



Senate Energy and Natural Resources Committee Testimony on HB 1151

North Dakota Game and Fish Department
Dr. Charlie Bahnson, Wildlife Veterinarian
March 16, 2023

Chairman Patten and members of the Senate Energy and Natural Resources Committee, my name is Dr. Charlie Bahnson. I serve as Wildlife Veterinarian for Game and Fish and an outsized portion of that role has become wrestling with CWD.

That's a difficult task. CWD is caused by a prion which is different from a virus or bacteria. That's important because it means that current vaccines or antibiotics don't work. There are a handful of human and animal prion diseases, some of which have been studied for over a hundred years by people around the world. They remain 100% fatal. If you are diagnosed with variant Creutzfeldt-Jakob disease or any of these diseases, it's a death sentence. No supplement or vitamin will change that.

The same is true for CWD. Infection results in a months-long course of disease that will end in death. A lot of these deer don't even make it that far because they become more vulnerable to other causes of mortality as the brain disease sets in. This is all while they shed the disease in their bodily fluids, potentially infecting others.

Now if only a few animals in a herd have this brain disease, it's 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. 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 grim. CWD is now established in portions of the state, but it is currently rare. It's easy to dismiss. We want to keep it that way.

That comes down to managing risk. Knowing how CWD is transmitted, what are we as hunters doing that promotes those behaviors? Numerous studies have documented that baiting alters natural behavior, it breaks down social structure, it brings lots of unrelated animals into close proximity. It increases the odds of consuming feed along with the urine, saliva, or feces of other deer. Studies have shown that baiting and feeding play large roles in the transmission of other diseases like brucellosis and

bovine tuberculosis. Outbreaks of either of those diseases in deer would be devastating to the cattle industry. House Bill 1151 would prevent Game and Fish from trying to help producers in such an event. During an outbreak of bovine tuberculosis, which can be spread between cattle and deer, a neighbor who doesn't particularly care about your cattle could continue to bait deer year-round spreading it among those animals and threatening your livelihood.

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. This winter is bad. But it didn't start in August and run through all deer seasons. And we don't have a winter like this every year. That is all to say that we can't use the existence of some risk that's beyond our control 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. 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 their opportunity to enjoy it.

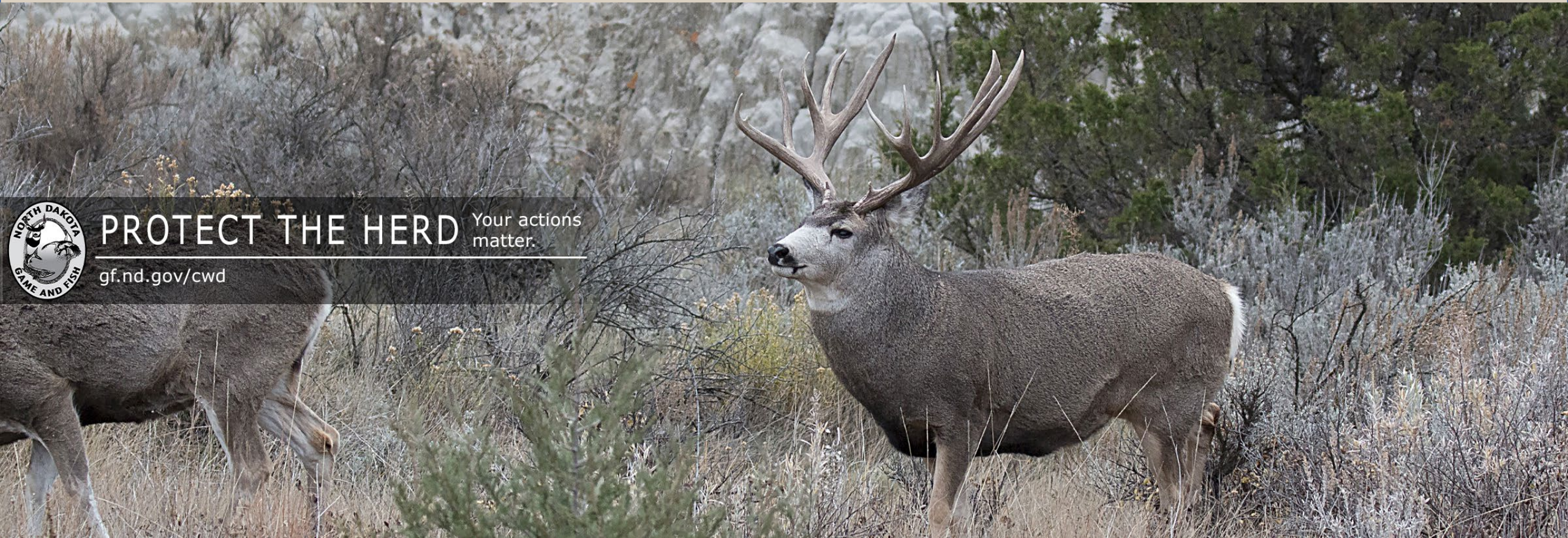
Senate Energy and Natural Resources Committee

HB 1151



PROTECT THE HERD Your actions matter.

gf.nd.gov/cwd



The mission of the North Dakota Game and Fish Department is to protect, conserve and enhance fish and wildlife populations and their habitat for sustained public consumptive and nonconsumptive use.

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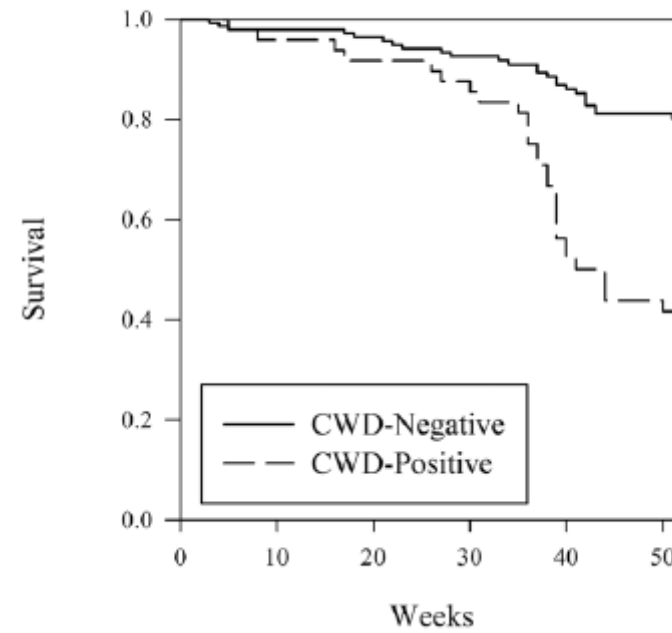
Mississippi Dept of Wildlife, Fisheries, and Parks



Wyoming Game and Fish Department; CWD Alliance

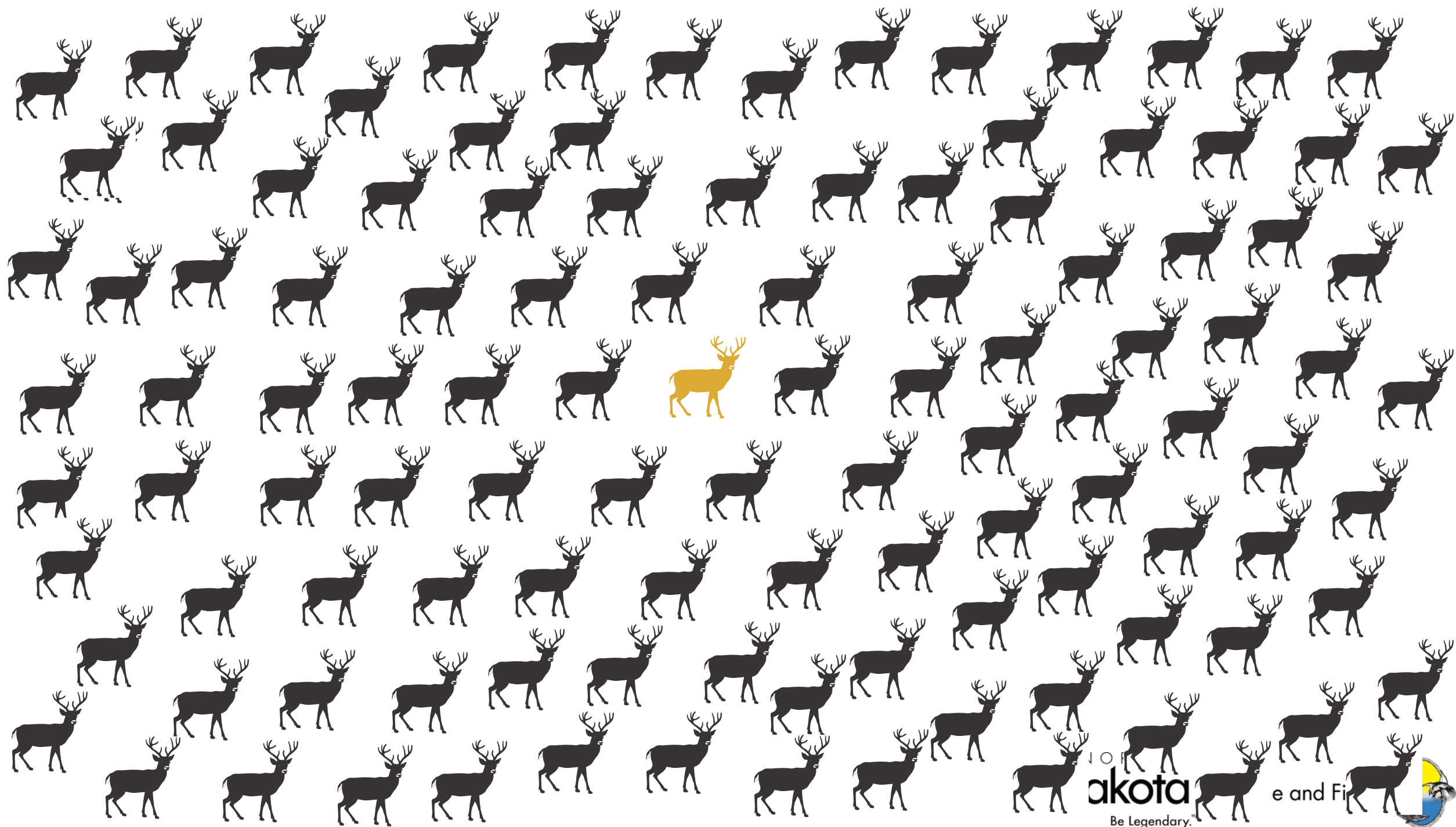


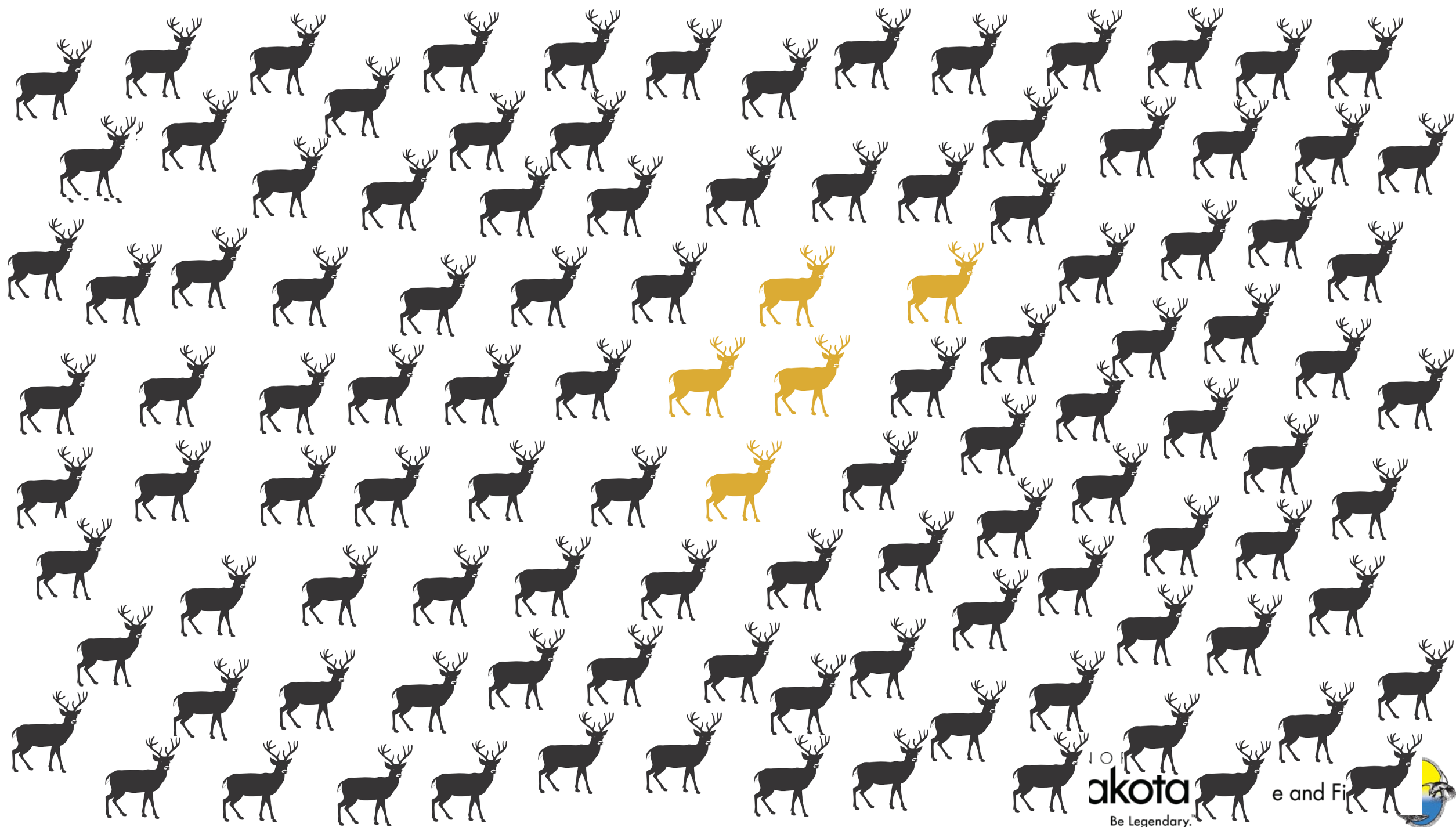
A) CWD-Negative vs. CWD-Positive

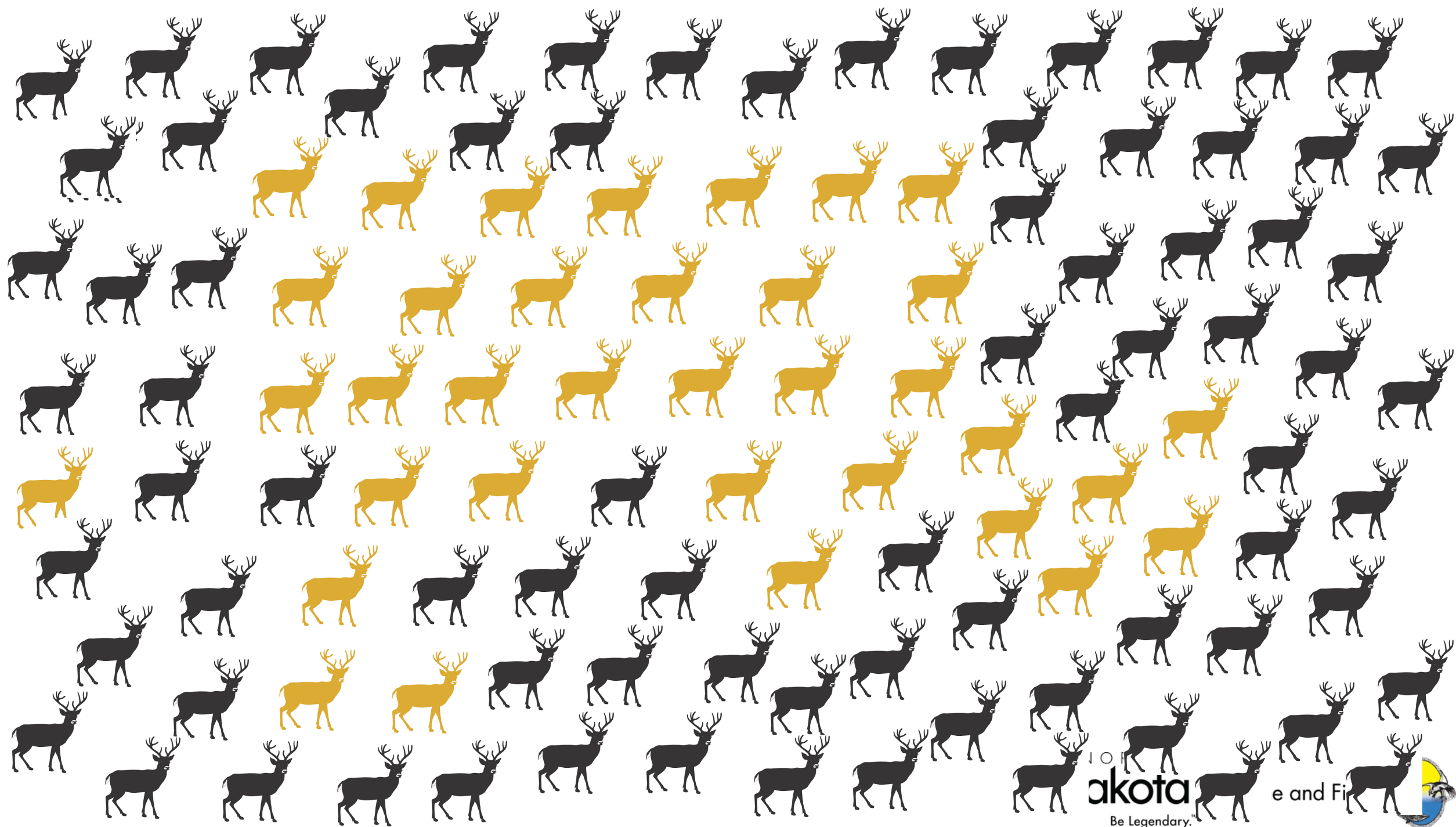


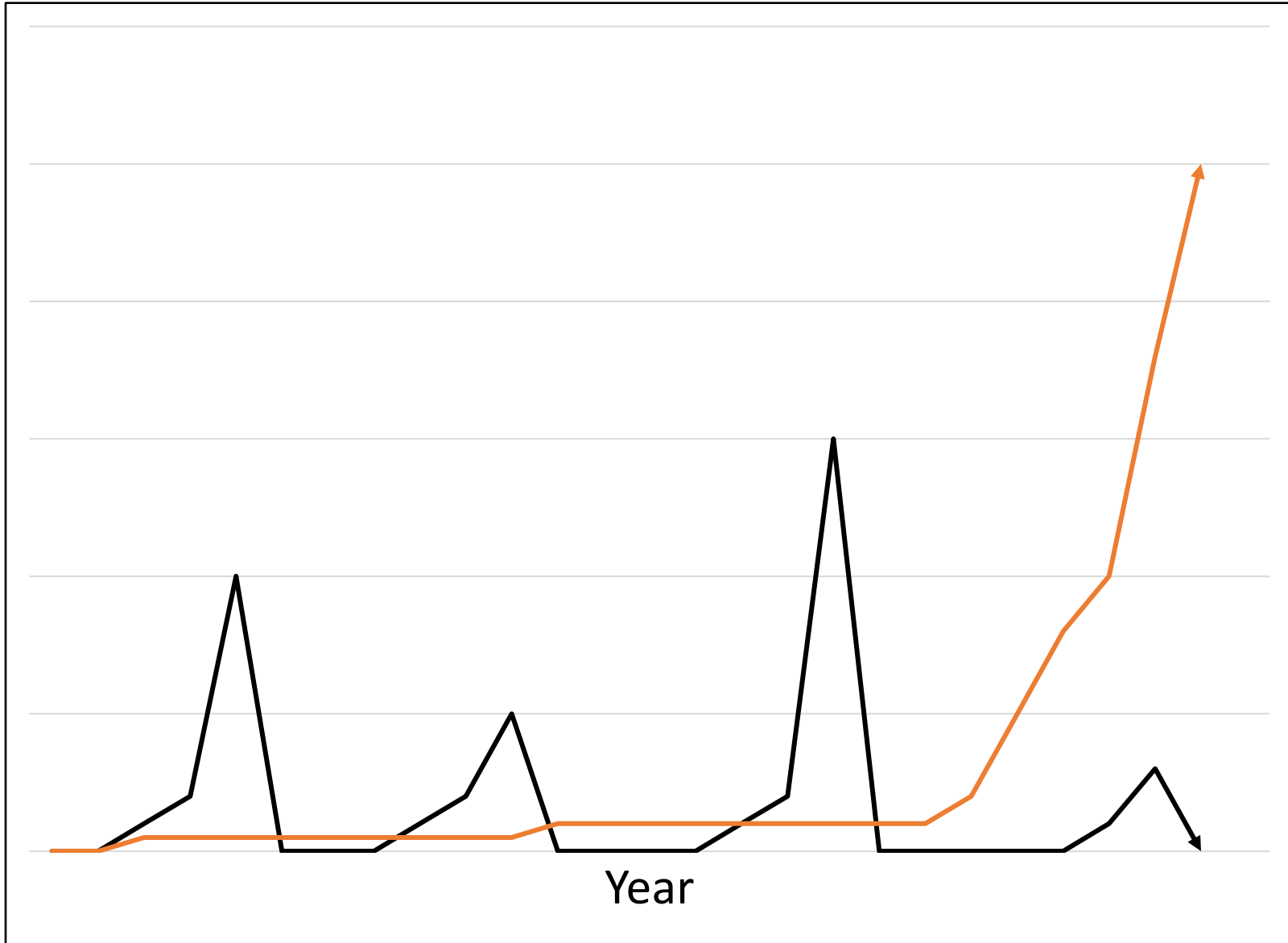
Edmunds et al. 2016. Chronic wasting disease drives population decline of white-tailed deer. PLoS One E0161127.





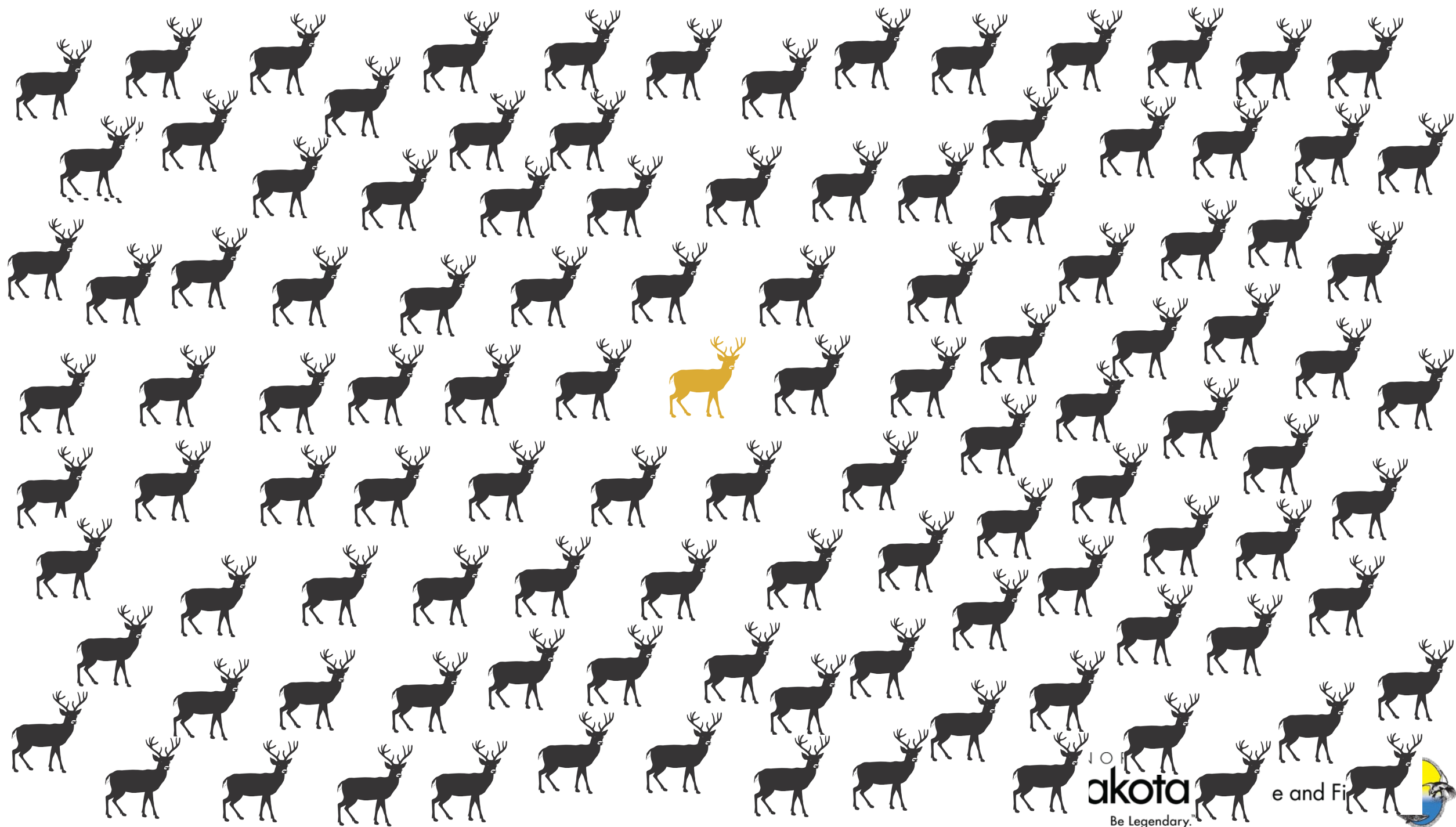






Year







https://lancasteronline.com/sports/pa-game-commission-explains-cwd-deer-feeding-ban-proposal-petition-opposes-it/article_347de1b2-a8a7-11ea-8fda-8b8106f45593.html







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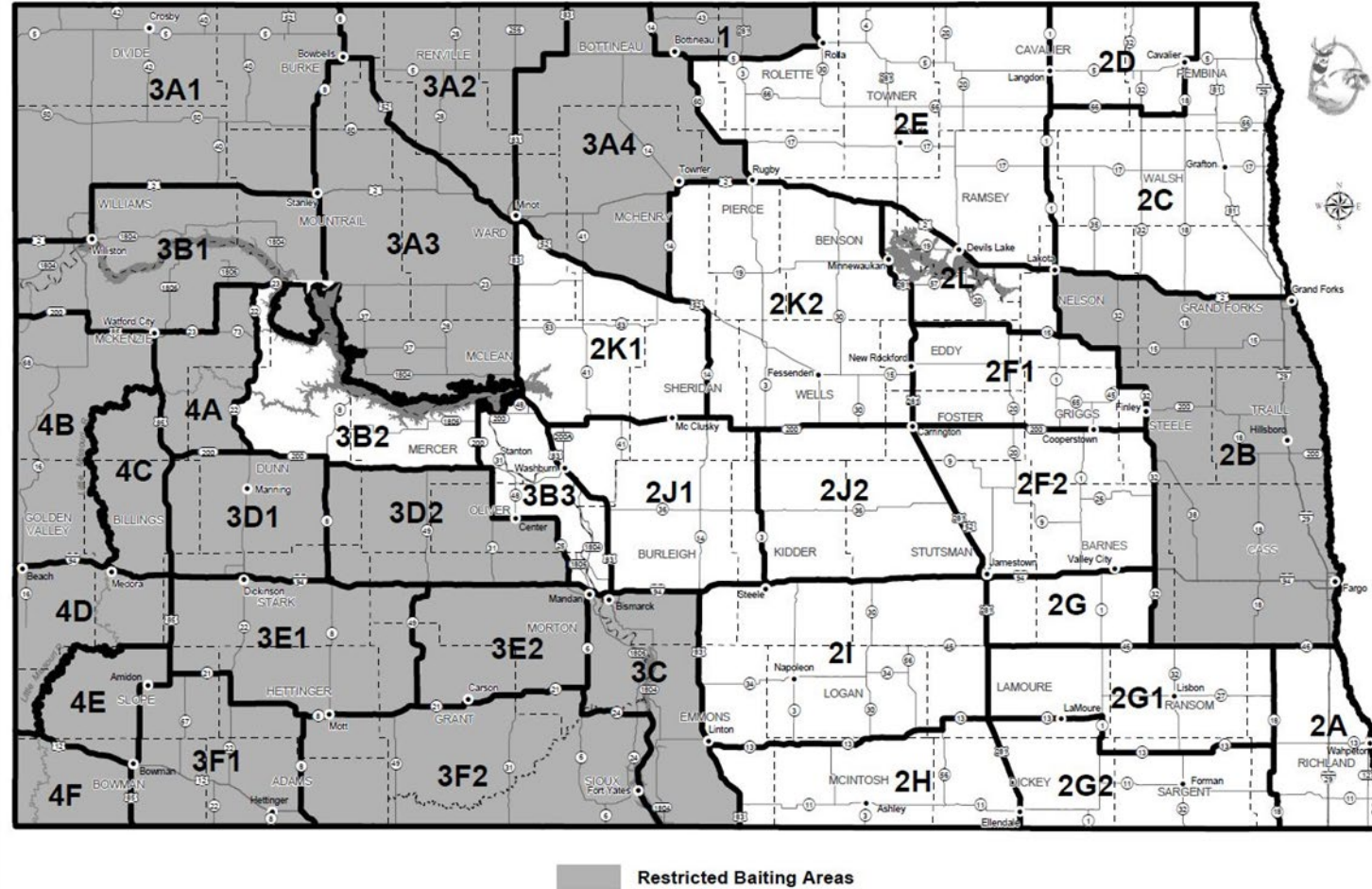
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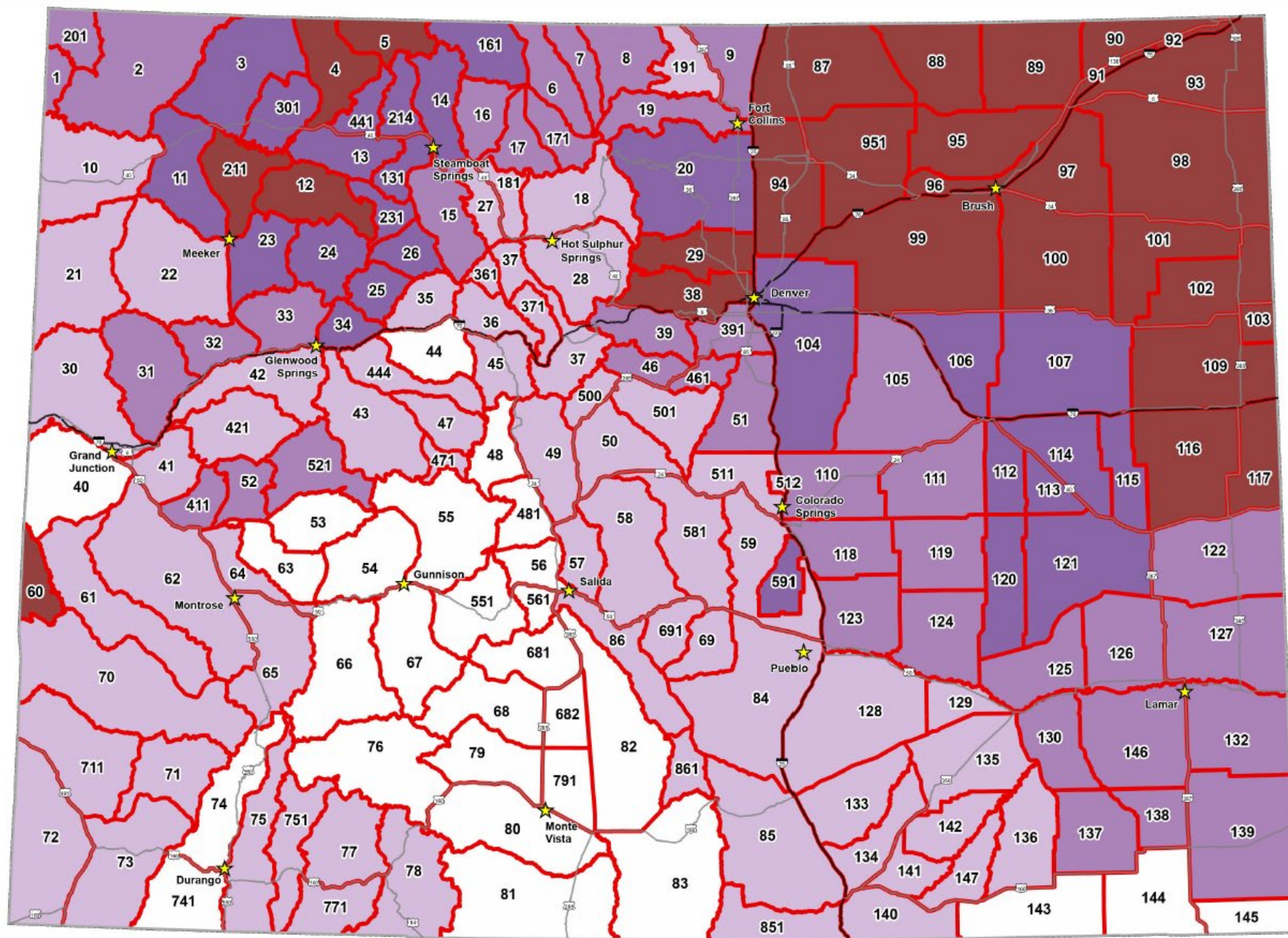


North Dakota Game and Fish Department Baiting Restrictions by Deer Gun Hunting Unit



North Dakota Game and Fish Department 2022





Detected CWD in Harvested Adult Deer Bucks

January 2022



Estimated CWD Infection Rates for Harvest Data in Colorado 2017 - 2021

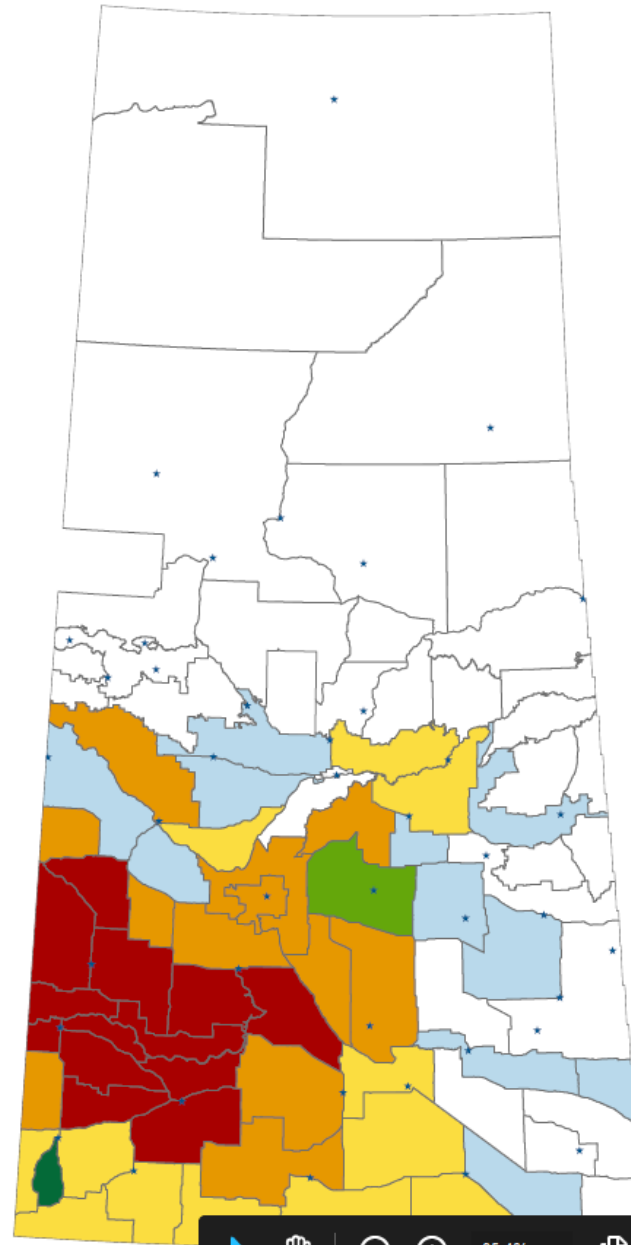


Wildlife and Fish



Chronic Wasting Disease Prevalence

Male Mule Deer
(2018-2020)



Wildlife Management Zones

CWD 3- Year Pooled Prevalence (Male Mule Deer**)

0-6 %

7-10 %

11-30 %

31-49 %

> 50%

* CWD Positive - Data Deficient to Estimate Prevalence

Not Detected

* Towns

*Insufficient sample size obtained to estimate prevalence

Please Note: Prevalence estimates are based on last three years' (2018-2020) pooled surveillance data for male mule deer. Confidence intervals vary based on sample size collected.

**Prevalence rates in male and female mule deer vary. On average, prevalence rates in male mule deer are 2X those in female mule deer, however, variation exists across WMZs.



