

Wet Weather Affecting Fall-Born Calves

LITTLE ROCK, ARK.

The prolonged wet weather is causing calf scours to become a problem in fall-born calves, according to the University of Arkansas Division of Agriculture. Scours is a broad, descriptive term referring to diarrhea. It's not a specific disease with a specific cause, but rather a clinical sign of a disease complex with many possible causes.

"Scours occur when normal movement of water into and out of the digestive tract is disrupted, resulting in water loss and dehydration," said Dr. Tom Troxel, animal science professor for the division. "Loss of body fluids through diarrhea is accompanied by loss of body salts. This fluid and electrolyte loss produces a change in body chemistry that can lead to severe depression in the calf and eventual death." Troxel said rehydration therapy of scouring calves with water and supplemental electrolytes can help alleviate effects of dehydration and help restore a normal electrolyte balance.

Noninfectious scours are usually caused by changes to the feeding program. While usually not severe enough to cause death, non-infection scours can weaken the calf and make it more susceptible to infectious scours.

Troxel said infectious scours are the biggest problem and are caused primarily by viruses, bacteria and protozoa. Identifying the infectious agent causing scours is an important part of developing a sound prevention program.

Dr. Jeremy Powell, associate animal science professor with the Division, said treatment will vary depending on the cause of the disease, but there is a basic four-step approach that can be followed. When treating calf scours, it's important to first correct any fluid deficit that exist. Once dehydration status is estimated, oral or

intravenous fluids may be used to correct this.

When oral fluids are administered, electrolyte powders can be added in order to correct imbalances. Since young animals have little energy reserves, it is important to replace energy stores with oral or IV fluids containing glucose or dextrose supplements. These supplements help replace electrolytes such as potassium, sodium and chloride that are lost due to diarrhea.

A broad spectrum antibiotic should be used in any type of infection. Antibiotics only work against bacteria, but if you have a viral infection antibiotics will prevent a secondary bacterial infection from occurring. In the case of coccidiosis, a sulfa-antibiotic (sulfaquinoxaline, sulfamethazine) or Amprolium should be used because they are effective against these parasites. It's important to consult with a veterinarian, as he or she will know what diseases may be prevalent in the area. This allows you to be more effective at preventing or treating calf scours in the herd.

Colostrum plays a vital role in the newborn's immune status during the first few months of its life. Colostrum is made up of essential nutrients for the newborn calf including energy, protein, and antibodies. If the calf fails to receive the proper amount of colostrum, it will be more susceptible to the pathogens such as calf scours. In order to insure the calf receives defensive antibodies against calf scours from colostrum, the cow should be vaccinated well ahead of calving. To optimize a high level of antibodies against calf scours in the cow's colostrum, she should be vaccinated about six weeks prior to calving. If a scours vaccine has never been used in a herd, then a booster dose may be required. Δ