

Chronic Wasting Disease (CWD) – Why Not To Feed Deer

By John Maher

Another deer taken in Fauquier County near the PWC border has tested positive for CWD. In Virginia, Chronic Wasting Disease (CWD) has been found in Clark, Culpepper, Fauquier, Frederick, and Shenandoah counties. The deer showed no signs of the disease.

CWD is a Transmissible Spongiform Encephalopathy (TSE) disease. The TSEs have similar clinical features, pathology, and causative agents, which are believed to be abnormal prion proteins (misfolded prions that do not contain genetic material and do not propagate or degrade like other infectious disease agents). There are theories regarding alternate causes of CWD, including bacteria, viruses, and trace mineral imbalances; however, the preponderance of scientific information supports prions as the cause of TSEs and the vast majority of the scientific community accepts this theory.

TSEs occur in animals and people. The most widely known is Mad Cow Disease which occurs in cattle. Some others include scrapie which occurs in sheep and goats; feline spongiform encephalopathy which occurs in cats; transmissible mink encephalopathy; and Creutzfeldt-Jakob Disease which occurs in humans. Chronic Wasting Disease (CWD) occurs in whitetail deer, mule deer, elk, and moose. A deer may have the infection for several years before showing signs of the disease. There is no non-lethal test for CWD though several efforts are underway.

Prion is short for "proteinaceous infectious particle" in reference to its ability to self-propagate and transmit its conformation to other proteins. It is not a virus or bacteria; it is an infected protein. It is spread via body fluids (e.g. feces, urine, saliva), Among the TSEs, the scrapie and CWD agents are unique in that they can persist in the environment and remain infectious for several years. If a deer urinates or salivates on a random spot of grass, it can lay there like a land mine until another deer consumes that grass – which may or may not ever happen. That same potential exists with saliva on corn – except now many deer are being attracted to a specific spot.

The most obvious sign of CWD is progressive weight loss. Numerous behavioral changes also have been reported, including decreased social interaction, loss of awareness, and loss of fear of humans. Diseased animals also may exhibit increased drinking, urination, and excessive salivation.

There is no known instance of a person being infected with CWD by eating meat from an infected deer. The U.S. Centers for Disease Control and Prevention (CDC) has thoroughly investigated any connection between CWD and the human neurological diseases and has stated “the risk of infection with the CWD agent among hunters is extremely small, if it exists at all” and “it is extremely unlikely that CWD would be a food borne hazard.”