

Prenatal test may save foal

BY CATHY ANDERSON

The loss of a foal can be costly and heartbreaking to the horse breeder, but deaths caused by one specific disease may be prevented.

Neonatal isoerythrolysis is like the Rh factor in humans except it occurs after the foal nurses colostrum (first milk) from the mother, says Dr. Bruce Abbitt, a theriogenologist at the veterinary diagnostic lab at Texas A&M University.

If a mare is A & Q negative and a stallion is A & Q positive, there is a chance of having an A & Q positive foal, Abbitt explains. But if the foal is A & Q positive when it nurses, antibodies contained in the colostrum will destroy its red blood cells.

Blood transfusions may be helpful, he said, but most often the disease is fatal.

"A serum test to detect NI has been available through the diagnostic laboratory for two years at the economical cost of \$3," Abbitt says, "and that's pretty cheap insurance."

The test is a good way to diagnose NI because it's concrete evidence, he explains.

The serum test is also used for verification of NI after the death of a foal.

The only drawback to the test is that it has to be done two weeks before foaling, Abbitt announces.

If NI is detected prior to foaling, colostrum from a surrogate mother can be given to the foal, he concludes.

For a profit

Market moxie urged

By THERESA SCOTT

Marketing is a major challenge for beef producers who expect to make a profit, says the head of the Department of Agricultural Economics at Texas A&M University.

"Cattlemen who have done well over the past decade have not necessarily been the most efficient producers, but those who sold right, bought right or both," Dr. John Hopkin told the Texas Animal Agriculture Conference April 5 and 6 on the Texas A&M campus.

These producers try to understand the forces affecting the market and to collect and evaluate information, he said.

"They understand the pricing tools of forward contracting and futures markets that are available and how to use them," Hopkin said. "Finally, they are aware of their cost and are able to assess (prospects) instead of gambling on striking it big."

In the final session of the conference, Hopkin told 200 cattlemen they can improve their marketing strategy by using available technology.

"Electronic marketing is now technically feasible," Hopkin said. "It gives cattlemen the benefits of flexibility and lets them reduce handling and transportation costs."

Cattlemen can also organize county or multi-county associations for marketing their calves and develop an annual sale, he said.

In this way, both producers and buyers are able to take advantage of economy of size in buying and selling, and the level of bidding on calves could increase materially, he said.

"There probably has never been a time in the history of the industry when the demand for beef has been so unclear," Hopkin said.

Demand is affected by consumers' perceptions, such as attitudes on health and diet, as well as by the level and distribu-

tion of per capita real income, he said.

"The beef industry needs to fully understand what is happening to demand and what can be done to increase it," Hopkin said. "Advertising and promotion is costly, but is a necessary part of today's business."

Advertising should be designed to address the marketing problems and opportunities identified by marketing research, he said.

Private lenders are on their own to see ranchers through this crisis, since government loans and aid have been cut to a minimum for the cattleman, Hopkin said.

"There is both good news and bad news in the trend toward internationalizing money markets," Hopkin said.

The good news is that funds are readily available in rural areas, he said, and the bad news is that the rate for these funds is set in the world money market.

Fat mares may be better mothers

By THERESA SCOTT

An old theory says that fat broodmares have lower fertility and more foaling problems than thin mares. But a recent Texas A&M University study showed it to be just that — a theory.

"A large number of mares are hard to rebreed in the same year they have a foal nursing them," said Dr. Gary D. Potter, professor of animal science at Texas A&M and conductor of the mare study.

"The question is whether there is any significance to the condition of the mare when she foals," he said.

Thirty-two mares were used in the study. Sixteen mares were fed so they foaled in fat condition and 16 foaled while thin.

After foaling, the mares were divided into four treatment groups for the first 90 days of nursing. Eight mares were fed to remain fat, eight to lose weight, eight to remain the same, and eight fed to gain weight.

"Pregnancy rates were as much as 50 percent higher in the fat and gaining groups than in the remaining thin group," Potter said. "Abortion within 90

days, a major problem in the horse industry, was significantly lower in the fat and gaining groups."

The level of stored fat in the mare's body may be an important source of energy, especially when energy requirements of the mare exceed the amount received in feed.

Thin mares often lack stored energy reserves, he said. Rebreding efficiency and milk production may suffer during early nursing because feed in-

take cannot be increased to meet all requirements without causing digestive problems.

Results indicate that thin mares had poor reproductive efficiency.


"Mares foaling in fat condition utilized stored fat for efficient reproduction and milk production even when energy intake did not meet nursing requirements," Potter said. "Excess fat did not impair rebreding efficiency and did not cause foaling problems."

After the University study, four ranches agreed to use their horses for an outside study following Texas A&M's procedures. The results of the outside study were the same: mares which entered the breeding season or foaled in fatter condition had higher reproductive efficiency and were able to utilize stored body energy.

Along with Potter, Don Henneke, Dr. Jack Kreider, B.F. Yeates and Dr. Doug Householder worked on the study.



Because of a lack of evidence one way or the other, the University studied the influence of mares' body condition at foaling on their rebreding efficiency and foal growth and development, Potter said.



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