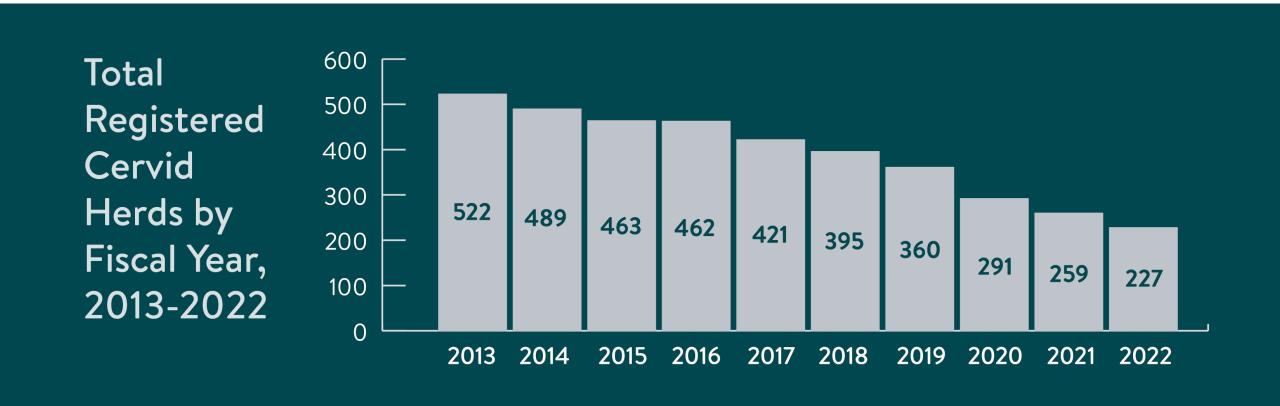


Farmed Cervidae Program Legislative update

Dr. Courtney Wheeler | Assistant Director

Farmed Cervidae – Fiscal Year 2022



Farmed Cervidae – Fiscal Year 2022

Species breakdown by animal

BREED	TOTAL ANIMALS	NUMBER OF HERDS	
White-Tailed Deer	3,337	140	
Elk	3,073	83	
Red Deer	154	7	
Reindeer	75	9	
Fallow Deer	93	7	
Sika Deer	27	4	
Muntjac	23	5	
Pere David's Deer	4	1	
Moose	2	1	
Caribou	2	2	
White-Lipped Deer	1	1	
TOTAL:	6,791	227	

Herd Usage

USAGE	TOTAL HERDS	
Breeding	57	
Exhibition/Competition	17	
Hobbyist	106	
Hunting Preserve Site	12	
Meat Production	45	
Other Animal Products	8	
Trophy/Hunting Animal Sales	71	
Urine Production	4	
Velvet Antler Production	16	
Unknown	1	
TOTAL:	227	

Farmed Cervidae Movement Requirements

- Requirements for importation of Farmed Cervidae from another state
 - Certificate of Veterinary Inspection and Import Permit
 - Official Identification and Secondary ID
 - Origin herd is not infected with CWD and is not quarantined due to CWD exposure
 - Origin farm is not in a CWD endemic area
 - Origin herd has achieved the highest surveillance level in the Herd Certification Program

- Requirements for movement of Farmed Cervidae within Minnesota
 - Movement Report
 - Official Identification
 - Origin herd is not infected with CWD and is not quarantined due to CWD exposure
 - Origin farm is not in a CWD endemic area
 - Origin herd participates in the Herd Certification Program has and met all requirements for at least 4 years

Farmed Cervidae Interstate Movements 2022

106 cervid imports



780 cervid exports

Inspection Requirements



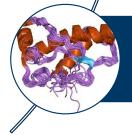
Contact DNR staff for all WTD inspections



Inspect and measure fencing and gates, verify animals are officially identified



Review inventory, movements and deaths in last year



Verify all animals ≥12 months of age that died were tested for CWD and animals were disposed of properly

Farmed Cervidae and CWD surveillance

Cervid farmers must:

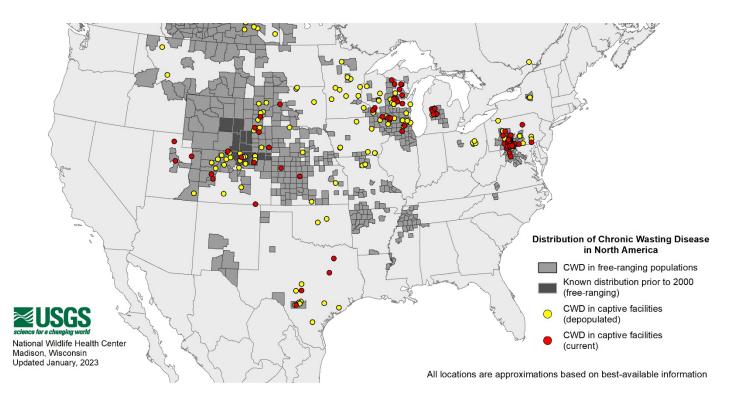
- Test all animals 12 months of age and older that die (only post-mortem testing) for Chronic Wasting Disease (CWD).
- Two decades of CWD surveillance in Farmed Cervidae:
 - 2002 2022
 - 13 CWD positive herds, 1,502 depopulated
 - 54 positive animals
 - 1,448 animals CWD not detected

Year (SFY)	Total tested for CWD	Total Not Detected	Total Positive	Percent Positive
2018	1,849	1,733	9	0.5%
2019	2,172	2,143	9	0.4%
2020	2,173	2,139	6	0.3%
2021	1,763	1,725	23	1.3%
2022	1,515	1,515	0	0%

Herd Certification Program

28 States Participate

- Alaska
- Colorado
- Idaho
- Illinois
- Indiana
- lowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Michigan
- Minnesota
- Missouri
- Montana
- Nebraska
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Pennsylvania
- South Dakota
- Tennessee
- Texas
- Utah
- West Virginia
- Wisconsin



CWD identified on Cervid Farms in <u>18</u> states

CWD identified in free-ranging deer in <u>29</u> states

All farms in Minnesota infected with CWD depopulated

Farmed Cervidae and CWD projects

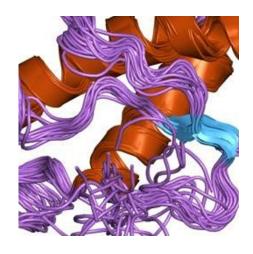
USDA funding available to states to control and prevent CWD in farmed cervids



Project 1

ASSESSMENT OF THE ECOLOGY OF WILDLIFE NEAR THE PERIMETER FENCE OF CERVID FARMS





Project 2

WHITE-TAILED DEER GENOMIC SUSCEPTIBILITY RESEARCH STUDY





Project 3

CERVID PRODUCER ONLINE PORTAL FOR HERD DATA SUBMISSION



Farmed Cervidae and biosecurity

Assessment of the ecology of wildlife near the perimeter fence of cervid farms

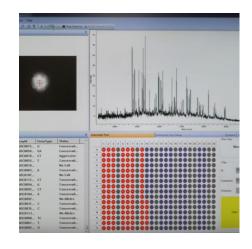
What is biosecurity?

- Biosecurity refers to plans and procedures implemented to reduce the risk of a hazard, in this instance, an infectious disease like CWD, from entering an operation (being carried onto your place by animals, equipment, vehicles, or people).
- Biosecurity practices works like insurance: the more you invest in appropriate preventive practices, the more you can reduce your risk.
- Biosecurity practices need to address the primary risks or hazards specific to a farm which may be different from risks to other farms.
- For CWD prevention, it is critical to consider all of the potential pathways of transmission, and highlight those which pose the greatest likelihood of occurrence.



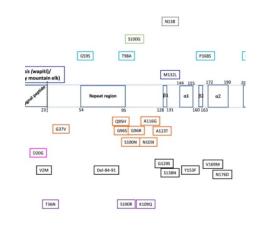
Farmed Cervidae and genetic susceptibility to CWD

Accurate Genomic Predictions for CWD in U.S. White-tailed Deer



Phase I

Identify highly susceptible animals by analyzing DNA samples from 123,987 regions of the white-tailed deer genome and looking at regions unique to animals known to be CWD positive.



Phase II

Blinded validation testing to confirm that the method developed in Phase I is able to achieve the same or better results in making determinations about the CWD susceptibility of each animal.



Phase III

Partner with producers who have CWD-positive animals in their herds to genotype their animals and help them make decisions about the susceptibility of the rest of their herd.

Conduct a select breeding pilot project with willing producers to remove animals considered to be at high-risk for CWD and then monitor how the herds fare over time.

Farmed Cervidae and herd data

Cervid producer online portal for herd data submission

- Accurate and timely herd data is critical to prevent, manage and respond to CWD.
- Farmers currently submit data on paper forms by mail or electronic forms via e-mail.
- This project will eliminate the need for annual census gathering as producers can submit data at the time of an event (e.g. herd addition, death) through an online portal.
- Data submission through the portal will result in reductions of staff time in State Animal Health Officials' office and increased accuracy in animal inventories.



Thank You!

Dr. Courtney Wheeler

Assistant Director

612-756-2810

Courtney.wheeler@state.mn.us