

MESSAGE FROM THE PRESIDENT

Chronic Wasting Disease (CWD)



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"This is an explosive topic that will, in my opinion, burst onto the ungulate scene (sheep, cattle, deer, elk) and humans within the next year. When it does, there will be dramatic political pressure to do something."

I AM NOT A BIOLOGIST OR A research scientist, but rather, a concerned hunter, sportsman and conservationist. I will rely heavily in this article on two scientists who are also Professional Members of the Boone and Crockett Club, Dr. Jack Ward Thomas and Dr. Valerius Geist, and also upon Brian McCombie, writer for *Field and Stream* magazine, and specifically an article by him titled, "Deadly Venison", which appeared in the February 2001 issue of *Field and Stream*.

I must admit that chronic wasting disease did not fully register upon me as a potential threat to wild game until recently. Like many others, I felt that there was no threat from widely dispersed game. I had read about the destruction of an elk herd at a game farm in Phillipsburg, Montana, as well as CWD in elk and/or deer in Alberta, Saskatchewan, South Dakota, Oklahoma, Nebraska, and Colorado.

Jack Ward Thomas, a professor at the University of Montana, and a Professional Member of the Boone and Crockett Club, gave me background information on CWD and about the apparent lack of research on a disease in wild game that is potentially life threatening to human beings. Fifteen percent of mule deer in Larimer County, Colorado tested positive for CWD. In 1967, CWD was found in the Colorado foothills, but not identified as such until 1980. In 1981, it was found in the wild elk population in Larimer County, Colorado. The overall infection rate in the area is around four percent, according to Michael Miller of Colorado's Division of Wildlife. It has spread to other areas of northern Colorado and into Wyoming.

The normal procedure when CWD is diagnosed in a game farm has been to destroy all contained animals and to selectively destroy portions of wild herds where infection is prevalent. Jack posed a question for me: "What if CWD got into the national elk herd at Jackson Hole, Wyoming—do we destroy the herd?" No matter how probable, the thought is mind-blowing, at the least.

In the hope of finding a way to avoid such a possibility, Jack and I are trying to determine the research that is currently underway in North America. If we feel it is necessary, we may call upon the Boone and Crockett Club to organize a North American Symposium on CWD.

The following are terms that you probably have read about, or will hear about soon:

- TSE: Transmissible spongiform encephalopathy (all infected mammals)
- CJD: Creutzfeldt-Jacob disease (human beings)
- CWD: Chronic wasting disease (game animals)
- MCD: Mad Cow Disease (cows - Europe)
- Scrapie: Sheep

TSE is virtually indestructible. You can burn carcasses and bury it, only to discover TSE is present years later, and can be once again transmitted by contact with the burned material.

CJD, MCD, and CWD are all forms of TSE. According to a British government advisory committee, there are 76 cases of CJD in Great Britain that are attributable to persons having eaten beef infected with mad cow disease.¹

Brian McCombie, in an article titled, "Deadly Venison?" in the February 2001 issue of *Field and Stream*, said, "Suspicion that a fatal, incurable illness can spread from infected deer to humans is increasing. Here, a special report on chronic wasting disease—and how one hunter may have lost his life from it." McCombie further reports that this

death from CJD has not been confirmed scientifically as a result of CWD. McCombie further reports that, "... two other deer hunters had recently died from CJD; Jim Koepke, 39, of Nevada, in February of 1999; and Doug McEwen, 30, of Utah, in March of the same year." Koepke's and McEwen's deaths are in addition to Jay Dee Whitlock, of Oklahoma. While these deaths have not been conclusively linked to CWD, the otherwise low rate of CJD in humans suggests a possible link.

In a letter to me from Jack Ward Thomas concerning a potential conference on chronic wasting disease, Jack stated, "The disease(s) in question are more than a bit frightening from several standpoints. The disease is not like anything that has been seen before, i.e., it is not a bacteria, not a virus, not a deficiency, not a poison. It is a malformed protein strand that can be transferred somehow between sheep, deer, elk, cattle, and in some rare cases, to people. It is not known how this transmission is achieved between animals and between animals and people (consumption is the prime suspect)."

Jack further states, "There is no cure and no diagnosis (for certain) save examination of the brain tissue of infected animals or people following death. The malformed protein strands cannot be destroyed via any standard means—burying, burning, boiling of instruments, etc."

"This is an explosive topic that will, in my opinion, burst onto the ungulate scene (sheep, cattle, deer, elk) and humans within the next year. When it does, there will be dramatic political pressure to do something. If we do not have a prescribed protocol in place, the reactions are very likely to be focused on herd reductions or even extinction of some subpopulations."

Thomas further states, "There may be better, more efficient, more effective approaches. But if there is any chance that such would be considered, they must be on the table when politicians demand and find

immediate actions. I would be much more comfortable if protocols were in place—and those protocols developed by teams that included qualified and experienced wildlife biologists.”

Valerius Geist, Ph.D., P. Biol., Professor Emeritus of Environmental Science, Faculty of Environmental Design, University of Calgary, and a Professional Member of the Boone and Crockett Club, also called for a “Stake Holder Conference” in a letter to Professor Jack Ward Thomas. The following is the text of Geist’s outline for a potential conference on the subject. Due to its importance, I have provided a substantial portion of Dr. Geist’s text:

CHRONIC WASTING DISEASE (CWD), AND WHAT TO DO ABOUT IT:

STAKE HOLDER CONFERENCE

Chronic Wasting Disease (CWD) has just been detected in a free-living mule deer in Saskatchewan. With this spread, CWD becomes a continental issue. We need to consider and act on Chronic Wasting Disease in free-living elk, mule deer, and potentially whitetail deer. It is a serious problem that concerns all who are involved with wildlife conservation. However, contrary to the gloom and doom now surrounding the issue of Transmissible Spongiform Encephalopathies (TSE), of which CWD is but a variant, it’s a problem that potentially may be solved.

A small conference of stakeholders is proposed. The objectives of the proposed conference are:

- 1) To foster a free discussion among wildlife veterinarians and a select group of specialists in deer and elk biology in order to relate the etiology of CWD to the ecology and behavior of free-living deer and elk.
- 2) To bring into the discussion representatives of sportsmen organizations and wildlife biologists

so as to:

- (a) develop pilot projects to determine the feasibility of removing sources of CWD infection from the countryside and disposing such safely.
- (b) develop a system of monitoring to detect infected deer and elk and lead to their removal.
- 3) To develop research projects aimed at rapid decontamination of the countryside.
- 4) To develop a dialogue with agricultural and environmental agencies so as to foster above objectives.
- 5) To organize an administrative structure to continually bring the volunteer potential of organized sportsmen to bear on the problem of CWD.

COMMENTARY

An assessment of the information currently available indicates that Chronic Wasting Disease in free-living cervids is likely to lead to widespread, but futile, attempts at eradicating the disease by eradicating free-living deer and elk. Such campaigns would be futile as known idiosyncrasies in cervid ecology and behavior and would insure re-infection of deer, and

re-contamination of the landscape. However, it is these very idiosyncrasies that suggest that there are potential means to remove the disease from the countryside. However, solutions require expertise and manpower not available to agencies concerned with CWD. The aim of the conference is to explore such potential solutions among stakeholders. We thus need to call into being, with the aid of concerned organizations, a brainstorming session of TSE experts, epidemiologists, deer and elk biologists, wildlife veterinarians, organized sportsmen, guides and outfitters, and hash out the problem.

The Boone and Crockett Club, after extensive investigation to determine current research and other proposed conferences, will either work with other groups or will call together a Symposium on Chronic Wasting Disease. Although there is no scientific proof that any hunter has died from CWD, one hunter would be too many. Our greatest concern, aside from human deaths, is the potential destruction of game herds in North America. We will report later on a further call to action. ▲▲▲

¹ FIELD AND STREAM ARTICLE
BY BRIAN MCCOMBIE,
FEBRUARY, 2001

