



UC DAVIS

VETERINARY MEDICINE
California Animal Health and
Food Safety Laboratory System

CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY • NOVEMBER, 2022



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HOLIDAY SCHEDULE

CAHFS will be open, but will have limited services available on **Friday, November 11** due to Veterans day.

CAHFS will be closed on **Thursday, November 24** due to Thanksgiving, and open but with limited services available on **Friday, November 25**; that day samples will be received only between 8 am and 12 pm.

Highly pathogenic avian influenza update

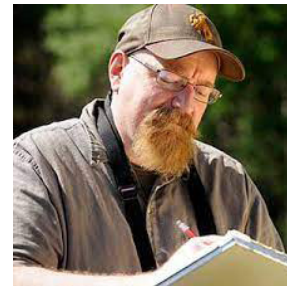
By the end of October, the **Eurasian strain H5N1 Highly Pathogenic Avian Influenza (HPAI)** has been detected in wild birds in the following 33 California counties: Alameda, Butte, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Lassen, Los Angeles, Marin, Mendocino, Monterey, Napa, Orange, Placer, Plumas, Riverside, Sacramento, San Benito, San Diego, San Francisco, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Shasta, Siskiyou, Solano, Sonoma, Stanislaus, Trinity, Ventura, Yolo. HPAI has also been detected in domestic flocks in the following 10 California counties: Butte, Calaveras, Contra Costa, Del Norte, El Dorado, Fresno, Monterey, Sacramento, Stanislaus, and Tuolumne. Most cases have been diagnosed by CAHFS and confirmed by NVSL.

Currently HPAI is widespread in California and may also be present in other counties that are not listed above. Enhanced biosecurity is critical to protect the health of captive birds in the face of ongoing disease outbreaks. Report any unusual or suspicious sick or dead domestic, pet, or collection birds immediately via the California CDFA Sick Bird Hotline at (866) 922-2473. Report any unusual or suspicious wild bird deaths to the California Department of Fish and Wildlife (CDFW) online at www.wildlife.ca.gov/Conservation/Laboratories/Wildlife-Health/Monitoring/Mortality-Report. If you have questions about wildlife rehabilitation, please contact the CDFW at RehabWildlife@wildlife.ca.gov or (916) 358-2790. If you need assistance with reviewing your existing avian biosecurity plan or need help developing your plan, please contact our Secure Food Supply Program staff at sfspermits@cdfa.ca.gov.

The four CAHFS laboratories (Davis, Turlock, Tulare and San Bernardino) receive submissions of domestic birds for necropsy and diagnostic work up. If HPAI is suspected, PCR for this disease is performed before other tests are done. For wildlife submissions, please contact CDFW's Wildlife Health Laboratory first at WILab@wildlife.ca.gov or (916) 358-2790.

Welcome Dr. Todd Cornish!

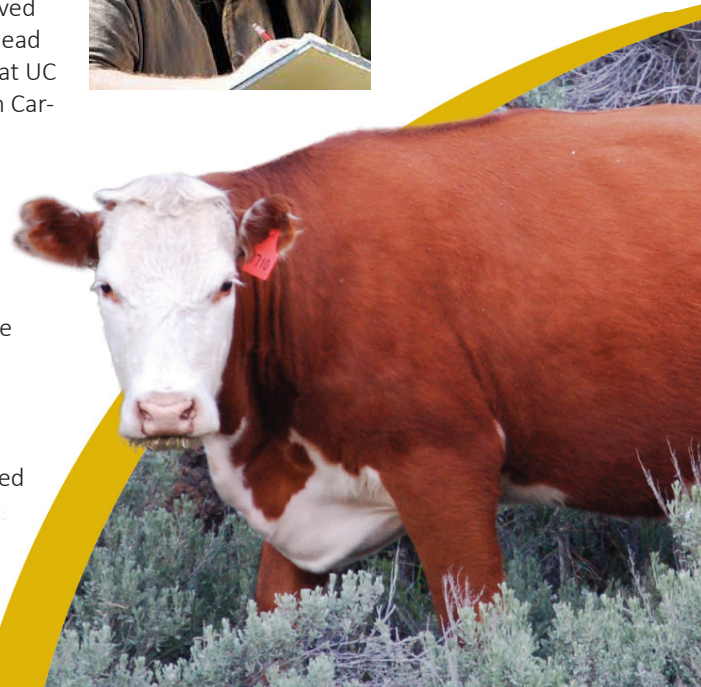
Dr. Todd Cornish has joined CAHFS-Tulare as a Pathologist and as Branch Chief. Dr. Cornish comes to CAHFS with 23 years of experience as a board-certified veterinary pathologist at the Wyoming Veterinary Diagnostic Laboratory, where he also served as Interim Director and Interim Department Head for one year. He completed veterinary school at UC Davis, residency training in Pathology at North Carolina State University, and a PhD in Veterinary Pathology at University of Georgia. In addition to his extensive pathology experience and administrative abilities, Dr. Cornish is also recognized as an award-winning teacher and for his scientific contributions, especially to understanding chronic wasting disease in free-ranging wildlife.



Dr. Cornish
Photo: Ted Brummond,
UW Photo Service, 2013

Bovine

Epizootic bovine abortion (EBA) was diagnosed in eight, 6.5-9-month-old beef fetuses submitted from four ranches with losses ranging from four abortions in one day to over 15





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abortions in two months. One ranch reported both heifers and cows aborting. Four of the eight fetuses were born alive, but prematurely. Post-mortem findings included enlarged lymph nodes, spleen and liver; the latter sometimes with a cobblestone or mottled appearance. The thymus varied from enlarged, red and edematous to small and firm. Microscopically, all eight fetuses had multi-systemic inflammation typical of EBA. Fetal serology titers for *Pajaroellobacter abortibovis* (the bacteria that causes EBA) were >1:10,000 in five fetuses and 1:1,000 in another one. *P. abortibovis* PCR performed on thymus, spleen and/or lymph node of two fetuses was positive. The results of both serology and PCR are considered confirmatory for EBA.

Caprine

Johne's disease was the cause of a month long inappetence and weight loss in a 1.5-year-old goat, which was the fifth animal with a similar clinical history in the herd. Diffusely thickened small intestinal wall with mucosal folds and markedly enlarged ileocecal lymph nodes were observed. Positive serology and PCR for *Mycobacterium avium* ssp. *paratuberculosis*, coupled with characteristic gross and microscopic lesions, the latter including myriad intracellular acid-fast bacteria, confirmed the diagnosis.

Equine

Aortic rupture resulted in the death of five 9- to 27-year-old unrelated horses including two mares, two geldings and a stallion. Two of these animals were crossbred and one each of the other three were Quarter Horse, Arabian, and Thoroughbred. Three of the five horses were exercising when they either reared, began shaking or simply collapsed and died. Another horse was found dead and one had ataxia prior to death. All had 4-7 cm tears in the ascending aorta and four of five animals had hemopericardium leading to cardiac tamponade, while the fifth had hemothorax causing exanguination.

Wildlife

Rabbit hemorrhagic disease virus 2 (RHDV2) infection was recently detected in a black-tailed jackrabbit in Yolo county. This is another indication that the virus is slowly moving North since its first detection in Southern California in May 2020. Our previous recent detections of RHDV2 were in Southern and Central California.

Porcine

Urinary calculi causing urethral obstruction and secondary bladder rupture was the cause of death of a 2.5-year-old castrated male potbelly pig on a diet of primarily alfalfa hay. Postmortem exam revealed a 2.5 cm tear in the bladder wall, and a small blood clot and two 0.5 cm calculi in the lumen. Another calculus was lodged in the urethra obstructing outflow. The abdomen contained 2L of red tinged urine.

Poultry

Erysipelas and fowl cholera were diagnosed in a flock of 94-week-old, H&N chicken egg layers with a complaint of increased mortality. On post-mortem examination, the birds had markedly enlarged livers, moderately enlarged spleen, yolk coelomitis and several birds had regressed reproductive tracts. Hepatic necrosis was observed microscopically. *Pasteurella multocida*, the causative agent of fowl cholera, and *Erysipelothrix rhusiopathiae*, the agent of erysipelas, were isolated from the livers, and PCR for *P. multocida* was positive on the liver.

New *Tritrichomonas foetus* assay

We remind our clients that effective November 1st we will only be offering the **new *Tritrichomonas foetus* RT-qPCR assay**. We will no longer be testing In-pouches by PCR. Samples need to be submitted in 15mL plastic conical screw top tubes. We are not accepting samples in glass Red Top tubes.

