



Animal Industry Division e-News

Winter 2010-2011

We share a similar mission and purpose with many of you who work with animals – preventing and controlling diseases, along with promoting animal and public health. Although we share a common purpose, our perspectives may be different and varied. We hope that through this newsletter and through our other modes of communication with you, we can give you more understanding of our work at the Colorado Department of Agriculture. Some of these issues will affect your work and your interests more than others so if you need more information on one of the topics in this newsletter, or if you have other concerns or questions, please feel free to contact our office.

The staff at the State Veterinarian's Office certainly values our partnership in promoting the health and well being of animals in the state of Colorado.

Dr. Keith Roehr, State Veterinarian

Summary of Items in this e-News:

- ❑ **Bovine TB:** The tracing of calves from the index Colorado TB affected facility still continues and the cattle from all seven TB affected premises have been indemnified with USDA funds and depopulated. [Click to read more](#)
- ❑ **Brucellosis:** For the first time in over five years, a cattle herd in Texas has been diagnosed with bovine brucellosis (Bangs disease). Last fall, two beef herds in Wyoming and a bison herd in Montana were found to be infected with brucellosis. [Click to read more](#)
- ❑ **FSA Livestock Programs Help Producers Recoup Losses from Winter Storms:** This is turning out to be a tough winter for many ranchers and farmers throughout the nation; learning about FSA programs is an important step for producers to take. Producers need to document the number and kind of livestock that have died as a direct result of these winter storms and notify their local FSA office of these losses in order to receive assistance. [Click to read more](#)
- ❑ **National Veterinary Stockpile (NVS) Program & Planned Exercise in Colorado:** The National Veterinary Stockpile (NVS) which is part of USDA APHIS provides the veterinary countermeasures, supplies, equipment, field tests, vaccines, and services that States need to respond to catastrophic



animal disease outbreaks when they occur. Animal Industry Division of CDA is planning a future National Veterinary Stockpile (NVS) Operational Exercise. [Click to read more](#)

- ❑ **A Foreign Animal Disease & Preparedness Workshop was Conducted at Colorado Cattlemen's Association Mid-Winter Conference:** Could a foreign animal disease outbreak such as Foot and Mouth Disease (FMD) happen on U.S. soil? The workshop informed cattlemen on the implications of a foreign animal disease outbreak and what Colorado's emergency response would look like. [Click to read more](#)
- ❑ **Bio-security Basics for Colorado Ranches, Livestock Shows, Exhibitions, & Sales:** Bio-security measures are those precautionary steps taken to reduce the exposure of susceptible livestock to contagious microbial agents. Basic bio-security is vital to keeping animals and livestock herds healthy, especially at our ranches and livestock shows, exhibitions, and sales. [Click to read more](#)
- ❑ **Equine Neuro Differential List:** Many practitioners have found the chart developed by Hana Van Campen and E.J. Ehrhart from CSU Diagnostic Laboratory very useful so we included it in our newsletter. [Click to read more](#)
- ❑ **Vector – Borne & Zoonoses Update:** This update was contributed by Elisabeth W. Lawaczek, State Public Health Veterinarian from the Colorado Department of Public Health & Environment (CDPHE). [Click to read more](#)
- ❑ **Animal Disease Traceability, Animal IDs, and Health Certificates (CVIs):** The new proposed traceability rules have implications for the practicing veterinarian. It will be advantageous for veterinarians to envision how they could advance their management of health certificates (CVIs). Also, how will veterinarians incorporate efficient electronic modes of completing the CVI and capture and transmit electronic animal ID information. [Click to read more](#)
- ❑ **Veterinary Medicine Loan Repayment Program (VMLRP):** The Veterinary Medicine Loan Repayment Program is a federal program under USDA to determine the geographical areas that have a shortage of veterinarians and to administer a protocol to accept veterinarians into the loan repayment program through a qualifying application process. [Click to read more](#)
- ❑ **BAP: Livestock Care & Well-being Course Planned by Bureau of Animal Protection & CSU:** The Bureau of Animal Protection is excited and proud to announce that the Colorado Department of Agriculture and Colorado State University are combining resources and planning a FREE three day equine investigations training event March 14 – 16, 2011 for Bureau of Animal Protection agents, other law enforcement personnel and veterinarians. [Click to read more](#)
- ❑ **Help for the Homeless (Animals):** The Adopt-a-Shelter Pet license plate is now available at your local Division of Motor Vehicles! Each time a Coloradan purchases a new Adopt-a-Shelter Pet license plate, \$30 will go to the Colorado Pet Overpopulation Fund, and each annual renewal of the plate generates \$23 for the Fund. [Click to read more](#)



- ❑ **Unwanted Horses – Here’s a Way to Help:** Colorado taxpayers now have a direct and meaningful way to help address the problem of unwanted horses – the Unwanted Horse Fund Tax Check-off. The legislation is an historic victory for Colorado’s horses and it allows Coloradans who wish to do so to donate to the Fund on their income tax form. [Click to read more](#)

- ❑ **Approved Feedlot System:** Colorado has special regulations to allow cattle from states that have been “down-graded” in their disease status (e.g., Tuberculosis, Brucellosis) to move into a special category of feedlots called the Colorado Approved Feedlots. The reason for these regulations was to establish a special classification of feedlots in order to protect the livestock industries within Colorado yet permit feeding operations to remain competitive. [Click to read more](#)

- ❑ **Dr Ron Ackerman’s Retirement:** Dr. Ron Ackerman has served the State of Colorado in various capacities for many years. As of February 1st, 2011, Dr. Ackerman turned the page to a new chapter in his life and retired from CDA. The whole Colorado Department of Agriculture will miss him very much but wish him well!!! [Click to read more](#)

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Bovine Tuberculosis

The tracing of calves from the index Colorado TB affected facility still continues and the cattle from all seven TB affected premises have been indemnified with USDA funds and depopulated. All seven quarantines have been lifted and some of the previously affected facilities have repopulated with livestock under the guidance of specific herd plans. The herd plans are a legal agreement that each facility has signed that contains bio-security and testing requirements.



Photo courtesy of USDA APHIS

The six month herd re-test on the trace-in dairy that leased cows to the initial TB affected dairy has been completed and revealed 41 Caudal Fold Test (CFT) responder animals out of the 875 total cows tested. This represents a 4.7% test response. A gamma interferon test was completed on the 41 head and revealed two “suspects” and one “reactor.” The three head were slaughtered on February 2nd to inspect for potential lesions of TB and to submit tissues for exam and culture.

The investigations and trace-outs from two of the previously affected facilities continue. At this point there are a number of trace-outs that are becoming more distant and of less risk. Some testing and retesting of cattle on these premises will continue for over a year from now and is required by present USDA Uniform Methods and Rules. Our field veterinarians, animal health technicians, veterinary epidemiologists, and other office staff continue to labor effectively to adequately examine the remaining traces in order to eventually close investigations or reveal new previously unknown infection in the herds that we investigate.



Brucellosis

For the first time in over five years, a cattle herd in Texas has been diagnosed with bovine brucellosis (Bangs disease). According to Texas Animal Health Commission (TAHC) officials, a small beef herd in South Texas (Starr County) has been determined to be infected. Brucellosis is a bacterial disease of cattle that can cause abortions, weak calves and low milk production. Humans can also catch brucellosis (undulant fever), most commonly by consuming unpasteurized milk products, or handling contaminated birthing material when assisting with difficult calving situations in infected cows.

Routine surveillance at a livestock market led to the discovery of the infected herd. TAHC rules require all adult sexually intact cattle to be tested negative for the disease prior to change of ownership. The herd may have been affected for some time and not detected due to lack of sales of adult test-eligible cattle from this herd. For that reason a full disease investigation is underway to find the possible source of infection, and to identify any exposed animals that may have left the herd. The federal brucellosis eradication program began in earnest in 1959, with Texas being the last state to be declared "Free" of the disease in 2008. Texas will not lose its Class Free status as designated by the United States Department of Agriculture (USDA). USDA issued an interim rule in 2010 that suspended the provision for possible reclassification of any Class Free State or area to a lower status, and instead encouraged a localized risk based disease management approach.

Prior to this diagnosis of disease in Texas the only known reservoir of infection was in the Greater Yellowstone Area (GYA). Last fall, two beef herds in Wyoming and a bison herd in Montana were found to be infected with brucellosis. Colorado producers are well aware of the risks of Brucellosis from the GYA. The diagnosis of Brucellosis in Texas raises new concerns that there may be other unknown areas of infection that may exist in other states as well.

“FSA Livestock Programs Help Producers Recoup Losses from Winter Storms”

(News release and photo from USDA webpage) The massive snow storm that covered half of the United States, producing two feet of snow in some parts of the Midwest and bringing a wintery mix of ice and snow in the Northeastern parts of the nation, could also cause serious harm to livestock.

With some pasture and forage areas destroyed with the remnants of what has been labeled “Snowmageddon,” many producers also are losing their animals to cold and hypothermia, and are seeking ways to help recuperate their losses.



A Farm Service Agency (FSA) Administrator says: “this is turning out to be a tough winter for many ranchers and farmers in the nation’s heartland, and learning about our FSA programs is an important



step for producers to take. We need producers to document the number and kind of livestock that have died as a direct result of these winter storms and timely notify their local FSA office of these losses. There may be situations where producers are transporting feed to their livestock. Producers should document these additional costs.”

Several programs that include the Livestock Indemnity Program and the Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program are offered through the Farm Service Agency to help producers recover from livestock deaths and loss of forage and food supplies due to emergency situations.

The [Livestock Indemnity Program](#) provides assistance to producers for livestock deaths caused by adverse weather conditions including blizzards and extreme cold.

[Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program](#) provides emergency assistance to eligible producers of livestock that suffered losses due to adverse weather conditions. This program covers losses not covered by other FSA programs such as the Supplemental Agricultural Disaster Assistance Payment program, Livestock Indemnity and the Supplemental Revenue Assistance program.

We encourage all who fear they may have losses because of conditions that are still developing to read the fact sheets and visit with their local [FSA county office](#) staff so they get a quick start in the recovery process.

For producers looking to sell or buy hay, USDA offers an online service called [Hay Net](#) that matches producers with hay to those who need hay. The site is secure and protects the privacy of individuals

CDA planning a future National Veterinary Stockpile (NVS) Exercise in Colorado

Animal agriculture is an enormous industry in Colorado and in the U.S. An all-hazard event or disease outbreak that affects animal agriculture could have major economic effects on the U.S. economy, negatively impact animal health, and cause adverse public health consequences. Such an event may be caused by a major natural disaster such as flood, wildfire, tornado, earthquake, or blizzard. It could also be biological, chemical, radiological, or explosive in origin. An all-hazards event affecting livestock could even have subsequent environmental health effects for humans. There is a close connection between animal health and human health; a livestock disease outbreak could pose a public health risk.

One of the responsibilities of the Colorado Department of Agriculture (CDA) is to prevent, protect, respond to, and recover from incidents affecting agriculture which helps to protect the health and well-being of Colorado and the nation. A rapid, effective livestock emergency response is vital to minimize the animal and public health implications caused by an all-hazards event. Having enough veterinary resources to adequately respond to a significant livestock incident is a concern for many states, including Colorado. The National Veterinary Stockpile (NVS) which is part of USDA APHIS provides the veterinary countermeasures, supplies, equipment, field tests, vaccines, and services that States need to respond to catastrophic animal disease outbreaks when they occur.



Animal Industry Division of CDA is planning a future National Veterinary Stockpile (NVS) Operational Exercise. The first stage is the development of a Colorado NVS Emergency Plan which is well underway; it is needed so that we have an efficient and effective method to activate the NVS deployment of supplies and to then manage the warehouses that would receive and disperse the supplies and equipment to the affected areas. The NVS operational exercise will be held in Cortez, CO and is tentatively planned for September 2012. Between now and the operational exercise, other workshops and trainings are being planned to test the NVS plan and get participants better prepared for the actual exercise.

The NVS Preparedness Plan and Exercise will help us be more ready to respond to a catastrophic livestock disease incident in Colorado and to mitigate its effect. The NVS exercise will train and exercise the ability to receive NVS supplies and appropriately warehouse, disperse, and send back NVS resources. The Colorado NVS Exercise would include CDA, Southern Ute Nation, Ute Mountain Ute Nation, Colorado Division of Emergency Management, CSU, CSU Extension, Colorado Department of Public Health & Environment, CVMF's Animal Emergency Management program, other non-governmental agencies, USDA, and possibly other state & federal agency representatives. If you have interest in being involved in the planning or implementation of the exercise, please contact Dr. Nick Striegel at the State Veterinarian's Office by calling 303-239-4162 or emailing him at nick.striegel@ag.state.co.us

Foreign Animal Disease & Preparedness Workshop Conducted at Colorado Cattlemen's Association Meeting

Could it happen here? Could a foreign animal disease outbreak such as Foot and Mouth Disease (FMD) happen on U.S. soil? South Korea is currently experiencing their worst outbreak of FMD in 50 years.

- Over 3 million animals have been euthanized
- Carcass disposal of the culled animals are raising issues of how it will affect the environment, animal and public health, and the emotional well-being of the people
- Dairy farmers are having to "dump milk"
- Continued higher prices for meat and dairy products are expected in South Korea
- Costs to this point are nearing 2 billion U.S. dollars
- Their outbreak has cost them dearly in the loss of trade

With the ease of travel and the vulnerability of our livestock industry, could an outbreak happen here in the U.S.?

At the 2010 Colorado Cattlemen's Association Mid-Winter Conference in Colorado Springs, the Colorado Department of Agriculture (CDA) sponsored a workshop entitled, "Building the CORRAL". The State Veterinarian's Office of CDA is in the process of building a livestock emergency management system called the Colorado Rapid Response for Ag & Livestock (CORRAL). The workshop informed cattlemen on the implications of a foreign animal disease outbreak and what Colorado's emergency response would look like. It was intended to better prepare cattlemen and the livestock industry for a livestock



emergency incident and encourage ways for cattlemen to be involved in the Colorado Department of Agriculture's emergency response and efforts to reduce the economic impact on producers.



Photo taken by Molly Witzel

The workshop was designed for those cattlemen who want to be more informed about a foreign animal disease outbreak such as FMD and the implications that a disease like this would pose for the livestock industry. Better-informed producers will help detect a foreign animal disease incursion more quickly which will protect their livestock industry. It is also intended for those producers who want to make a difference and would be willing to be part of Colorado's collaborative livestock emergency response to a disease outbreak.

Outcomes or benefits for cattlemen in attending these types of workshops are:

- A better-informed livestock industry
- Producers get an opportunity to help chart the course for our Colorado Rapid Response for Ag & Livestock (CORRAL) System
- The capacity and effectiveness of the Colorado Department of Agriculture's (CDA's) emergency response is strengthened
- Stronger working relationships are built between CDA and producers.
- Livestock producers become a greater asset for a livestock emergency response which helps to assure the continuity of Colorado livestock operations.

Similar workshops are planned for the future to strengthen Colorado's livestock preparedness and response capabilities.

Bio-security Basics for Colorado Livestock Industry

A recent news release from the Colorado Department of Agriculture reported that "According to a survey conducted by Colorado State University, in 2006 13.2 million visitors experienced agritourism in Colorado, with a total economic impact of \$2.2 billion." "Agritourism is a growing segment of the agriculture industry in Colorado and across the nation," said Wendy White, marketing specialist at the Colorado Department of Agriculture. In addition,

Not only do we have international guests visiting our farms and ranches but livestock shows and exhibitions also have many visitors from other countries. The U.S. livestock population is very susceptible to many contagious livestock diseases that are not found in the U.S. but are present in other countries. If foreign animal diseases like foot-and-mouth disease, classical swine fever, or African swine fever were introduced into our livestock, it would be devastating to our animals, producers, and the U.S.



economy. Diseases do not respect a country’s borders and can be transmitted by a traveler’s clothing, bodies, possessions, and food items.

Bio-security measures are those precautionary steps taken to reduce the exposure of susceptible livestock to contagious microbial agents. Basic bio-security is vital to keeping animals and livestock herds healthy, especially at our ranches and livestock shows, exhibitions, and sales. The risk of disease spread by people and possessions will vary depending on the disease agent, country of origin, the time elapsed since the visitor’s last animal contact, and degree of exposure that the susceptible animals have to the visitor. Travelers with more recent contact with foreign animals (within the last 5 days) carry a greater risk to livestock.

Here are a few simple bio-security basics for foreign visitors or travelers who have been outside of the U.S. to help ensure the safety of livestock in our state and ultimately in the U.S.:

- Wear clean clothing and boots / shoes
- Wash your hands frequently with soap & water, and also use hand sanitizers
- Do not use any equipment that could have had contact with foreign livestock
- Do not bring any food items from other countries into the U.S.
- Avoid unnecessary contact with animals
- If have had contact with animals in another country in the last 5 days, do not have any direct contact with livestock in Colorado

These are fairly simple ways to keep our animals and livestock industry healthy!

DIFFERENTIAL DIAGNOSES FOR EQUINE NEUROLOGIC CASES

Many practitioners have found the following chart developed by Hana Van Campen and E.J. Ehrhart from CSU Diagnostic Laboratory very useful so we thought we would print it in our newsletter for your reference.

**Hana Van Campen and E. J. Ehrhart
From CSU-VDL Newsletter – Fall 2010**

Key: 1 = first (and sometimes only) choice, 2 = second choice, 3 = third choice of diagnostic tests

Agent	Diagnostic Tests			
Trauma				
Fracture, cranial, vertebral	Gross			
Viruses	Serology	PCR	FA	Histo
Rabies		3,brain (KSU)	1	2 IHC
EHV-1 (Rhino)	2, acute and conv.	1,blood		3



	samples	brain		
West Nile virus	1, IgM ELISA	2,brain		IHC
WEE	1, IgM ELISA	2, brain		
EEE	1, IgM ELISA (NVSL)	2,brain		
VEE	1, PRNT (NVSL)			
Borna disease	Exotic to the U.S.			
Bacteria	Aerobic/anaerobic culture			
Meningitis, septicemia	1, swab, blood culture			1
Abscess, brain, vertebral	1, swab, aspirate			1
Osteomyelitis, spine	1			1
Granuloma				1
Toxins				
Locoweed	Plant i.d.			1
Senecio (other hepatotoxic spp.)	Liver, brain Plant i.d.			1
Moldy corn (Fusarium spp.)	Brain			1
Star thistle	Brain			1
Botulism	Clinical exam, Bioassay (UCDavis, UPenn), blood, ingesta			
Sudan grass	Plant i.d.			1
Ionophore	Feed analysis			1
Tetanus				
Nutritional/metabolic				
Equine motor neuron disease	Brain, spinal cord			1
Hepatic encephalopathy	Liver, brain			1
Parasites				
Equine protozoal myelitis, <i>S.neurona</i> or like organisms	Spinal cord, brain Referral lab, serum & CSF			1
Visceral larval migrans				1
Cryptococcus				1
Tumors				
Lymphoma				1
Melanoma				1
Schwannoma				1
Cholesterol granuloma				1



Degenerative				
Cervical instability, compressive myelopathy, OCD	Gross with histo confirmation of spinal cord			
Genetic				
Cerebellar cortical abiotrophy				1
Congenital encephalomyelopathy				1
Other				
Polyneuritis equi/Cauda equina syndrome				1

Vector-Borne & Zoonoses Update

As of January 25, 2011

By Elisabeth W. Lawaczeck, DVM

State Public Health Veterinarian

Colorado Department of Public Health & Environment (CDPHE)

Skunk Rabies Update

As of January 25, 2011, two animals have tested positive for rabies in Colorado in 2011: a skunk from an eastern suburb of the town of Pueblo and a skunk from Parker in Douglas County.

On November 17, 2010, a coyote from Cortez, submitted by Montezuma County Health Department to the CDPHE Laboratory, tested positive for rabies. This coyote was shot due to aggressively trying to enter a fenced-in area with dogs. Monoclonal antibody testing at the CDC indicated that the coyote was infected with a variant associated with big brown bats.

On October 28, 2010, Colorado State University Veterinary Diagnostic Laboratory reported that a skunk submitted by Colorado Division of Wildlife from a home 15 miles north of Livermore in Larimer County (adjacent to the Wyoming state line) tested positive for rabies. The skunk was under a home owner's porch with an owned dog. Larimer County public health officials conducted outreach in the rural neighborhood to notify and educate residents. Monoclonal antibody testing of specimens from this skunk at the CDC indicated infection with the variant associated with skunks in the south central U.S.A.

On January 21, 2011, the Wyoming Department of Health reported that a skunk from Cheyenne tested positive for rabies. Variant typing at CDC is pending. If testing indicates the south central U.S. skunk variant, this would herald the arrival of a new rabies virus variant in Wyoming.

During 2010, CDPHE and CSU laboratories tested over 1,200 animals and confirmed rabies in 139 animals in Colorado: 64 bats, 63 skunks, 7 foxes, 1 mule deer, 1 muskrat, 1 horse, 1 cat, and 1 coyote. For these lab confirmed rabid animals, 45 humans and 168 domestic animals were known or strongly suspected to have been exposed. Please see the attached summary data table (Table 1) for a summary



of rabies data for 2010. *Note the distribution of skunk rabies in your area* within the provided map for skunk rabies for 2007 through end of 2010 (Figure 1). Please visit the CDPHE rabies webpage for regular updates on rabies including maps (see figure 1) and data tables:
www.cdphe.state.co.us/dc/zoonosis/rabies.

Colorado Rabies Resource Guide

In March 2011, a new document titled the *Colorado Rabies Resource Guide* will be posted on the CDPHE rabies webpage. The purpose of this document is to serve as a resource for the surveillance, prevention and control of rabies in Colorado. The target audience is “first responders” to rabies, which includes local public health, animal control, and wildlife officials, as well as veterinarians, wildlife control operators, and wildlife rehabilitators. This document was drafted by the Colorado Rabies (CORAB) Task Force, a self appointed group which first met on June 21, 2010. The mission of CORAB is to coordinate state, local, and federal resources for protection of public health, wildlife health, and domestic animal health from rabies in Colorado. CORAB Task Force members include: CDPHE; Colorado Division of Wildlife; Colorado Department of Agriculture; Colorado Veterinary Medical Association; Colorado Association of Animal Control Officers; local public health leaders; Jefferson County Sheriff’s Office—Animal Control Division; Colorado Wildlife Control Operators; USDA, Animal Plant Health Inspection Service, (APHIS), Animal Care; USDA, APHIS, Wildlife Services; USDA, APHIS, Veterinary Services; and the Colorado Council for Wildlife Rehabilitation.

The document will include a “how to guide” for submission of animals for rabies testing, guidance for quarantines of domestic animals, recommendations for proper notification/communication protocols between first responders, regulations related to rabies, and a section on roles, responsibilities, and resources of multiple agencies and associations involved in prevention and control of rabies. Veterinarians are strongly encouraged ensure that veterinary clinic staff are aware of the *Colorado Rabies Resource Guide* and to save the webpage as a favorite on your clinic computer.

West Nile Virus Summary for 2010

The number of confirmed human cases of West Nile Virus (WNV) infection in Colorado for the 2010 season was 81 (including 4 deaths), which is Colorado’s second lowest year of total reported human cases since 2002. However, the percentage of neuroinvasive cases reported was 32%, indicating a significant decrease in testing of humans for WNV compared to previous years. The human WNV cases were reported from 19 counties in Colorado. The five counties with highest number of the reported human cases were Boulder (4), Larimer (10), Mesa (8), Phillips (4), and Weld (12). Specimens from 39 horses were submitted for testing at Colorado State University and the Rocky Mountain Regional Animal Health Laboratory of the Colorado Department of Agriculture, of which 7 were positive from the following counties: La Plata (1), Mesa (1), Montezuma (2), Prowers (1), Pueblo (1), and Weld (1). The Rocky Mountain Regional Animal Health Laboratory is no longer offering WNV serology testing. Only 47 birds were tested for WNV in 2010, of which 9 tested positive, which were wild birds from the following counties: Boulder (1), Larimer (5), and Pueblo (3). Most of the birds tested were part of a validation study of a new PCR assay on feathers of wild birds with neurologic symptoms or sudden death. Feathers were collected by wildlife rehabilitators from severely ill or freshly dead wild birds. This PCR validation study is being conducted by the Centers for Disease Control & Prevention.

Of the 2,266 mosquito samples submitted for testing, 47 tested positive from the following counties: Adams (1), Boulder (1), Delta (1), Larimer (29), Logan (3), Mesa (3), Otero (1), Prowers (3), and Weld (5).



36th Annual Zoonoses Conference – April 14, 2011

This one day conference is co-sponsored by Aurora Animal Care Division, Tri-County Health Department, and Colorado Department of Public Health & Environment (CDPHE). The conference will be held at the Aurora Municipal Center (AMC), 15151 E. Alameda Parkway, Aurora, CO 80011. CDPHE is requesting continuing education (CE) for environmental health professionals from NEHA, as well as 4.5 hours of CE for veterinarians and veterinary technicians. Zoonotic disease topics include: infection control & biosecurity in the animal shelter and veterinary clinic setting; multistate *Salmonella enteritidis* outbreak investigation; salmonellosis & poultry production; antibiotic resistance; climate change & infectious disease; and updates on rabies, plague, tularemia, and West Nile virus.

The AMC is directly east of the Central Library, located at Alameda and Chambers Road. Parking is available on the west, south and east sides of the building. Entrances for the AMC are on both the east and west sides.

More details on the agenda, location, map, and registration information, will be posted in early February 2011, at the following webpage: www.cdphe.state.co.us/dc/zoonosis/index.html

Animal Disease Traceability, Animal IDs, and Health Certificates

Since January of 2007 to January 2011 Colorado has experienced two incursions of Bovine Tuberculosis. The first incident occurred in rodeo bucking bulls. The second incident was found in the dairy industry. Between the two occurrences over one hundred premises and more than sixteen states have been involved. The lack of consistent official animal identification and documentation of livestock movement has contributed to a tremendous burden in adequately mitigating and tracing the disease.

Genotyping of the *Mycobacterium bovis* isolates demonstrated that the rodeo bulls were infected with a *M. bovis* strain that was similar to those that had previously been found in Mexico. The *M. bovis* genotyping of the Colorado dairy cattle in the current outbreak has demonstrated the isolate to be a unique genotype. Livestock movements and exposure to cattle populations that have originated from multiple sources increases the risk of the spread of most diseases but is particularly true with TB. The take-home message is that Mexican origin cattle and dairy cattle are at higher risk for TB.

Some of the challenges that we have been faced with in the current TB outbreak is that there is no consistent form of animal identification and documentation of livestock movement. Some cattle were presented with a single USDA "brite" tag, multiple USDA "brite" tags, OCV tags, ranch tags, brands, and often, no animal ID was present. Contributing to the problem was that infection was found in bull calves from the index dairy; it is thought that the calves were fed unpasteurized milk from infected cows. Some of these calves had no identification when they left the dairy; many of them were then sold through livestock markets. In addition, often times the numbers recorded on the various forms of records did not match the cattle or because not all of the identification numbers were recorded on the documents. Bottom line, we need better official identification for cattle and that information needs to be documented on test charts and certificates of veterinary inspection (health certificates). Discussions concerning "lessons learned" on how we can improve animal disease prevention and control usually are distilled down to two important factors:



- We need a better method to electronically record and search animal movements (health certificates / CVI and movement permits)
- We need to individually identify and record animal IDs on CVIs and couple that with improved electronic searching capabilities for the animal IDs

Other areas of exploration and discussion within the Animal Industry Division has centered on requiring official identification of dairy cattle from birth to slaughter in order to mitigate future TB outbreaks and implications.

The State Veterinarian's Office (Animal Industry Division) of CDA, is looking at ways to build a system to electronically capture data that is contained on the interstate certificate of veterinary inspection. Not only will it be important in disease trace-back activities but being able to trace back the origin of animal to a premises and the movement of livestock is part of the performance standards that are in the proposed draft of the new USDA-APHIS Animal Disease Traceability rules. The performance standards associated with the proposed regulations would measure the ability for states to trace a certain percentage of cattle within a specified period of time. These standards would need to be met in order for a state or tribe to maintain a consistent state status. States that don't maintain this consistent status would be required to meet more restrictive requirements in order to move livestock inter-state. At this time, the proposed draft rule will require that certain groups of livestock that are moved inter-state be officially identified and accompanied by a Certificate of Veterinary Inspection (CVI). The new proposed Traceability Rule will be open for comment in April 2011.

These new traceability rules have implications for the practicing veterinarian. It will be advantageous for veterinarians to envision how they could advance their management of health certificates (CVIs), how they could incorporate efficient electronic modes of completing the CVI, and how they could capture and transmit electronic animal ID information. Currently, there are two systems that provide services to fill out health certificates electronically. One is GlobalVetlink (GVL) and the other is USDA-APHIS system called Veterinary Services Process Streamlining (VSPS). They both are capable of producing electronic health documents, integrate digital photos and laboratory tests, and submit documents to state officials on a secure web system. GVL is a private company and is fee-based; VSPS was developed by the USDA and is free. Here are the websites for the two systems:

GVL : <http://www.globalvetlink.com/about>

VSPS: <https://vsps.aphis.usda.gov/vsps>

Veterinary Medical Loan Repayment Program (VMLRP)

The Veterinary Medicine Loan Repayment Program is a federal program under USDA to determine the geographical areas that have a shortage of veterinarians and to administer a protocol to accept veterinarians into the loan repayment program through a qualifying application process. USDA's Veterinary Medicine Loan Repayment Program (VMLRP) helps qualified veterinarians offset a significant portion of the debt incurred in pursuit of their veterinary medicine degrees in return for their service in certain high-priority veterinary shortage situations.



In 2010, eight geographical areas in Colorado were accepted as shortage areas and Colorado has had two candidates accepted into the VMLRP. Here are excerpts from a Colorado Department Agriculture (CDA) news release on the VMLRP:

The VMLRP exchanges veterinary service for educational costs. Recipients will receive up to \$25,000 per year for three years of service in veterinary shortage areas. In all, 62 awards were granted. Colorado awardees are:

- 1. Dr. Shane Porter who practices at the Limon Veterinary Clinic, which is a mixed animal facility. The clinic serves Elbert and Lincoln counties. Dr. Porter earned his degree from Oklahoma State University in May 2010.*
- 2. Dr. Britt Stubblefield who owns Rocky Top Veterinary Service; it is a mobile veterinary service in which he practices large animal medicine and surgery in Park and Teller counties.*

According to the USDA, "veterinarians are critical to the national food safety and food security infrastructures, and to the health and well-being of both animals and humans; however, major studies indicate significant and growing shortages of food supply veterinarians and veterinarians serving in certain other high priority specialty areas. A leading cause for this shortage is the heavy cost of four years of professional veterinary medical training, which can average between \$100,000 and \$140,000. Congress established the VMLRP as a way to remedy this growing need."

The VMLRP Steering Committee has met in January 2011 to start the process to nominate veterinary medical shortage areas within Colorado for 2011. The Steering Committee consists of representation from the State Veterinarian's Office within CDA, CSU College of Veterinary Medicine and Biomedical Sciences, CSU Animal Science Department, CSU Diagnostic Laboratory, CVMA, practicing veterinarians, Colorado Cattlemen's Association, Colorado Livestock Association, Western Dairy Association, and Colorado Commissioner of Agriculture's Office.

If you are in a food animal practice (or anticipating going into food animal practice), still have educational debt, and want to practice in Colorado, we would like your input in order to submit our 2011 veterinary shortage areas. The shortage areas will be submitted by the State Veterinarian's Office by March 29th of this year. If you are interested in this program, please contact Dr. Keith Roehr, State Veterinarian or Dr. Nick Striegel, Assistant State Veterinarian, to discuss and provide information that will assist in the submission of the Colorado veterinary shortage areas.

More information can be obtained through the following USDA APHIS webpage:
http://www.nifa.usda.gov/nea/animals/in_focus/an_health_if_vmlrp.html

Bureau of Animal Protection and CSU planning a Livestock Care & Well-being Training Course

The Bureau of Animal Protection is excited and proud to announce that the Colorado Department of Agriculture and Colorado State University are combining resources and planning a FREE three day equine investigations training event March 14 – 16, 2011 for Bureau of Animal Protection agents, other law enforcement personnel and veterinarians. The training, which will be held at the B.W. Pickett



Equine Center in Fort Collins Colorado, will include lots of hands-on body condition scoring, basic identification, equipment and use, equine behavior and an investigative overview summarizing what was learned and how to apply it to a neglect investigation. We are fortunate to work with CSU professors, some of the best equine science professors in the country using the Horse Industry Handbook as text. This will be a great educational opportunity for ACO's and other law enforcement personnel to take advantage of! The class is limited to 30 students, register soon and reserve your space! For more information about how to register, please refer to the attached flyer or contact Lisa Gibson at 303-239-4167 or lisa.gibson@ag.state.co.us

The Bureau of Animal Protection (BAP) serves a vital service to Colorado; the BAP staff serves and advocates for animal health and welfare across the state. The Bureau of Animal Protection serves as a support mechanism to local law enforcement agencies in conducting animal cruelty and neglect investigations. The Bureau has been given the responsibility under state statute and regulations to protect animals, and it takes its role very seriously. The Bureau also oversees approximately 130 BAP commissioned agents distributed throughout the state.

Basic Equine Care and Handling Body Condition Scoring Class

Hosted by:
Colorado Department of Agriculture - Bureau of Animal Protection &
Colorado State University - Equine Science Department

March 14-16, 2011

Cost: Free

**Held at: CSU Equine Center, 701 S. Overland Trail
Ft. Collins, CO 80523**

Presenting a basic yet intensive three-day course that will concentrate on basic skills for equine care and handling as well as introduction to body condition scoring horses. Topics covered include:

- Introduction to use of the Henneke Body Condition Scoring System
- Hands-on application of the Henneke Body Condition Scoring System
- Basic horse identification skills, including breeds, colors and markings
- Basic equipment and use
- Equine Behavior/Psychology
- Veterinary issues including equine disease, hoof and dental care
- Investigative overview - How to build a good case, body condition scoring, documentation

Register soon - This class is expected to fill quickly!

To register or get more information, e-mail Lisa Gibson at lisa.gibson@ag.state.co.us
or call 303-239-4167

CDA's Bureau of Animal Protection plans to team up with Colorado State University to offer a course on investigating livestock abuse and neglect.

There is a need to supply appropriate livestock neglect investigational training for law enforcement agencies, Bureau of Animal Protection agents, veterinarians, veterinary and equine students, and even equine professionals. This type of training is valuable as it covers investigation issues in cases of livestock neglect, supplies participants with the tools and experience they need to identify legitimate animal neglect, and helps them pursue viable solutions. This class will give participants what they need to accomplish the job of removing horses and livestock from a neglectful situation safely and efficiently.



A NEW WAY TO HELP HOMELESS ANIMALS IN COLORADO



The Adopt a Shelter Pet license plate is now available at your local Division of Motor Vehicles! Each time a Coloradan purchases a new Adopt a Shelter Pet license plate, \$30 will go to the Colorado Pet Overpopulation Fund, and each annual renewal of the plate generates \$23 for the Fund. This money will be used to provide grants for spay/neuter surgeries and medical care for animals in Colorado shelters and rescues where the need is the greatest. The plates will also help raise awareness of the need to save lives by adopting pets from shelters and rescues.

On June 9, 2010, Governor Bill Ritter signed into law House Bill 10-1214, sponsored by Senator Gail Schwartz and Representative Beth McCann. The Adopt a Shelter Pet license plate, created by this legislation, establishes a new funding source to help Colorado shelters and rescues offset costs for spay and neuter surgeries and for medical treatment for animals in their care.

“Coloradans have generously given to the Pet Overpopulation Tax Check-off to support shelters throughout the state,” Sen. Schwartz said. “To additionally fund these important efforts, we now have an Adopt a Shelter Pet license plate. Pets enrich our lives and our families, but every day in Colorado thousands of animals are in shelters, waiting for a family to take them home. This new license plate will raise awareness of the availability of homeless pets and fund the effort to place these pets in loving homes and reduce animal overpopulation.”

Grant application guidelines for license plates funds will be posted on www.coloradopetfund.org by February 15. You may also call the Colorado Pet Overpopulation Fund at 303.722.6435 for more information.



Help Address the Problem of Unwanted Horses

Colorado taxpayers now have a direct and meaningful way to help address the problem of unwanted horses – and we seek your help in getting the word out! On May 27, 2010, Governor Ritter signed into law Senate Bill 10-139, which created the Unwanted Horse Fund Tax Check-off. The legislation is an historic victory for Colorado’s horses and it allows Coloradans who wish to do so to donate to the Fund on their income tax form. Donations will:

UNWANTED?
Abandoned? Neglected? Abused?

Not if we can help it.
The Colorado Unwanted Horse Alliance supports those who help horses in Colorado.

Now you can help, too.
Donate to the Unwanted Horse Fund on your Colorado tax return.

Help us help horses in Colorado.

www.counwantedhorse.org

- Support programs that help address the plight of Colorado horses for which homes cannot be found
 - Aid horse rescues with grants to increase the adoptability of their horses
 - Conduct research into the many factors that impact the unwanted horse issue so resources can be directed for greatest impact
 - Assist owners who no longer want their horses (or can no longer afford to keep them) to make responsible decisions about their future

An estimated 6,000 Colorado horses became unwanted each year according to research conducted by the Colorado Unwanted Horse Alliance (CUHA). CUHA encourages anyone who wants to help reduce that number and improve the lives of Colorado’s unwanted horses to donate to the Unwanted Horse Fund Check-off on their state tax returns.

The Fund will be administered by the Colorado

Unwanted Horse Alliance (CUHA), a 501(c) (3) nonprofit corporation organized to reduce the number of Colorado’s unwanted horses and to promote public and private collaboration and education concerning their welfare, ownership, and disposition. Information about CUHA can be found at www.counwantedhorse.org.

Here’s how you can help create visibility about this new way to help horses:

- Display the enclosed poster
- Add a link to www.counwantedhorse.org on your website – and encourage others to download and display a copy of the poster from the website
- Include information about the tax check-off in your print or electronic communications
- Donate!

Thank you taking this opportunity to make a positive difference for Colorado horses.



Colorado Approved Feedlots

Certain livestock diseases, in which the Colorado Department of Agriculture has responsibility to regulate, pose a significant risk to Colorado livestock producers. Colorado is a “net-importer” of cattle and therefore cattle from many different states are imported into Colorado. Some states may not have the same disease “free” status as Colorado and therefore increased testing requirements may be required to bring cattle into Colorado from those states which increases costs for producers and feeders. Confinement feeding operations have some unique characteristics in which disease risk can be drastically reduced and managed so that the risk of disease spread to Colorado’s breeding herd and livestock producers is extremely low or even non-existent. The Division of Animal Industry import rules are designed to be reasonable, science-based, aid in the protection of the health of Colorado livestock, and control possible disease spread.



Photo courtesy of USDA

Colorado has special regulations to allow cattle from states that have been “down-graded” in their disease status (e.g., Tuberculosis, Brucellosis) to move into a special category of feedlots called Colorado Approved Feedlots. The reason for these regulations was to establish a special classification of feedlots in order to protect the livestock industries within Colorado yet permit feeding operations to remain competitive.

The potential for livestock disease entry into Colorado can be properly mitigated and controlled through the special requirements that the Colorado Approved Feedlots must follow to import cattle from certain areas of the U.S. The basic requirements that the Approved Feedlots must follow are:

- All cattle must have individual animal identification that denotes the state of origin
- The feedlots must maintain appropriate records of the livestock they feed
- The livestock must remain in the feedlots until they exit the feed-yard for direct movement to slaughter
- None of the cattle from the feedlot can be pastured or grazed with other livestock

Dr. Ron Ackerman’s Retirement

Dr. Ron Ackerman has served the State of Colorado in various capacities for over 21 years. As of February 1st, 2011, Dr. Ackerman has turned the page to a new chapter in his life by retiring from the Animal Industry Division of CDA. The whole Colorado Department of Agriculture will miss him very much but in particular, the staff at the Animal Industry Division will feel the void that he has left. We certainly wish him very well as he moves forward to new and different endeavors. There are many of you who have worked with Dr. Ackerman in many ways; maybe it was in some of his field work and investigations, his duties at the Colorado State Fair and National Western Stock Show, or his educational efforts throughout the state. We know you will miss him too in that scope of work. Please drop him a note or give him a call if you wish, we know he would be delighted to hear from you.

Ron Ackerman, DVM

Phone: 719-267-4246

Email: ackerman@rural-com.com

Thanks again Ron for all of your work over the years, you have benefited many!!!



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