

## WRITTEN TESTIMONY OF

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Concerning  
Chronic Wasting Disease  
in  
Free-ranging Deer and Elk

Before the  
SUBCOMMITTEE ON FORESTS AND FOREST HEALTH  
and  
SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS  
COMMITTEE ON RESOURCES  
UNITED STATES HOUSE OF REPRESENTATIVES

Thank you, Mr. Chairman and distinguished members of the subcommittees, for the opportunity to comment on chronic wasting disease (CWD) in Wyoming and on associated critical needs for federal funding to states with CWD in free-ranging deer and elk. Governor Jim Geringer has asked me to represent him and Wyoming and asked that I stress that CWD is regarded to be of critical importance to Wyoming.

In Wyoming the Game and Fish Department and University of Wyoming's State Veterinary Laboratory are responsible for CWD management, diagnostics, surveillance, and public outreach. We commend you and other subcommittee members for recognizing the significance of CWD to affected states and for exploring how Congress and the Federal Government can help.

Dr. Mike Miller, Colorado Division of Wildlife, has provided an excellent review of the science of CWD. I will not repeat the technical background he presented, but I hope you were impressed that CWD, a transmissible spongiform encephalopathy (TSE), is a very unusual disease about which there seem to be more questions than answers and which is very difficult to control. As much as anything, it is a disease of negative perceptions.

In Wyoming CWD was first detected in a deer at the Department's Sybille Wildlife Research and Conservation Education Unit in 1978; it was detected in a free-ranging elk in 1986 and a free-ranging deer in 1990. It was undoubtedly present long before it was detected in the wild or at the research facility, and it is impossible to determine if it occurred first in free-ranging or captive, research cervids. As far as we can tell, CWD is restricted to approximately 11,000 square miles of southeast Wyoming where it now is considered endemic. The University of Wyoming and Game and Fish Department have collaborated since the early 1980s on CWD surveillance, diagnostics, and research. Wyoming is fortunate to have experienced, world-recognized CWD researchers and outstanding facilities for CWD research at the Sybille Wildlife Research Unit and the University's Wyoming State Veterinary Laboratory.

Chronic wasting disease in free-ranging and captive deer and elk in southeast Wyoming and northeast Colorado was little more than a curious disease, which attracted little attention and

even less research money until the late 1980s when the bovine spongiform encephalopathy (BSE, "mad cow disease") epidemic began to ravage the cattle industry of the United Kingdom. Although there may be more differences than similarities between CWD and BSE, CWD began to attract attention, but not research dollars, simply because it was, and still is, the only animal TSE known to occur in free-ranging, uncontrolled non-domestic animals.

Interest in CWD increased considerably after new variant Cruetzfeldt-Jacob Disease (nvCJD) in humans in the U.K. was linked to BSE in 1996 and when CWD was diagnosed in captive, commercial farmed elk in Saskatchewan in 1996 and in South Dakota in 1997. The increased attention being focused on CWD still was not accompanied by funding for research, surveillance, management, or public outreach. Indeed, except for a small amount of money for surveillance from USDA-APHIS, state wildlife management agencies in Colorado and Wyoming diverted money from other wildlife management needs to fund CWD activities related to free-ranging wildlife.

In 2001, Secretary of Agriculture Veneman declared a CWD emergency in recognition that CWD was about to be, if not already, out of control in the commercial farmed elk industry. Since then many millions of federal dollars have been spent by USDA-APHIS to combat CWD in the elk farm industry. This is commendable and appropriate because, among other things, it reduced opportunities for transmission of CWD to new foci of infection outside the endemic area of southeast Wyoming and northeast Colorado. However, new foci of infection, at least one of which is associated with a game farm, have been identified in Nebraska, Colorado, South Dakota, and Wisconsin within the last year. There are now five states with

CWD in free-ranging deer, which in conjunction with CWD continuing to spread in the game farm industry, has resulted in CWD being regarded as a National crisis. The five states with CWD in free-ranging deer are now expected to aggressively address CWD and are responding as best they can, but they are receiving little or no federal funding and do not have the necessary resources for these activities.

It could be stated that there are three types of CWD outbreaks now occurring in the United States and Canada: 1) Until CWD was discovered in the game farm industry, the only

known CWD was in free-ranging deer and elk of southeast Wyoming and contiguous northeast Colorado. The disease also occurs in research facilities operated by the Wyoming Game and Fish Department and the Colorado Division of Wildlife within the affected area. This is the **endemic area** and is the only place CWD is known to be established as a self-maintained disease. Prevalence of CWD within the endemic area varies from less than 1 percent to approximately 15 percent. The size of the endemic area is likely increasing as the disease spreads, but spread appears to be very slow. 2) The second CWD outbreak is occurring in commercial captive cervids as the **game farm CWD outbreak**. Once introduced into a game farm, CWD appears to readily become established, although it may be years before it is detected. Prevalence of CWD in farmed cervids is variable, and in at least one case prevalence exceeded 50 percent. Game farm to game farm spread appears to readily occur, sometimes over great distances, via intrastate and interstate transport of affected game farm cervids. In at least one location, and probably others, CWD has moved to from farmed cervids to free-ranging deer outside the affected premise. 3) This has contributed to the third type of outbreak – CWD hot spots or **new foci of CWD** outside the endemic area. New foci of infection are cause for considerable concern, because, if the disease becomes established, they will become endemic areas where control or eradication may not be possible. It is possible, especially where high densities of white-tailed deer are involved, these new endemic areas could spread to involve huge multi-state and provincial areas of North America.

The advent of CWD in game farms and new foci of infection has resulted in the current CWD crisis and this Congressional hearing. Thousands of farmed deer and elk have been killed in attempts to control or eradicate the disease at costs of many millions of Federal dollars, primarily for indemnity to owners. Similarly, in new foci of CWD, thousands of deer are being killed in order to determine the extent of infection and in hopes of eradicating it before it becomes endemic. The difference is that where new foci of CWD are being addressed, it is being done not with Federal dollars, but state wildlife management agency resources and no indemnity is paid for publicly-owned deer and elk.

In Wyoming, game farms are highly restricted and there is only one elk farm; it is well outside the

endemic area and does not have CWD. The scarcity of game farms in Wyoming

probably explains why we do not have game farm CWD and have not identified any new foci of CWD.

Surveillance for CWD in free-ranging deer and elk in Wyoming was initiated in 1983, and CWD-related activities have been ongoing and expanding since then. These activities have addressed management, or containment, efforts; research; and information and education activities. Management and containment activities include: targeted and hunter-killed surveillance of CWD within and outside the CWD endemic area; prohibited translocation of live deer and elk from the endemic area; no movement of live deer and elk from the Sybille Wildlife Research Unit; killing deer and elk with symptoms suggestive of CWD to decrease opportunities for transmission; an unsuccessful attempt in 1987 to eradicate CWD at the Sybille Wildlife Research Unit by depopulating all deer and elk present; participation in numerous interstate coordination and research meetings; strict regulations requiring 60-month CWD-free certification before a new elk can be imported to the state's single game farm; and extensive, TSE diagnostic services at the Wyoming State Veterinary Laboratory.

Wyoming has some of the world's leading authorities on CWD and outstanding facilities for CWD research. Therefore, Wyoming is an active participant in CWD research, including: research to determine if CWD will transmit from deer to cattle; the pathogenesis of CWD in elk and deer; evaluation of a variety of blood and tissue tests for CWD; evaluation of tonsillar biopsy for diagnosis of CWD; mechanisms of transmission of CWD; studies of the presence of CWD in reproductive tissues; pathology of CWD and evaluation of changes over time; strain typing of CWD agents by bioassay and biochemical means; studies of the susceptibility of humans and cattle by molecular techniques and transgenic mice; studies of geographic distribution and dynamics of CWD; and an elk infectious dose titration study.

Wyoming regards information and education efforts regarding CWD to be important. This is especially relevant given the complex and unique nature of CWD and the high volume of misinformation in circulation and associated misperceptions regarding CWD. Public outreach efforts in Wyoming have included: numerous press releases, responses to telephone inquiries, and interviews with reporters, writers, radio, and television; agency-developed television and

radio stories; training presentations to agency personnel; informational letters to limited quota hunters, taxidermists, and meat processors in the endemic area; informative letters to hunters whose animal tested positive for CWD during hunter-killed surveillance; identification of CWD-affected hunt areas and information on CWD in hunter information booklets and hunting orders; pamphlets on CWD; and

production of a training video on CWD.

Wyoming would like to expand its CWD program and is in the process of preparing a CWD Management Plan that will incorporate and expand activities currently in place and address newly emerging issues. In addition, Wyoming, Nebraska, and Colorado are working on developing a multi-state CWD plan, which should further coordinate the states' CWD management activities.

States with CWD in free-ranging deer and elk communicate frequently and cooperate where practical. Wyoming and Colorado have and are collaborating in many CWD research projects. In addition, the states recognize and very much appreciate diagnostic services and advice provided by USDA National Veterinary Services Laboratory and crucial research conducted by USDA Agricultural Research Services laboratories in Pullman, Washington, and Ames, Iowa. The National Institutes of Health laboratories, especially at Hamilton, Montana, also have conducted important research on CWD.

As previously mentioned, the Secretary of Agriculture recently declared a CWD emergency in order to free up money to combat CWD in the game farm industry. But the economic importance of free-ranging deer and elk eclipses the economic value of game farms; and, yet, very little Federal money is being made available to states to help pay for very expensive management, surveillance, outreach, and research necessary to address CWD in free-ranging deer and elk.

In Wyoming, as an example, it is estimated that in 2001 deer and elk hunters spent \$182.7 Million and supported approximately 4,800 jobs. In addition, elk and deer are important to Wyoming's tourism industry, which in 2000 contributed almost \$1.5 Billion and 27,000 jobs

to its economy. Deer and elk are of equal, or greater importance, to many other states. If CWD is left uncontrolled and is allowed to become endemic in other areas, it could adversely affect deer populations and, through negative perceptions, have severe impacts upon hunting and hunting's contributions to the economies of many states.

Although Federal agencies have limited jurisdiction for management or health of free-ranging deer and elk, CWD is clearly a national problem and deserves Congressional attention, especially through funding to states for CWD. A model is present, although much smaller in scale, by which Congress appropriates money to Montana, Idaho, and Wyoming to address another national wildlife disease problem – brucellosis in the Greater Yellowstone Area. Under this model, Federal dollars are appropriated to USDA-APHIS for grants to the three states to participate in Greater Yellowstone Interagency Brucellosis

Committee activities as they relate directly to brucellosis in free-ranging wildlife. Perhaps Congress could use an approach similar to this to provide the financial support states desperately need to address CWD in free-ranging deer and elk.

Mr. Chairman, thank you for the opportunity to share these thoughts with you today. I would be happy to answer any questions you may have.

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