



Beef (Dr. Ron Del Vecchio) **Slower Moving Cattle Taste Better.**

Australian researchers with the Cooperative Research Center for Cattle and Beef Quality say there is a genetic correlation between temperament and tenderness. Cattle with undesirable temperaments produce tougher meat. Temperament is measured by flight time, which is defined as the amount of time it takes an animal to travel six feet after leaving a weighing machine, scale, or chute. Bad tempered cattle will leave the scales quickly and aggressively (i.e., come out the of the blocks like lightning), while cattle with a more moderate temperament will not have such aggressive movements and be slower to leave the scales. It has already been shown that more aggressive/flighty cattle do not perform as well as even tempered cattle, and now data suggest that these cattle are not only poor performers but the end product also is less desirable to the consumer.

Irradiation of food may be more acceptable.

According to a survey by the public relations firm, Porter Novelli, the American consumer is now more interested in buying irradiated food (beef). It seems that the news coverage of bioterrorist activity in the United States, along with publicity about the use of irradiation to kill anthrax spores in contaminated U.S. mail, has helped change the public's perception of the technology. The survey was recently conducted among 1,008 U.S. adults. More than half (52 percent) said the government should require irradiation to help ensure a safe food supply. Whereas, last year, only 11 percent of Americans said they would buy irradiated foods.

Further, the U.S. Department of Defense has announced that ground beef and poultry products processed using electron beam food safety technology (irradiation) has been added to the military food procurement lists.

Vegetarian Teens at Risk.

According to research published in the Journal of Adolescent Health, researchers at the University of Minnesota found that vegetarianism may serve as a red flag for eating disorders and other problems related to self images in teens. Adolescent vegetarians were more weight and body conscious, more likely to have eating disorders and more likely to have tried a variety of healthy and unhealthy weight loss practices. The researchers also reported that these teens were more likely, than their non-vegetarian peers, to have contemplated or attempted suicide.

(Sources: The Cattleman, November and December 2001 and Texas Cattle Feeders Association, January 4, 2002)

Horses (Dr. Clint Depew)

Deworming

Researchers with the LSU Veterinary Science Department are finding some interesting changes in worm infestations that may dictate changes in deworming programs. Information on immunity in horses, worm concentrations in the wintertime, and effectiveness of dewormers dictate changes in deworming schedules and products.

Dr. Dennis French and others have conducted research on infection rates of worms in horses and have evaluated many deworming products. Researchers have reported that horses develop some immunity to worms. Recent research indicates that some horses become almost totally immune to worms and may not need to be dewormed at all. Young horses are always susceptible to worms but by the time horses reach maturity, many have highly developed immunity and may need to be dewormed only once or twice a year. Consequently it may be important for horsemen to have fecal egg counts taken prior to deworming to determine if deworming is needed.

Researchers also have shown that worm infestation rates are highest in the winter months because horses graze closer to the ground (because of the shortness of the grass). Therefore a good deworming program is more critical during the winter than in the summer.

Additionally, researchers are proving that the worm population is becoming less susceptible to many of our deworming products. This immunity is narrowing the selection of effective dewormers. The only products that are effective, consistently, are ivermectin and moxidectin, commonly known as Quest.

These findings on natural immunity in horses, concentrations of worms in the winter months, and the reduced effectiveness of many of the deworming products, indicate changes in the deworming protocol are needed. Horsemen with large numbers of horses may find it economical to check fecal egg counts and deworm only those horses that show significant infestations. The critical time for deworming horses is in the fall and winter months. Only effective dewormers should be used.

Each horse and each situation is different; therefore it is critical that horseman continue to observe their horses closely for signs of problems. A long hair coat, poor skin condition, and lack of thriftiness are common signs of worm infestations. By understanding the research, and with close observation, horseman can maintain the internal and external health of their horses.

Economics (Dr. Ken Wegenhoff)

The Economic Research Service, USDA released a new electronic report entitled "Characteristics and Production Cost of U.S. Cow-Calf Operations" by Sara D. Short, Statistical Bulletin Number 974-3, November 2001.

This report examines 3 major topic areas: (1) performance and input use, (2) production costs and returns and (3) operator and operation characteristics by region (North Central, Southern Plains, Northern Plains, Southeast and West), number of cows (less than 50, 51-99, 100-249 and 250 or more), production cost group (low, medium and high cost) and typology group (retirement/residential/lifestyle, farming occupation/lower-sales, farming occupation/higher-sales and large/very large family farms).

This report is available at the Economic Research Service website: www.ers.usda.gov

Click on publications, go to publications by title, click on A-Z titles, click on C and go down the list.

This information will be useful to producers to compare their operation to regional averages.

Dairy Update (Dr. Charlie Hutchison)

The milk price paid to producers for the past couple of months has been rather steady, around \$14.00 per cwt.

From previous discussions with dairy producers, \$15.00 per cwt is the breakeven point. When milk prices drop below \$15.00 per cwt, it is extremely difficult for producers to be very profitable or to make any new capital improvements in their operations. The outlook for 2002 is somewhat cloudy according to most analysts. According to Jim Miller, USDA dairy outlook analyst, milk production will grow almost 3% in 2002 and softening economic conditions may result in less demand for cheese, butter and dairy products. Dr. Bill Herndon, Ag Economist Mississippi State University, states that the average price paid to producers in 2002 should be about \$15.00 per cwt compared to about \$14.10 in 2000 and an estimated \$16.60 in 2001. He predicts that the price of milk will remain steady but weak during the first half of the year, and then increase \$1.50 to \$2.00 per cwt. during the second half of 2002. Any dramatic price fluctuations will be influenced by demand shifts since stocks of dairy products are higher than in 2000.

Milk production nationwide in 2001 declined by 1.4% to 165.4 billion lb. Milk production per cow decreased by 73 lb., from 18,204 lb. in 2000 to 18,131 lb. in 2001. The major reason for the decrease in total milk production was a decrease in cows. Basically all of the decline in cow numbers came from the Eastern and Central regions of the country.

Good news for dairy producers in Louisiana,

Extensive research, much of which has been conducted at the LSU AgCenter Central Station Swine Unit as well as at Kansas State University, has shown that high levels of supplemental zinc oxide have a

USDA has granted full approval for the world's first bovine neosporosis vaccine. The name of the vaccine is NeoGuard™ and is marketed by Intervet, Inc. The vaccine should be available soon through veterinarians and animal health suppliers with the approximate cost being \$4.50 per dose. Several producers have had outbreaks of neosporosis which causes abortions.

If you were asked to name a food staple of pre-school and college students that contains dairy products and results in the commercial disappearance of one billion lb. of milk each year, would you have guessed Kraft's Macaroni and Cheese? According to Betsy Holden, CEO of Kraft USA, one million boxes of Kraft's Macaroni and Cheese move off of U. S. store shelves every day. This much product soaks up one million lb. of cheese annually or one billion lb of milk.

Poultry (Dr. Theresia Lavergne)

Total U.S. broiler production for 2001 is estimated to be 31 billion pounds, which is up 2% from 2000. The wholesale price of broilers averaged 59.1 cents per pound, up 2.9 cents per pound from 2000. Total broiler exports for 2001 are estimated to be 13.6% higher than in 2000. United States egg production increased 1% in 2001, and egg prices decreased 1.7 cents per dozen. Per capita consumption of eggs increased an estimated 1%.

In 2002, broiler production is expected to increase slightly (about 1%) compared to broiler production in 2001. Broiler prices are expected to remain the same in 2002, and producer net returns are expected to remain similar to the returns in 2001. Broiler exports are expected to increase by 3-4% in 2002. Egg production is expected to increase 1% in 2002. Wholesale prices should remain similar to 2001.

Almost one billion pounds of broilers were produced in Louisiana in 2001. The gross farm value of broilers was \$387 million in 2001. These broilers were produced by 575 producers. Total eggs produced was 27.4 million dozen, and the farm value of commercial egg production was \$11.7 million in 2001.

Swine (Dr. Tim Page)

Zinc in Show Pig Nursery Diets

One of the most important management and production times for show pig producers is immediately post weaning. It is critical for producers to provide optimum nutrition and health care in order for the young pigs to look their best for evaluation by potential buyers. Scours, and especially E. coli scours, can have a significant detrimental effect on the visual appearance of baby pigs and, therefore, reduce producer pig sales and price per pig.

positive impact on E. coli scours. Zinc is an essential nutrient that is fed at low levels in most swine diets. At high levels, zinc actually acts as a growth promotant. Most baby pig diets should be supplemented with 3,000

ppm zinc until the pigs weigh 15-20 pounds. Then, producers should supplement diets with 2,000 ppm zinc until the pigs weigh 25-30 pounds. After the pigs weigh 30 pounds, research indicates there is little benefit to providing supplemental zinc in their diets. At this stage however, pigs are not past the danger of breaking with E. coli scours.

Zinc oxide does not cure E. coli, but if the pigs have normal E. coli problems and the producer removes supplemental zinc from the diet, the E. coli will get worse. There are several theories as to why zinc oxide can reduce diarrhea problems in both pigs and people. One study indicates that the addition of zinc at 2,500 ppm prevented post weaning diarrhea without affecting the number of E. coli excreted in the feces. Similar experiments have shown that a high prevalence of diarrhea occurred when pigs did not receive high concentrations of zinc oxide when challenged. Other researchers have indicated that zinc apparently does not reduce the number of E. coli present, but interferes with the ability of the E. coli to produce a toxic environment in the gut.

Show pig producers should consider adding high levels (2,000-3,000) of zinc to post weaning diets if they want to promote growth and reduce scour problems in baby pigs. This nutrient manipulation could possibly be a valuable tool in marketing healthier and more attractive pigs at sale time.