

# CHRONIC WASTING DISEASE

## PART 3

This series will give our readers a closer look at Chronic Wasting Disease. It will touch on the various challenges posed by this disease and begin to update you and all hunters about the status of CWD and what science can tell us about it today.



"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."

Dr. Jack Ward Thomas, 2001



# AN ALLIED FRONT

Until the late 1990s, most hunters, and even wildlife biologists, had very little awareness of what Chronic Wasting Disease was, and nobody was prepared for the impact it would have on hunting and cervid management in the coming decade. But, by 2003, when the disease had been confirmed in eight states and two Canadian provinces, CWD had emerged as an undeniable threat to North America's deer and elk populations. Adding to the growing concern about CWD and its impact to wildlife was the fear that the disease might pose a risk to humans. Media outlets, public health agencies, and sportsmen and sportswomen began asking more questions, but were left only to speculate due to an absence of reliable information and scientifically verified fact.

As CWD was discovered in new areas at an alarming rate during the early 2000s, wildlife management agencies began scrambling to develop techniques to stop or control the disease's spread. At the same time, they were being forced to balance the complex, and often competing or conflicting interests of the general public, hunters, captive cervid industry, traditional livestock industries, and numerous state and federal animal and public health agencies.

**MATT DUNFEE**  
WILDLIFE MANAGEMENT INSTITUTE  
PROGRAM MANAGER  
B&C PROFESSIONAL MEMBER

[www.CWD-Info.org](http://www.CWD-Info.org) has up-to-date information and resources to learn more about CWD in the U.S. and Canada.



**IT WAS IN THIS ENVIRONMENT THAT THE CWD ALLIANCE WAS CREATED.**

As questions, concerns, and fears about CWD and its impacts on wildlife populations and hunting grew, it became clear that strong leadership was needed to ensure that hunters and conservationists had access to timely and accurate information about the disease, as well as a voice in the political debate. In late 2001, three Boone and Crockett Club members provided start-up funds to allow the Club to develop a CWD initiative. Dr. Gary Wolfe, a Professional Member of the Club, was contracted to develop and coordinate the Club's CWD plan. Soon after, the Rocky Mountain Elk Foundation, and the Mule Deer Foundation joined forces with the Club to help fund this important collaborative project. This partnership became known as the CWD Alliance in January of 2002, and the partners agreed to pool resources, share information, and cooperate on projects and activities to positively impact the CWD issue. Since then, over 20 other conservation organizations, sportsmen groups, and industry partners have joined the Alliance.

The early members and partners of the CWD Alliance all recognized that reliable, un-biased public information and education about CWD should be the focus of the Alliance's work. Then, like today, CWD was emotionally and politically charged and inaccurate reporting and sensationalism undermined progress in managing the disease. Thus, the mission of the Alliance was crafted: "To promote responsible and accurate communications regarding CWD, and to support strategies that effectively control CWD to minimize its impact on wild, free ranging cervids."

That mission remains as critical today as it did in 2002. With CWD now found in 24 states and four countries, the concern about the disease's impact to cervid populations has not diminished. Scientific, reliable, and timely information remains at a premium. The flagship project of the Alliance, the website [cwd-info.org](http://cwd-info.org), continues to be the premier information clearing-house for CWD news, updates, and current regulations, ensuring that anyone needing to understand more about CWD has a place to obtain the truth. Over 45 state fish and wildlife agencies link to the site, and it has become a trusted vehicle to disseminate up-to-date information about CWD from a variety of agency partners.

In addition to [cwd-info.org](http://cwd-info.org), the Alliance remains active on numerous other fronts. Over the last decade that Alliance has:

- Provided written and in-person congressional testimony on CWD funding and management issues,
- Helped coordinate and sponsor national CWD symposia,
- Maintained continual media outreach, providing over 120 media interviews,
- Served on dozens of national CWD and wildlife health working groups and committees,
- Produced information brochures and videos on CWD,
- Coordinated CWD information campaigns and resources for other conservation organizations,
- Compiled databases of CWD-related research articles.

**"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."**

Past B&C President Earl E. Morgenroth, addressing CWD for the first time in *Fair Chase* magazine, 2001.



In 1981, it was found in the wild elk population in Larimer County, Colorado. The overall infection rate at that time in the area was around four percent, according to Michael Miller of Colorado's Division of Wildlife.

## BOONE AND CROCKETT CLUB'S BOOTS ON THE GROUND.

The Boone and Crockett Club is unique in the fact that many of our members are leading the way or directly involved with CWD research. They work for the state and government agencies trying to understand and manage populations, and are the stakeholders listening to land owners and hunters in the field. Many of our members are board members and active participants of other conservation organizations like the Rocky Mountain Elk Foundation and the Mule Deer Foundation, ensuring that lines of communication stay open and our efforts are organized and cooperative.



In 2002, Fair Chase reprinted an article, *Is it Safe To Hunt?* by David Stalling from the Rocky Mountain Elk Foundation. It was originally written for *Bugle* magazine. The conversation around hunter safety has been going on for 15 years.



Ellis County CWD-Positive WTD, September 19, 2016. PHOTO BY: JASON WAGNER, KDWP

“My experience with CWD includes implementing a statewide surveillance program for a disease considered by many hunters, wildlife managers, policy makers, and researchers as the most devastating disease to have ever affected the nation’s wild cervids. Through national committee work, I help develop strategies to curb CWD’s spread and assist multiple states with legal cases in stopping the movement of this disease. The prion is shed by chronically infected animals that leave habitats infected for years. With no cure or treatment, CWD is spread through animal migrations but more quickly to distant lands in transport trailers. The most effective way to curb its spread is to stop moving animals, both wild caught and owned captive cervids. This one action can slow the spread of CWD to new areas and provide the chance of a healthy wildlife resource for future generations.”

**Colin Gillin serves as the State Wildlife Veterinarian for the Oregon Department of Fish and Wildlife and chairs the Committee on Wildlife Diseases for the US Animal Health Association and the Association of Fish and Wildlife Agencies CWD Standards Working Group.**

“After 20 years of involvement in almost every aspect of CWD, I tend to be more philosophical than scientific in my perspective of this disease. I reflect on human arrogance, which demands a solution to every problem, but knows not the consequences of the solution. I question our empathy for healthy, sentient creatures when our only management solution seems to be a bullet. I despair at how ineffectual human intervention is once a disease takes hold in wildlife. Lastly, I wait to see a comprehensive cost-benefit analysis of current and proposed management efforts to control or eradicate CWD.”

**Terry J. Kreeger, DVM, PhD retired as the State Wildlife Veterinarian with the Wyoming Game and Fish Department. In 2016, he was unanimously elected a lifetime Honorary Member of The Wildlife Society.**

In the state of Kansas it took roughly 7 years after the first detection in 2005 before the first CWD-positive deer with clinical symptoms was observed. On 23 October 2012 in Sherman County, Kansas Department of Wildlife, Parks and Tourism Game Warden Micheal Hopper captured the first photos of a wild, clinical, CWD-positive deer in the state. Reports of clinical CWD-positive deer have increased in the Northwest Zone since Hopper’s encounter. Despite increasing prevalence and geographic spread, no significant deer density declines have been observed in the Northwest Zone using annual distance sampling techniques.

Although interest in CWD among Kansas hunters and the public varies, overall interest in the disease has been stable and slightly increased since CWD was first detected in the state. Even to this day I encounter people who say they have never heard of CWD, or if they have heard of it, are unaware of exactly what the disease is. More importantly, most hunters do not actively pursue having their deer or elk tested for CWD. The reasons for not testing vary, but cost, convenience, access to formalin preservative, knowledge of tissues needed, and lack of concern about CWD are speculated to be the main reasons.

**Shane Hesting, Wildlife Disease Coordinator, Kansas Department of Wildlife, Parks and Tourism**

**2001 - SUMMER ISSUE FROM THE PRESIDENT**

“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.

**2002 - FALL ISSUE FROM THE PRESIDENT**

On May 16th, [2002] the House Resources Subcommittees on Forests and Forest Health and Fisheries Conservation, Wildlife and Oceans held a joint oversight hearing on CWD. The purpose of the hearing was to

probe the growing threat of CWD, and focused on ways federal agencies could support state wildlife managers and other involved state agencies in preventing further spread of CWD to non-infected populations. Additionally, the hearing explored ways in which the federal government could aid and support research and development efforts aimed at containing and, ultimately, eradicating the disease.

Boone and Crockett Club Professional Member, Gary Wolfe, chair of the Club's newly created Wildlife Health Committee was one of ten witnesses invited to present testimony at the congressional hearing. Gary explained the efforts of the Club and the CWD Alliance, and offered specific recommendations for congressional action.



**MESSAGE FROM THE PRESIDENT**  
Chronic Wasting Disease (CWD)



**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.**

*Earl E. Morgenroth*

**How They Could Impact Diseases**  
The Future of Big-Game Hunting



In a time when many North American big-game sportsmen are beginning to question the future of big-game populations and the future of hunting, recent wildlife diseases have gained attention. The fact is, as projected by the media, we will change daily with time and that will affect our sportsmen and the wildlife. It is time to get more knowledge of these diseases, their medical aspects and treatments, and their potential to cross between species. Wildlife management of chronic wasting disease (CWD) and brucellosis are established in some areas, hunters, wildlife managers, and other conservationists are all searching for answers.

*Earl E. Morgenroth*

**2003 - SPRING ISSUE DISEASES - HOW THEY COULD IMPACT THE FUTURE OF BIG-GAME HUNTING**

We have entered a time when we need to contemplate the effects of our actions and decide how highly we value our big game resources. Our demands and actions of the past have created many of the problems we are presently dealing with; now it is our responsibility to promptly find and enact solutions. Through gaining a thorough knowledge of CWD, bovine TB, and brucellosis, state and federal agencies will be able to improve big-game management and the general public will have a better understanding of the reasons for the changes.



LEFT: Deer are netted and sedated, then fitted with a GPS collar while tests are run and vitals recorded. Winter 2011

<p><b>2001 SUMMER MESSAGE FROM THE PRESIDENT</b> Chronic Wasting Disease Earl E. Morgenroth</p>	<p><b>2002 SUMMER MESSAGE FROM THE PRESIDENT</b> CWD is Topic of Congressional Hearing Earl E. Morgenroth</p>	<p><b>2002 FALL IS IT SAFE TO HUNT?</b> David Stalling Bugle Magazine</p>	<p><b>2003 SPRING DISEASES HOWS THEY COULD IMPACT THE FUTURE OF BIG-GAME HUNTING</b> Michael Lavelle and Kurt VerCauteren USDA/APHIS/WS/National Wildlife Research Center</p>	<p><b>2008 SPRING KNOWLEDGE BASE New Hazards for the Wildlife Biologist</b> Winifred B. Kessler Professional Member</p>
---	---	---	---	---



**2008 -SPRING ISSUE KNOWLEDGE BASE**

Is there some general trend that can explain the emergence of these diseases into the human environment? One theory is that habitat loss and human encroachment into previously wild areas have forced animals

and people into closer contact than ever before. There is greater public awareness about the diseases that jump from animals to people, causing human death and suffering. But zoonoses travel a two-way street. Because they can also jump from humans to animals, zoonoses figure into wildlife conservation and management as well as human health.

**2011 -WINTER ISSUE DEAD DEAR WALKING: CHRONIC WASTING DISEASE IN NEW YORK STATE**

In April 2005 the state of New York got some very, very bad news. A captive whitetailed deer on a farm in central New York tested positive for chronic wasting disease (CWD). Subsequent surveillance identified four more captive deer and two free-ranging deer that tested positive for the fatal disease. In an instant, New York wildlife biologists were faced with one of the most mysterious and unusual wildlife diseases ever reported. CWD had plagued hunters and wildlife professionals in the western U.S. for decades, and in recent years the pernicious disease cropped up in several states and provinces throughout North America. As a newcomer to the east, CWD was unequivocally unwelcome. That's because this tiny, misbehaving protein can cause an awful lot of trouble.

**2014 -SUMMER ISSUE KNOWLEDGE BASE**

A 2011 study by Vaske and Lyon (*Risk Analysis, Vol. 31 No. 3*) looked at CWD-related factors that would influence hunters' decision to give up deer hunting in a state. One factor is CWD prevalence; 52 percent of hunters said they would give up hunting in a state if prevalence of CWD reaches the 50 percent level. Add in the hypothetical situation of a human death due to CWD, and the quit rate jumps to 64 percent. Such studies show how CWD spread undermines the hunting heritage by eroding confidence in a nutritious food source, and by reducing hunter participation and associated revenues needed for wildlife conservation and management.

**2014 -FALL ISSUE FROM THE PRESIDENT**

One key to preventing the spread of wildlife disease is the close monitoring of all captive wildlife. While there is a long history of close inspection and regulation of domestic livestock, captive wildlife generally falls outside of those regulations. The captive wildlife industry is a more recent development. Further, the captive wildlife industry has worked hard to avoid close inspection, which has been one major way that Chronic Wasting Disease has unknowingly spread among captive herds and then to wild herds with devastating effect. Better policy will require changes in legal definitions and jurisdictions concerning

captive wildlife in order to get the right and honest answers on health inspections and control. These are fundamentals that we long ago worked out for other aspects of conservation, and the North American Model must now adapt to address these new developments of wildlife disease.



**What's next? Part four of our CWD series will focus on the disease impacts on cervid populations and the long-term consequences.**

**2010 SPRING KNOWLEDGE BASE Wildlife Diseases**  
Winifred B. Kessler  
Professional Member

**2011 WINTER Dead Dear Walking: Chronic Wasting Disease in New York State**  
Amy Dechen Quinn  
with David Williams and Bill Porter (Professional Member)

**2014 SUMMER KNOWLEDGE BASE CWD: Game Management's Worst Nightmare**  
Winifred B. Kessler  
Professional Member

**2014 FALL FROM THE PRESIDENT Animal Health**  
William A. Demmer