



UC DAVIS

VETERINARY MEDICINE

California Animal Health and Food Safety Laboratory System

CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY • FEBRUARY, 2017



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Holiday Schedule

In observance of President's Day, CAHFS will be closed on Monday, February 20, 2017.

Tritrichomonas foetus testing - new ID requirements

Starting January 1, 2017, bulls being tested for *T. foetus* will require both an official ID (such as a USDA silverbrite tag) AND a California "Trichomonosis approved color-coded" tag. Tag color (white, orange, blue, yellow, and green for subsequent years) and time frame (September 1 - August 31) are designed to follow those used by neighboring states. The Trich tags are required to be replaced each year that the bull is tested and are not considered official ID; make sure to include the Official ID number on all Trichomonosis Test Report Forms submitted to CAHFS. More information is available through the [CA Department of Food & Agriculture](#).



Equine

Nigropallidal encephalomalacia was diagnosed in a 20-year-old Icelandic mare that was euthanized following acute onset of seizures, self-mutilation, circling and compulsive chewing. Gross and histologic lesions were confined to the brain consisting of round-oval malacic foci in the substantia nigra and globus pallidus. The lesions were consistent with **Yellow Star Thistle** (*Centaurea solstitialis*) or **Russian Knapweed** (*Rhaponticum (Centaurea) repens*) intoxication. Yellow Star Thistle is a common widely distributed weed in California, that when ingested by horses is associated with nigropallidal encephalomalacia.

Bovine

Fungal abomasitis, pneumonia, coccidiosis and **Salmonella septicemia** were diagnosed in tissues from a 4-month-old Holstein calf with a history of being down and unresponsive to antibiotic treatment for four days. Fungal infections in calves are often associated with prolonged antibiotic use. Severe coccidiosis is also common in calves that have recently been placed into group pens after being in calf hutches. Group D1 Salmonellae (usually *Salmonella Dublin*) are associated with septicemias and sometimes enteritis in young calves.

Intestinal coccidiosis causing diarrhea and mortality in 3- to 7-month-old calves was identified in a number of dairy, calf ranch and beef ranch submissions. Submitted calves had hemorrhagic colonic contents and gross evidence of anemia. Histologic changes consisted of typical colitis associated with numerous coccidia stages.

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Pig

Corn cob related laryngeal obstruction

caused the deaths of two 1-year-old pigs that showed no clinical signs prior to being fed a mixed ration but when checked six hours later, both pigs were dead. On postmortem examination, both pigs had 2-3 inch chunks of corn cob blocking the glottis with complete obstruction of the airway. The owner had just added corn cobs to the ration for the first time.

Cervid

Bluetongue virus serotype 17 infection was diagnosed in a female deer from a partially closed herd experiencing increased mortality. Moderate serosanguineous edema in the subcutaneous tissue of the ventral abdomen, hemorrhagic contents in the colon and rectum, and hemorrhage of the wall of the pulmonary artery were observed. The diagnosis of Bluetongue virus was confirmed by PCR from a spleen sample. Deer adenovirus and epizootic hemorrhagic disease virus PCR tests were negative.

Small Ruminant

Fungal pneumonia was diagnosed in an 8-year-old Nubian goat with a clinical history of one day of reduced activity followed by lateral recumbency and inability to rise. Necropsy revealed multiple, extensive areas of necrosis throughout the lungs affecting approximately 60 percent of the lung volume and diffuse serous atrophy of fat. Numerous fungal hyphae were observed histologically and *Aspergillus fumigatus* was isolated from the lungs. Additionally **Haemonchus contortus** (barber-pole worm), and **coccidia** were observed, and **copper deficiency** was detected in the liver.

Poultry and Other Avian

Mycoplasma gallisepticum was detected by PCR in a group of 8-week-old commercial broad breasted turkey hens with clinical history of sneezing and swollen infraorbital sinuses. Gross examination revealed caseous exudate in infraorbital sinuses and air sacs. Histologically, tracheitis, sinusitis and air sacculitis associated with large lymphoid follicles were noticed.

Histomoniasis was diagnosed in a 2-year-old, male peacock from a flock of five peacocks and two chickens. Target-shaped lesions and large caseous cores were noticed in liver and ceca respectively. Histologically, hepatitis and typhlitis were associated with large numbers of protozoa compatible with histomonads. In addition, a few round worm eggs, compatible with *Heterakis spp.*, were detected in the cecal lumen.

Avian tuberculosis was diagnosed in a 2-year-old, male black-necked swan that was part of a private collection of several exotic birds. Necropsy revealed severe emaciation and multifocal grey-yellow, caseous nodules distributed in multiple organs (lung, liver, spleen, ribs and bone marrow). Histologically, lesions consisted of typical granulomas and numerous acid-fast bacilli. PCR on liver was positive for *Mycobacterium avium* complex. *Mycobacterium avium* was isolated and identified from a selected tissue pool.

