

Show Ring Age Determination - Art, not an Exact Science

L. Mac Cropsey, D. V.M.
Golden, Colorado

At a few cattle breed shows and most major steer shows, show herds have been subject to the procedure known as “mouthing” to establish the accuracy of their birth dates.

A more accurate explanation of the procedure would be an examination of the development of teeth in young cattle to determine over-age in the showing classes. The technical explanation is the observation of the shedding of the deciduous (milk or baby) teeth, and replaced by permanent teeth at various stages as a means of determining the approximate age, provided nutrition, environment, and health have been normal.

This is a procedure recognized by the cattle industry as a check to assure that rules set up for cattle shows as to age classifications are adhered to as near as it is possible to diagnose by human judgment. There has been much controversy among breeders and veterinarians for nearly three decades on the accuracy, or the implied lack of accuracy, in determining ages that the system provides; but, every year in practically every show, by every breed in the country, it is obvious that the need for the system and the policing action exists.

“Mouthing,” or more accurately age determination, was not designed to tell us the exact date an animal was born. Variations in an animal’s dental development can result from several causes, but primarily from nutritional variation or stress from sickness and environmental conditions. There is very little bovine variation as the result of genetics or breed.

Historical Background

There has been a great improvement in the general attitude of the breeders since the first “mouthing” of a breed show took place in 1954 at the National Angus Futurity in Louisville, Kentucky. There, 13 exhibitors with one or more animals were ousted from the show and a great outcry was raised.

Those breeders who were showing cattle in the 1940’s and early 1950’s are all aware of the “mess” the purebred industry was in from an ethical

standpoint. In the early ’50’s the larger and more active cattle showmen fully realized that if they were going to be successful in the showing, they would have to indulge in the same unethical fitting practices, and exhibit cattle that were just as much overage as their competitors. This involved decisions to alter the birth dates as much as six months. The fact that they were very successful in their show program made these practices very commonplace.

The integrity of the entire purebred beef cattle industry was open to serious question at that time. This is not to say that all breeders went in for this kind of practice, but those who were scrupulously honest were few and were showing at a distinct disadvantage. It seemed at the time, and still does, that rules designed to regulate an activity which an Association sets up must be enforced or all the advantage is given to the unethical showman who chooses to violate the rules. The man who obeys the rules starts the game with three strikes against him when those rules are not enforced!

In the early 1950’s there had been a procedure that was used with a degree of success in some Wisconsin steer shows developed by the University of Wisconsin Extension Veterinarian, Dr. C. Wayne Burch, which involved a comparison of the development of the incisor teeth in a show animal, to determine its approximate age. I extended this study to include molar and pre-molar teeth, and found that there was a very close correlation in show animals that had high nutritional levels and no stress conditions between the development of the entire dental system of a bovine animal and its age.

Comparative studies of cattle whose exact ages were known and their dental development had been checked over a period of time gave me enough background to take the system to the board of the American Angus Association in 1954. After considerable deliberations, they accepted the idea and put the procedure to work at the futurity in Lexington, Kentucky, that same year. Since that initial event, I have performed the service for every

major beef breed association and most major stock shows in the country.

At first, there was a great controversy over the new policing procedure to enforce ethical and age-show rules. After Dr. Burch and I disqualified a heifer in the Chicago International Stock Show in 1955, the owner entered suit against the American Angus Association. We had expelled the animal from the show, not on a question of age, but on the basis of unethical fitting. The case was tried in court in a million dollar lawsuit and the exhibitor lost. The Angus Association and the veterinary profession won.

The Legal Rights of a Breed Association

The actual significance of this suit was to prove in a court of law that a breed association does have the legal right to police and enforce its rules and regulations and then take appropriate action. Apparently, none of the cattle, dog, horse, or other animal shows or breed associations at this point in history had their regulations brought to court trial and the legality tested.

In the late 1950's at the international show, Dr. Wayne Burch and I disqualified many steers in the three major beef breeds. This resulted in many suits, none of which ever came to trial. To the best of my knowledge, there has never been a suit involving the age determination (only) procedure brought to actual trial.

Determining age is not an exact science and does not reflect the pinpoint accuracy of chemical analysis. I wish there were a system in which

chemistry could be utilized to give the exact age of an animal, but in the biological sciences there are many variables. The "mouthing" procedure is a human judgment, much like a medical diagnosis without laboratory tests based on observation, experience, and training. The judgment ability comes of knowing standards and understanding variations in dental growth and their causes. It comes with examining thousands of sets of teeth and filing away in your mind the results of these examinations. You subject yourself to this sort of decision every time you go to any professional person for diagnosis. The procedure is an art, not an exact science which is what laboratory procedures provide.

Future Needs

As long as there is competition involved in livestock shows, there will be the tendency among some breeders to attempt to bend the rules on age. This same holds true, and even more so, with performance tests and bull test stations today. As long as there is this determination among breeders to win, there will be a need for some method to determine accurately the ages of cattle. Though we realize the imperfections of the system, "mouthing" is the best measure we have been able to come up with. Though breeders may curse it, argue its merits with rancor, pro and con, or shout about its injustice, there are few who would argue that it has made a valuable contribution to protect the credibility of the industry, cattle competition, including shows and bull gain test stations.

Dairy Herd Management and Veterinary Service in Michigan rians was not significantly different for the two groups. It has been theorized by some that herds on a planned veterinary service basis may have less emergency type calls, which was not evident in this study. Dairymen spent less than \$2.00/cow on non-veterinary drugs (Table 5) in this study.

Generally, the dairymen that used the most veterinary service were more satisfied with results from their investment in veterinary services than the group spending the least for veterinary service. In many cases, these were the same veterinary services which one dairyman considered a good investment for his dairy operation while the neighbor considered veterinary service a cost which should be reduced for maximum profits. Most of the former dairymen and veterinarians operated on a loose verbal contract which did not specify per call or per cow charges, rather a payment for services rendered basis.

Summary

Thirty-six dairy herds were divided into two

(continued from page 47)

groups: 1) limited veterinary service and 2) complete veterinary service. The herds using complete veterinary service averaged 14,657 lbs. milk/cow, 404 day calving interval, 11.3% calf losses and invested \$20.29 per cow in veterinary services; while the comparable limited veterinary service herds averaged 13,373 lbs. milk/cow, 400 day calving interval, 16.7% calf losses and invested \$12.70 per cow in veterinary services. Except for calving intervals, the differences are statistically significant ($P < .05$). Veterinary service and herd management are important input factors for economically successful milk production units.

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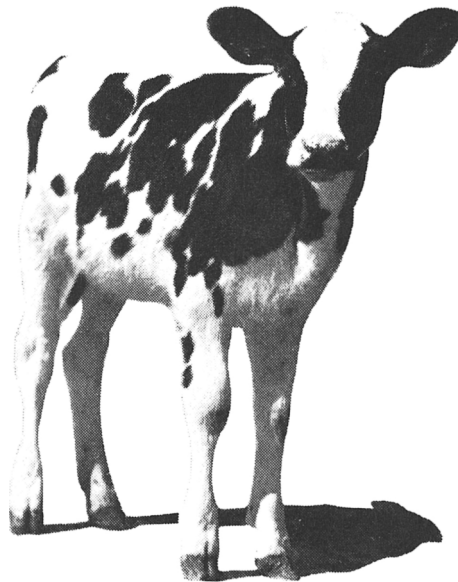
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