

IMPACT AND CONTROL OF CHRONIC WASTING DISEASE

Scott R. Craven ¹

Chronic Wasting Disease (CWD) is an always fatal, degenerative disease that affects members of the deer family. It is related to Bovine TSE (Mad Cow Disease) and CJD in humans. CWD was discovered and described in Colorado in the 1960s but with its recent discovery on widely dispersed captive cervid farms and in wild white-tailed deer in Wisconsin, it has become a major national conservation issue.

Three cases of CWD were documented in south western Wisconsin during the 2001 November deer-hunting season as a result of routine, random, disease surveillance by the Wisconsin Department of Natural Resources (DNR). The discovery triggered a massive surveillance program to determine the extent and distribution of the disease in Wisconsin, a management program to control the disease, and intense public reaction.

During 2002, over 40,000 hunter-harvested deer were tested for CWD. Over 200 positives were identified in the general area of the original 3. While 95% of Wisconsin appeared to be disease free, there was clearly a major problem within about 1000 square miles just west of Madison.

In addition, deer or elk on several scattered Wisconsin Game Farms tested positive and a few cases were discovered in wild deer just across the Wisconsin border in Illinois. Testing to date in 2003 has reaffirmed the 2002 data but also turned up positive cases in adjacent counties.

CWD in Wisconsin represents a major threat to dense white-tailed deer herds east of the Mississippi River. Resource agencies, hunters, and farmers are watching the events in Wisconsin very closely, but what does the 2001 discovery of CWD really mean over the short and long-term? Unfortunately there are many unanswered questions about the disease itself. Numerous research projects are underway, but good research takes time. Human nature, in terms of hunter and landowner behavior, remains another uncertainty. Despite these uncertainties, there are many likely and possible implications of CWD in Wisconsin. If the disease is not contained or eliminated here these problem could easily spread.

- ! Economics: In the first full year of CWD management (2002), Wisconsin spent over 12 million dollars. Other wildlife management programs suffered as human and financial resources were redirected. The battle to contain CWD will be long and costly. A 10% decline in hunter numbers in 2002 rebounded by 4% in 2003; but this still represented significant lost revenue to the DNR and to local communities where

hunting takes place.

- ! The deer herd: No one knows the ultimate threat to the deer herd itself. Some computer models suggest a catastrophic crash in deer numbers; others are more conservative. With a plan to drastically reduce deer numbers within the CWD management zones, deer numbers and hunting opportunity will diminish there. As for the rest of the state, as goes the deer herd, so goes Wisconsin's 1 billion dollar+ deer hunting industry. @

1/ Professor and Chair, Dept. of Wildlife Ecology, Univ. of Wisconsin-Madison, 1630 Linden Dr. Madison, WI 53706

- ! Ecology and problem management: Lower deer numbers, whether from disease or disease management, mean major implication for deer-vehicle collisions, crop damage caused by deer and for native plant ecology.
- ! Risk to humans and other species: There is no current evidence to suggest a major risk to human health, livestock, or other wild animals. However, the similarity of CWD to bovine and human TSE diseases and the history of mad-cow disease are a source of understandable concern. Numerous research projects are underway to help understand and manage the risk, if any.

There are related issues such as the controversy over feeding and baiting deer and landowner opposition to some management strategies. CWD clearly represents a major challenge to wildlife management with real or perceived risks for many segments of society. It will likely remain an issue for many years to come.