

Animal Industry News Update

from the LCES Animal Science Specialists



Animal Health (Dr. Steve Nicholson) **A Look Back at Disease Control**

Diseases that once caused serious economic losses in Louisiana livestock that have been successfully eliminated through state-federal programs include bovine tuberculosis, bovine brucellosis, Texas Cattle Fever, Tick Fever or bovine babesiosis, and hog cholera, a virus infection now called Classical Swine Fever.

Tuberculosis and brucellosis remain in just a few places in the USA. Texas Fever is caused by an organism transmitted by a specific tick which was eliminated in the 1940's by a mandatory cattle dipping program. The tick and the disease remain as close as the Mexican border where surveillance is maintained.

Another scourge in the southeast and southwest was the screwworm. The screwworm fly places its eggs in wounds in animals and man. The larvae then feed on live tissue creating an ever enlarging, debilitating and often fatal wound. Small wounds and the navel of new born deer, cattle and other animals were often infested. The threat of screwworms meant that every baby calf, pig, foal, lamb and kid had to be observed daily for signs of infestation. The knowledge that the female fly only mates once gave entomologists a way to attack this pest. Male flies were raised by the millions and sterilized with radiation. Boxfuls of sterile males were dropped from airplanes into areas where screwworm cases were confirmed. The program was funded in part by a 50 cent check-off when cattle were sold.

A Look Forward at Disease Control in Cattle

Diseases like anthrax and blackleg can be controlled by vaccination. Prompt and proper carcass disposal is a major concern with anthrax cases. Johne's disease, bovine virus diarrhea (BVD) and bovine leukosis (BLV) are of economic importance in Louisiana beef and dairy production but are not controlled as easily. Testing to identify infected cattle which maintain these diseases in herds can be relatively expensive and often must be repeated. The cost of replacing test positive culled animals with disease free animals, if you can locate them, can be significant. Economic forces, not government programs, will likely determine whether or not a serious effort is made to eliminate these diseases.

Horses (Dr. Clint Depew) **Tapeworms**

Tapeworms generally have not been a significant problem in horses. However, the current deworming products for horses have been very effective in controlling the normal worm populations, so tapeworms have a greater opportunity to thrive in the horse's intestines and are now being identified as

a greater risk. Research shows that 54% of the U.S. horse population, and nearly 80% of Louisiana's horse population, has been exposed to tapeworms. New products which combine ivermectin and praziquantel are available to control all the major internal parasites including tapeworms. Horsemen should consider adding a tapeworm application to their deworming program.

Hoof Abscesses

A large number of horses have experienced hoof abscesses this year. Wet weather conditions tend to soften horse's feet and make them more susceptible to abscesses, caused by a bruise to the foot as a result of stepping on something. A puncture or separation of the hoof wall also may cause an abscess.

Typically when a foot is bruised, the foot responds by increasing blood flow to the area. The area creates a pocket which seals off, swells, and the pressure causes pain for the horse. Normally the horse will limp slightly the first day, show considerable pain the second day and be reluctant to put weight on the foot by the 3rd to 4th day.

Treatment includes identifying the painful area with hoof testers and then opening up the abscess to relieve pressure. Applications of iodine or peroxide are appropriate to kill the bacteria. The horse will receive relief immediately when the pressure is relieved. Also, wrapping the foot to minimize contamination is recommended. If the abscess is not drained, the pressure formed by gas produced by the bacteria will move up the sensitive laminae and break out of the foot at the heel or the coronet band in a couple of weeks.

To protect your horse from abscesses, avoid rocky and hard ground when possible. If you must ride on hard ground, shoe your horse to provide protection to the foot and to absorb the impact. Always clean the horse's feet daily and check the horse's feet at the first sign of lameness. You cannot avoid all abscesses but you can minimize the occurrence and effect of them by proper foot protection and care.

Poultry (Dr. Theresia Lavergne) **Exotic Newcastle Disease (END) Experimental Vaccine**

As a result of the recent outbreak of END in California, 3.5 million commercial and backyard poultry were euthanized and \$104.5 million was spent to contain and eradicate END. Thus, USDA scientists have been working on an experimental vaccine to combat END. However, the vaccine will not be available in the near future.

How is this vaccine different from current vaccines? Current END vaccines are made from attenuated (weakened) like viruses or killed viruses.

These vaccines protect birds against subsequent exposure to END. These vaccines can be effective, but some birds have adverse reactions to the vaccine and the result is a decrease in bird performance and production.

The experimental vaccine is called a virosome vaccine. This vaccine induces immunity but does not allow the virus to replicate. To make the vaccine, the scientists took the END virus apart, removed the virus' replicating genetic material, and then put the virus back together. The vaccine causes a protective immune response. This immune response allows scientists to differentiate between vaccinated and virus-infected birds.

In one USDA study, 100 percent of the virosome vaccinated chicks were protected from END after exposure to the virus. (USDA- ARS, October 29, 2003)

Dairy (Dr. Charlie Hutcison) Milk Prices

According to the USDA, the Class I price will climb to \$14.37 for November, which is a 10¢ increase from October and \$3.77 higher than a year ago. For the third month in a row, there will be no Milk Income Loss Contract payment. This means that the Class I price of milk in Federal order #7 is \$17.47 for Fulton county Georgia. Also, USDA announced that October's Class III is \$14.39/cwt. which is up 9¢ from September. The Class IV price is \$10.16/cwt, up 11¢ from September. It's too soon to tell which direction the December Class I price will take, since it depends on the cheese market's direction the next few weeks. Unfortunately, cash cheese prices on the Chicago Mercantile Exchange took a tumble for the week ending October 31st with blocks dropping and closing at \$1.4850/lb. Also, barrels were down and closed at \$1.4575/lb. Cash butter closed with a slight increase to \$1.1925/lb. Whether the cheese market can recover or continue a downward trend will go a long way in determining prices for the end of the year and early 2004.

Milk Production and Cow Numbers

Milk production in the top-20 dairy states fell 0.1% during September (USDA September "Milk Production" report). Cow numbers were down 38,000 head compared to last year, and 7,000 head less compared to August. Milk production per cow increased 6 pounds. USDA also revised its August milk production estimate, saying it was down 0.9% compared to last year (a drop of another 0.1%). For the third quarter of 2003, U.S. milk production was off 0.6%, and cow numbers were down 88,000 head. Cooler weather may help increase milk per cow, but cow numbers are expected to decline further. According to the USDA's "Livestock Slaughter" report in September, dairy cow slaughter increased 11% (24,000 cows) compared to August. Also, the

September slaughter market figures are 14 % higher (31,000 cows) compared to last year. With cows headed to slaughter through the CWT herd retirement program, the October slaughter levels could see a much larger increase.

Cooperatives Working Together (CWT) Program

The CWT program is using a multi-tiered approach to remove approximately 1.2 billion pounds of milk supplies from the domestic marketplace through 2004. The reduction of this amount of milk will be accomplished through increased exports of finished butter and cheese, as well as with decreased milk production at the farm level. Farm level milk production will be reduced by retiring entire herds and by compensating dairy producers for cutting back production on their farms. The following is the breakdown of the two farm level milk production reduction programs.

National CWT Facts*

Bids received for CWT's two dairy producer programs: **2,552 bids**

Herd Retirement	Reduced Production Marketings
Total volume bid: 5.3 billion lbs.	Total volume bid: 397 million lbs.
Total accepted bid volume: 608 million lbs.	Total accepted bid volume: 88 million lbs.
Total number of bids submitted: 2,038	Total number of bids submitted: 514
Total number of bids accepted: 299	Total number of bids accepted: 77
Average accepted bid: \$4.00/cwt.	Average accepted bid: \$4.07/cwt.
Number of cows retired: 32,734	Average percentage reduction: 17%

*Table adapted from CWT web page

Believe It or Not!

Thirty-four people have received specialized training to become odor inspectors for the Iowa Department of Natural Resources. Their task over the next two years will be to determine just how much odor comes from livestock operations. Lawmakers will use results from the study to see if the state needs to develop new air-quality standards that would include odor limits for livestock operations.