

Report of the Iron County Chronic Wasting Disease Study Committee
August 20, 2019



Mission Statement

The mission statement of the Iron County, Wisconsin Chronic Wasting Disease In Cervids Study Committee is to study, review, and consider efforts to help stop or reduce the spread of Chronic Wasting Disease, protect public health, and to advise The Iron County Comprehensive Planning/Land and Zoning Committee.

Introduction

Chronic Wasting Disease (CWD) is in the family of universally fatal diseases known as transmissible spongiform encephalopathies (TSE). These prions can infect deer, moose, caribou, elk, and other cervids. Misfolded proteins enter the body and convert normal cellular proteins to abnormal forms that cannot be broken down via our normal body processes. The prion then multiplies in the body and causes degeneration of the central nervous system after a prolonged incubation period of up to 18 months. Other diseases belonging to the TSEs are scrapie in sheep, mad cow disease (BSE), Creutzfeld-Jacob Disease (CJD), and CJD-variant (from eating infected cows) in humans. All are fatal with no known cure.

A prion is not a bacteria or virus. There are not treatments available. Antibiotics are not effective on prions. There are no successful vaccines. Deer and elk show no true genetic resistance (Immunity). Prions are excreted in the urine, feces, and saliva of infected animals. Prions have been shown to be taken up from the soil by alfalfa, wheat, corn, and tomatoes. These findings present a potential route of prion exposure for wildlife, domestic animals, and humans following consumption of these plants.

Prions are one of the most resilient pathogens known. They are very resistant to high heat and harsh chemicals. Prions will bind to soil particles, particularly found in clay soils, and remain infectious in the environment. CWD prions are known to last at least two years or longer. Scrapie prions have remained 16 years in the soil and still are infectious.

Although there are no known cases of CWD in humans, there is considerable concern that prions are capable of adapting to their host and could someday infect humans. The Centers for Disease Control and Prevention (CDC) recommends no one knowingly consume CWD positive venison. A study currently underway has found macaques (monkeys) developed disease after being fed infected brain tissue and skeletal muscle (i.e., venison) from CWD positive deer. These findings are the basis of the CDC's recommendation that anyone hunting in a CWD endemic area have their animal tested before consumption.

The biggest risk for spreading prions is via movement of sub-clinically infected live cervids and their parts or products. Both the captive cervid industry and wildlife agencies move live cervids intra- and inter- state. Hunters regularly travel hundreds of miles to other states and provinces to hunt. An analysis of successful hunters in the four county region (Dane, Sauk, Iowa, and Richland) of Wisconsin with the highest rates of CWD showed that over 32,000 deer were taken and that a "hot zone" carcasses went of 49 different states. Some of these areas have prevalence rates over 50% in adult males and 35% in adult females.

Recommendation 1: The Committee recommends that Iron County develop and implement a captive cervid fencing ordinance and/or a conditional use permit.

- a) Requires captive cervid operations in Iron County to comply with the WI DNR fencing standards specified in NR 16.45 in addition to being 12 feet tall.
- b) Requires a second fence of 12 feet tall at not less than 8 feet and not more than 16 feet from the first fence.
- c) Requires annual inspections and inspections after severe weather events.
- d) Requires removal or pruning of all trees with 3 inch dbh (diameter at breast height) or greater inside and outside of the perimeter fencing to ensure that if a tree were to fall it would not contact the fence.
- e) Require double gates at each ingress and egress point in the fence to ensure no animals can pass through.
- f) Requires new feeding equipment and tractors.

Justification: A double fence allows no nose to nose contacts between farm raised cervids and wild cervids, thereby helping prevent transmission of CWD. A taller fence is needed in Iron County due to increased snow on the ground commonly found in the snow belt of Iron County, often 180" or greater. The use of old equipment from other cervid farms could possibly be contaminated with CWD prions.

Recommendation 2: Additional conditional use permit Chronic Wasting Disease (CWD) deer health requirements

- a) Require all cervids 4 months of age or older found dead or killed tested for CWD.
- b) If a cervid within a captive cervid farm tests positive for CWD the following actions are required:
 - 1) Depopulate all cervids from the farm within 3 months.
 - 2) Maintain the perimeter fencing of the farm for a minimum of 5 years from the date of the removal of the last cervid.
 - 3) Quarantine the farm with no cervids moved onto farm for 5 years from the removal of the last cervid.

Justification: Cervids as young as four months have tested positive for CWD. By testing cervids younger than one year old gives a greater opportunity timewise to pick up positives earlier in a cervid's life. State regulations on depopulation are on a case by case basis. Iron County wants the herd depopulated within three months. Due to the long life of prions in the environment the farm must be cervid free and fenced to prevent spread of the disease.

Recommendation 3: The Committee recommends that Iron County develop and implement a public information program to educate citizens about ways to help keep Iron County CWD free.

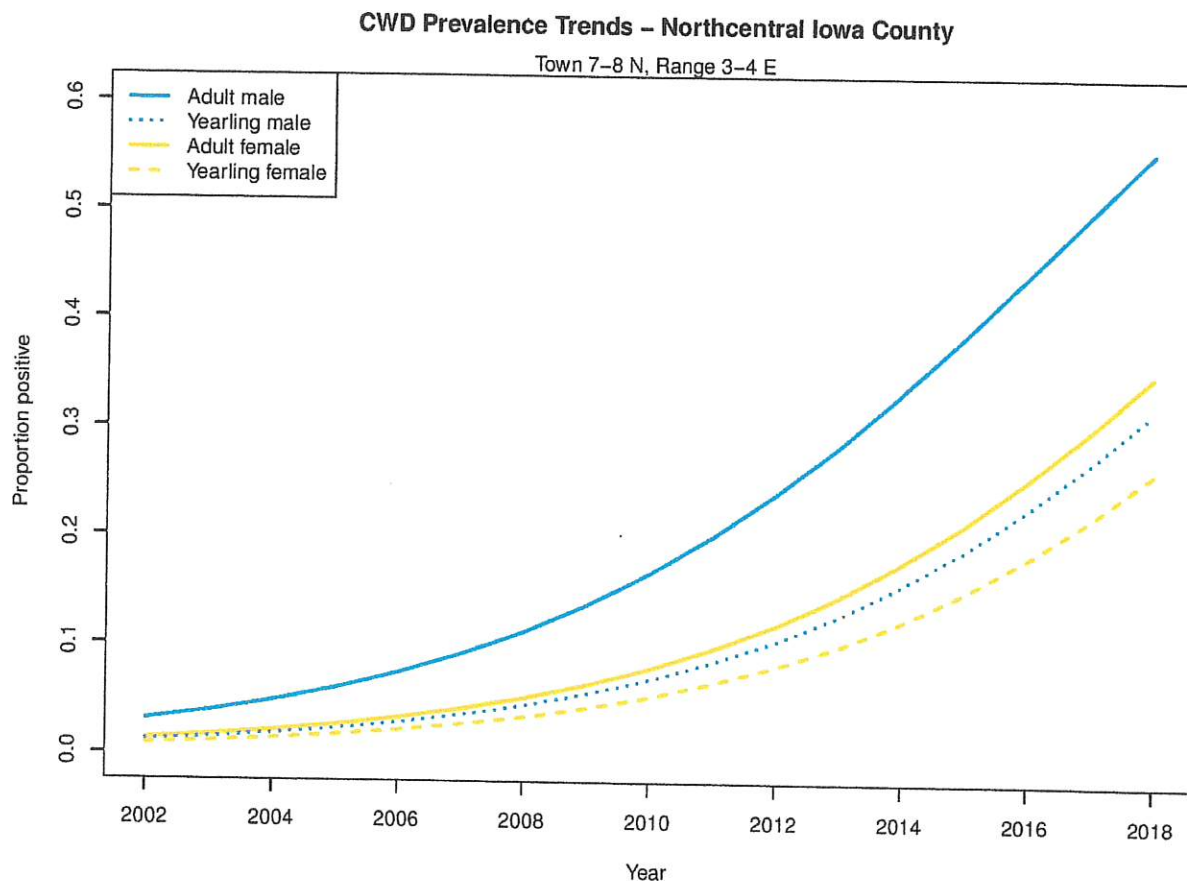
- a) Encourage hunters to have their harvested cervids processed in the counties in which they were harvested.
- b) Inform hunters of the importance and methods of proper carcass disposal.
- c) Inform hunters of the importance and their options for testing their harvested cervids for CWD and possible public health concerns of prion disease in humans.
- d) Discourage baiting and feeding in order to reduce the chances of transmission of cervid disease within wild cervid populations in Iron County.
- e) Discourage the use of lures and scents that contain cervid products to reduce the chances of transmission of cervid disease within the wild cervid populations in Iron County
- f) Educate hunters on the best management practices for field dressing and butchering harvested cervids in order to enable CWD testing of the carcass, minimize hunter exposure to CWD prions, and reduce the spread of prions in the environment.
- g) Encourage CDACs and stakeholders to consider infectious disease management when developing and implementing cervid population management goals.
- h) Consider new funding to hire an LTE position for 6 months (August-January). The position would be responsible for developing and implementing the educational messaging as well as coordinating the Adopt-A-Kiosk and Adopt-A-Dumpster Programs.

Justification: The best way to manage CWD in Iron County is too keep Iron County CWD free. But, if it is diagnosed, the county needs to be prepared to minimize transmission and possibly eradicate it. To that end, the Committee is recommending Iron County play an active role in educating hunters and the public about things they can do to minimize the chances of bringing CWD to Iron County. Recognizing that traditions and behaviors around deer hunting are deeply ingrained, the Committee is recommending the use of education and assistance to achieve voluntary compliance with best management practices rather than regulatory forced compliance. Developing buy-in and acceptance from the public will be more effective. The Committee also recognizes that natural vectors, such as the movement of wild cervids, are likely to bring CWD into the county at some point, but while we still have the opportunity to keep Iron County CWD free it is important to eliminate human-assisted transmission. Changing habits around baiting and feeding, as well as carcass transport now, will make the county better prepared to slowing transmission of CWD if it is diagnosed in Iron County.

Recommendation 4: The Committee recommends The Iron County Board develop and implement programs to support more CWD testing and proper carcass disposal.

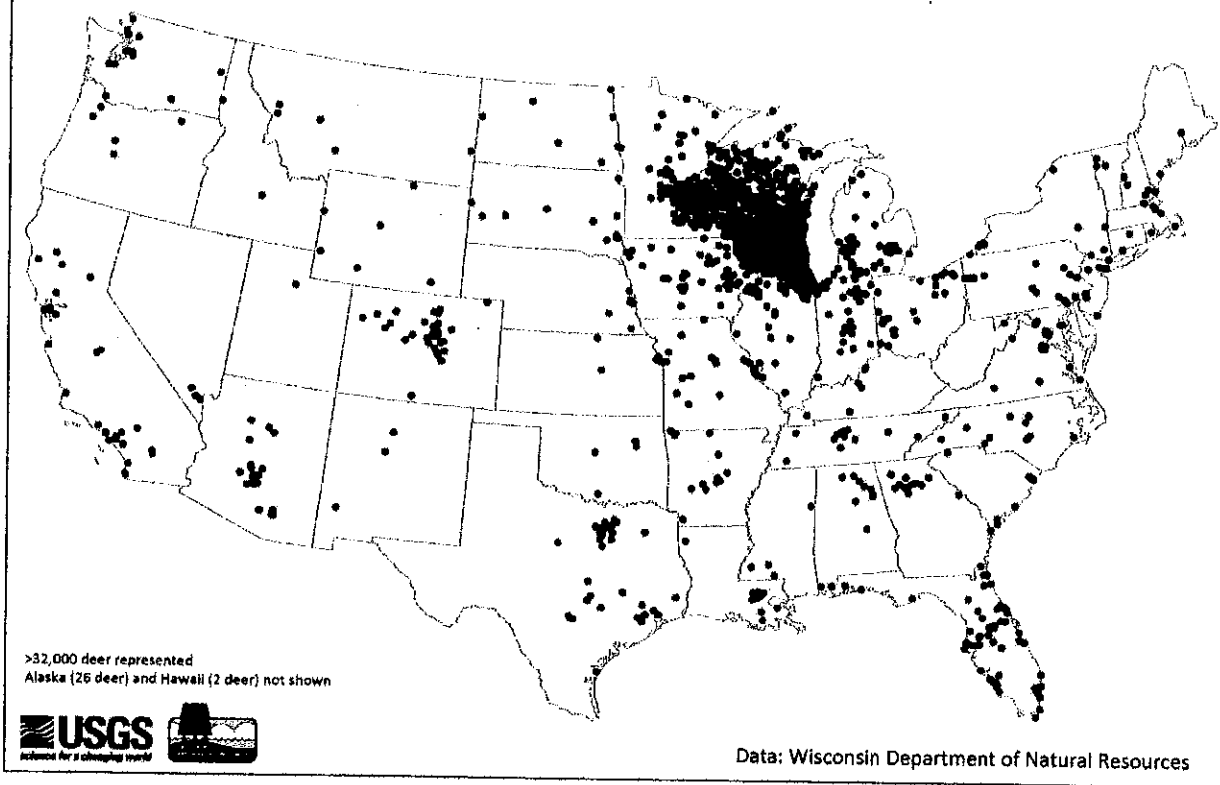
- a) For the 2019/2020 hunting season work with the DNR to install and support a minimum of six testing kiosks in Iron County that can be used by hunters to prepare and drop off cervid heads for CWD testing.
- b) For the 2019/2020 hunting season, provide carcass disposal dumpsters in a minimum of six locations throughout Iron County.

Justification: Putting cervid carcasses in dumpsters and burying them in a designated landfill removes the possibility of prions getting into the environment and contaminating it. The following charts show why this is so vitally important.



Northcentral Iowa County, Wisconsin has had exponential growth in disease prevalence to 50% in adult males and 35% in adult females. Incidence in yearly bucks is 32% and yearly does is 27%.

Home Zip Codes of hunters harvesting deer in Dane, Iowa, Richland and Sauk Counties, Wisconsin, 2016-2017



Recommendation 5: The Committee recommends Iron County develop and implement a captive cervid import ordinance that:

- a) Prohibits the importation of live cervids into Iron County without exception unless:
 1. The animal comes from a herd enrolled in the Herd Status Program as specified by Agriculture, Trade, and Consumer Protection (ATCP) regulations 10.53.
 2. The cervid has a Certificate of Veterinary Inspection (CVI) as specified in ATCP 10.56(2-3).
 3. Documentation is provided that shows the animal is coming from a location that is not within 10 miles of a known positive CWD diagnosis in a wild or captive cervid recorded within five years prior to the animal movement.
 4. No live cervids can enter Iron County until a reliable live animal test is developed, and the cervid tests negative.

Justification: The movement of live cervids represents a risk of transmitting CWD over long distances. Cervid breeders who buy for breeding purposes do so from herds that are enrolled in the Herd Status Program only if those herds are well away from CWD positive areas.

Recommendation 6: The Committee recommends Iron County prepare a multi-stakeholder plan in the event of a diagnosis of CWD in Iron County. Find an example response plan 'The New York Interagency Chronic Wasting Disease Response Plan 2015-2025' at https://www.dec.ny.gov/docs/wildlife_pdf/cwdresplan2015.pdf.