

REPORT OF THE COMMITTEE ON CAPTIVE WILDLIFE AND ALTERNATIVE LIVESTOCK

Chair: Michele Miller, FL
Vice-Chair: Peregrine Wolff, NV

Paul Anderson, MN; Scott Bender, AZ; Warren Bluntzer, TX; Deborah Brennan, GA; Kristina Brunjes, KY; Beth Carlson, ND; Donald Davis, TX; Mark Drew, ID; John Fischer, GA; Nancy Frank, MI; Richard French, NH; Tam Garland, TX; Robert Gerlach, AK; Paul Gibbs, FL; Colin Gillin, OR; Michael Gilsdorf, MD; Chester Gipson, MD; Dean Goeldner, MD; Greg Hawkins, TX; Michael Herrin, OK; Robert Hilsenroth, FL; David Hunter, MT; John Huntley, WA; Shylo Johnson, CO; Kevin Keel, GA; Karl Kinsel, TX; Patrice Klein, MD; Terry Kreeger, WY; Francine Lord, CAN; Konstantin Lyashchenko, NY; John MacMillian, AR; David Marshall, NC; Chuck Massengill, MO; Leslie McFarlane, UT; Robert Meyer, WY; L Devon Miller, IN; Julie Napier, NE; Jeffrey Nelson, IA; Sandra Norman, IN; Mitchell Palmer, IA; Janet Payeur, IA; William Pittenger, MO; Jewell Plumley, WV; Justin Roach, OK; Keith Roehr, CO; Mark Ruder, KS; Emi Saito, CO; Shawn Schafer, ND; David Schmitt, IA; Dennis Schmitt, MO; Stephen Schmitt, MI; Roy Schultz, IA; Andy Schwartz, TX; Charly Seale, TX; Laurie Seale, WI; Daryl Simon, MN; Jonathan Sleeman, WI; Cleve Tedford, TN; Robert Temple, OH; Charles Thoen, IA; Brad Thurston, IN; Kurt VerCauteren, CO; Kimberly Wagner, WI; Rick Wahlert, CO; Ray Waters, IA; Skip West, OK; Ellen Wiedner, GA; Kyle Wilson, TN; Nora Wineland, MO; Richard Winters, Jr., TX; Jill Bryar Wood, TX; Taylor Woods, MO; Glen Zebarth, MN.

The Committee met on Tuesday, October 23, 2012 at the Greensboro Sheraton Hotel, Greensboro, North Carolina, from 8:00 a.m. – 12:30 p.m. There were 34 members and 41 guests present.

Presentations and Reports

Update on the Chembio DPP VetTB Assay Applications

Dr. Konstantin Lyashchenko
Chembio Diagnostic Systems, Inc.

Serologic immunoassays constitute an attractive alternative to the existing methods of testing for tuberculosis, such as the intradermal tuberculin tests. Using Dual Path Platform (DPP) technology, an animal-side test, DPP VetTB, was developed for rapid detection of tuberculosis-specific antibodies in various host species. In recent evaluation studies, this assay showed 100% accuracy for elephants and variable diagnostic performance for cervids (sensitivity 65-81%, specificity 96-98%) depending on the species. In elephants, DPP VetTB assay detected antibodies years prior to culture-based diagnosis. In cervids, DPP VetTB assay detected *Mycobacterium bovis* infection in both skin test reactors and non-reactors, thus suggesting that a combined use of these tests may provide a more sensitive diagnostic algorithm. Differential antigen recognition was found when comparing antibody responses measured by DPP VetTB assay in different cervid species or in experimental versus natural *M. bovis* infection of white-tailed deer.

Update on Activities of USDA-APHIS-AC

Dr. Chester Gipson
USDA-APHIS-Animal Care (AC)

Dr. Gipson presented an update on the activities of USDA-APHIS-AC, including Elephant Tuberculosis (TB) and notice to adopt the 2010 Guidelines, Dangerous Animal Concerns, and activities involving enhanced compliance and enforcement of the Animal Welfare Act. Proposed and final rules that are being worked include: contingency plans, traveling exhibitor itineraries, marine mammals, live importation of dogs, retail pet store definition, and the horse protection act. The rule involving rats, mice and birds is currently on hold.

Evaluation and Interpretation of Rectal Mucosa Biopsy Testing for Chronic Wasting Disease within Four White-Tailed Deer Herds in North America

Dr. Bruce V. Thomsen
USDA-APHIS-VS, National Veterinary Services Laboratories (NVSL)

An effective live animal test is needed to assist in the control of chronic wasting disease (CWD), which has spread through captive and wild herds of white-tailed deer in both Canada and the United States. Rectal biopsy sample testing for CWD has shown promising results in previous studies and rectal biopsy sample testing has also been utilized successfully as a live animal test to diagnose the closely related disease, scrapie in sheep. This study compared the test results of postmortem rectal mucosa biopsy samples to those from conventional postmortem samples of the brainstem at the obex; the medial retropharyngeal lymph node; and the palatine tonsil in four CWD-infected, captive white-tailed deer herds. Three of the herds were located in Canada and one of the herds was from the United States. The effects of age, sex, genotype at prion protein (*PRNP*) codon 96, and stage of disease progression were evaluated as possible factors that might influence test performance. Test sensitivity for CWD on rectal biopsy samples in white-tailed deer ranged from 63% to 100% in the four herds within this study. Test performance was influenced by genotype at *PRNP* codon 96 and by

stage of disease progression. Test sensitivity was the highest for 96GG deer and lower for 96GS deer. Rectal biopsy test sensitivity was 100% for deer in the later stages of disease progression, as evidenced by abundant immunohistochemical staining for PrP^{CWD} in sections of brainstem. Rectal biopsy test sensitivity was reduced for deer in the earlier stages of disease. Selective use of this test, in conjunction with conventional testing postmortem testing, could provide valuable information during disease investigations of CWD suspect deer herds.

Review and Updates of the USDA-APHIS Veterinary Services (VS) National Chronic Wasting Disease (CWD) Program

Dr. Patrice Klein
USDA-APHIS-VS
CWD Rule Update

CWD Interim Final Rule was published on June 8, 2012, establishing a national voluntary CWD herd certification program (HCP) and consistent minimum interstate movement requirements. The rule became effective on August 13, 2012. Enforcement of the interstate movement regulations is delayed until December 10, 2012 to give States time to apply to APHIS to become an Approved State CWD HCP.

After reviewing the public comments, the APHIS will issue a final rule, and if needed, incorporate any changes made in response to comments on preemption. Comments received on other topics will be held for future rulemaking.

The goal of the CWD Program is to assist States, Tribes, and the cervid industry to prevent and control spread of CWD in farmed and wild cervid populations through establishment of a national CWD HCP and interstate movement requirements.

APHIS provides federal oversight of the voluntary national CWD HCP with program activities conducted by the Approved State CWD HCPs. APHIS will serve in an advisory capacity to Approved States for epidemiological investigations on CWD positive findings, development of herd plans, and assist (where possible) with herd inspections and inventories.

APHIS will continue to fund confirmatory testing on any presumptive CWD-positive samples from farmed and wild cervids, conducted by the National Veterinary Services Laboratories (NVSL).

Farmed/captive cervid surveillance testing

Through FY2012, CWD surveillance testing was conducted on approximately 22,585 farmed /captive cervids by the immunohistochemistry (IHC) standard protocol. This reflects testing that was funded by APHIS through December 2011 and the transition to these laboratory costs paid directly by the cervid owner beginning in January 2012 as a result of CWD program budget reductions in FY2012.

Farmed/captive cervid CWD status

To date, 60 farmed/captive cervid herds have been identified in 13 states: Colorado, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, New York, Oklahoma, Pennsylvania, South Dakota and Wisconsin. Forty were elk herds, 19 were whitetail deer (WTD) herds, and one was the red deer herd. At this time, 15 CWD positive herds remain – seven elk herds in Colorado, three elk herds in Nebraska, three WTD herds in Iowa, one WTD herd in Pennsylvania, and one red deer herd in Minnesota.

On October 11, 2012, Pennsylvania reported a CWD positive three and one-half year old female white-tailed deer (WTD) in a farmed cervid herd in Adams County, Pennsylvania. NVSL conducted the confirmatory CWD testing and this represents the first report of CWD in PA. The index herd is under state quarantine, and an epidemiological investigation and trace outs are in progress to identify epidemiologically-linked premises in Pennsylvania and other states.

In July, 2012, Iowa reported a CWD positive six year old male WTD in a hunt facility in Davis County, Iowa that was sourced from a deer breeding farm under the same ownership in Cerro Gordo County, Iowa. Trace outs identified several other premises that purchased deer from the index herd. CWD testing of the traced out animals has begun. To date, one CWD positive doe was identified in the source herd that had direct contact with the index animal, and four additional CWD positive deer (including two purchased deer) have been identified on separately owned premises.

In May 2012, Minnesota reported CWD in a two and one-half year old male red deer from a breeding farm in Ramsey County, Minnesota. This represents the first report of CWD in red deer (*Cervus elaphus*) in the United States. During the epidemiological investigation, 56 pen mates (cohorts) were tested and CWD was not detected in any of those animals. No point source of introduction yet has been determined. The herd remains under state imposed quarantine which is allowing for some animals to be transported directly to a slaughter facility. All slaughtered animals have been CWD tested and reported as 'not detected'.

Wild Cervid surveillance

In FY2011, cooperative agreements were awarded to 46 State wildlife agencies (approximately \$4.2 M) and 34 Native American Tribes (approximately \$340,000). The Native American Fish and Wildlife Society received approximately \$175,000 to support CWD outreach and education activities Cooperative agreement funds were eliminated in FY2012 due to federal budget reductions.

FY2010 funding supported surveillance in approximately 74,900 wild cervids in 46 cooperating States. Wild cervid CWD surveillance totals are pending for FY2011 due to seasonal surveillance activities and completion of final

cooperative agreement reporting to APHIS. To date, approximately 60,890 wild cervids have been tested in fiscal year 2011.

Budget: Commodity Health Line Structure

In FY2011, APHIS received approximately \$15.8 million in appropriated funding for the CWD Program. In the FY2012 budget, livestock commodities regulated by USDA were organized into 'Commodity Health Line' structures or groupings. APHIS' Equine, Cervid and Small Ruminant (ECSR) Health line supports efforts to protect the health and thereby improve the quality and productivity of the equine, cervid and small ruminant industries. In FY2012 approximately \$1.925 million of ECSR funding was allocated for CWD program activities to provide Federal oversight of the national CWD herd certification program (HCP). The President's FY2013 budget proposes further funding reductions.

Flu in the Zoo

Jeanie Lin
USDA-APHIS-AC

Dr. Jeanie Lin presented "Flu in the Zoo" which addressed contingency plans for zoos. The goal was to have better emergency preparedness for zoos. Through a series of workshops and planning exercises, state, local, zoo, and other agencies that have resources available to help before, during, and after an emergency or disaster at a zoo or exotic animal facility can plan to become acquainted and coordinated in planning how to deal with these potential situations. Having a contingency plan in place and becoming familiar with the local resources will provide zoos with better coordination to potentially transport, deal with media, and address escaped animals during these stressful conditions if a disease or natural disaster event were to occur. Under the Animal Welfare Act (AWA) contingency rule, it will be important for zoos to have a draft plan in place. There are many resources available to contact both locally and nationally.

The Death Warrant of Three African Antelope

Charly Seale
Exotic Wildlife Association

Mr. Charly Seale, representing the Exotic Wildlife Association (EWA), presented a brief history of the exotic wildlife industry in Texas. In the 1960's with less than 500 animals left worldwide, a global conservation effort was undertaken. Private ranches have focused on three African antelope species, the Scimitar horned oryx, Dama gazelle, and Addax antelope, donated from zoo populations. From an original population of less than 1200 Scimitar Horned Oryx (SHO), Addax and Damm Gazelle in 1975, numbers increased to 1246 SHO, 449 Addax, and 369 Dama by the mid-1990's when these species were virtually extinct in their native countries and placed under the protection of the Endangered Species Act (ESA). In 2005, US Fish and Wildlife Service (USFWS) exempted Texas ranchers and these species from the ESA to reduce governmental permitting restrictions. A lawsuit by Friends of Animals against USFWS resulted in removal of the exemption with a ruling against the 2005 USFWS rule. An appeal was made by EWA, USFWS, and Safari Club International (SCI) which was dropped with administrative changes within USFWS. A new petition was filed to delist the species based on a current census: 11,032 SHO; 5112 Addax; and 894 Dama gazelle. USFWS published a new rule which will place the three species under the ESA in January 2012 which took effect in April 2012. Populations have decreased by 50% after the new rule was proposed and the value dropped by 50-60% due to the difficulty of permitting. Legislation pending the House of Representatives would move the status back to the 2005 exemption. The delisting suit settled with EWA will make a determination on delisting by May 2013. They have published for comment in the Federal Register that delisting may be warranted for these species.

Committee Business:

There were five resolutions presented and passed by the Committee, and forwarded to the Committee on Nominations and Resolutions. The resolution titles are as follows:

- Chronic Wasting Disease (CWD) Control
- Funding for Chronic Wasting Disease (CWD) Testing
- Funding for indemnity of CWD positive or exposed animals.
- Chronic Wasting Disease Program Standards.
- Vaccine for the various strains of epizootic hemorrhagic disease in cervids.

The Committee adjourned at 12:30 p.m.