

ABS Club Calf Update

April 3, 2009

Two separate genetic conditions have surfaced in the Maine Anjou and Shorthorn breeds. Many of the affected sires are bulls used to produce club calves. Many popular sires are carriers of the recessive gene for these conditions; a bull may be a carrier for one or both. Unfortunately information relating to the exact status of all bulls is unclear. The purpose of this document is to inform you of the known carriers at this time. We will continue to look for additional information and provide it as it becomes available. The best source of factual information regarding these two conditions and known carriers is the Shorthorn Association and the Maine Anjou Association, below are there websites.

American Shorthorn Association

<http://shorthorn.org>

American Maine Anjou Association

<http://www.maine-anjou.org>

What are TH and PHA?

TH

TH is a disorder of multiple congenital defects seen in calves. Translated, the name refers to absence of all or part of the tibia (tibial = the bone between the knee and ankle in humans or the stifle and hock in cattle and hemimelia = absence of all or part of a limb). But TH encompasses more defects than the name implies. TH is lethal, as the calf may be born dead, but if not dead the condition is incompatible with life. These calves have large abdominal hernias (weakening of the abdominal muscles that allows intestinal contents to bulge out), twisted legs sometimes with absent or deformed bones. They may be cryptorchid (undescended testicles), have a meningocele (defect in the skull with tissue coming out) and a long shaggy hair coat.

TH was first described in Galloway cattle in the 1960's and in Shorthorn cattle in 2000. Since that time hundreds of calves with TH have been identified. Studying the pedigrees of affected and unaffected cattle has led to the conclusion that TH is a recessive disorder. For the calf to be affected, it must have inherited the defective gene from both parents.

There is a DNA test for TH. Carriers are listed on both the Shorthorn and Maine Anjou websites

PHA

PHA (pulmonary hypoplasia with anasarca). Translated, that means little, poorly formed lungs (pulmonary hypoplasia) and lots of excess, retained fluid (anasarca). This is also a lethal defect and the calves are usually born dead. Calves may also be aborted early. The anasarca is a major problem. Calves can retain so much fluid that an 80 pound calf can weigh 200 pounds! PHA often causes dystocia and may require a C-section.

In PHA, like TH, the defective gene is recessive, meaning both parents appear normal (phenotype) but both parents carry the defective recessive gene (genotype). If you have a cow that has a PHA calf, you know both the sire and dam are carriers of the defective gene.

ABS Club Calf Sires known status as of 4/3/09

Stud Code	Bull	TH	PHA	
137SP2961	Ace of Diamonds	TH Free	PHA Free	Marketing
54XX779	Alias	TH Free	PHA Free	Marketing
140CM0002	Almost Famous	Carrier	PHA Free	Marketing
54XX983	Bailout	TH Free	PHA Free	Marketing
49CM1385	Bold Statement	TH Free	PHA Free	Marketing
75XX007	Carnac		PHA Free	Marketing
59MA171	Cowboy Cut	TH Free	Carrier	Marketing
54CA813	Direct Hit	Carrier	PHA Free	Marketing
137XX2459	Doctor Who	TH Free	PHA Free	Marketing
29AN1603	Edition	Clean by pedigree	Clean by pedigree	Marketing
41CM5056	Full Moon	TH Free	PHA Free	Marketing
36AN1197	Gator	Clean by pedigree	Clean by pedigree	Marketing
137MA2774	Gigolo Joe	TH Free	PHA Free	Marketing
54XX806	Golden Child	Carrier	PHA Free	Marketing
49CM1375	Hannibal	TH Free	PHA Free	Marketing
54MA651	Hard Core	TH Free	PHA Free	Marketing
254HP078-C+	Hard Drive	Clean by pedigree	Clean by pedigree	Marketing
109MA352	Jasper	TH Free	Carrier	Marketing
140SP0115	King Pin	TH Free	Unknown	Marketing
29SM0371	Macho	Clean by pedigree	Clean by pedigree	Marketing
137XX2765	Manchild	Carrier	PHA Free	Marketing
29SM0364	Muscleman	Clean by pedigree	Clean by pedigree	Marketing
54XX867	My Turn	Carrier	PHA Free	Marketing
179MA39	Paddy O'Malley	TH Free	Carrier	Marketing
49MA1310	Pale Face	TH Free	PHA Free	Marketing
137XX3048	Point Taken	Carrier	PHA Free	Marketing
137XX2900	Priceless	Carrier	PHA Free	Marketing
138HP3800	Purple Milsap	Clean by pedigree	Clean by pedigree	Marketing
49CM755	Q Dog	Carrier	PHA Free	Marketing
138SS3470	Radio Active	TH Free	Unknown	Marketing
179MA46	Rocky Balboa	TH Free	PHA Free	Marketing
54SP181	Salute	TH Free	PHA Free	Marketing
29SM0402	Sheriff Taylor	Clean by pedigree	Clean by pedigree	Marketing
49SP1270	Sin City	TH Free	PHA Free	Marketing
254MA5044	Smokin' Joe	TH Free	PHA Free	Marketing
54XX721	Sun Seeker	Carrier	PHA Free	Marketing
49XB745-C+	Supernatural	Carrier	PHA Free	Marketing
29CG0002	Tracken Norman	TH Free	PHA Free	Marketing
54MA738	Tyson	TH Free	PHA Free	Marketing
137XX3191	Wave Goodbye	TH Free	PHA Free	Marketing
54CM59	Who Made Who	TH Free	PHA Free	Marketing

Clean by pedigree = no Maine Anjou or Shorthorn