



February 9th, 2022

The Honorable Elder Vogel
Chairman
Senate Agriculture & Rural Affairs
Senate Box 203047
362 Main Capitol Bldg.
Harrisburg, PA 17120-3047

The Honorable Judy Schwank
Chairwoman
Senate Agriculture & Rural Affairs
Senate Box 203011
457 Main Capitol Bldg.
Harrisburg, PA 17120-3049

The Honorable Dan Laughlin
Chairman
Senate Game & Fisheries Committee
Senate Box 203049
169 Main Capitol Bldg.
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The Honorable Jim Brewster
Chairman
Senate Game & Fisheries Committee
Senate Box 203045
458 Main Capitol Bldg.
Harrisburg, PA 17120-3045

Senate Agriculture and Game Committee Chairs and respective Committee Members,

On behalf of the Pennsylvania Deer Farmers Association (PDFA), I am providing testimony for today's hearing regarding Chronic Wasting Disease, also referred to as CWD. The PDFA is appreciative of this opportunity to share with you a critical and unique perspective relating to CWD.

PDFA- Background and History

Private Deer Management commonly referred to as Deer farming or Deer Ranching is the propagation or raising of deer, elk and a variety of other cervid species. It is termed as "livestock farming in the traditional sense." Farmed deer provide for a variety of purposes, including but not limited to venison production, breeding stock, hunting scents, hunting stock, antlers for crafts and collections, germ plasma, and exhibition.

The Pennsylvania Deer Farmers Association was formed over 20 years ago with the mission to "preserve, protect, and promote" the ethical raising and managing of private cervid operations in the Commonwealth of Pennsylvania. There are currently around 700 family owned and operated private deer facilities in the state, with herd sizes ranging from a few deer to well into the hundreds. Pennsylvania is ranked second in the nation in terms of the number

of deer farms; Texas is first in the nation. Nationally, our industry has an economic impact of nearly \$8 billion.

In 2006, legislation was passed by the PA Legislature placing regulatory authority of all private deer facilities under the Pennsylvania Department of Agriculture. As farmers, herd health is a priority if we want to be successful in our livestock enterprise, the Department's staff of animal health professionals provide the experience and training to properly implement disease management and inventory protocols currently adopted by our industry. As a livestock industry within the Commonwealth, we look forward to maintaining our cooperative relationship with the Department of Agriculture.

CWD

CWD is a neurological disease specific to Cervidae (deer, elk, and moose) that causes chronic weight loss and eventually death. CWD is a prion disease in the family of diseases known as Transmissible Spongiform Encephalopathies, or TSE's. Other diseases in this family include BSE (Cattle), Scrapie (Sheep), CJD (humans), Mink encephalopathy (Mink), Kuru (Humans) and a few years ago a prion disease was discovered in camels in Northern Africa. The Center for Disease Control has stated that CWD is likely spread between animals via bodily fluids, through direct contact, or through environmental contamination of soil, food, or water. And although there are no reported cases of CWD in humans, the World Health Organization recommends that humans avoid consuming infected venison.

Historically, CWD was first identified in 1967 at a DNR research facility in Fort Collins, Colorado. Since then, it has been identified in more than 25 U.S. states, four Canadian Provinces, South Korea, and in a wild population of Caribou in remote Norway. Regionally, CWD was identified in the adjacent states of West Virginia in 2005, Virginia in 2009, Maryland in 2010, and finally in Pennsylvania 2012. It's important to note that Virginia and Maryland do not currently permit deer farming. CWD was identified in only *free-range* deer in both Virginia and Maryland. Additionally, West Virginia's Hampshire County their epicenter of CWD positive activity in the state lies directly south of the Pennsylvania Game Commission's Disease Management Area 2 or DMA2, with more than 360 positive animals to date one could reasonably deduce that CWD may have simply walked across our boarder from our southern neighbors.

First CWD identified in PA

In the fall of 2012 CWD positive, free range whitetail deer, were identified in 3 sperate locations in Blair and Bedford counties. An individual deer also tested positive on a farm in Adams County. These positive animals initiated the start of what are now called DMA's or Disease Management Areas. DMA 1 (Adams County) after years of sampling free range and farmed deer turned up no more positives and has since been revoked or eliminated. This is a success story to the management of the CWD programs implemented by the Department of Ag and also the PGC.

Since the initial first positive identifications in 2012, both free range and privately managed deer have tested positive. Control measures are limited outside of our deer farms and the task of containment of CWD in DMA 2 has been much more challenging. After the initial identification of the 3 free range whitetail deer, more and more deer tested positive and distributed the disease on the landscape. 5 years later, in 2017, this distribution was found in the first farmed operation within the DMA 2 borders.

CWD Monitoring Programs

In 2006, PDFFA worked tirelessly with the Department of Agriculture ensuring all deer farmers were required to be in one of two CWD monitoring programs. All Pennsylvania herds with CWD susceptible species must participate in either the Herd Certification Program (HCP) or Herd Monitoring Program (HMP). **HCP's are required to test 100% of all age eligible mortalities (12 months of age or older) for CWD.** HMP's are required to test 50% of all age eligible mortalities (12 months or older) for CWD. In addition, intensive inventory and permitting processes are required under both programs.

Thousands of privately owned cervid on deer farms from across the state are tested each year at the expense of the operator not the tax payer. These CWD programs implement the highest level of testing and traceability of any deer herds, wild or farmed, in the state. Because the Department of Agriculture has mandated that their herds are the most tested herds in the state, they have allowed for the best management and control to be implemented if and when the disease finds its way into a private herd. These programs help identify CWD early allowing for management strategies to be implemented.

To be clear, there is risk when dealing with CWD. The HCP and HMP CWD programs are designed to quickly identify disease and allow for real control measures to take place preventing further spread and/or remove all live animal disease risk from the CWD positive premise. Herd Quarantines, depopulations, live animal testing and genomic analysis just to name a few are all tools we have to manage this disease.

Current state of our industry

Deer Farmers have excepted the responsibility of the regulatory environment created from the HCP and HMP programs. While these programs are necessary for the monitoring of CWD they can and do place substantial burden and risk on the producers and stifle investment into expansion and new business formation. It's no coincidence that there has been a significant decline in the number of deer farms throughout PA from 2014 until today. Nearly 500 operations have closed their gates for good.

From a demand standpoint, the products that deer farms sell continue to be well received in the marketplace. I am of the opinion, based on growth trends through the 1990's

and early to mid 2000's, that private cervid management would be a massive industry today. Sadly, this is not the reality of the day and CWD is here to stay.

A look to the future

With that said I would like to provide you with a positive vision for the future of whitetail deer not only in our Commonwealth but across North America. As I mentioned earlier, Pennsylvania deer farming and ranching is a leader nationwide and we now have exciting new technologies to demonstrate it.

A few years ago, Dr. Christopher Seabury, Professor Texas A&M University published his breakthrough 2017 journal reviewed paper "Accurate Genomic Predictions for Chronic Wasting Disease". This publishing has laid the groundwork for new technology to be developed and used identifying the susceptibility of individual animals to CWD.

How does this work and what implications can this have on our whitetail deer herds on both sides of the fence?

First, a sample of genetic material is produced from the animal. This can include antler/bone, hair with follicles, tissue, blood or germ-plasma. For the best results in a timely manner, the company "All-Flex" has a "TSU" (Tissue Sample Unit) tube and applicator. This tool takes a small ear punch and stores it sealed from contamination. The sample can be banked and stored for extended periods of time (years) or submitted for analysis. The samples are submitted through NADR or the North American Deer Registry, which currently house more than 350,000 DNA records of whitetail deer, the largest in the world. Analysis is run on the sample using SNP or "snips" technology and then processed through Dr. Seabury's CWD-GPS system. GPS is Genomic Predictive System. Upon completion, the submitter is supplied with a GEBV (Genomic Estimated Breeding Value). This value is represented as a number and then used to make assessments to the genetic merit of this animal in a breeding program. This number specifically represents merit based on the animal's susceptibility level to CWD.

Preemptively, just prior to the release of CWD-GPS, knowing its importance, the PA Deer Farmers Association announced its largest funding initiative in our two-decade history. We developed a cost share program for our membership at \$50 per test, \$500 per farm, and \$50,000 in total spend. We also hosted a first of kind educational event in September, presenting the "Future of Cervid Farming... CWD GPS" This event highlighted all aspects of our knowledge on CWD-GPS and provided a starting point for producers to work from.

The application of this technology will change the face of whitetail deer in North America. Over time and with development of innovative management strategies, we will breed and develop animals that are genetically superior to what exists today and have a very low susceptibility to testing positive for CWD and perhaps even animals that would never contract the disease.

The implication outside the fence of a deer farm is tremendous. Wildlife officials can develop genomic analysis programs regionally within its existing infrastructure, map genomic populations of susceptibility to CWD and develop plans to start shifting the genetic makeup of population throughout the state.

Perhaps one day, much like the early 1900's, wildlife agencies and private deer managers will work collaboratively on the introduction of low subspeciality brood bucks into high risks zones of the state. Much in the way we supplement trout and pheasant populations, so to the whitetail deer not only for superior antler and body traits but also for the most important of all, CWD Resistance.

In closing, I emphasize that deer farmers have a vested interest in containing and, if possible, eliminating this disease. If our herds are not healthy, we lose our livelihood. On both a state and national level our industry has and will continue to fund CWD research, implement the latest science and push for regulatory improvements based on that science. Our association and myself will continue to collaborate and pursue the most common-sense solutions to the problems we face and advocate for the best cervid industry possible. I look forward to working with many of you in the future. Thank you for this opportunity to share some of these details about our industry.

Sincerely,
Josh Newton
President of PA Deer Farmers Association