



Animal Health (Dr. Steve Nicholson)

Torpedograss became toxic

In late June-early July, two horses on a small pasture in Calcasieu Parish developed signs of liver disease. This was confirmed by liver biopsy at LSU. On-farm investigation revealed that the pasture was 90% torpedograss (*Panicum repens*). This grass was introduced by the USDA to the Gulf Coast region in the 1920s. *Panicum spp* have a reputation for causing liver damage in horses and secondary photosensitization in sheep. Kleingrass (*Panicum coloratum*) is the best known of the species. Toxicity appears following excessive rainfall, and hay retains the toxin.

Arsenic source finally located!

In October, several cattle exhibited diarrhea, weakness, became unable to rise and died. Necropsy findings suggested acorn or arsenic poisoning. Arsenic was confirmed in kidney samples. The source was not obvious, but a barn was suspect. MSMA herbicide was mentioned, but the owner did not recall ever having it on the place. In the spring he again added cattle on the pasture; diarrhea appeared suddenly in one of the animals. This prompted a serious search for the arsenic source, which he found in the old barn. A can of MSMA herbicide had rusted out and contaminated the ground. Soil samples were analyzed and found to contain high levels of arsenic.

Sheep and Goat stomach worm alert

Conditions have been favorable for parasite larvae to survive in summer pastures. Expect to see life-threatening anemia become common in all ages of small ruminants during August and September. Use your thumb to pull the lower eyelid over and down to view the color of the back of the eyelid. It should be pink to red. Pale pink to pure white indicates anemia. Selecting an effective dewormer drug is the challenge because parasite resistance may be high. Moving treated animals to pasture that has not been grazed for months helps slow re-infection.

August-October is season for increased cattle health problems

Horse fly and deer fly transmitted anaplasmosis will appear in some herds. Mature cattle may be found dead or may collapse and die during penning and handling. Severe anemia is the reason for the clinical effects. Herd outbreaks of bacterial pneumonia and emphysema caused by perilla mint weed may affect mature cattle. Acute illness and death caused by blackleg disease are to be expected in some groups of older calves that have not been vaccinated. Cattle owners are urged to get a prompt veterinary medical diagnosis.

Eastern equine encephalitis virus could cause an outbreak this fall

All horses should be protected by recent vaccination against Eastern, Western and West Nile virus encephalitis.

Poultry (Dr. Theresia Lavergne)

Catastrophic Composting?

Composting is a popular means of disposing of regular poultry mortalities, and the disposal of mass or catastrophic mortalities has been done through burial or burning; however, in light of the increasing poultry disease and transmission concerns, investigators are evaluating composting as a potential method for mass mortality disposal.

In the mid-1990s, researchers evaluated the survival of highly pathogenic avian influenza virus and egg drop syndrome-76 during composting. After 10 days of composting, the avian influenza virus was not detectable, and the egg drop syndrome-76 virus was not detectable after 20 days of composting. (Senne et. al., 1994, Avian Diseases, 38:733-737)

More recently, researchers at the University of Delaware and the University of Maryland composted litter and carcasses within poultry houses. Composting catastrophic mortalities within poultry houses can minimize the potential spread of viruses, as well as minimize the effects on the environment. In this evaluation, two farms found positive for avian influenza were used. A single windrow of litter and poultry mortalities was formed within each house. The temperature within the windrows reached 131° F (the temperature needed to destroy most pathogenic organisms) and stayed there for 10 days. (Malone et. al., 2004, Poul. Sci. 83(Suppl. 1):395)

Currently, in Louisiana and many other states, the state agency uses burial as the preferred method of handling catastrophic poultry deaths; however, composting of carcasses can be an effective method of disposal of mortalities and destruction of viral diseases. Therefore, after more research and evaluation of catastrophic composting, it could become an acceptable method.

Dairy (Dr. Charlie Hutchison)

Milk Prices, Milk-feed Ratio, Cow Numbers:

The Class I price took another \$3.00 plus drop, resulting in another setback in milk prices for milk being produced in August. The USDA announced the August Class I price at \$14.62, which is \$3.33 less than July. This tops July's price drop of \$3.18. This makes the \$3.33 price/cwt drop the largest month-to-month Class I price drop ever; however, the Class I price is still higher than the \$13.69 target price needed for Milk Income Loss Contract payments to resume. The milk-feed ratio also took a step backward in July, falling to 3.05. This is a decrease of

0.07 points, primarily caused by a drop in milk price of \$2.00 per hundredweight between June and July since the prices of baled alfalfa hay, corn and soybeans used in the calculation all declined in July. Dairy cow culling activity for June dropped about 14% from a year ago, according to the USDA's Livestock Slaughter report. During June, 179,000 dairy cows were slaughtered; this is 28,000 head fewer than the same time last year, but 13,000 head more than May. For the week ending on August 6, 2004, butter prices on the Chicago Mercantile Exchange (CME) dropped nearly 25 cents per pound, 40-lb blocks of Cheddar ended the week gaining a penny and closing at \$1.54/lb, while barrels were up 2 cents per pound closing at \$1.51/lb. On the futures market, Class III contracts took a nosedive with September contracts, losing \$1.26/cwt and closing at \$14.66, with October contracts losing \$0.72/cwt and closing at \$14.25/cwt.

Beverage Milk Sales:

U.S. per capita beverage milk sales declined again in 2003, with sales dipping to almost 190 lb. This is about a 25% decline since total beverage milk sales peaked in 1975 at 250 lb. Whole milk sales during that 28-year span declined about 50%. Lower fat milks had seen gains in the 1980s, with a peak occurring in the early '90s followed by a decline in sales over the years after the peak. Skim milk sales have been declining for the past five years. The only milk to have shown some positive gains is flavored milk, but its market share is so small that it cannot make an impact in overall per capita sales.

Research Notes:

The standard recommendation in A.I. technique for cattle is to deposit the semen past the cervix into the body of the uterus. Placing the semen in one of the uterine horns was thought to result in lower conception and pregnancy rates; however, a recent study at Michigan State showed a 42% jump in pregnancy rate with deep horn breeding. The study involved three commercial dairy farms and more than 800 cows. Technicians were trained in deep horn breeding prior to the start of the study. In the trial, semen was either placed in the uterine body or split between the two uterine horns. All three farms saw an increase in pregnancy rate with deep horn breeding, ranging from a 26% to 43% increase.

According to data analyzed by USDA's Animal Improvement Program Laboratories (AIPL), cows with somatic cell counts of 400,000 may be producing 5.5 lb less milk per day than uninfected herd mates. That is a 35% to 45% increase in milk production losses over the estimates previously made more than 20 years ago by University of Wisconsin researchers. "This may be because milk yields in the present data are about 50% higher than in the earlier [1982] study," says USDA's Robert Miller.

According to information submitted to NMC, formerly the National Mastitis Council, researchers from the United Kingdom found the type of Group B streptococcus that causes infection in three out of 1,000 newborn babies is very likely a strain that derives from mastitis in dairy cows. The researchers believe the leap occurred about 30 years ago, but have no idea why it happened. The results of this study re-emphasize the need to control *Strep Ag* as part of your milk-quality program.

Beef (Dr. Jason Rowntree)

Master Cattle Producer Update

The Master Cattle Producer (MCP) began in Lafayette on July 26 and runs until November. Agents Stan Dutile, Andrew Granger and Keith Normand, along with Stuart Gardner (NRCS) and Joe Hidalgo (LCA), are hosting the event. The MCP participation is high; 75 producers are enrolled. **TWO FUTURE PRESENTATIONS** are scheduled in Port Allen and Hammond beginning September 13 and 14, respectively. More information on MCP can be accessed at www.lsuagcenter.com/masterfarmer.

\$ 11.64 Million for Animal ID

On August 5, USDA announced the selection of 29 state and tribal projects to receive a total of \$11.64 million to aid in the upstart of the animal identification initiative. The Louisiana Department of Agriculture and Forestry received \$100,000. The USDA's Animal and Plant Health Inspection Service (APHIS) will distribute the funds through cooperative agreements with the 29 recipients. Funds can be used to register premises (locations) through a standardized system provided by APHIS or other approved data systems.

Horses (Dr. Clint Depew)

Age-related effects on fertility on the mare

Research indicates that fertility tends to decline in older mares. Reports have suggested that there is a correlation between large cysts and mare age, particularly mares older than 16 years of age. The incidence of cysts also increases as mares have more colts. Therefore, endometrial cysts have been identified as a possible cause of low fertility.

A study with 310 mares with suspected uterine problems showed the presence of cysts in 55% of the mares. 73% of cysts occurred in mares older than 14 years, whereas only 29% were present in mares younger than 14 years. Research also indicates that the size of cysts increases with the age of the mare and these cysts are also associated with other indicators of poor fertility including bioscopy score and glandular changes. One study indicated that when more than five cysts were present, the foaling rate decreases. The presence of cysts decreases motility of the embryo and attachment of the placenta, which can result in inadequate blood flow and nutrient provision for the embryo leading to early

embryonic loss. Additionally, if the embryo is not available to move around the uterine horns in the first 30 days of pregnancy, the mare may not recognize the pregnancy and will abort the embryo.

Cysts can be detected by rectal palpation, ultrasound or endoscope. Treatment is recommended for mares that have large or numerous cysts or a poor reproductive history. Treatment includes rupturing or puncture of the cysts and adjunct therapy such as saline solutions or antibiotics.

Traditionally the most common problem in undertaking the treatment of cysts has been reoccurrence. More commonly the presence of cysts is an indicator of other underlying uterine disease and fertility problems. Treatment has restored fertility in some mares where large cysts or large numbers of cysts are present. Not every cyst needs to be addressed because mares with small cysts or fewer than five cysts do not tend to have problems. Producers who have mares with fertility problems should have them checked for the presence of cysts.

Colic

Colic is a common term used to describe painful digestive problems. Most problems with colic are a result of improper feeding such as changes in the feed, overfeeding or feeding during a time of stress such as exercise, hauling, etc. The symptoms are essentially the same regardless of the cause. Heart rate increases rapidly; sweating may occur as pain increases. The colicky horse will be restless, paw the ground, roll or frequently bite at the abdomen. Normally the horse will not eat or drink and is not able to pass feces. Research indicates that horses with colic are more susceptible to repeat episodes and of those that require surgery about 10% will require a second surgery. Of those that require a second surgery only about 20% survive over the long term. 53% of all surgeries are the result of mechanical obstructions and 48% are the result of functional obstructions. 89% of the repeat colic surgeries are performed within 2 months of the primary surgery.

Although colic surgeries are becoming more successful and technology is increasing rapidly, it is very important that horsemen manage their horses properly to avoid colic episodes. Appropriate management includes consistent feeding, plenty of forage or pasture, ready access to water at all times and withholding grain or feeding small quantities of grain during times of stress for the horse. By using good management techniques, you can avoid most colic.