

Chronic Wasting Disease Positive Tissue Bank

Background

In 2005, the USGS National Wildlife Health Center entered into an agreement with the Wyoming Game and Fish Department and the Department of Veterinary Sciences at the University of Wyoming to produce a collection of positive tissues from cervids intentionally infected with chronic wasting disease. This agreement was facilitated through the University of Wyoming Cooperative Fish and Wildlife Unit.

The purpose of this project is to make the collection available for researchers to use as a positive control for detection assays, infectivity studies, or to test newly developed assays.

Also, the investigators on this project sampled the animals incrementally over 2 years to show changes over time, and examined tissues from the animals by immunohistochemistry. CWD positive tissues are catalogued

by species, sample site and time of infection. These data and more will soon be published.

Data Sampling Techniques

At least 10 each of wild elk, mule deer, and white-tailed deer were live-captured in Wyoming and Colorado by the Wyoming Game and Fish Department and the Colorado Division of Wildlife and transferred to the Tom Thorne/Beth Williams Wildlife Research Unit at Sybille in southeastern Wyoming. Blood samples were collected from all animals and genotyping was performed. All animals were challenged with infected brain material from conspecific wild cervid donors (courtesy of the late E.S. Williams of the University of Wyoming). Beginning at 6 months post-oral inoculation, a subset of each species was killed and full necropsies were performed. Prior to death, each animal was bled, then serum, plasma (collected in EDTA and heparin), and whole blood were



collected and frozen. At necropsy, samples were collected from all organ systems, all major peripheral lymph nodes, brain, and spinal cord. These samples were equally divided and either frozen or fixed in 10% neutral-buffered formalin. Feces and urine were collected from each animal at necropsy and fecal pellets and urine-soaked soil were collected from the animals' holding pens. All of this material is frozen.

Sample Access

If you are a researcher desiring access to these samples, please provide a written request accompanied by a research proposal, which will be evaluated by a panel of researchers. To submit a request, please contact:

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