



State of Wisconsin  
Governor Tony Evers



**Department of Agriculture, Trade and Consumer Protection**  
Bradley M. Pfaff, Secretary  
**Department of Natural Resources**  
Preston D. Cole, Secretary

June 24, 2019

The Honorable US Representative Ron Kind  
1502 Longworth House Office Building  
Washington, D.C. 20515

Dear Representative Kind:

The Wisconsin Department of Natural Resources along with our collaborators and partners have led the nation in research and management action on Chronic Wasting Disease (CWD) for nearly 20 years in an effort to combat the disease and protect the white-tailed deer resource for current and future generations. The Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) is charged with regulation of the farm-raised deer industry. Despite the scientific advances made by researchers in Wisconsin and beyond, knowledge gaps remain on topics that are fundamental to our understanding of this disease. The lack of information and the uncertainty surrounding certain aspects of the disease limit/restrict our ability to combat CWD and to provide hunters, landowners, and stakeholders with effective management strategies and more efficient testing options.

The lack of understanding about certain aspects of CWD also affects the farm-raised deer industry in Wisconsin. Although this industry is heavily regulated on the state and federal level, and most herd owners incorporate bio secure management practices in their day-to-day farm operation, CWD continues to be detected on deer farms. The disease takes a toll on farm-raised deer keepers in the form of lost commerce, quarantines and depopulation of herds, followed by restrictions on land use after diagnosis of CWD on their premises. Continued scientific advances and knowledge could potentially provide herd owners and regulatory agencies with a better understanding of risk factors that may lead a herd to become infected; effective tools to protect farm-raised deer from contracting CWD; and, methods to effectively manage herds and environments already infected with the disease.

Management of CWD and research to support those actions generally fall into three primary areas of emphasis: 1) Prevention of CWD Introduction and Establishment; 2) Disease Surveillance; and 3) Disease Management. Within those broad areas, WDNR and DATCP have identified specific research topics that, with additional funding, could enhance our ability to effectively manage CWD in Wisconsin and throughout the nation. These include:

1. Prion detection and diagnostics.
  - Research that will lead to making CWD surveillance and hunter-service testing faster, easier, and less costly,

- Research to increase our ability to understand prions in the environment and their role in CWD epidemics
  - Research that may lead to efficient and reliable methods of live animal CWD testing
2. Disease biology and pathogenesis
- Distribution, concentration, and infectivity of prions on the landscape in both the natural environment and in depopulated farm-raised deer environments
  - Methods to effectively clean and disinfect equipment and prion-contaminated environments
  - Prion shedding as a function of white-tailed deer disease stage and genotype
  - Methods of prion transmission and infectivity in relation to gametes, feed, forage crops, scavengers, etc.
  - Genotype influences on CWD susceptibility, genetic resistance patterns or extended incubation periods
  - Strain differences of prion: infectivity, pathogenesis in herd, difference of pathogenesis in various species, testing method to differentiate strain variation
3. Management and ecology of the disease and host
- Use next-generation genomics to better understand connections between white-tailed deer relatedness, landscape dynamics, and CWD spread
  - Use next-generation genomics to investigate genetic selection in white-tailed deer populations arising from CWD mortality
  - Evaluate the effectiveness of management treatments such as white-tailed deer density reduction and targeted removals
  - Develop white-tailed deer population monitoring techniques that can quantify deer abundance at small spatial scales to better track deer population response to CWD across the landscape.
  - Identify risk factors in farm-raised deer herds and methods to mitigate risk
4. Human Dimensions
- A broad array of human dimensions and social science research is needed that help address the following questions:
    - What factors influence hunter participation in disease testing
    - What are public perceptions of CWD risk
    - What is the public support for CWD management actions and regulations
    - What is the economic impact of CWD prevalence and disease spread
    - What is the effectiveness of CWD messaging

Responding to CWD includes contemplation of opportunities to integrate research. The Association of Fish and Wildlife agencies best management practices for CWD include incorporating research whenever possible and using available resources in the most effective manner. Addressing

knowledge gaps by management agencies, as well as producers of farm-raised deer, to support critical research toward closing knowledge gaps will help to move toward successful management and reduce risks of CWD into the future.

Sincerely,



Preston D. Cole  
Secretary



Bradley M. Pfaff  
Secretary

cc: Governor Evers