



House Energy and Natural Resources Committee
Testimony on HB 1151

North Dakota Game and Fish Department
Dr. Charlie Bahnson, Wildlife Veterinarian
January 20, 2023

Chairman Porter and members of the House Energy and Natural Resources Committee, my name is Dr. Charlie Bahnson and I have served as Wildlife Veterinarian for North Dakota Game and Fish. In addition to being a veterinarian, I'm also a trained scientist, having received a PhD from the University of Georgia. I've done disease work for wildlife management agencies across the United States. I sit on multiple regional and national wildlife health working groups and have coauthored numerous peer-reviewed scientific research papers. But beyond that, and perhaps most importantly, I have roots here. I grew up in South Dakota. I married into a family that is spread across this state. My kids were born here. Like everyone else in this room, I too am an avid hunter. My desire to share that with my kids is a major reason that I go to work every day. And, like everyone else in this room, I'd like nothing more than to never have to talk about CWD again. But my training in science and medicine prevents me from doing so.

Casey shared some of the history of CWD in North Dakota and hunter statistics. I'll dive a bit more into the disease itself, along with how we try to manage it.

So what is known about CWD? We know that CWD is a real disease and it's a real threat. It's shed in bodily fluids and is transmitted directly between animals, or indirectly through contaminated surfaces. Under captive settings, all research animals infected with CWD eventually developing fatal neurologic disease. Out on the landscape infected animals are more vulnerable to other causes of mortality but will succumb to the terminal stages of the disease if they live long enough. In free-ranging animals, the likelihood of surviving for one year is cut nearly in half, and virtually no animals survive past two years.

We also know that infection rate or "prevalence" matters. You can imagine that one out of a hundred is pretty easy to write off. However, as infection rates climb- as a larger portion of your herd consists of these sick animals - the impact becomes larger, to a point where you can no longer ignore it. That means finding sick deer. That means producing fewer mature animals to hunt. This new cause of mortality will cut into the "harvestable surplus" meaning fewer licenses if we're trying to maintain population levels. In the most extreme situations, that cause of mortality can outpace the herd's ability to compensate, meaning population declines. The tipping point at which these things will happen will vary. In some western herds, declines were documented at as low as 30% infection rates.

Also challenging is how CWD prevalence grows. Drought, harsh winters, or other diseases like EHD tend to be cyclical – you have bad years followed by good years and population rebound.

In contrast, CWD starts small and slowly builds over years, eventually becoming a continuous pressure on the population. For reasons we can discuss later, it's probably not feasible to *lower* prevalence. Rather your first goal is to prevent the disease. Your second goal is to maintain as low of a prevalence as possible. Ultimately, you get one shot. When infection rates reach an exponential phase, the outlook is pretty grim. Therefore, it is critical to reduce transmission to the furthest extent possible especially early. CWD is currently rare in North Dakota. It's easy to dismiss. We want to keep it that way.

Now if you'll indulge me in a thought experiment. Let's assume CWD is a good thing and you wanted to spread it as fast as possible. How would you go about doing it? You'd want to open up the gates to carcass movement from out of state and encourage leaving them all over the landscape. We'd want to stockpile deer in areas to much higher densities. You'd also want to somehow get deer to exchange bodily fluids – to encourage lots of contacts between as many animals as possible; to get deer to consume feed and dirt contaminated with bodily fluids. Essentially, you'd want to start putting out bait piles. The more, the bigger, the longer, the better.

There have been a lot of claims about science and how evidence-based decisions are made. If I try to drive 150 mph from here to Fargo in a blizzard, I'm likely to get in an accident. There is no study documenting that, but we can make a strong inference based on our understanding of driving at high speeds or traveling in winter conditions. By that same token, we have several hundred research papers that shape our understanding of CWD and guide how best to address it.

We know how CWD is transmitted, and we know that baiting promotes those behaviors. Numerous studies have documented that it alters natural behavior, it breaks down social structure, it brings lots of unrelated animals into close proximity. It promotes direct and indirect contact. Studies have shown that baiting and feeding play large roles in the transmission of other diseases, including brucellosis and bovine tuberculosis. This large body of research allows us to strongly infer that baiting poses considerable risk to CWD transmission.

We do not have a randomized clinical trial like you would for a new drug. It's considerably more complicated than that when we're talking about free-ranging wildlife on varying landscapes. Frankly, as a trained scientist, I don't know how you'd set that up ethically or feasibly. I know that it'd take many millions of dollars and 15 to 20 years. It'd be great if that study someday happened. It'd be great to have research clearly demonstrating that baiting doesn't contribute to transmission risk. I'd gladly reconsider our management approach. But until then, we have to follow the clear direction the evidence points us towards and there is robust science that does that.

In the packet provided, you'll find a fact sheet summarizing baiting, as well as our 2023 Management Plan. What I want to point out is that both of those cite peer-reviewed scientific research. You'll also see a list of over 250 references. None of these stand completely on their own, but rather, they build on each other. Each adds a small piece to our collective understanding of CWD. These represent ideas, observations, questions, or theories, that have been tested, scrutinized, proven, or in some cases disproven in a systematic way. This is how we understand a phenomenon. This is the science.

Baiting restrictions are one of only a handful of very blunt tools we have to combat CWD. We make no claims that it will stop the disease in its tracks. We know that deer are social animals that yard up for portions of the year. There is some natural transmission that we have no control over. This winter is bad. But it didn't start in August and run through the archery season. And we don't have one like this every year. That is all to say that we can't use the existence of this risk to justify increasing it- by congregating animals more intensely and for a much larger portion of the year.

As a lifelong hunter, I can understand why some folks are upset. If baiting has been a part of how you hunt for years, it's hard to imagine hunting without it. Nobody likes the idea of more hunting regulations, but they are in place to protect the resource. Imagine another scenario. Imagine you shoot a nice buck and as you walk up to it, you realize it's skin and bones. Imagine your kid or grandkid shoots his first deer and a week later you get a phone call and have to decide if you throw away that infected meat or feed it to your family. Those scenarios have already begun to happen in North Dakota. We don't want them to become common. This conversation around CWD is not fun. It'd be much easier in the short term to ignore it. But it'd be irresponsible of the Department to do so. We have to face reality. Our hunting heritage depends on a healthy deer herd. When we pass it along to the next generation, I hope we can look them in the eye and tell them we did everything we could to protect it.



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