

CWD: PGC's Failed Policies vs HB 1483

A 12-year University of Wisconsin study indicates that the Pennsylvania Game Commission's deer management program is promoting chronic wasting disease in Pennsylvania's deer herd and threatens deer, elk, and sport hunting in the Commonwealth. Scientists found that adult buck are twice as likely to be infected by and spread chronic wasting disease (CWD) than adult female white-tailed deer. Adult males were five times more likely to be infected than yearlings of either sex. CWD infection sexual variation from the Wisconsin study was reported as follows: (1) yearling males (3.2% infection rate), (2) yearling females (3.6%), (3) adult females age 3+ (8.1%), and (4) adult males age 3+ (16.3%). Of the three deer management strategies that were evaluated, only male-focused harvest succeeded in reducing CWD prevalence. By harvesting adult buck (management without antler restrictions), the rate of CWD infection can be stemmed as the higher prevalence class (older adult buck) is reduced in the population, and the lowest prevalence class (females) is increased.

According to the study, regarding the herd-control harvest strategy which focuses on harvesting females in order to reduce herd growth rate and size of the deer herd, nearly 50% of adult males and 25% of adult females are expected to become infected within a decade. Even worse, when the management strategy is female-focused to reduce does and also promotes older buck (using antler restrictions), not only are deer densities expected to be low, but more than 50% of surviving adult bucks and 30% of adult does would be infected within a decade. **It should be noted that this is the Game Commission's deer management strategy.**

PGC's Failed Policies. The findings of this comprehensive scientific study indicate that the deer management strategy of the Pennsylvania Game Commission is promoting the frequency of infection and rate of spread of CWD throughout Pennsylvania's deer herd. The two principal deer-management strategies of the Game Commission – promoting herd reduction by focusing on high harvests of female deer, and increasing the density of older adult bucks in the herd through an antler-restriction policy – is encouraging the frequency and spread of CWD and is projected to result in the infection of 50% of surviving adult bucks and 30% of does within 10 years. **PGC's deer-management program threatens the Commonwealth's white-tailed deer and elk herds and risks the future of sport hunting in Pennsylvania. If PGC's deer-management program continues, it is likely to have catastrophic biological, social, and economic repercussions that could last for generations.**

HB 1483 Controls CWD. In contrast to PGC policies, the provisions of HB 1483 are designed to remove the focus of the harvest from killing does and reinstitute the two-week buck only season – as had been the successful deer management strategy of PGC for decades prior to the year 2000 and prior to CWD in Pennsylvania. In addition, by aggressively creating new deer and wildlife habitat across 6,000 square miles of state game and state forest lands, multiple disease-reduction and sportsmen-friendly management benefits will result from HB 1483:

- The number and proportion of females (does) will increase in the herd – promoting not only CWD reduction but maximum herd growth rate and sustained yield for sport hunting and a healthy herd.
- The overall density of males will increase while decreasing infected buck – reducing CWD, maximizing the sustained yield of legal buck for hunting by 75%, and increasing numbers of youth and adult hunters.
- The populations of 150 species of other game and nongame wildlife will increase greatly over 1.5 million acres of state game lands and 2.5 million acres of state forest lands.

CWD Cure. Those involved in the design of HB 1483 have been working closely with scientists at LSU who have isolated the bacterial cause of the disease, are developing a vaccine to halt and prevent CWD throughout the nation, and who will have a field-test for hunters to immediately check their kills in the field for the presence of CWD. This is revolutionary research that is being promoted by HB 1483 and supporters of the bill, and will be implemented in Pennsylvania upon passage of the bill and completion of the LSU research. **The**

future of Pennsylvania's deer and elk herds now depends on passage of HB 1483 and halting PGC's failed policies.

John Eveland • February 6, 2018 • Relevant quotations from publications appear on the reverse side of this page.

Transmission of Chronic Wasting Disease in Wisconsin White-tailed Deer: Implications for Disease Spread and Management

*By Jennelle, Henaux, Wasserberg, Thiagarajan, Rolley, and Samuel
Published March 21, 2014*

"We used hunter harvest data from 2002 to 2013 to investigate chronic wasting disease (CWD) infection rate and transmission modes, and address how alternative management approaches affect disease dynamics in a Wisconsin white-tailed deer population. Specifically, we show that harvest focused on the greater-affected sex (males) can result in stable population dynamics and control of CWD within the next 50 years.

As demonstrated in previous work in this system and in Colorado, adult males have higher CWD infection rates than females.

High female harvest reduces population size, which requires lower realized harvest rates to maintain stable population goals (based on social tolerance for deer). ...static harvest rates over the simulated time frame of 50 years resulted in host and disease extinction. For the herd-control harvest strategy nearly 50% of adult males and 25% of adult females are expected to become infected within another decade. Even worse, for female-focused harvest not only are deer densities expected to be low, but more than 50% of surviving adult males and 30% of adult females would be infected.

Given that quality deer management practices focus on production of older bucks with large antlers, management agencies could face difficult alternatives from these competing interests."

Kill Bucks, Lower CWD

By Steve Rogers (4-12-14)

A study by University of Wisconsin-Madison scientists suggests the best way of stemming the spread of chronic wasting disease among whitetail deer is to kill more bucks, which are most likely to carry CWD and spread the disease among the species. The study suggests the disease can be reduced if hunters target its most likely carriers. The 12 years of data showed CWD infection rates are twice as high in males as females and support the idea that the rate at which deer become infected is driven by CWD prevalence in the herd, not the size of the herd.

LSU Scientist Makes CWD Testing Breakthrough, Paves Road for Vaccine

Posted by Bruce Billingsly, Dec 17, 2017, Conservation News/Hunting News

Last week, the Louisiana State University College of Agriculture released information about a breakthrough made by animal scientist Frank Bastian. Spending the bulk of his career studying chronic wasting disease, mad cow disease, and Creutzfeldt-Jakob disease, his team is now able to grow the bacteria and begin working on tests and possible vaccines. With the bulk of his research centered on the diseases and the effects they can have on the human condition, Bastian plans to develop a field testing unit that hunters can carry with them while pursuing deer, elk, and moose. While there is no proven evidence of human transmission, Bastian believes

there is potential. Now able to grow organisms, his team has the ability to generate data that should not only provide answers to questions surrounding the disease but lead to a vaccine. Bastian believes that he and his team are within a year or two of producing the test for hunters to use in the field. (It should be noted that Dr. Bastian has identified the real cause of CWD -- a tiny bacterium that is the size of a virus. He discovered that while prions (malformed proteins) occur in the presence of CWD, they are not the cause, but, instead, a by-product of bacterial action.)