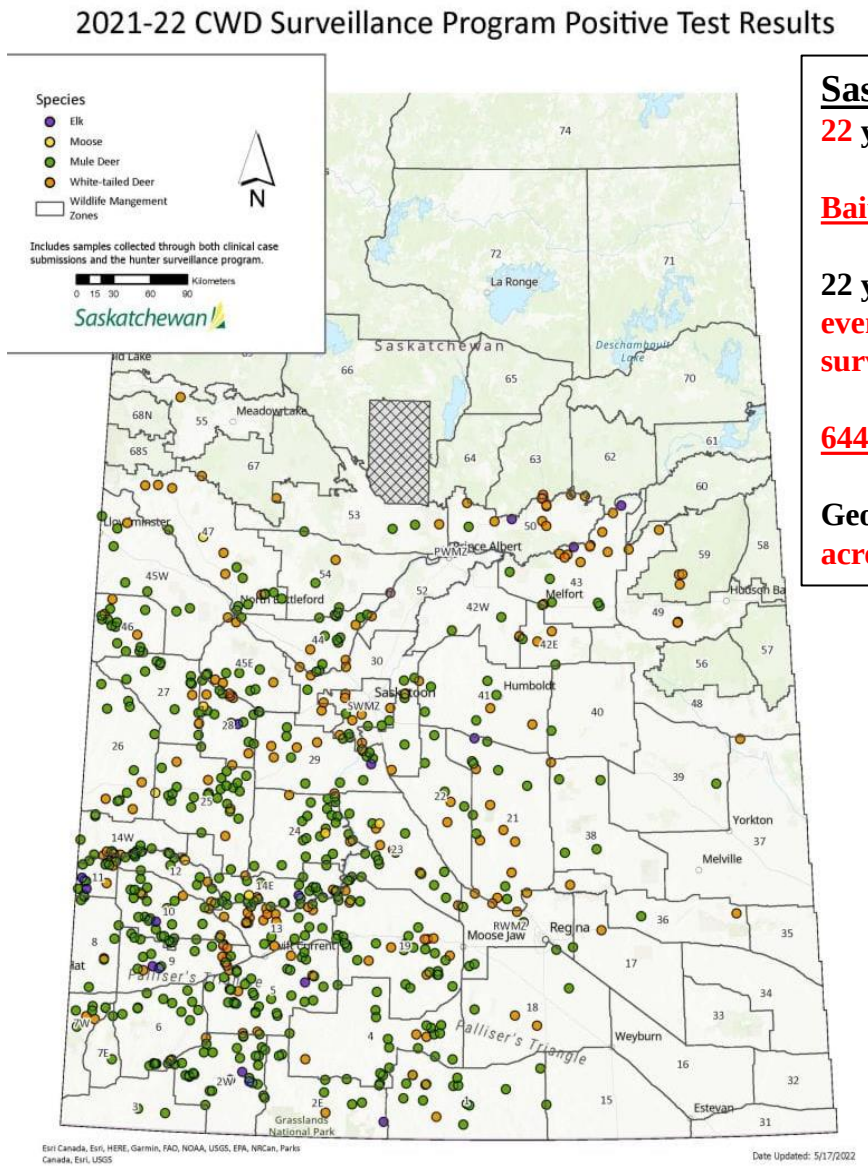
North Dakota – 2009-2023

Followed best management practices (i.e. baiting bans) and spent hundreds of thousands of dollars spent on depredation measures

TOTAL CWD positives = 105

37 miles of linear distance in southern ND outbreak

Saskatchewan vs South Dakota



<u>Saskatchewan</u> – 2000 – 2021
22 years with CWD

<u>Baiting is legal and widely popular</u>

22 yr TOTAL CWD positives = 2,599 even with multi-year gap in surveillance

<u>644 Positives just 2021/22 report</u>

Geographic Spread over ~ 70 million acres (higher density across range)

<u>South Dakota</u> – 2001 - 2021
21 years with CWD

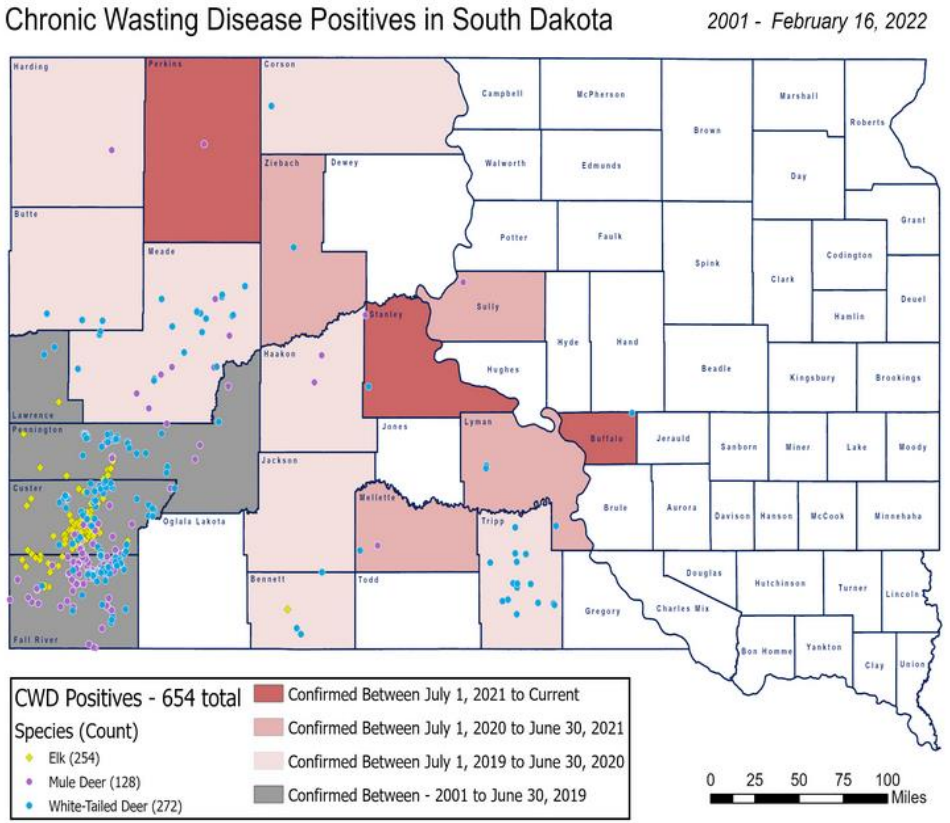
No Baiting

21 yr TOTAL CWD positives = 438 in wild deer

282 captive elk in Wind Cave NP

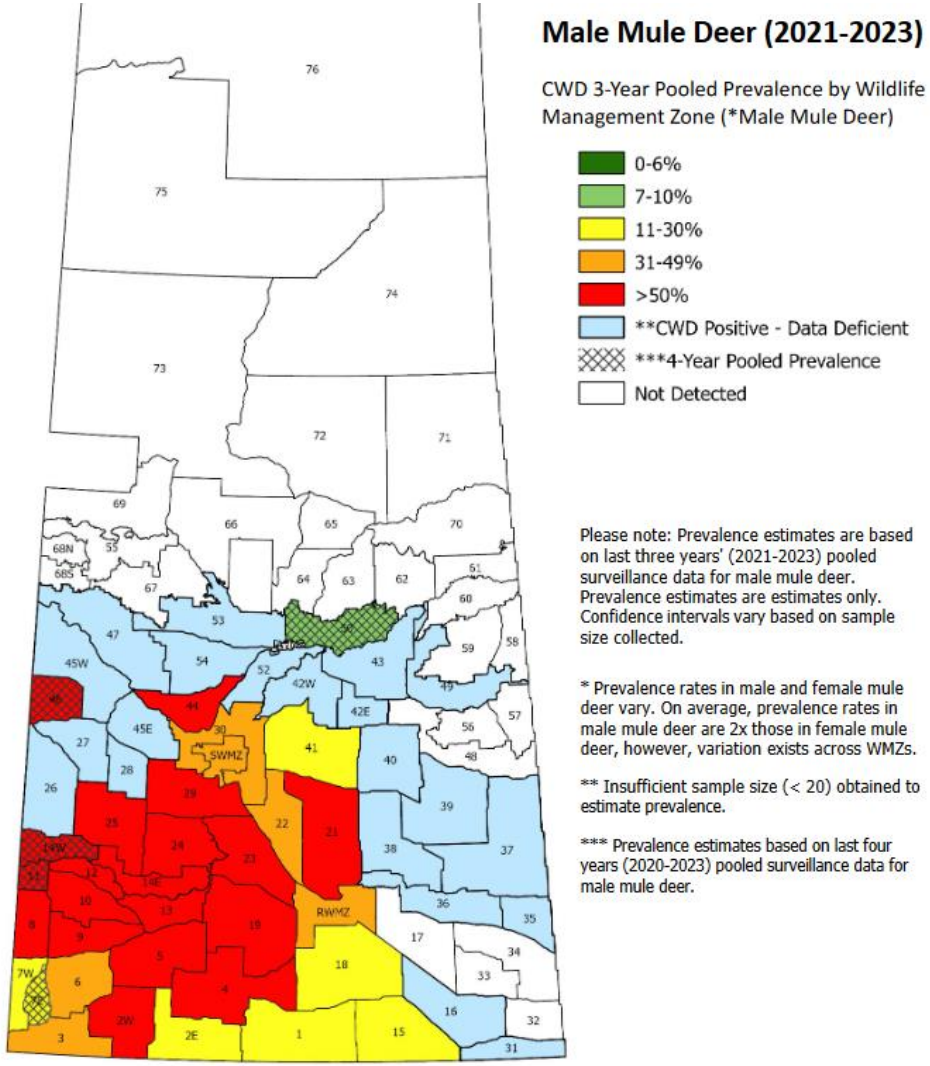
<u>54 Positives just in 2021/22 report</u>

Confined to west half of the state ~ 23 million acres

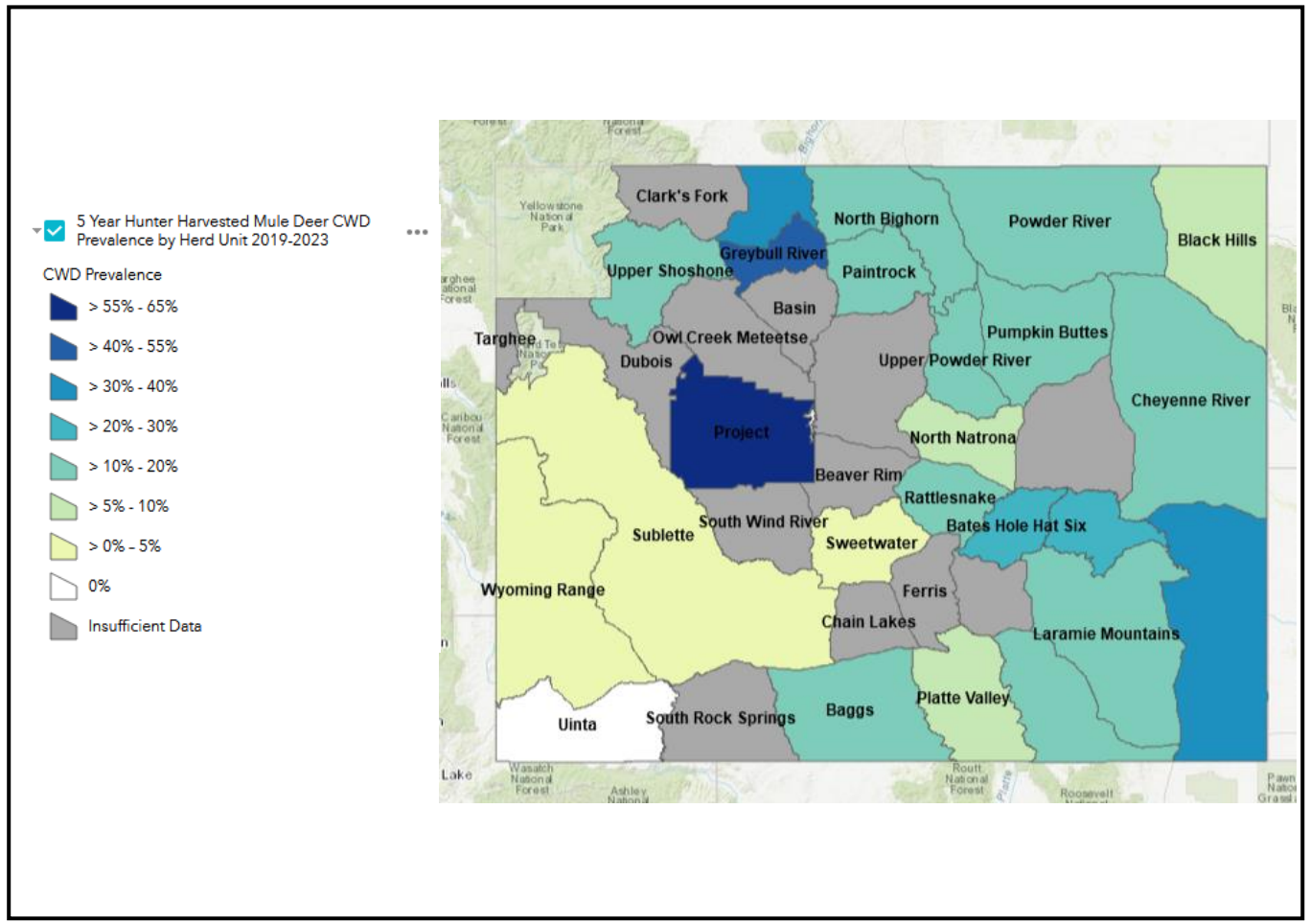


Baiting in Saskatchewan vs no baiting in Wyoming

Recent Prevalence Estimates after 24 years
~74.4 Million acres of geographic spread
18 units with over 75% prevalence



Recent Prevalence Estimates after 39 years with disease
~55.5 million acres of geographic spread
2 units over 50% prevalence



Saskatchewan vs Colorado Prevalence

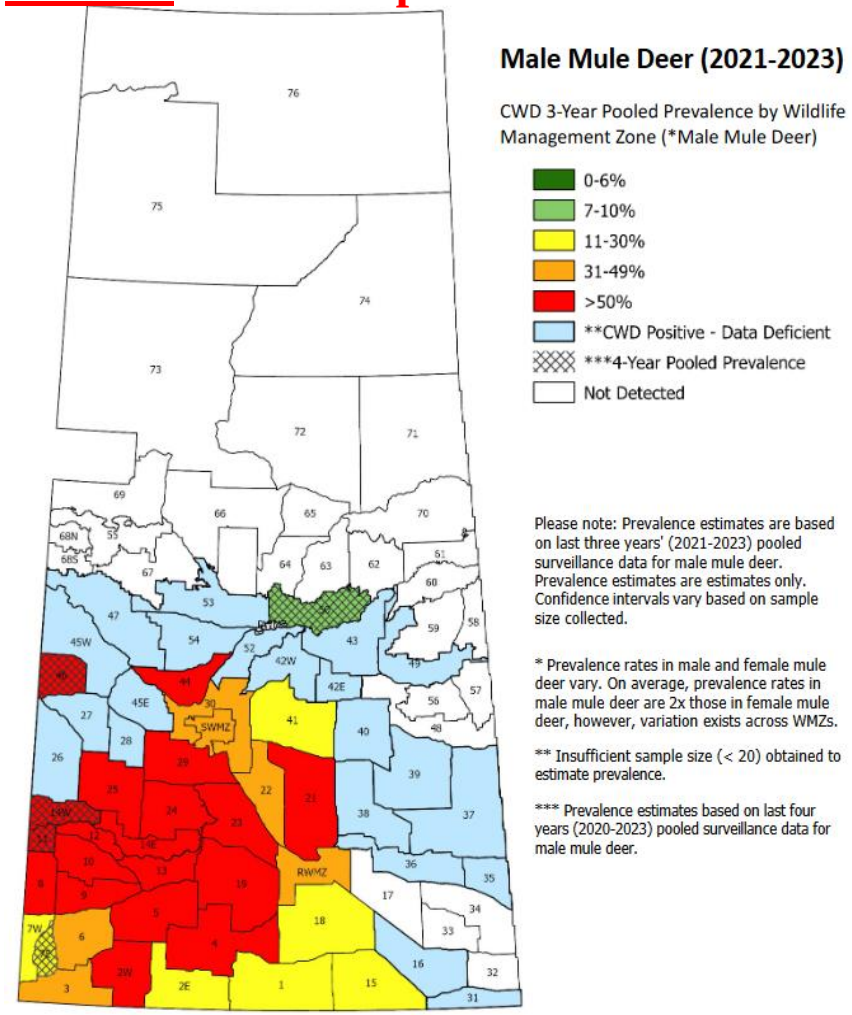
Recent Prevalence Estimates after 24 years

First detection in the wild – 2000

Baiting has always been allowed

~74.4 Million acres of geographic spread

18 Units over 75% prevalence



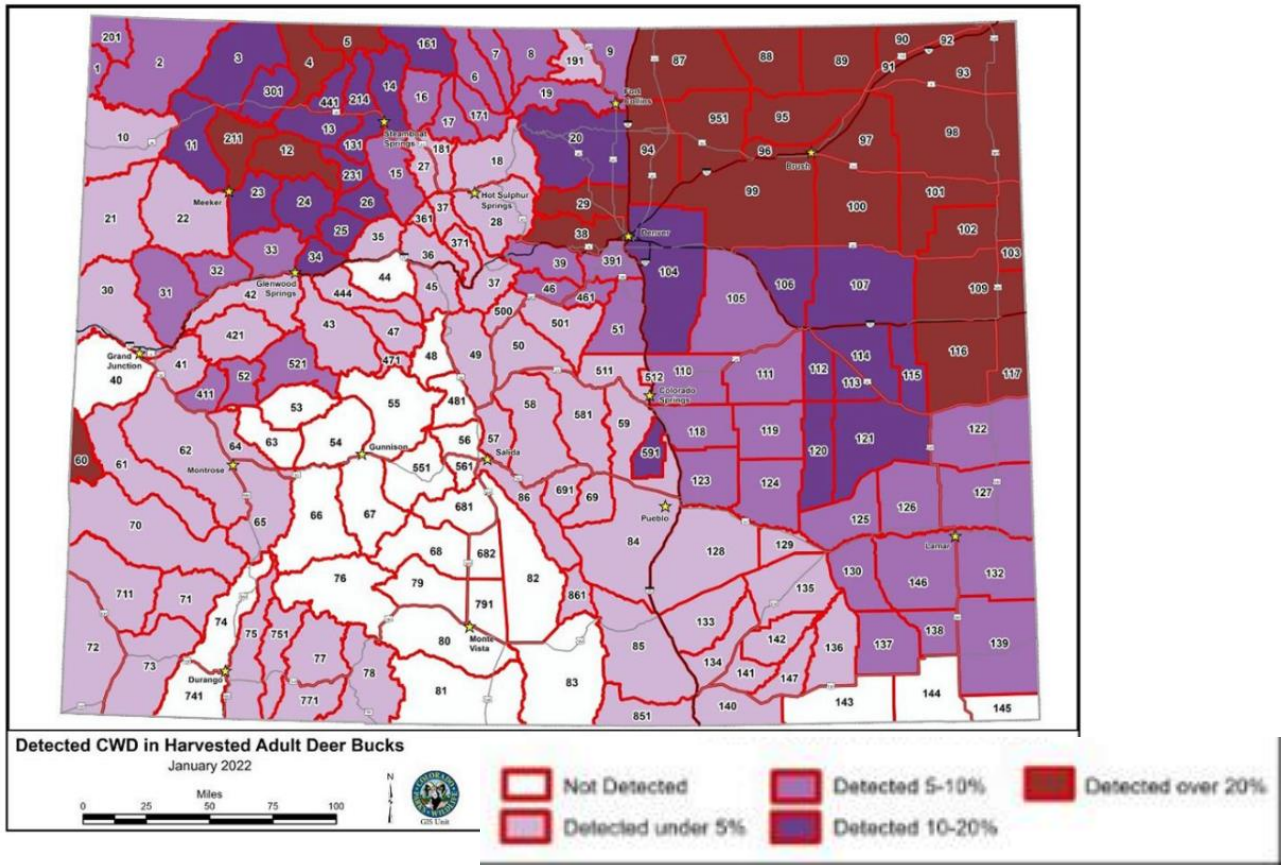
Recent Prevalence Estimates after 43 years with disease

First detection in the wild – 1981

Baiting was never allowed

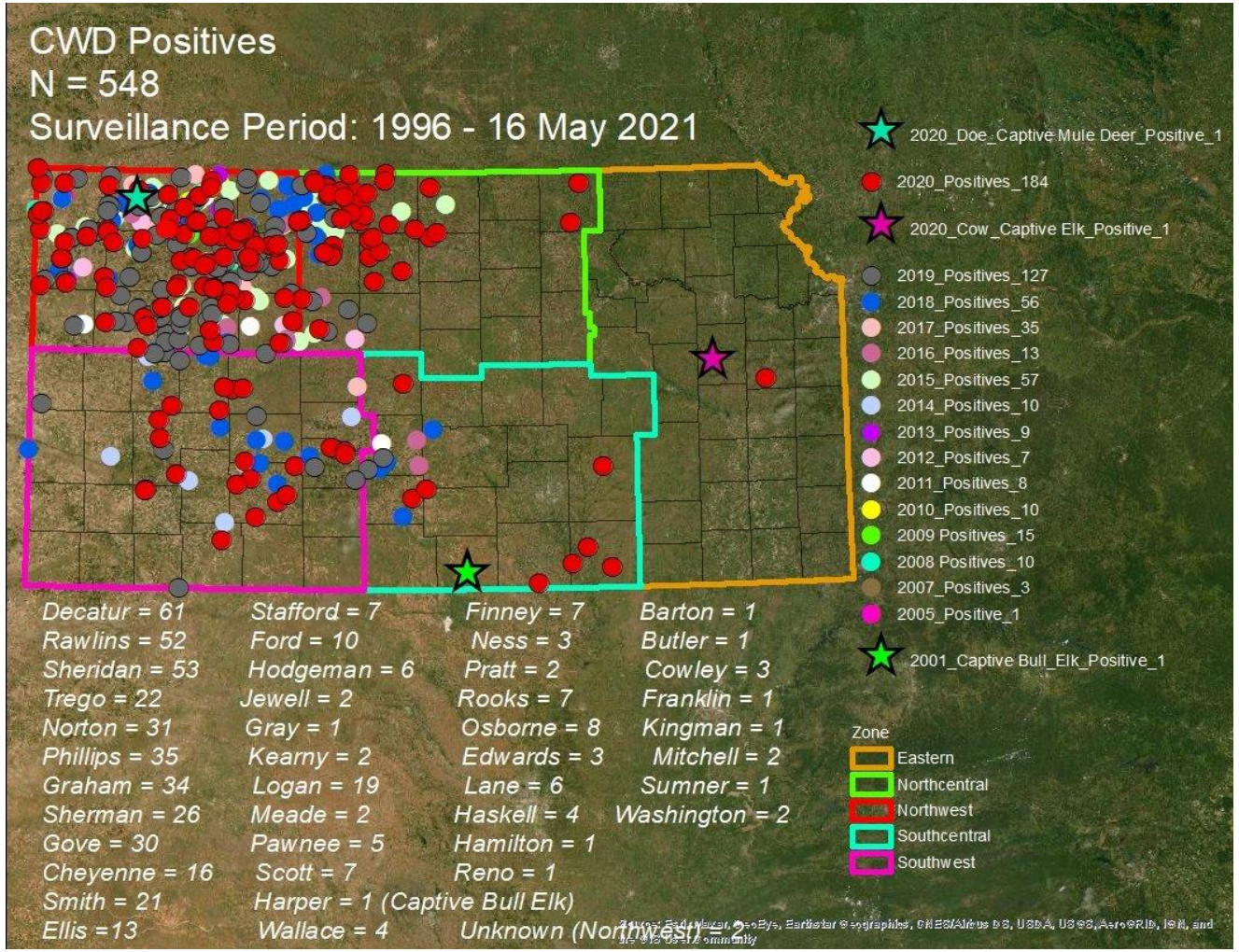
~56.5 million acres of geographic spread

NO UNITS over 30% prevalance

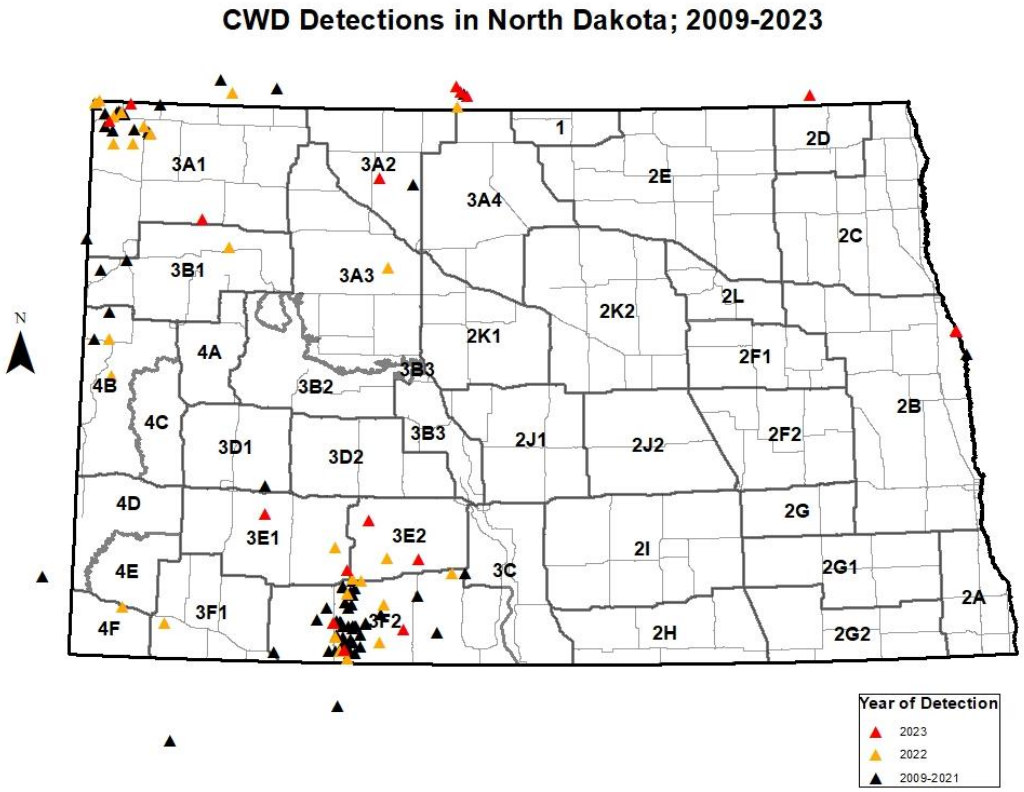


Kansas (2005-2021) vs North Dakota (2009-2023)

First detection in the wild- 2005
Continues to allow baiting
16 years with disease – 548 positives

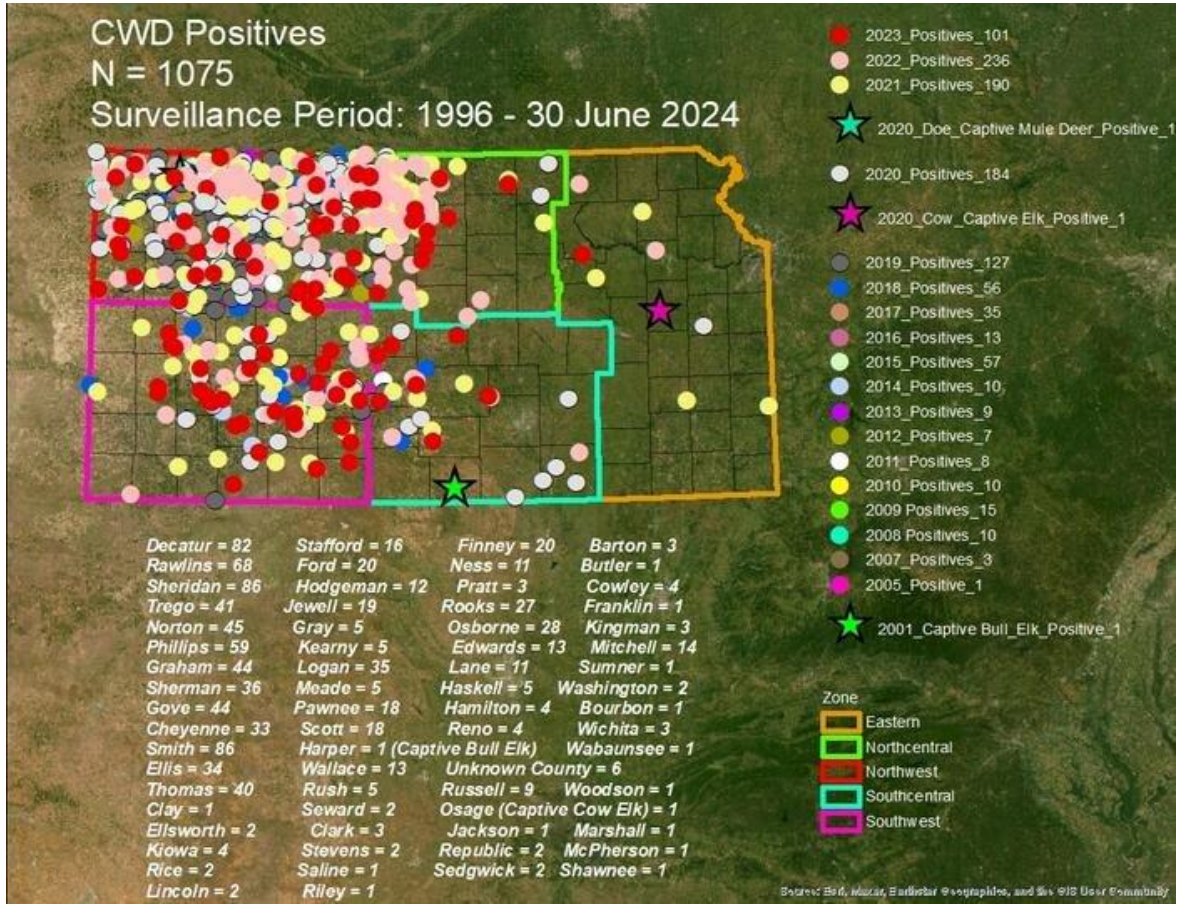


First detection in the wild – 2009
Baiting Bans
14 years with the disease – 105 Positives



Kansas after 2024, now over 1,200 cases

First detection in the wild- 2005
Baiting is legal and widely popular
19 years with disease – 1,075 positives in the wild
Finding sick deer is relatively common



South Dakota -First detection in the wild – 2001
Baiting is not legal
23 years with the disease – 438 wild deer and elk positives
Single digit prevalence outside of Wind Cave NP
282 captive elk positive in Wind Cave NP)

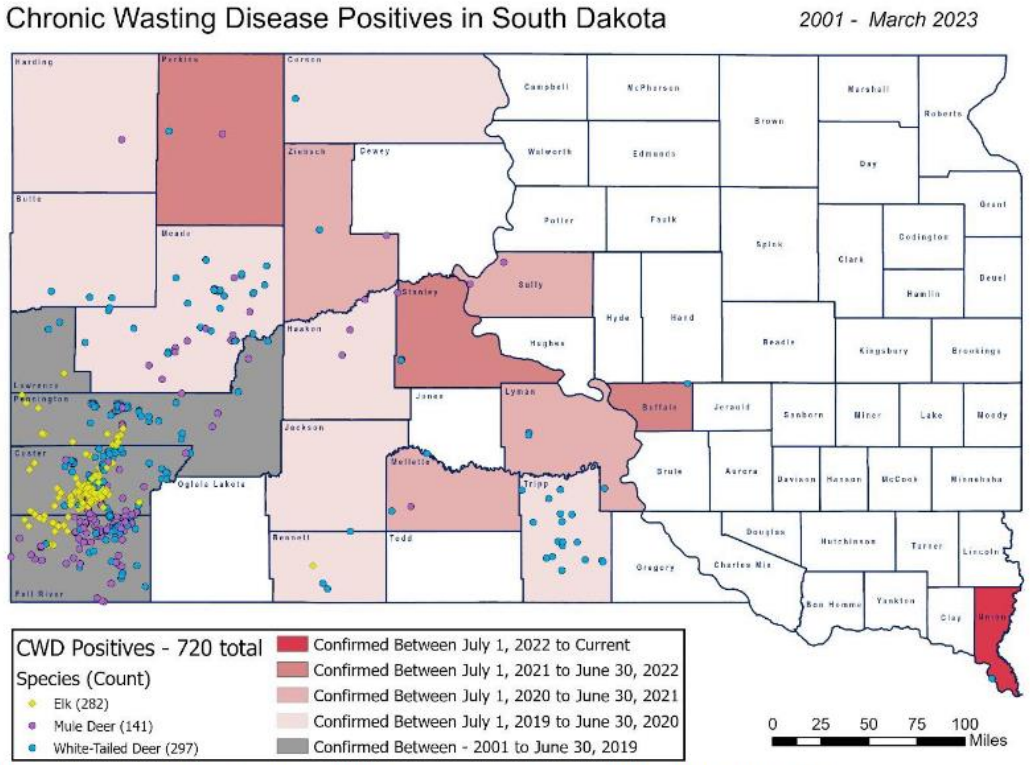
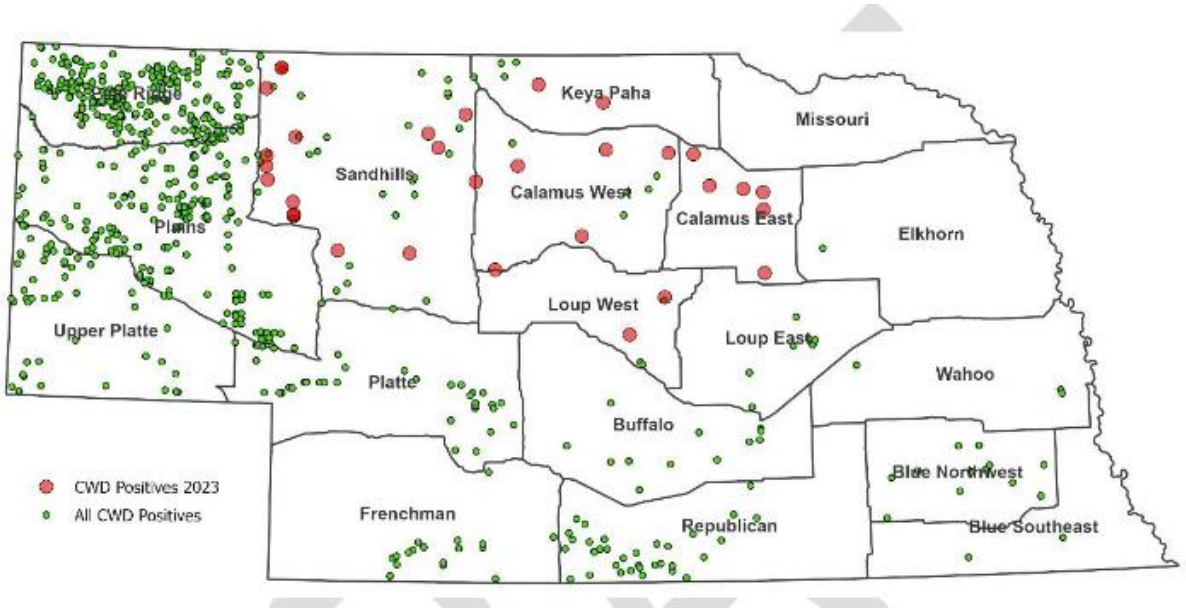


Figure 1. Locations of CWD infected free-ranging cervids in South Dakota, 2001-2023.

Nebraska vs South Dakota

- **CWD first discovered in 2000**
- **Baiting allowed on Private Lands**
- **24 years with disease**
  - **1,269 positive wild deer**
  - **19 positive elk**



First detection in the wild – 2001

No baiting

23 years with the disease – 438 wild deer and elk positives

282 captive elk positive in Wind Cave NP

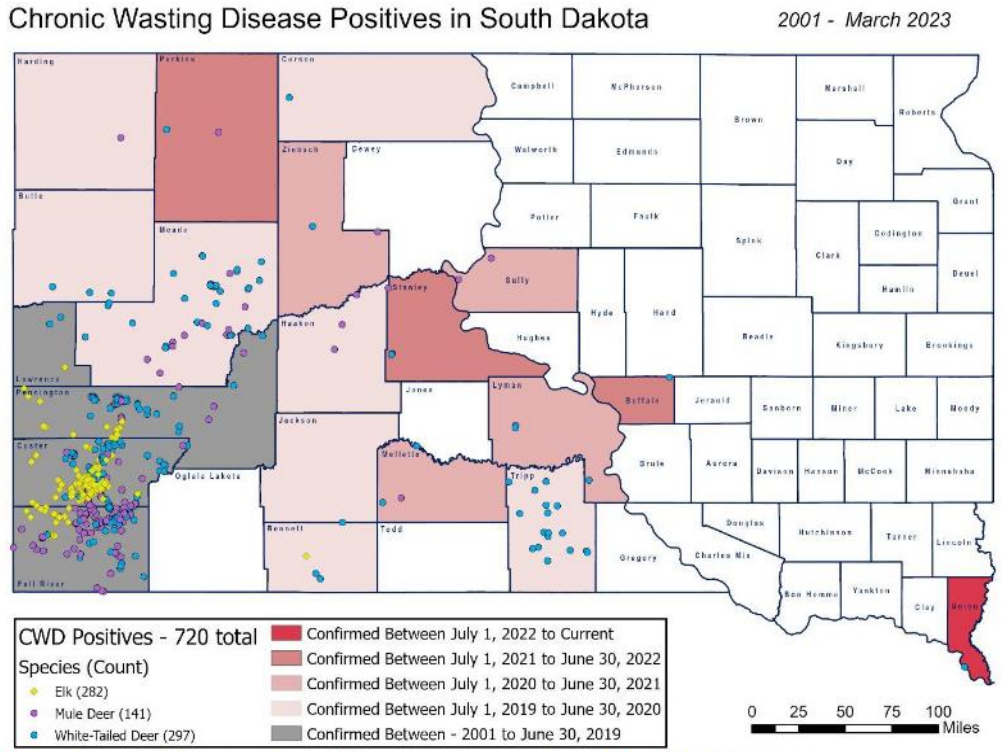


Figure 1. Locations of CWD infected free-ranging cervids in South Dakota, 2001-2023.

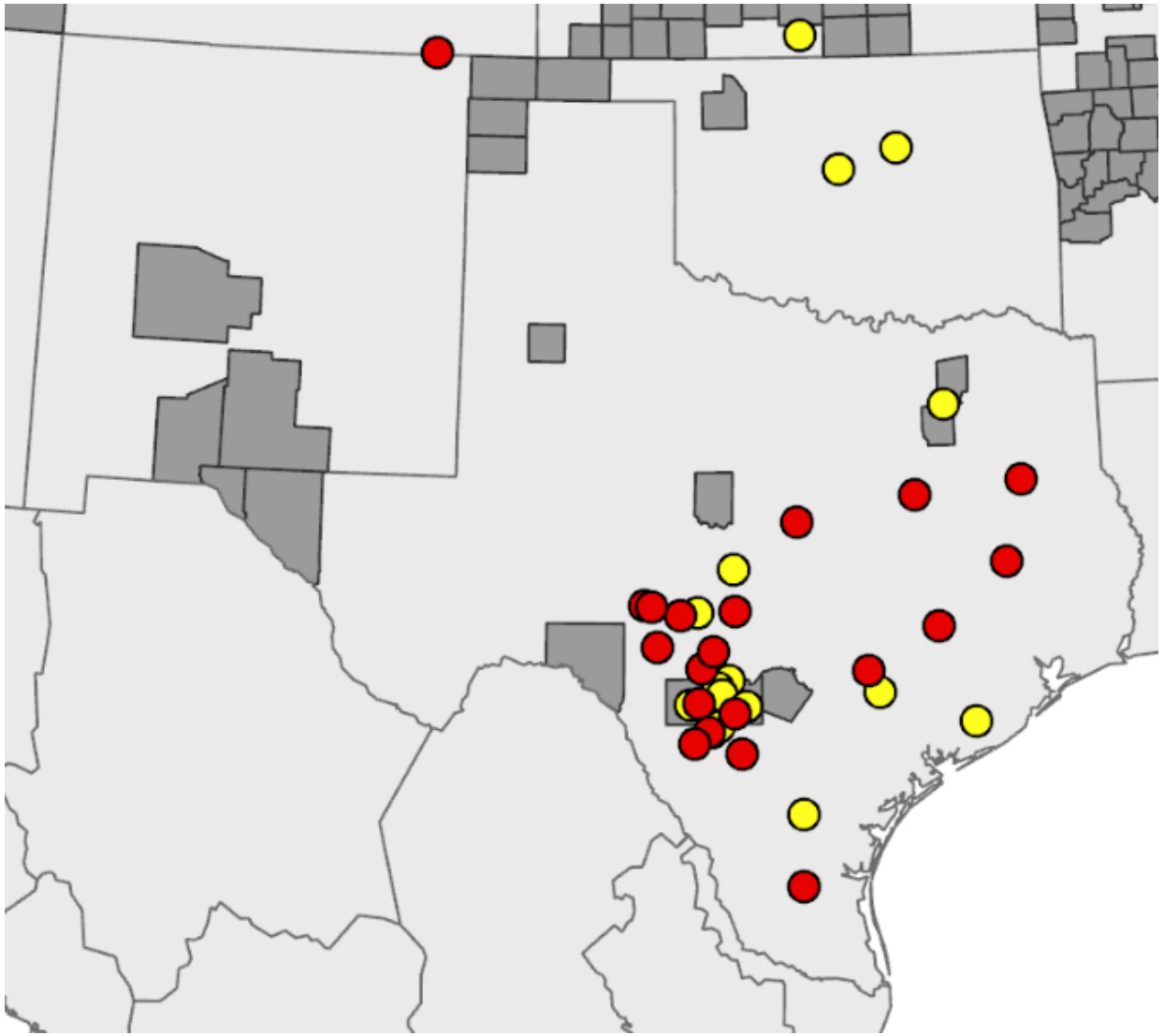
Texas vs New Mexico

New Mexico – 2002 - 2023
First detected in 2002

<u>No baiting</u>

<u>TOTAL CWD+</u> = 59

Confined to 3 counties



Texas – 2012-2024
First detected in 2012

<u>TOTAL CWD positives</u> = 1,019 as of November 2024

Texas has blurred the lines with captive and wild deer. Captive deer can still be considered wild, and thousands of captive deer are "released" into the wild every year in Texas.

Significantly more Geographic Spread.

Investments in fighting CWD and Winter Transmission

Biennium	License $$ Spent Landowner on depredation
2009-11	$1,068,000
2011-13	$851,000
2013-15	$253,000
2015-17	$276,935
2017-19	$689,339
2019-21	$471,910
2021-23	$699,528
2023-25	$1,761,269

Total $ $6,070,981 = 498 Hay yard projects from 2009 – Fall 2024

Baiting Mule Deer

Former Utah Wildlife Board member among 7 charged in illegal hunting scheme

By Carter Williams, KSL.com | Posted - Aug. 23, 2024 at 7:03 p.m.

Utah Wildlife Board member Wade Heaton, left, speaks during a meeting on Jan. 4, 2022. Heaton, who resigned from the board last year, faces 11 charges tied to an illegal baiting scheme, according to court documents. (Utah Department of Natural Resources)

A Lucrative Hunting Business

Clients of Heaton's company told investigators they paid from $3,000 to $40,000 to hunt deer with his guides, often in Southern Utah's Paunsaugunt hunting unit. The clients were assigned specific deer to hunt, along with photos to recognize them. The targeted animals were also given nicknames by Heaton and his guides, including Belly Dump, Cialis, and Tokyo Drift.

Most importantly to investigators, Heaton worked with his guides to lure the deer to specific locations using corn feed, court documents said. They even cut down tree limbs to improve the line of sight from deer blinds. Investigators frequently cited WhatsApp text messages from Heaton as evidence of his intentions.

"Let's all carry 1-2 keylicks of feed and feed whatever we drive by," Heaton allegedly wrote in a text message from August 2023. "Put what you feed on this text."

Former Utah Wildlife Official Charged in Illegal Hunting Scheme

Wade Heaton is one of seven men charged with baiting game animals, a practice Utah lawmakers made illegal in 2021.

Written by Andrew McLemore Aug 29, 2024 12:14 p.m. ET

Support us! GearJunkie may earn a small commission from affiliate links in this article. Learn More

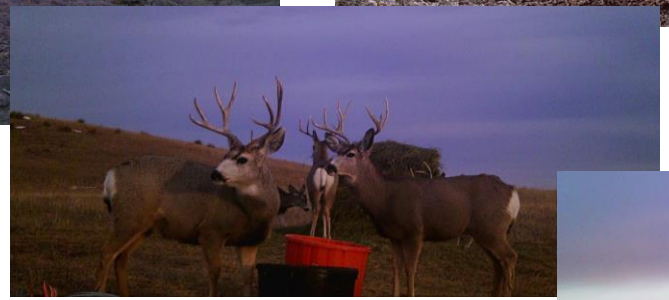
A former member of the Utah Wildlife Board faces nearly a dozen charges for baiting game animals through his hunting guide business.

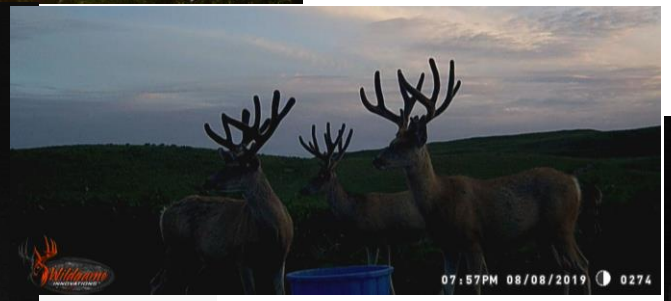
"A reminder of our decision about feed ... We are going to keep the hunters as removed from it as possible," according to a text from Heaton in August 2021. "No feeding with a hunter in the truck. Keeping the feed out of sight of the public."

Heaton did not respond to requests for comment.

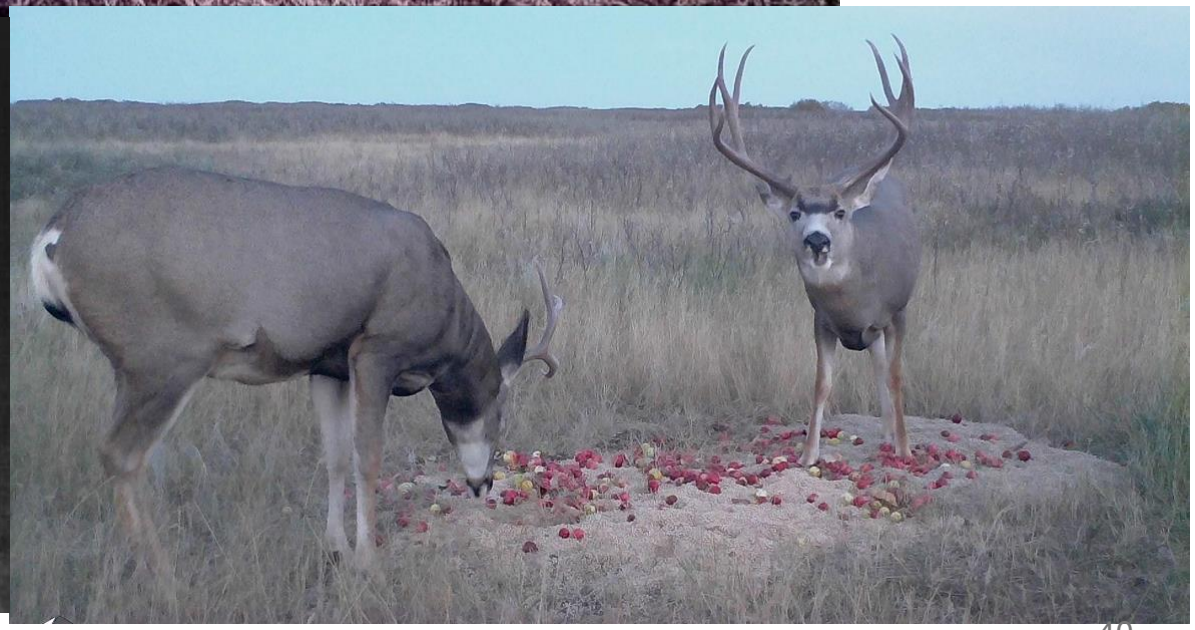
Two close-up shots of trophy mule deer bucks that were posted to Color Country Outfitter's Facebook page in 2023. Photos via Facebook

Baiting Mule Deer





Baiting Mule Deer



Wildlife is managed for all of the people of North Dakota, for the PUBLIC GOOD.

Article XI Section 27 of the North Dakota Constitution

Section 27. Hunting, trapping, and fishing and the taking of game and fish are a valued part of our heritage and will be forever preserved for the people and managed by law and regulation for the public good.

ND Century Code

20.1-01-03. Ownership and control of wildlife is in the state - Damages - Schedule of monetary values - Civil penalty.
The ownership of and title to all wildlife within this state is in the state for the purpose of regulating the enjoyment, use, possession, disposition, and conservation thereof, and for maintaining action for damages as herein provided. Any person catching, killing, taking, trapping, or possessing any wildlife protected by law at any time or in any manner is deemed to have consented that the title thereto remains in this state for the purpose of regulating the taking, use, possession, and disposition thereof. The state, through the office of attorney general, may institute and maintain any action for damages against any person who unlawfully causes, or has caused within this state, the death, destruction, or injury of wildlife, except as may be authorized by law. The state has a property interest in all protected wildlife. This interest supports a civil action for damages for the unlawful destruction of wildlife by willful or grossly negligent act or omission.

ND Game and Fish Mission Statement

Insight from Theodore Roosevelt

"Defenders of the short-sighted men who in their greed and selfishness will, if permitted, rob our country of half its charm by their reckless extermination of all useful and beautiful wild things, sometimes seek to champion them by saying the 'the game belongs to the people.' So, it does; and not merely to the people now alive, but to the unborn people. The 'greatest good for the greatest number' applies to the number within the womb of time, compared to which those now alive form but an insignificant fraction. Our duty to the whole, including the unborn generations, bids us restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wild life and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose, and method."

2025 HOUSE STANDING COMMITTEE MINUTES

Energy and Natural Resources Committee
Coteau AB Room, State Capitol

HB 1236
2/6/2025

Relating to use of hunting license and permit application fees.

4:12 p.m. Chairman Porter opened the hearing.

Members Present: Chairman Porter, Vice Chairman Anderson, Vice Chair Novak, Representatives: Dockter, Hagert, Headland, Heinert, Marschall, Olson, Ruby, Conmy, Foss

Members Absent: Representative Johnson

Discussion Topics:

- Committee action

4:12 p.m. Representative J. Olson moved a Do Not Pass.

4:12 p.m. Representative Heinert seconded the motion.

Representatives	Vote
Representative Todd Porter	Y
Representative Dick Anderson	Y
Representative Anna Novak	N
Representative Liz Conmy	Y
Representative Jason Dockter	Y
Representative Austin Foss	Y
Representative Jared c. Hagert	Y
Representative Craig Headland	N
Representative Pat D. Heinert	Y
Representative Jorin Johnson	A
Representative Andrew Marschall	Y
Representative Jeremy L. Olson	Y
Representative Matthew Ruby	N

4:14 p.m. Motion passed 9-3-1

4:14 p.m. Representative Dockter will carry the bill.

4:14 p.m. Chairman Porter adjourned the meeting.

Wyatt Armstrong for Leah Kuball, Committee Clerk

REPORT OF STANDING COMMITTEE
HB 1236 (25.0460.01000)

Energy and Natural Resources Committee (Rep. Porter, Chairman) recommends **DO NOT PASS** (9 YEAS, 3 NAYS, 1 ABSENT OR EXCUSED AND NOT VOTING). HB 1236 was placed on the Eleventh order on the calendar.