

*Cattle Dwarfism*¹

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DWARFISM in cattle has been known for many years. The type of dwarf was considered the small individual, usually with very short legs and an abnormally shaped head.

Investigations at this experiment station indicate that the miniature individual is only a part of the "dwarfism" picture. In the regular "dwarf" there are certain bone deformations, the heart is usually round and the pituitary, sexual glands and muscles may be abnormal. These same abnormalities may be observed in many of the normal sized animals that give birth to "dwarf" calves.

During the past few years cattle producers have presented problems to the North Dakota Agricultural Experiment Station which were of such a nature that they could not be answered.

One of the most common problems was abortion or death of the calf within minutes after its birth. Other investigations showed that, while brucellosis abortions were de-

creasing in number, abortions due to vibriosis, trichomoniasis and listeriosis were still quite frequent. The problem of moldy feed was frequently presumed to be the cause of abortions and stillborn calves.

As our investigations with dwarf and dwarf carrier cattle progressed, certain facts become apparent. Many of the feti submitted to the laboratory for diagnosis showed no evidence of an infectious disease. In many cases deformations in bones, shape of heart and the presence of edema (dropsy) indicated that the actual cause of death was heart failure.

It would help in the study of dwarfism, for cattle producers to submit aborted calves and those dying within 24 hours after their birth to this laboratory, along with the name and registration number of sire and dam. This information will be kept confidential.

The number of abortions and possibly death losses of older animals due to abnormalities of physical structure suggests that losses of this kind may be very high.

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