

PART 3: Genetic Defects and Factors

REPORT OF GENETIC DEFECTS IN ANGUS CATTLE

Mail Completed Form To:
AMERICAN ANGUS ASSOCIATION
3201 Frederick Ave.
St. Joseph, Missouri 64506

Rule 301 of the Association provides for members to report to the Association any abnormalities in Angus cattle. This form may be used in reporting such information. Every effort will be made, with the aid and counsel of qualified geneticists, to determine whether or not any reported defect is heritable. Genetic defects known to be present in Angus cattle are described on the reverse side of this form.*

Detailed description of affected animal _____

Sex _____ Date of Birth _____ Was calf a twin? _____ Is calf still living? _____

If dead, _____ Cause of death _____
give date of death _____ if determined _____

Name and address of attending veterinarian _____

Was Birth normal? _____ If not, describe in detail _____

Name of dam _____ No. _____

Has this dam had other abnormal calves? _____

Service record of dam for period when affected calf was conceived (Give complete record as shown and attach breeding receipts if available)

1st service - Date _____ Bull's name _____ No. _____

2nd service - Date _____ Bull's name _____ No. _____

3rd service - Date _____ Bull's name _____ No. _____

Name of herd owner _____ Address _____

I certify that this information is true and correct to the best of my knowledge and belief. The American Angus Association has my permission to use the above information as it may determine.

Signature of Owner Making Report

Fig. 2: Reporting form for genetic defects in Angus cattle

*See Fig. 1 on page 33 for an explanation of hereditary defects.

HEREDITARY DEFECTS

The Board of Directors has directed the Executive-Vice President to maintain a record of each animal concluded to be a carrier of one or more of these genetic defects described as follows:

DEFECTS OR FACTORS	SYMPTOMS OF ABNORMALITY	MODE OF INHERITANCE
1. Red	Skin and hair coat red color, easily recognized by color of nose and skin around eyes. Not to be confused with brown coat with dark skin.	Recessive
2. Dwarfism	Undersized, shortlegged, shortbodied animal, usually potbellied with noisy breathing. Several different types including a broad-headed, bulging fore-head kind and a long and mature headed kind. X-Ray of 2-3 week old dwarf shows abnormal lumbar vertebrae.	Most recessive: Some forms incomplete dominant
3. Osteopetrosis (marble bone disease)	Calves often with short lower jaw and impacted molars, born dead 10 to 30 days premature. Marrow cavity of long bones partially filled by two bony cones whose points almost meet in the center of the bone. Bones often easily broken.	Probably recessive
4. Double Muscled	Abnormally large, wide, rounded thighs with deep creases between the very prominent muscles with little fat covering. Fine bones.	Incomplete dominant Incomplete penetrant
5. Syndactyly (mulefoot)	Adhesion of toes; webbed toes	Simply Inherited Recessive
6. Heterochromia Irides (white-eye)	The hair of the entire body surface is brown (chocolate) instead of black, as is typical for Angus cattle. The muzzle, hooves (claws) scrotum in males, are also brown. The skin surface is brownish to grey. The most distinguishing factor involves iris color. Heterochromia irides calves have a light usually two-colored iris. This gives a double-ringed appearance to the iris when viewed closely: an outer, faintly brown ring and an inner, light blue ring circling the pupil. From a distance, the eyes appear white.	Recessive

Note: Hereditary abnormalities are present in all species. Although the frequency of genetic defects in Angus cattle are minimal, the Board of Directors feel it is important that members have a means of identifying and reporting such defects should they occur so as to maintain reasonable control within the breed.