

Privately Owned Cervid CWD Research Projects

1. Precursors of CWD – Looking at multiple causatives for metabolic acidosis that precedes CWD.
 - a. Looking at the following areas:
 - i. Blood – trace minerals, chemistry panels, thyroid levels including T3&T4
 - ii. Water – testing for extreme levels of minerals, Heavy metals and Ecoli
 - iii. Feed & Hay – Test for Iron, Manganese, aluminum and Molybdenum.
Second test for 17 mycotoxins.
 - b. Once the test results come back we can then start adding Humic Acid to feed and soil to start balancing the PH in both to a minimum 7 – 7.5 level.
 - c. Test facilities are in Wisconsin and Texas.
 - d. This study is being funded by UDFoM.

2. Apple Creek Humic Acid Study
 - a. Feeding Humic acid (30lbs per ton) in the feed directly to infected Herds.
 - b. Soil treating with 300 lbs per acre in infected pens.
Markered deer were rectal biopsied negative and placed in pens with infected deer.
 - c. Blood work was taken on all deer for Ph levels as well as mineral and heavy metals.
 - d. Fecal samples were taken on 120 deer and sent to Ames Iowa to test for shedding. We will take fecal samples at 6 months and test for shedding again.
 - e. In first year the positive pens on Humic Acid had a lower fawn mortality than the rest of the farm.
 - f. This study is being funded by UDFoM and other state Associations.

3. Genetic Resistance Study at Ames Iowa (USDA Funded)
 - a. Dr. Haley's research is a 5 – 7 year project which is testing 5 genetic markers for resistance to CWD.
 - b. Looking at potential transmissions
 - c. Improving the rectal biopsy test when the deer are tested every 6 months.
 - d. Looking to see when an infected animal shows shedding of prions.
 - e. All animals in this project were donated by deer farms from Michigan.

4. Genetic Resistance Study by Chris Seabury at Texas A&M (funded by NADR & Aphis CWD money).
 - a. Seabury's study was looking at 123,650 genetic markers (to expensive) so he is now testing 50,000 markers currently.

- b. USDA is currently using Seabury's test to validate the live rectal biopsy test. The current accuracy of the test is out performing normal percentages of test models.
 - c. USDA gave Dr. Seabury 400 random samples to check, out of 118 positives he found 113 accurately. Great promise.
 - d. USDA just used the rectal biopsy test on a quarantined farm in Iowa. All animals tested negative and they released the farm from quarantine.
5. Dr. Chris Seabury's presentation can be watched on the NADeFA website.