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Holiday Schedule

CAHFS will be open, but will have limited service on **Wednesday, November 11, 2015** in observance of Veteran's Day.

CAHFS will be closed on **Thursday, November 26, 2015** in observance of Thanksgiving and will be open from 8 am to 12 noon on **Friday, November 27, 2015** as it is a University of California holiday.

Please contact your laboratory to plan your testing needs accordingly.

Richard Breitmeyer Awarded USAHA Medal of Distinction

Congratulations to CAHFS' Director, Richard Breitmeyer, on being awarded the United States Animal Health Association's (USAHA) Medal of Distinction at this year's annual meeting in Providence, RI. The USAHA Medal of Distinction is awarded annually to recognize one or more distinguished USAHA members who have demonstrated outstanding leadership, provided exemplary service, and have made significant contributions to the advancement of the Association.



Richard Breitmeyer receiving the USAHA's Medal of Distinction from USAHA President, Bruce King.

Bovine

Coccidiosis was diagnosed in a group of 2- to 3-month-old heifers from an organic dairy. Heifers were lethargic with severe diarrhea, dehydration and rapid weight loss. All four heifers submitted had moderate to severe, sometimes hemorrhagic, enterocolitis with moderate to large numbers of coccidia in the spiral colon, and small numbers in the ileum. *Salmonella* group D1 was isolated from two of the four heifers, one of which had *Salmonella* septicemia. Additionally, all four heifers had selenium deficiency.

Ureaplasma caused destructive **polyarthritis and stillbirth** in a 9-month-old Holstein fetus with severe damage to the hip, stifle, shoulder, elbow and occipital-C1 and C1-C2 joints. The fetus was undersize and had concurrent hydrocephalus. *Ureaplasma* was isolated from the rumen contents. *Ureaplasma* is most commonly associated with placentitis but has also been identified in sporadic cases of late gestation fetal polyarthritis.

Anaplasmosis caused **anemia and death** in two herds of native beef cows on pasture and an Angus heifer in a feedlot. One pastured herd of 100 cattle had six sudden deaths and abortions. Two cows that aborted and then died were anemic. The second pasture herd had two of 19 cows go down and die after processing through a chute for breeding. The blood was very watery on an aged cow. The feedlot heifer was off feed with a fever of 105°F for 3-4 days before it died of anemia. Splenomegaly and hypoxic hepatic and myocardial necrosis were found. Anaplasma organisms were seen on the blood smears in all cases. The heifer was also seropositive.

Equine

Lymphosarcoma was the cause of decreased tail tone and progressive rear limb ataxia leading to recumbency and euthanasia of an afebrile 13-year-old Haflinger mare. On postmortem examination the perivascular connective tissues surrounding the heart, mesentery between the cecum, dorsal and ventral colon and meninges of the spinal cord at T6-T9 were thickened with white masses. Histopathology confirmed lymphosarcoma. The neoplastic lymphocytes in the spinal cord were confined to the meningeal connective tissues. In the brain, neoplastic cells were also present around vessels in the meninges.

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Your feedback is always welcome. To provide comments or to get additional information on any of the covered topics or services, please contact Sharon Hein at shein@ucdavis.edu.

We're on the Web
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Small Ruminant

Copper toxicosis resulted in the death of ewes from three separate flocks. Clinical signs ranged from walking into fences and red urine in one animal, to being off feed, weak and terminal respiratory signs in another. One flock of 17 reported six deaths. Affected ewes submitted ranged from 2.5 to 5.5-years-old. All three ewes had liver necrosis, hemoglobinuric nephrosis and icterus. Urine was red in the two animals from which urine was available. Liver copper ranged from 230-570ppm (normal 25-150ppm) and kidney copper from 35-280ppm (normal 4-6ppm). Neurologic signs in one ewe were probably from severe liver damage causing hepatic encephalopathy.

Abomasal parasitism caused severe **anemia** and death in an adult doe from a mixed goat and sheep pasture operation. Before the death, the goat and two sheep were noted to have pale conjunctiva. Large numbers of *Haemonchus* and *Teladorsagia* were found in the abomasum and the tissues were pale and the blood was watery. The liver had necrosis from hypoxia (anemia). The doe was also severely selenium deficient.

Pig

Seneca valley virus (SVV, aka Senecavirus A) was the cause of **snout vesicles** on four pigs in a group of 180 market hogs at a slaughter facility. Since this virus mimics lesions of Foot-and-Mouth disease (FMD), a foreign animal disease investigation was performed by CDFA. Samples were tested at CAHFS for FMD the same day. NVSL did further testing for other foreign swine vesicular diseases including FMD, VES, SVD and VSV and they confirmed SVV. SVV can also cause coronary band vesicles and lameness and has been seen in several states in the Midwest this year initiating numerous foreign animal disease investigations nationally.

Other Mammalian

Listeria septicemia was the cause of death in a 2-day-old roan antelope that died with no observed illness. No gross lesions were reported. The submitted tissues had severe necrosuppurative hepatitis, interstitial pneumonia, splenitis, lymphadenitis and endocarditis. *Listeria monocytogenes* was isolated from multiple tissues in pure growth.

Poultry and Other Avian

Colibacillosis caused **pleuropneumonia** in two flocks of about 8,000, 12-week-old turkeys, 25% of which experienced severe depression, respiratory signs and increased mortality in three days. The birds had severe fibrinous pleuritis and pneumonia resembling fowl cholera which is caused by *Pasteurella multocida* but pure culture of *E. coli* were isolated from the lungs.

Synovitis due to Reovirus was diagnosed in several submissions of broiler chickens ranging from 34 to 44 days of age. Clinical signs in the chickens included going down on legs, being unable to walk and increased mortality in the flock. The hock joints were swollen due to increased clear or yellow turbid fluid and histopathology confirmed severe tenosynovitis. Reovirus was isolated from the tendons and most of the birds had very high titers for reovirus.

Encephalomalacia, also called "crazy chick disease", due to **vitamin E deficiency** was diagnosed in 22-day-old broiler chicks which had ataxia, paralysis, opisthotonus, torticollis and were unable to right themselves if laid on their backs. The cerebellum in a few chicks was enlarged, pale yellow and had a few petechiae. Histopathology of this organ confirmed encephalomalacia. Vitamin E levels in the liver of four birds were less than 1 ppm (Normal 3 to 15 ppm).

Salmonellosis due to *S. Typhimurium* was diagnosed in two separate pigeon lofts. One loft had **increased mortality** and the other had a pigeon submitted with **neurological signs**. The latter had pale yellow foci in the cerebral cortex, enlarged cerebellum and cloudy meninges. Both birds had hepatitis and the neurologic bird also had meningoencephalomyelitis, osteomyelitis, otitis interna, pneumonia, splenitis, nephritis and iridocyclitis. *Salmonella Typhimurium* was isolated from the liver of both birds and brain and intestine of the neurologic one.