

Let's Keep Up-to-Date on Imported Cattle

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During the last three years, there has been a marked increased interest in the use of French breeds to improve beef production in the United States and Canada. This interest is due primarily to two factors. The first is the tremendous advancement in knowledge which has made it possible to import animals from areas known to be infected with foot-and-mouth disease. Second, the high cost of production of beef in the United States and the desire to lower the cost of producing good quality beef protein without excess fat has initiated a search for new genetic improvement.

The Canadian government has been most farsighted in the establishment of a maximum security quarantine station which would permit the importation of these animals in a manner that would prevent the introduction of foot-and-mouth disease, as well as many other diseases. They established the Grosse Isle quarantine station in the St. Lawrence river, capable of accommodating 240 animals per importation. The personnel of this station have had the responsibility of supervising the importation of all cattle from continental Europe to Canada the last three years. The demand has exceeded the facilities to such an extent that the French and Canadian governments have now entered into an agreement whereby they are jointly building a quarantine station on the French island of St. Pierre et Miquelon, which is just off the South coast of Newfoundland. This station will be constructed by French funds and operated and supervised by Canadian veterinary officers. Whereas the demands on the Grosse Isle station for its use in the importation of wildlife, plus the fact that the St. Lawrence was frozen a portion of the year, prevented the use of this station for more than one importation a year. The station on St. Pierre et Miquelon will be used year around and permit the importation of five groups of cattle every two years with each group containing 250 animals.

During the past summer, the author was privileged to make first hand observations of the various breeds of cattle in France and became impressed with the possibilities that the various breeds had in cross-breeding programs in the U.S. The opportunity was also available to closely study the arrangements for treating the animals purchased for shipment to North America.

When an animal is selected from a French farm for importation, it is first tested on this farm by a veterinary officer of the Canadian government. The animal is then placed under quarantine on the farm away from all other cattle, sheep and hogs. Periodic inspection of this quarantine is made by a Canadian veterinary officer. These cattle are tested for brucellosis, tuberculosis, Johne's disease, foot-and-mouth disease (both by immunology and viral isolation from the tonsil region) and numerous species of leptospira organisms. If any of these tests are positive, the animal is not permitted to come into the shipment. If any of the animals from the farm react to a foot-and-mouth disease test, then no animals from the farm are allowed in the shipment. After a quarantine of approximately 30 days on the farm, the animal is transferred to a central quarantine station near a port of embarkation in France. The one most commonly used is the quarantine station at Brest. At this station, all the animals consigned to the shipment are assembled and maintained in quarantine, but in contact with one another for a period of thirty days. During this 30 days, they are again tested for the diseases mentioned above as well as temperatures daily. The process of bringing all the susceptible animals into one place yet in quarantine is the second step in assuring the importing of disease free animals into the North American continent.

Upon the successful completion of the Brest quarantine, the total importation is transferred by ship to a maximum security quarantine station in North America. In this sta-

tion, they are rigorously tested for the diseases previously mentioned, and held for 90 days. The numerous animals which have been brought to the North American shores through these procedures, are ample evidence that this is an efficient and safe procedure for importation of European cattle. Needless to say, the danger of the introduction of foot-and-mouth disease into the livestock of the United States is much greater when one considers the thousands upon thousands of returning tourists who set foot on American farms than is the danger from the importation of these cattle. This is especially true when a virus of foot-and-mouth disease can live in a persons hair for seven days, though it only takes about 18 hours for a person to leave a French farm and arrive back on his own farm in midwestern United States.

The only cattle which have been brought into the North American continent in the last decade which did not follow this procedure were three groups of cattle which were purchased in France in 1963 and 1964 and moved to the island of St. Pierre et Miquelon. These cattle were tested on the farm and in the Brest quarantine station by the French veterinary officers. They were then moved to the French island of St. Pierre et Miquelon and maintained there until 1967, at which time they were then moved through maximum security quarantine station at Grosse Isle and permitted to enter Canada.

Due to the tremendous demand for the genetic potential offered by these new breeds, the Canadian government in 1967 placed an embargo on the exportation of all imported animals and their female progeny. For this reason, only the male progeny of these imported animals are available in the United States. All of the original males, the imported males, must abide by this embargo. At the present time, there are two house bills and one senate bill introduced in Congress to permit the U.S. Department of Agriculture to establish maximum security quarantine stations under their direction. Needless to say, this would permit the cattle breeders of the United States to acquire females and imported males which they could use directly in their breeding herds. The Canadian importations, plus those of many other countries of the world, have already proven the procedure to be safe.

All of the first interest in imported cattle was in the *Charolais breed*, primarily as an attempt to improve the domestic Charolais of North America. Of course, all of the domestic Charolais are descendants of the small importation from Mexico many years ago and have resulted from a grading up program using domestic cattle of the United States. It was for this reason a great emphasis was placed on the importation of pure French Charolais cattle. The French Charolais animal originated in the region of Charrolles and was confined to this region until 1773. In

this year, a breeder moved to the Nièvre region of France where his large white beef-type animals caused comment and the attention of his neighbors. The Nièvre region has since become the center of the Charolais cattle in France with the Charolais herd book having its office at Nevers, France. From this point, Charolais cattle have spread throughout France and are popular through most of the regions of France where beef cattle are raised. Many have been exported to South America in great numbers, as well as to Africa, Japan, Russia, England and Ireland. The use of semen and young pure French bulls, which have been imported, on domestic Charolais of the United States, and has produced a marked improvement in the breed. Breed registration is by the American-International Charolais Association, Houston, Texas.

In the 1968-69 Canadian importation to Grosse Isle, a bull calf from the Limousin breed was included. The *Limousin cattle* have been developed in a portion of France that is from hilly to mountainous. This region has a poor soil and the cattle have been developed as a sturdy, hardy breed. The Limousin breed was first developed about 1850, with the herd book being established in 1866. The Limousin herd book is maintained at Limoge. The Limousin cattle are solid red in color and characterized by an excellent beef conformation. Though not as large as the Charolais cattle, the Limousin have good weight gains and produce an excellent carcass. Both male and female Limousin animals are now in Canada and semen is for sale in the U.S. The promotion of the breed is being coordinated by North American Limousin Foundation, Denver, Colorado.

A third breed which has been imported from France and Switzerland is the breed known as the *Simmental*. In Europe, these cattle are also known as the Montbelliard or the Pie Rouge; both of which are dual purpose breeds. Most of these animals are milked and their calves raised for beef. The herd book for the Pie Rouge is at Dijon and includes among its functions the recording of milk production records. Though the color pattern varies considerably in the breed, a large per cent of these animals have orange to yellow spots on a white background. A solid white face is characteristic of the breed. However, many of the animals imported on the North American continent have been selected for a solid red color pattern with white feet, legs and face. The use of these animals on Hereford cows has produced good growth calves with a color pattern very similar if not the same as seen in the Hereford. The use of Simmental cattle on the domestic breeds of North America should produce a rapidly gaining calf with good carcass quality. When crossbred heifers are saved, they will materially increase the milk production of most domestic

cattle. Semen is available in the U.S. from several Simmental bulls in Canada, while some of the first Simmental A.I. calves in the U.S. are now approaching one year of age. The present headquarters of U.S. Simmental associates is in Cairo, Illinois.

A fourth breed which touched the North American shores in the 1968-69 Canadian importation into Grosse Isle is the *Maine-Anjou breed*. These cattle are the second largest breed in the world and are also a dual purpose breed. The breed originated in approximately 1840 by crossing Duram cattle from England on native French cattle. The resulting red and white animals are extremely long, very muscular, with good strength of loin, and long muscles on the rear quarter. Many of the breeders in France will place two or perhaps three calves on one cow and then milk the

extra cows. Milk production records are also kept on this breed at the herd book headquarters in Chateau-Gontier. At the present time, there are two yearling males and one yearling female in Canada. Semen is for sale in the United States through at least one A.I. stud. The newly formed Maine-Anjou Society of America has its headquarters in Kansas City and is planning its first annual meeting in December, 1970.

There will undoubtedly be other breeds brought to these shores in future importations in this new quest for genetic material to improve our beef production. Should the present nationwide interest in these various breeds continue for a decade, the result could very well exceed the influence that the Shorthorn bulls had on the Longhorn herds of the early west.

("Mastitis," continued from page 6)

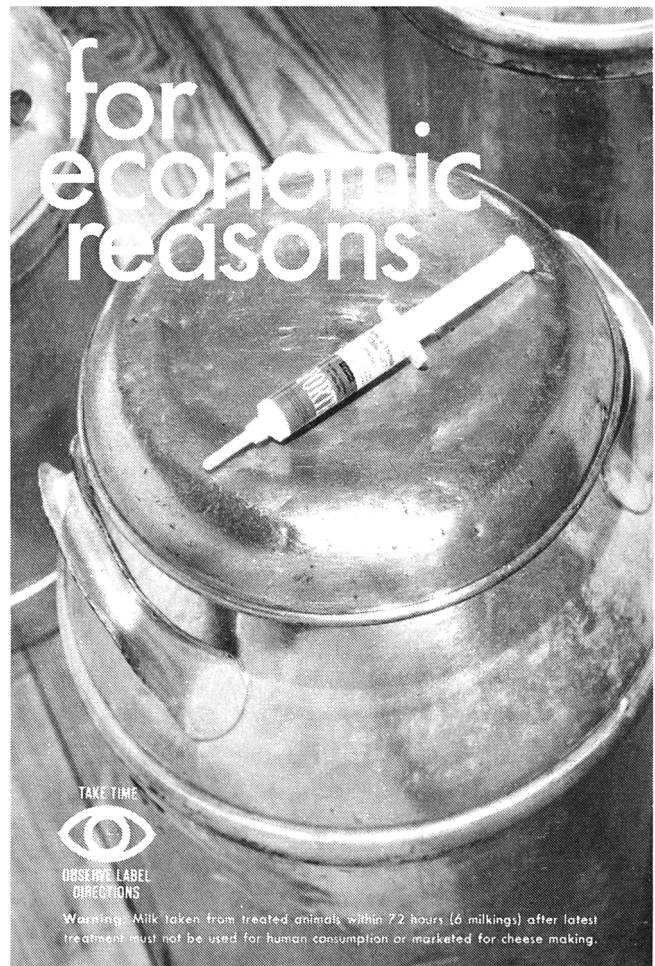
ship with the cow. To knock out this flora, renders the animal subject to an acute infectious process by more pathogenic organisms. It seems to me that this constitutes the greatest danger in the dry cow treatment program. Additionally, concern is evidenced over the likelihood of developing a bacterial population which is resistant to antibiotics; or the introduction of pathogens with the cannula of the therapeutic tube which are refractors to that particular medicament.

It is my judgement that we do not know enough about the long term effect of such a random therapy program to recommend it to our clients at this time.

Very simply, I have been describing the pathogenesis of mastitis. Any steps we can take to interrupt the chain of events helps in the control of this disease complex. Bringing together the present knowledge of bacteriology, physiology and physical principles involved, we should be able to increase the time factor and decrease the number of bacteria traversing that one half inch of tissue separating the external environment from the internal environment of the gland!

"Bovine practice will rise to new horizons of excellence under the stimulus of our organized efforts."

**Vernon E. Tharp, D.V.M.
AABP Director, 4th District**



for economic reasons

TAKE TIME
OBSERVE LABEL
DIRECTIONS

Warning: Milk taken from treated animals within 72 hours (6 milkings) after latest treatment must not be used for human consumption or marketed for cheese making.