

**Annual Report for task agreement: CA # H2380040002
Veterinary Diagnostics for Wildlife Species
Task Agreement TA 04-20; J2380402420 (previous TA 00-11, Modification 3)**

October 21, 2005

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In accordance with the task agreement, the CSUVDL has provided the NPS, BRMD with ongoing diagnostic services for a variety of wildlife species. CSUVDL performed more than 300 diagnostic evaluations for the NPS during the fiscal year from October 1, 2004 to September 30, 2005. The majority of these necropsies and diagnostic tests were evaluating the chronic wasting disease (CWD) status of the animal submitted. Approximately 290 CWD tests were run. Most of the CWD tests were performed using immunohistochemistry of formalin fixed tissues (brain stem and retropharyngeal lymph nodes). The majority of the CWD tested animals originated in Rocky Mountain National Park or Wind Cave National Park. The remainder of the diagnostic tests performed spanned a large range of disease testing in a variety of species. All diagnostic tests were reported and interpreted by a qualified veterinary pathologist. Pathologists were available for additional consultation if needed for accurate interpretation of the tests.

In addition to providing diagnostic services for both chronic wasting disease and other wildlife diseases, CSUVDL offered training opportunities for the NPS Wildlife Health Team (WHT). The WHT was invited and participated in diagnostic necropsies of any NPS carcass submission. They were trained in tonsillar biopsy and rectal biopsy collection on post mortem carcasses, tissue preservation, anatomical location of tissues, and proper sample storage techniques. The CSUVDL also provided fresh post-mortem specimens for the NPS to use in CWD training courses in remote park locations.

The CSUVDL provided the space and logistical support for operating a -80 C freezer appropriate for long term sample preservation (e.g. serum and genetic samples) as well as a -20 C freezer appropriate for general tissue sample storage. This storage facility constitutes the NPS fresh/frozen tissue archive.

Finally, the CSUVDL provided the capability to alkaline digest carcasses and biological specimens as needed for sanitary disposal. This service was routinely used particularly by biologists from Rocky Mountain National Park for disposal of CWD infected carcasses.

The mapping project, which involves intensive manipulation of CWD positive NPS deer submissions, is in the beginning phases. The largest need for facilitating this project was hiring an assistant for Dr. Spraker to cut in tissues for subsequent IHC and evaluation. A part time biotechnician was hired at the end of the 2005 fiscal year. She will continue as needed through the 2006 fiscal year. A final report for the mapping project will be provided by the end of the 2006 fiscal year.