

RESEARCH 2015 HIGHLIGHTS

Preventing ‘Foothill Abortion’ in Cattle Through Vaccine Development

A new vaccine developed by our researchers shows promise for preventing Epizootic Bovine Abortion (EBA) – a tick-borne bacterial disease commonly known as foothill abortion which kills calves before or at birth. Endemic in California’s coastal range and the foothill regions of California, Nevada and Oregon, it is a major cause of economic loss for California beef producers, annually causing the death of an estimated 45,000 to 90,000 calves. Thanks in part to CFAH funding, the recent expansion of USDA-approved field trials for the experimental vaccine began in April, 2015 and will further establish the vaccine’s effectiveness and safety in varied conditions, as well as provide relief to ranchers for protecting their calf crop.



HIGHLIGHT: Environmental Health and Sustainable Production Systems for Marine Aquaculture

In Tomales Bay, California – one of state’s premier commercial fisheries for Pacific oyster and one of three regions in the state that account for 90% of all commercial shellfish culture in California – our researchers are evaluating shellfish aquaculture microbial standards and pathogen occurrence. Through monthly sampling of water, sediment and oyster



meat for pathogens capable of impacting human and oyster health, research is aimed to help guide aquaculture policy development for a safe and sustainably harvestable commodity. Microbial water quality and pre-harvest food safety are a central focus for California public health, agricultural, and water quality agencies, and shellfish harvesting is restricted in the Bay. The Bay is listed on the Clean Water Act as impaired for pathogens, leading to the adoption of a ‘total maximum daily load’ to ensure the protection of area waters. Through this project, our researchers are collaborating with the University of California Cooperative Extension – Marin to partner with area oystermen in the project, and with the California Department of Public Health, the Tomales Bay Watershed Council, and the Tomales Bay Shellfish Growers Technical Advisory Committee for community engagement and outreach.



CFAH research will help guide aquaculture policy development for a safe and sustainably harvestable commodity.