

Shipping Fever Research

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A comprehensive research program was initiated in 1976 to study problems associated with movement of feeder calves from farms in the Southeast to grazing and feeding areas in Texas and Oklahoma. This effort was intended to complement established work on the problem and to allow certain investigations which require experimental control of animals from farms of origin to ultimate destination. It was developed as a cluster of mutually supportive studies. Major thrust of the effort involves researchers in Tennessee, Texas, Oklahoma and the Agricultural Research Service of the United States Department of Agriculture. Other scientists in Oregon, Missouri, Oklahoma and Texas are working on a wide array of pathogens in cooperation with personnel of the National Animal Disease Center, Ames, Iowa. All of the studies are dependent upon the active participation of a large number of farmers, order buyers, wheat pasture and feedyard operators, and practicing veterinarians in Oklahoma, Texas and Tennessee.

The overall project contains intensive and extensive phases. Approximately 700 feeder calves were shipped from Tennessee to Texas and Oklahoma during 1977 in the intensive studies. Some 25 separate identifiable studies are being conducted on these cattle. Work began on many of the animals prior to weaning on the farms of origin and will continue until they are finished and slaughtered. Research questions asked range from pre- and post-shipment treatments

of interest to beef cattle production and nutrition workers, to immune-response determinations by veterinary medical researchers, to animal response to transport environment variables of interest to a transportation research team. In addition to those participants previously identified, state extension personnel are providing vital support to this research effort in locating cattle and securing farmer cooperation. Diagnostic laboratories of the three primary states contribute by providing post-mortem information on calves which die.

The extensive phase of the study utilizes animals in the normal industry flow of feeder cattle. With the permission of the owners of the cattle, researchers clinically examine animals as they are loaded for shipment and upon arrival at their destination. They are monitored on pasture or in the feedyard and the health record of the animals obtained. They are identified at the shipping point and back-traced to points of origin to obtain information on the assembly process. The major objective of this phase of the overall study is to identify gross aspects of the assembly and transportation components of the movement of calves which are related to morbidity and mortality at final destination.

Researchers at this time have results from shipments in 1976 and have made the second shipments. Most of the studies will require at least three years before conclusions will be possible.