



Chronic Wasting Disease in Crow Wing County

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Merrifield Public Meeting

March 4, 2019

Agenda

- Opening Remarks
- DNR Information
 - Brief overview of Chronic Wasting Disease (CWD)
 - Past surveillance in north central MN
 - MNDNR plans for this winter
- Board of Animal Health presentation
- Q&A with DNR and BAH

Chronic Wasting Disease: What is it?

- CWD is a slowly progressive, brain disease of deer, elk, moose, and reindeer
- CWD belongs to the family of diseases known as transmissible spongiform encephalopathies (TSE) or prion diseases
- Not caused by a virus, fungus, or bacteria – mis-shapen protein
- Spread animal-to-animal, mostly through saliva, feces, urine



Photo by J. Skukrud

Both Deer are CWD-Positive
Top Photo: Pre-clinical disease
Bottom Photo: Clinical disease



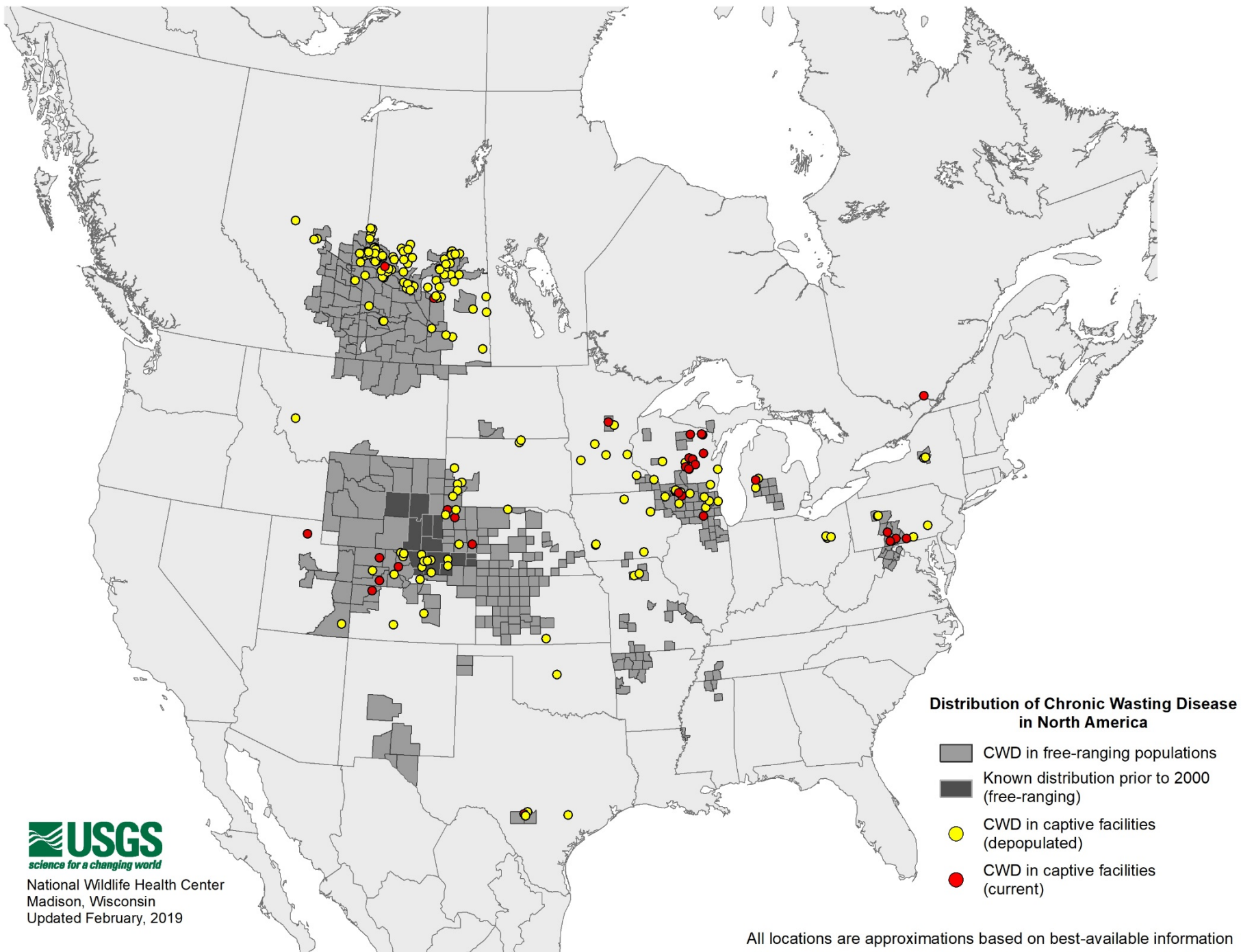
Photo by Terry Kreeger

Characteristics of CWD

- Neurologic clinical signs: dementia, in-coordination, abnormal behavior, loss of body condition
- No treatment or vaccine, always fatal
- Prions persist in the environment and remain infectious for an undetermined length of time
- Incubation of disease is 1.5 to 3 years from exposure to development of clinical signs
- Infected animals begin to shed prions soon after exposure
- There is no genetic immunity
- CWD not shown to infect humans or cattle, but health agencies recommend NOT to eat an infected animal



CWD Positive Deer – Pine Island - 2010



National Wildlife Health Center
Madison, Wisconsin
Updated February, 2019

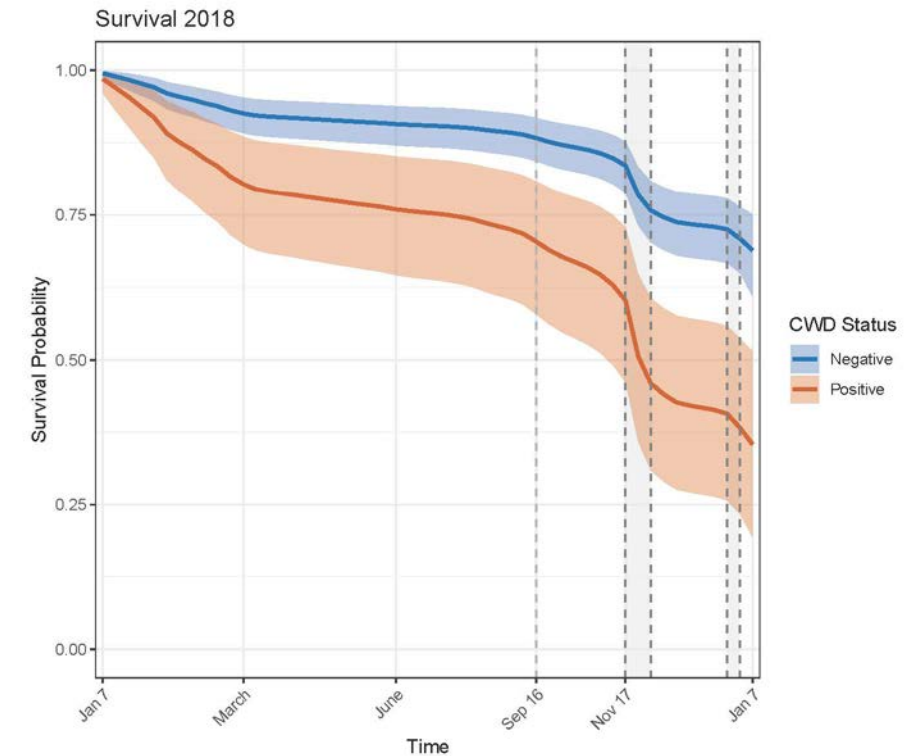
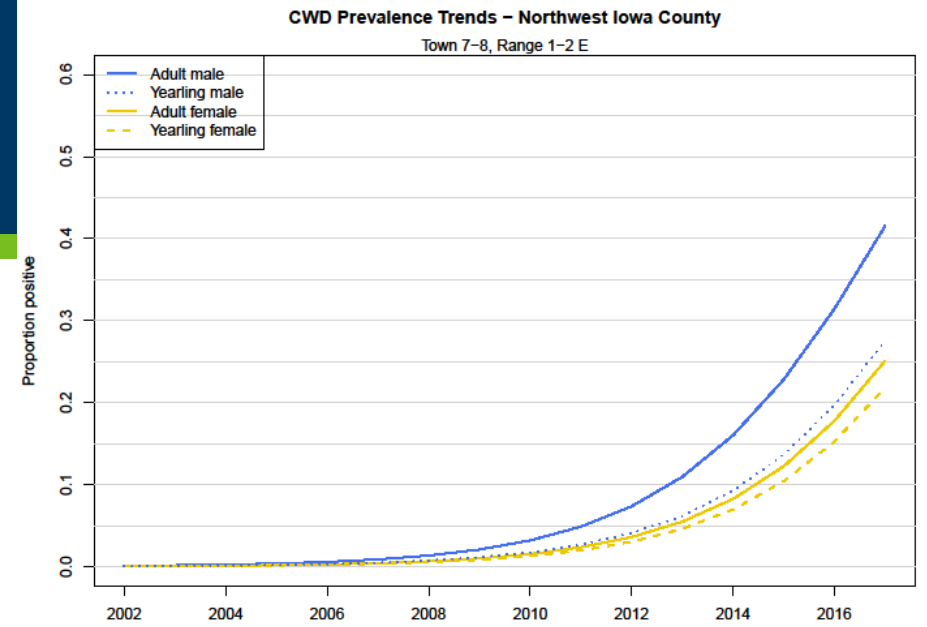
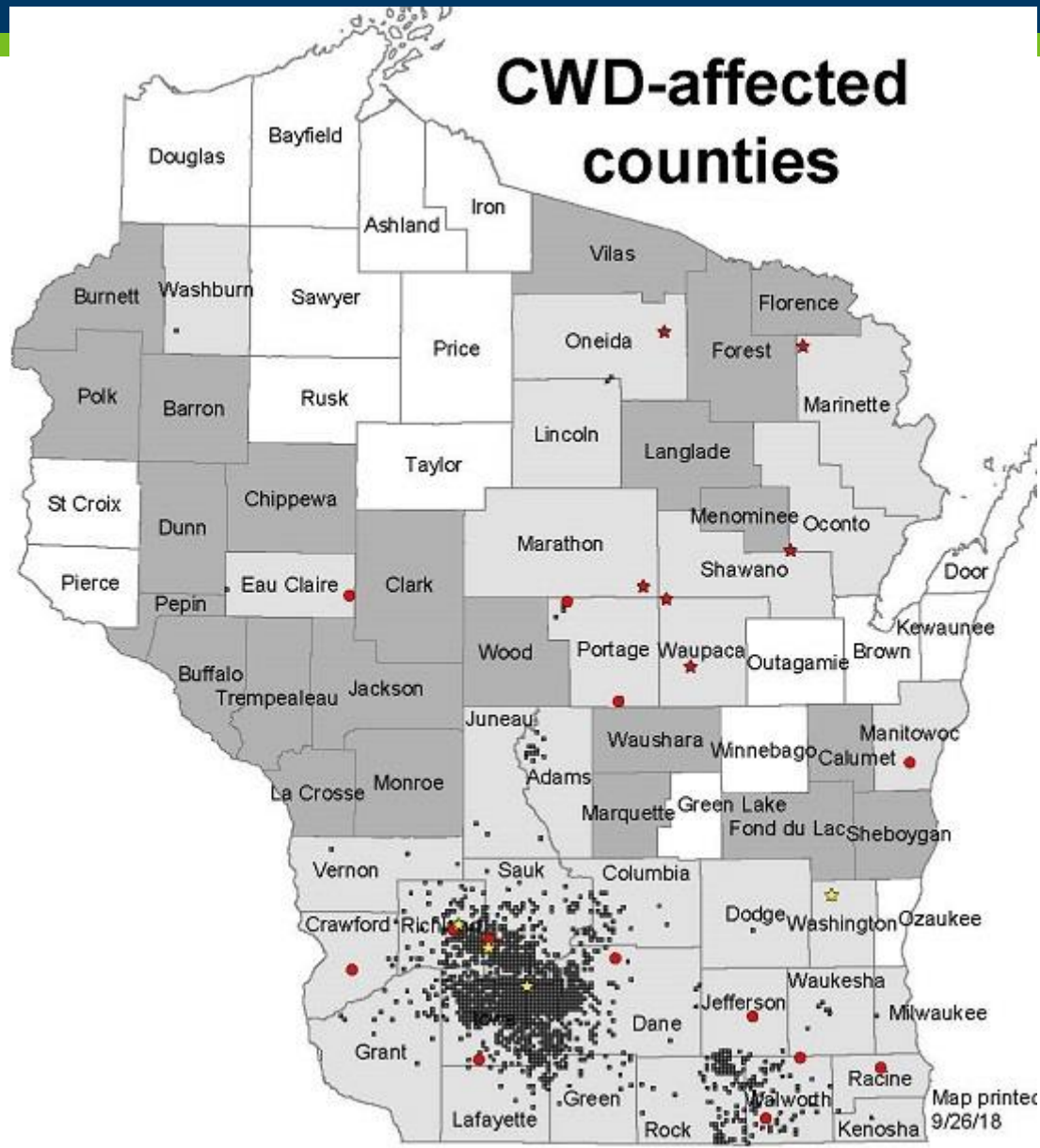
All locations are approximations based on best-available information

Things are NOT OK in areas with CWD

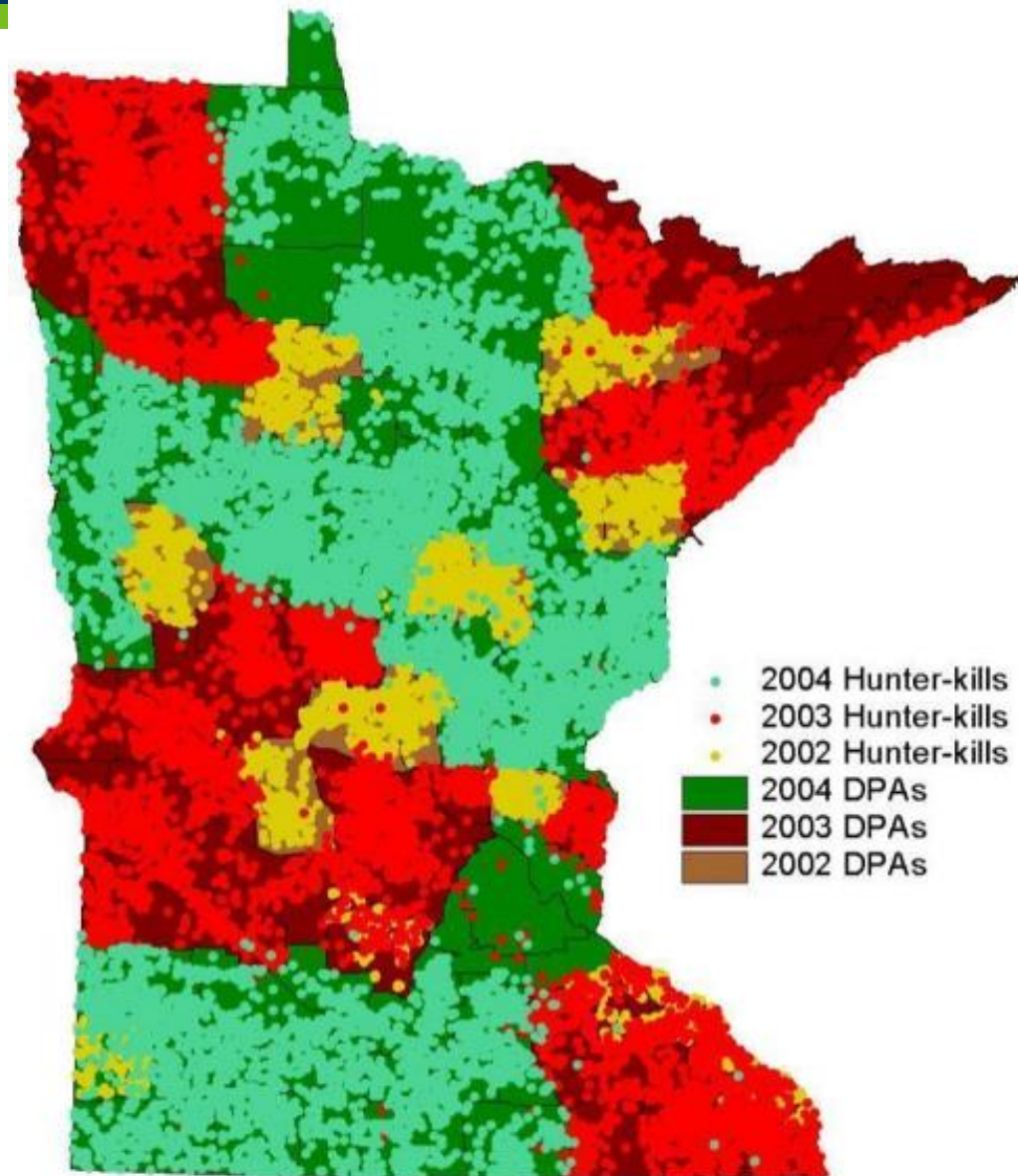
What we know ...

- Disease is 100% fatal
- Deer that are infected (but not symptomatic) have higher mortality rates than uninfected deer. In WI, it's 35% vs 70% -
<https://dnr.wi.gov/topic/research/articles/February2019.html#articleOne>
- Bucks are 3x more likely to have the disease
- Yearling males are CWD delivery systems
- The percentage of infected deer increases annually, in addition to a larger geographic area
- The disease is having a negative effect on long-term deer densities in other states

We are trying to avoid this ...



The History of DNR's CWD Surveillance Efforts

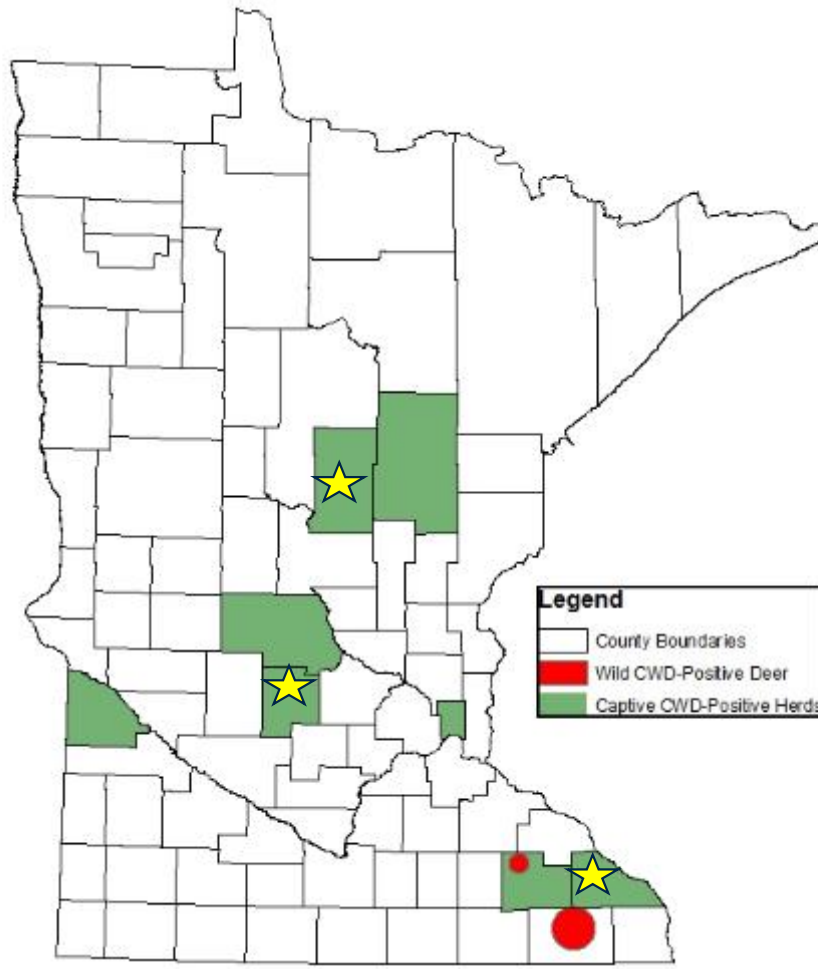


Statewide Surveillance

- Prompted by CWD discovery in Wisconsin and positive domestic elk farm in Aitkin, MN.
- 2002 - 2004
- 28,000 samples taken in statistically-based design
- No positives detected

MNDNR's CWD Surveillance-Focus on Risk

CWD-positive cervid farms in MN (n = 8)



★ 2017 CWD+ Game Farms

Risk-Based Surveillance

Since 2005, sampling triggers include:

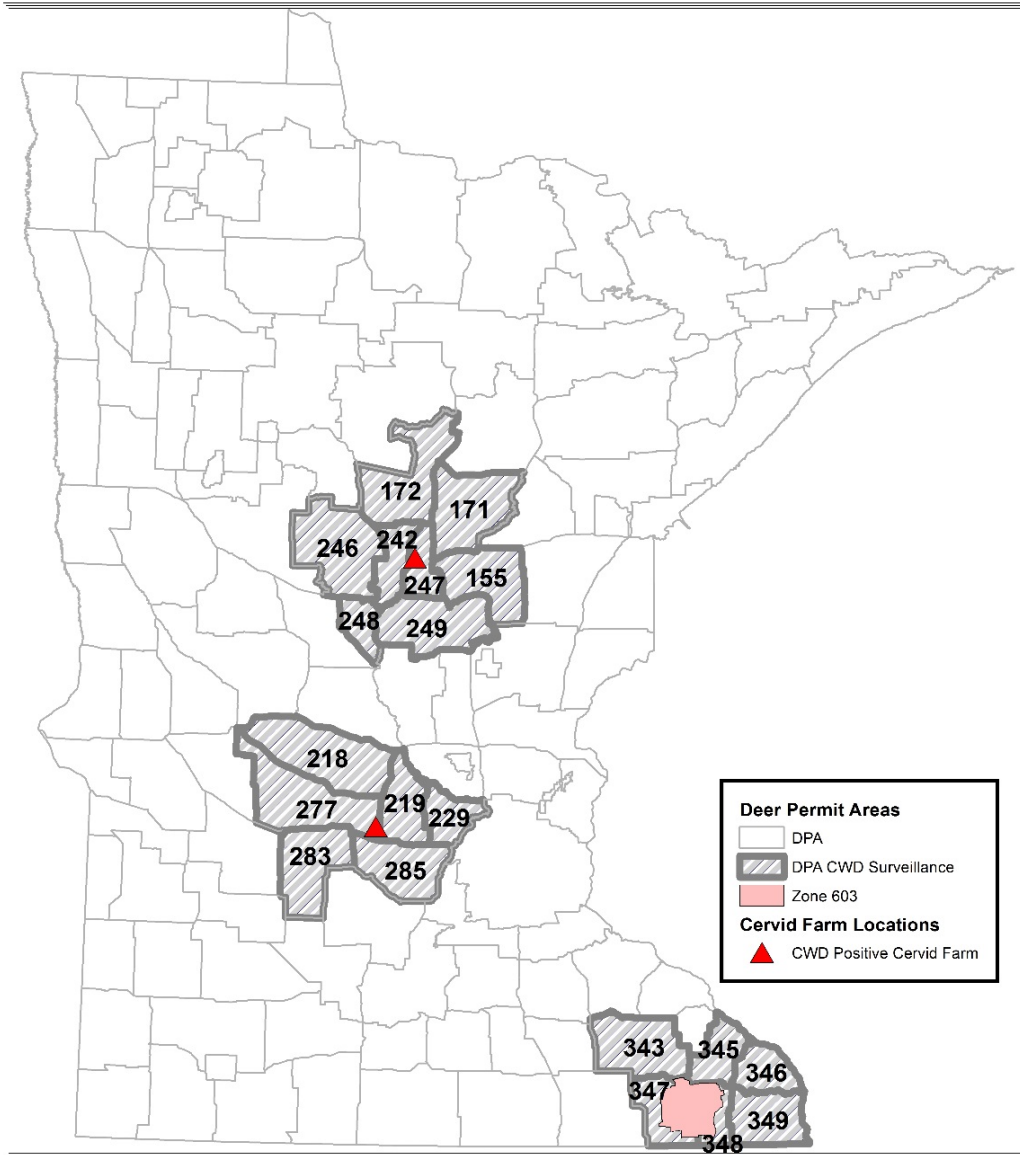
1. **Suspect deer-** deer exhibiting CWD symptoms
2. **New infection found in adjacent state-** sampled several times for WI infections and northeast Iowa
3. **Association with positive captive cervid farm** - surveillance around areas known to have CWD (n = 8)
 - 3 elk, 4 white-tailed deer, and 1 red deer farm



Fall 2017 CWD Sampling Goals

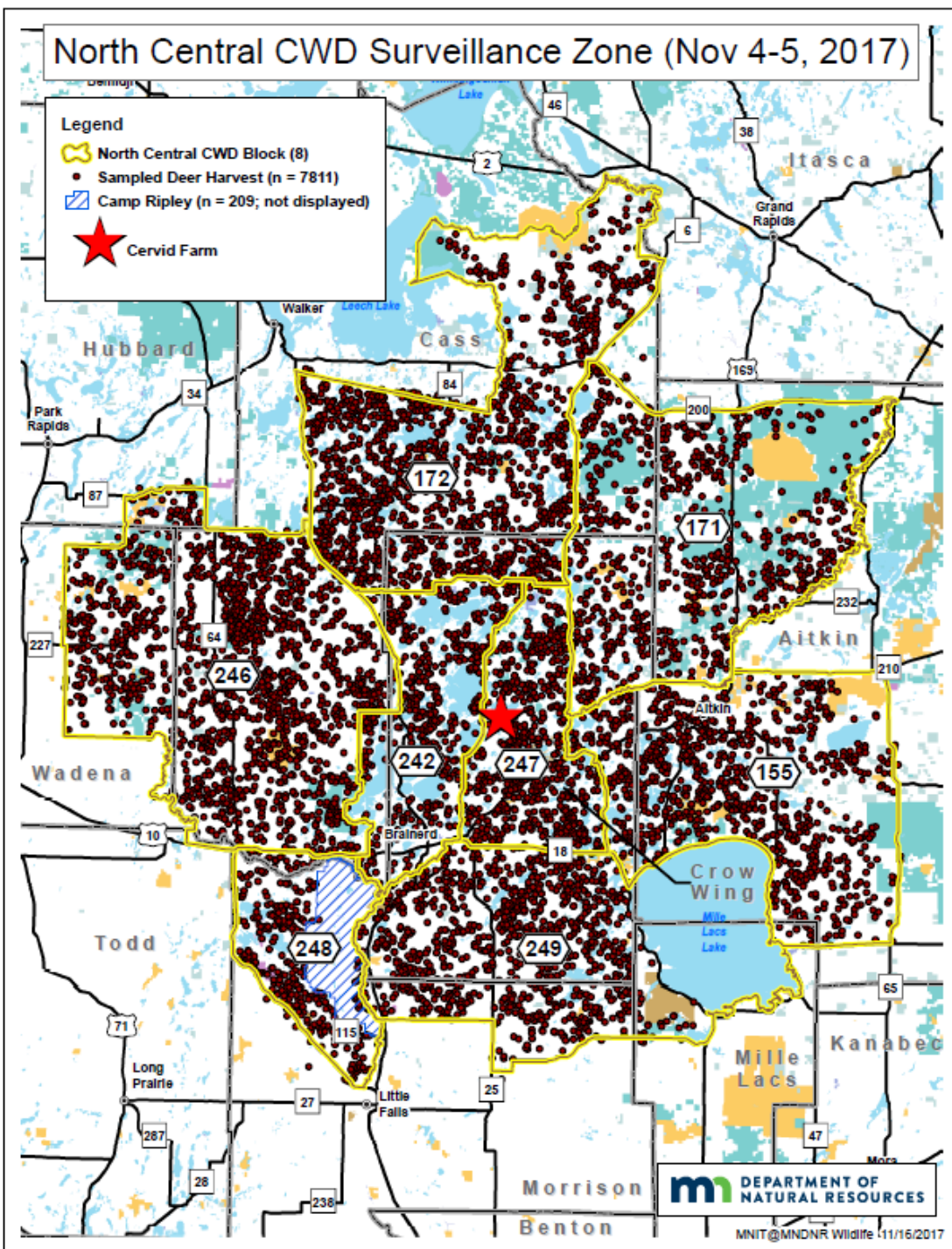
2017 Surveillance: Mandatory on Deer Opener!

- North-central surveillance zone – a goal of 3,600 deer (>1 yr old)
- Central surveillance zone - a goal of 1,800 deer
- Southeast surveillance zone - a goal of 1,800 deer **outside of zone 603.**
- Zone 603: testing is mandatory for all adult deer through all seasons, carcass movement restrictions in place; likely 1,000-1,500 samples)



Date: 6/22/2017

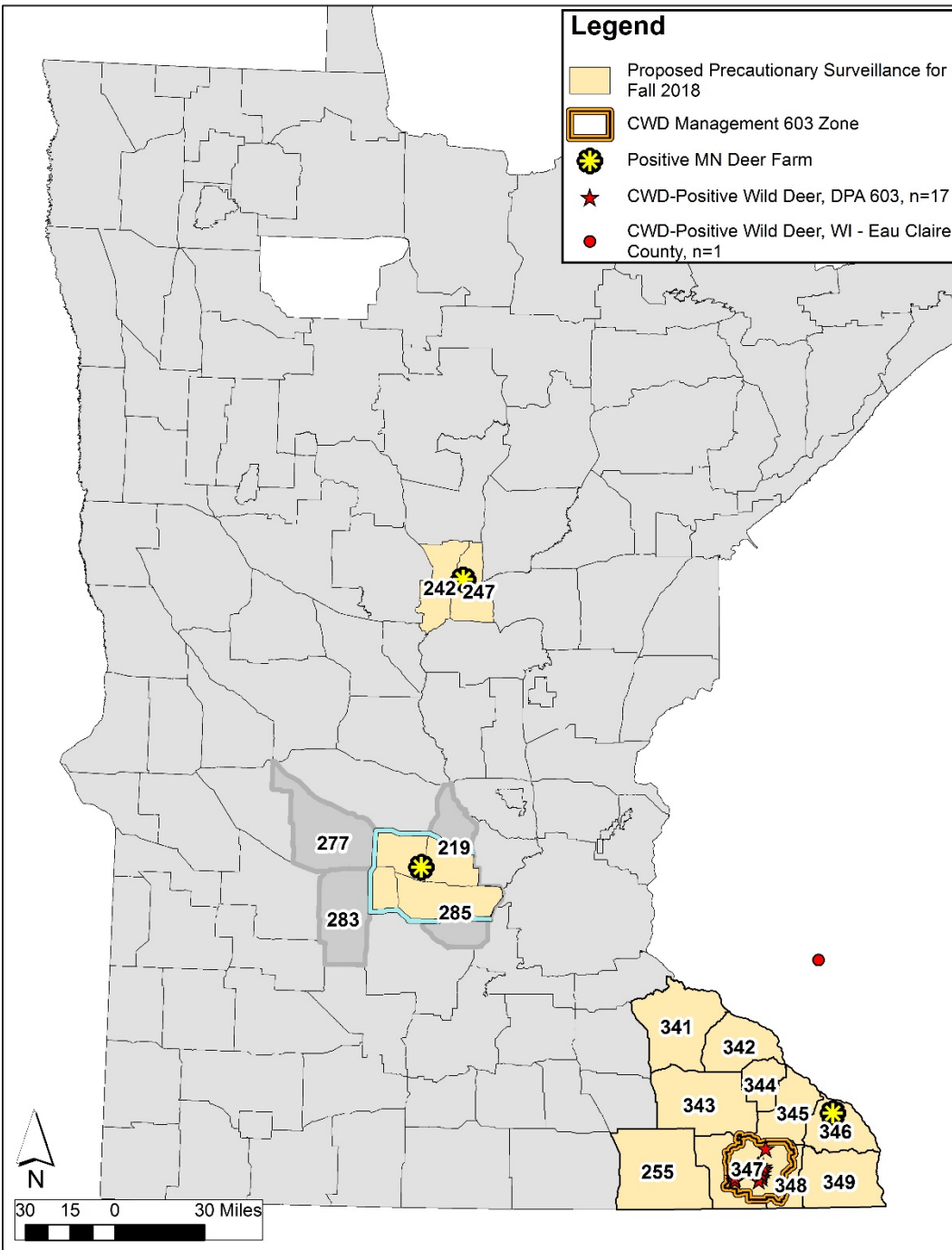
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North Central Zone, Fall 2017

- Goal was 3,600 samples
- Staffed 19 sampling stations
 - 58 DNR staff
 - 95 veterinary & natural resources students
- Total samples collected: 7,945 (2.2x goal)
- No detections of CWD
- 92% compliance with mandatory surveillance

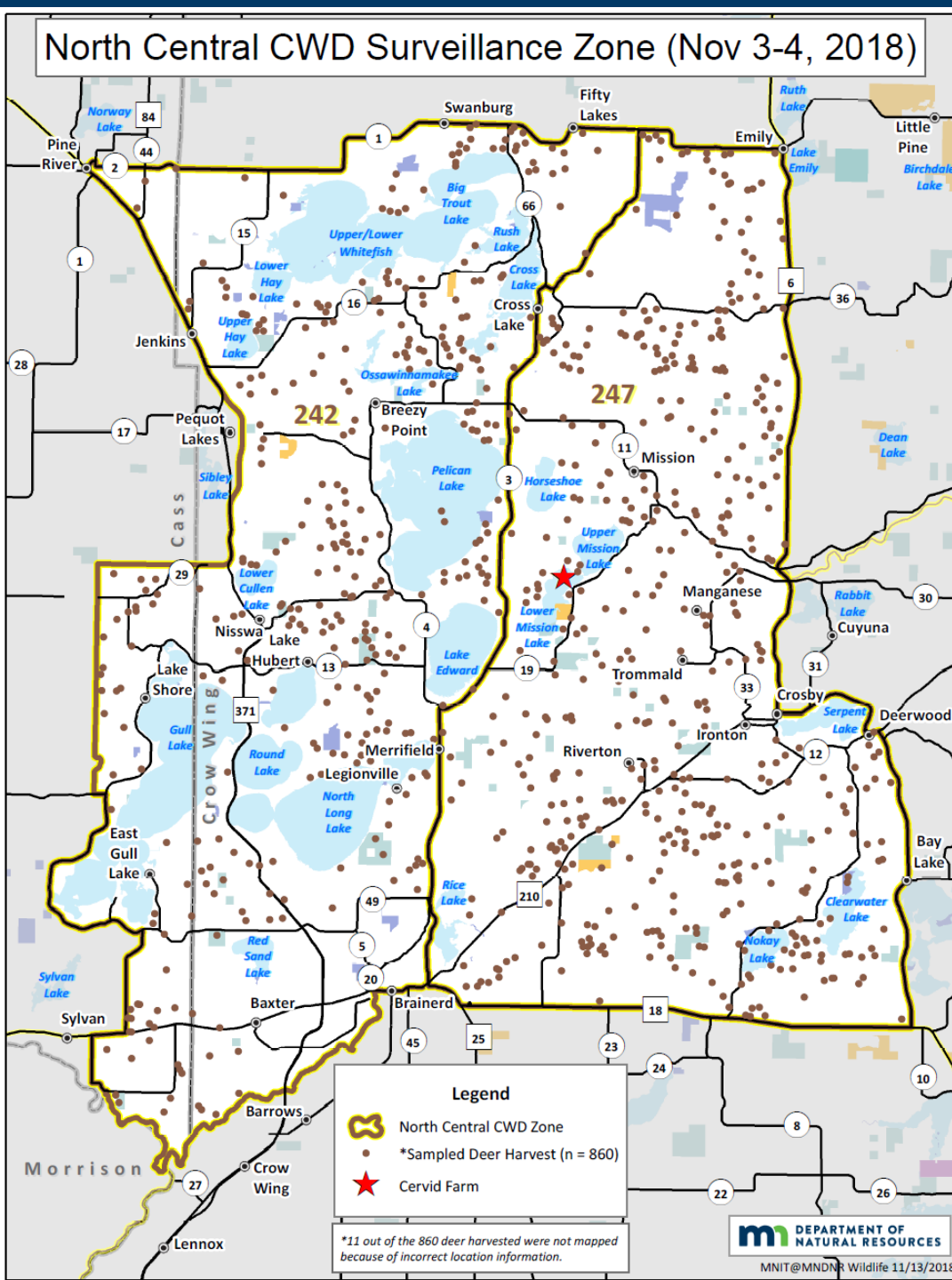
Fall 2018 Statewide CWD Surveillance Plans



- North-central and Central Zones
 - Mandatory sampling; opening weekend only
 - Reduced surveillance zone to ~15mi radius around CWD+ farms
 - Goal is 500 samples in each zone
- Southeast Zone (not including 603)
 - Mandatory sampling; opening weekends of 3A/2A and 3B in 10 DPAs
 - Goal is 3,150 samples
- Zone 603 (same game plan as 2017)
 - Mandatory sampling throughout all deer seasons (archery through muzzleloader)
 - Carcass export restrictions (fawns excluded); DNR provided dumpster available to hunters
 - Headboxes for slow times; staffing stations throughout entire 3A and 3B

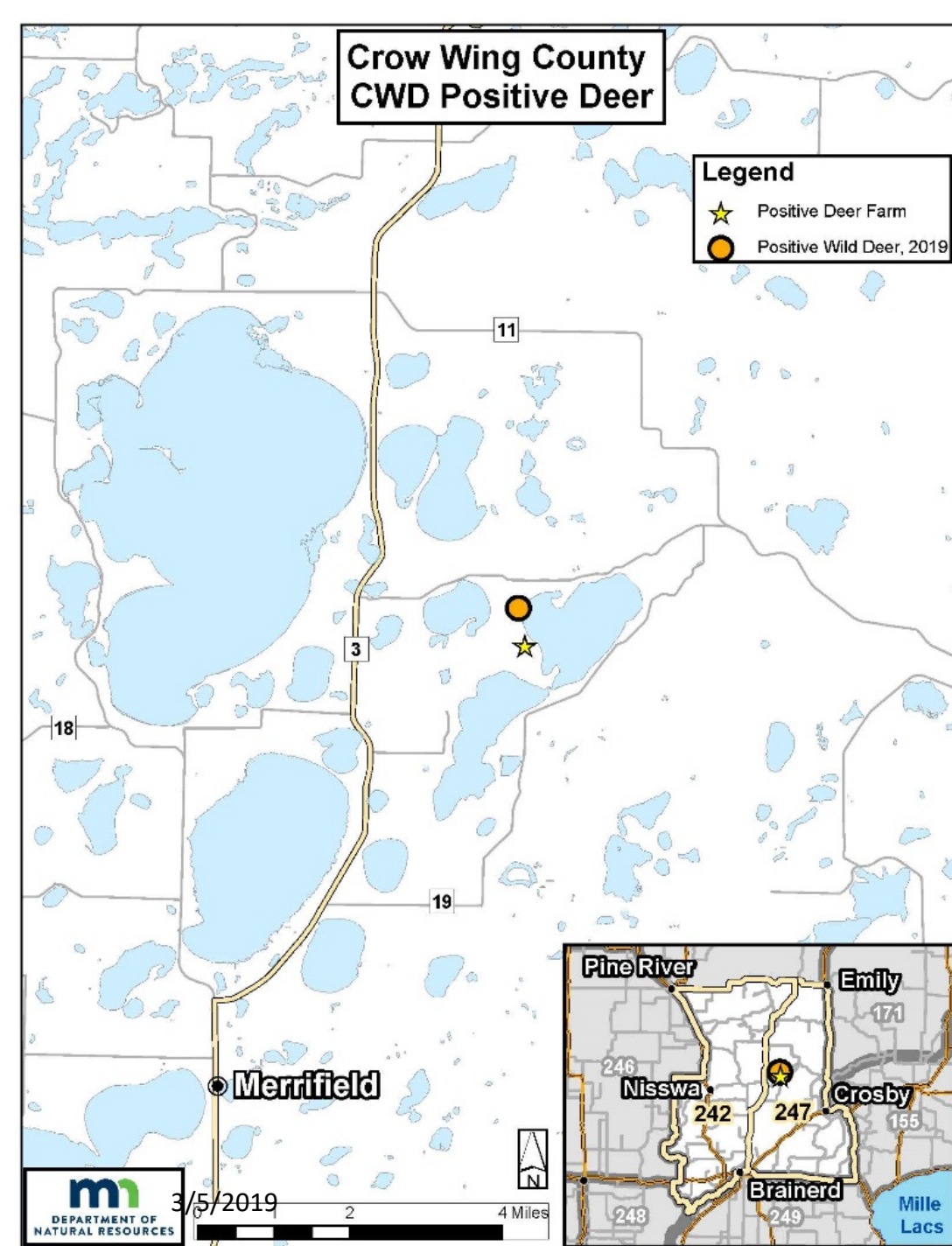
North Central Zone, Fall 2018

- Goal was to collect 500 samples, opening weekend of firearm season
- We collected 861 samples (92% compliance rate)
- All samples are not-detected for CWD
- We had 1 more year left in our 3-year response plan; however, given the recent additional detections of disease on the Merrifield farm, we planned to continue testing wild deer in the vicinity.

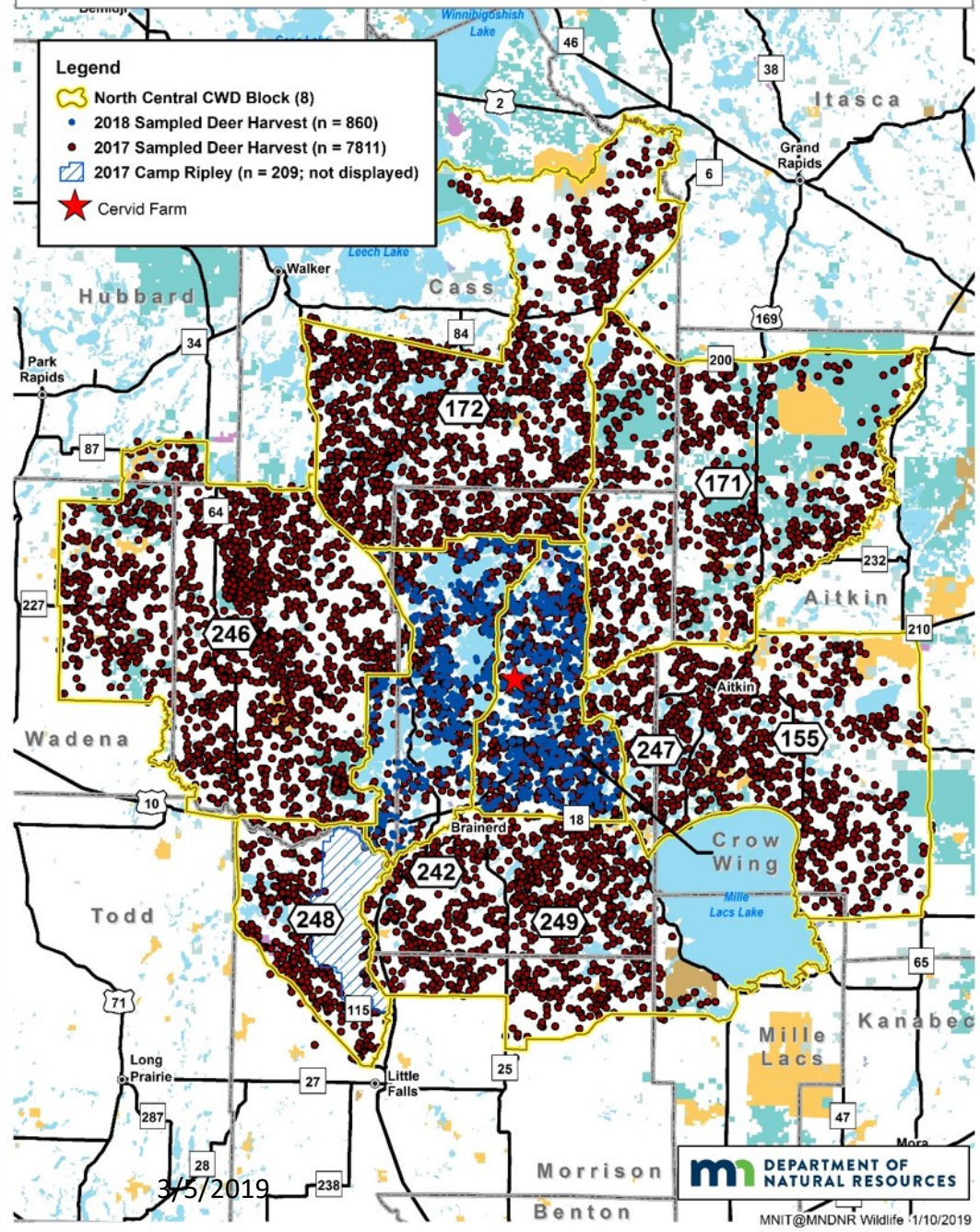


First detection of CWD in a wild deer in Crow Wing County

- Jan 23rd, a deer was found dead by a cabin caretaker and reported to DNR
- Deer was an adult doe and very thin. Samples were collected to screen for CWD, as part of DNR's routine surveillance for clinical suspects
- Deer was confirmed to have CWD on Feb 14th
- Carcass as recovered and submitted to the University of MN for necropsy; CWD was determined to be primary cause of death



North Central CWD Surveillance Zone Samples for 2017 and 2018



What does this CWD discovery mean?

- With over 8,800 deer sampled over the past 2 years and no detection of CWD, the disease not likely established in the local deer herd
- Given the infected deer was located <0.5 miles from a CWD-positive deer farm, it's the likely source of this disease in the wild
- If additional CWD-infected deer exists near this farm, it is necessary to remove them from the landscape now versus let them potentially transmit the disease to other deer by next fall.

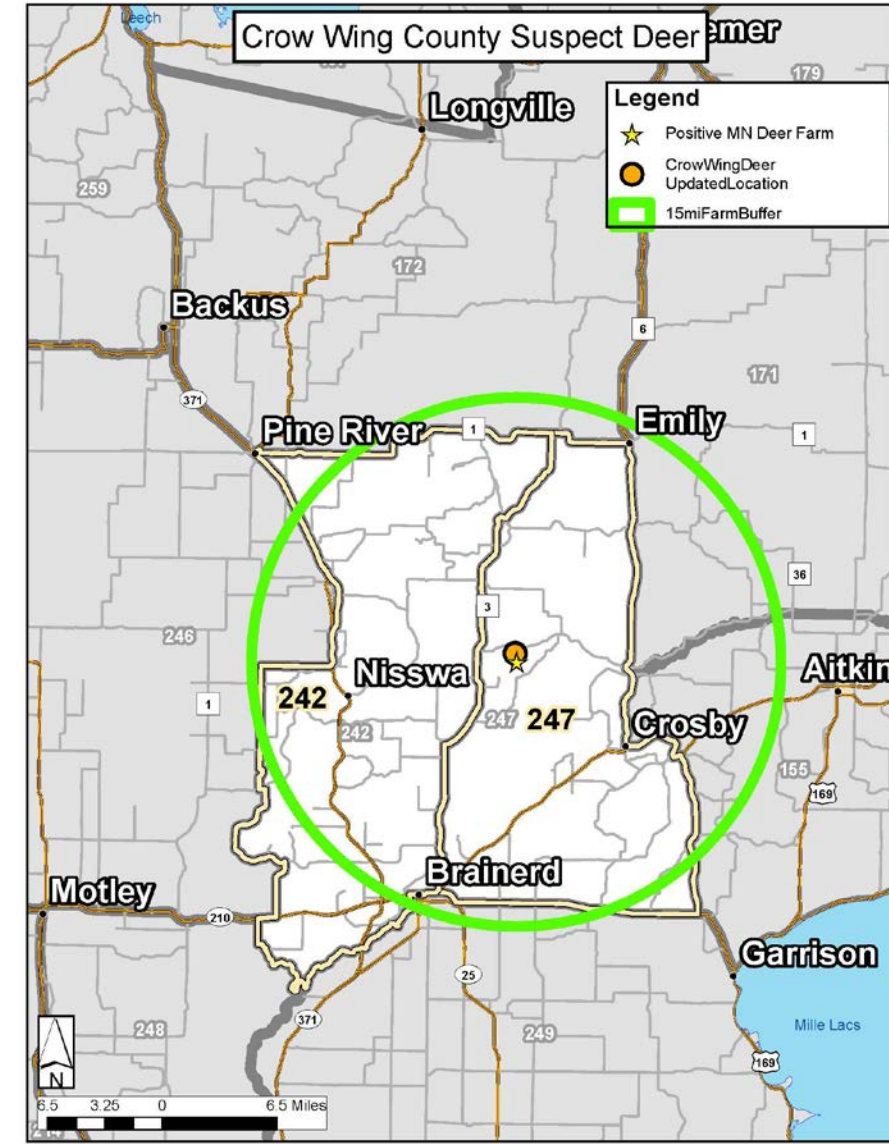
This Winter's Efforts

- Goal: To remove potentially-infected deer off the landscape now.
- Landowner deer shooting permits were issued to landowners with >10 acres of land within 2 miles of the CWD-positive deer and farm. The landowner deer shooting permits are valid from **Saturday, March 2nd through Sunday, March 24th**.
- Additional landowner shooting permits may be issued to landowners with less than 10 acres by request.
- USDA-Wildlife Services is contracted by DNR to provide assistance to landowners for deer removal.

DNR's CWD Response and Management Plan: Looking ahead to Fall 2019

Initial Response to CWD Detection in the Wild:

- Conduct outreach activities (public meetings, new releases, website, etc.)
- Conduct an aerial survey
- Create a CWD Management Zone, no less than 15 miles around positive detection
- Add an attractants ban for deer, already a deer feeding ban
- Institute carcass movement restrictions outside this CWD Zone
- Reduce wild deer densities within the CWD Zone
- Conduct mandatory sampling of hunter-harvested deer during all deer seasons



Share the Harvest

- The public can sign up to receive donated venison from the special hunt, landowner shooting permits, and deer removal efforts this winter
- This is a partnership with Bluffland Whitetails Association to utilize deer taken through efforts to manage CWD
- Only deer with “Not-Detected” test results will be released into donation program
- Interested people can sign-up through DNR website:
<https://www.dnr.state.mn.us/cwd/share-harvest.html>
- Venison will available either as whole carcass or boxed quarters and backstraps
- Landowners that wish to donate a deer harvested under their shooting permit can surrender the field-dressed carcass to the DNR Wildlife staff at Brainerd.



- The potential to eliminate CWD from Merrifield requires aggressive and swift actions
- This goal will NOT be attainable without the cooperation of hunters and landowners
- If CWD becomes established here, it will remain a significant health threat to the deer herd locally and statewide
- Only through working together can we hope to successfully fight CWD and maintain a healthy and productive deer herd for future generations

KEEP MINNESOTA'S DEER HERD HEALTHY

STOP THE SPREAD
OF CWD



DEPARTMENT OF
NATURAL RESOURCES