



BOARD ANNOUNCEMENT

Feb. 22, 2017

Dr. Jonathan Beever of the University of Illinois recently contacted the American Angus Association® regarding a potentially emerging recessive genetic abnormality in Angus cattle. The condition is known as Sodium Channel Neuropathy and is exhibited in calves that are born alive but fail to stand. The majority of calves display significant torticollis, or wry neck, likely related to dystonia (a neurological movement disorder that causes sustained or repetitive muscle contractions). Calves may also have a “short-coupled” appearance. Euthanasia is necessary, Dr. Beever notes.

The lab reports that a producer who noticed an increased occurrence of affected calves during the past two years, submitted pedigree information and blood or tissue samples to the lab in November 2016. Pedigree information revealed that the single common ancestor on both sides of the pedigree is a registered Angus bull, Dr. Beever reports, that had been purchased as a yearling in 2006 and had been used each subsequent breeding season as a natural-service cleanup sire. The majority of affected calves were the result of sire-granddaughter matings. All samples were genotyped for further genetic analysis that revealed clear evidence of recessive inheritance with all calves sharing a common region of homozygosity.

The U of I team will proceed with screening in the coming weeks, as well as the development of a functional diagnostic. **Only then can the source of the mutation and the potential allele frequency in the current population be determined.** This particular phenotype, Dr. Beever notes, has not been widely reported.

The American Angus Association now plans to work with genomics companies and in cooperation with Dr. Beever to further determine the impact of the genetic condition.

Please contact the American Angus Association at 816-383-5100 if you have additional questions or if you become aware of calves that match the condition description.

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