

Phenotypic Standard of Australian Brahman Cattle

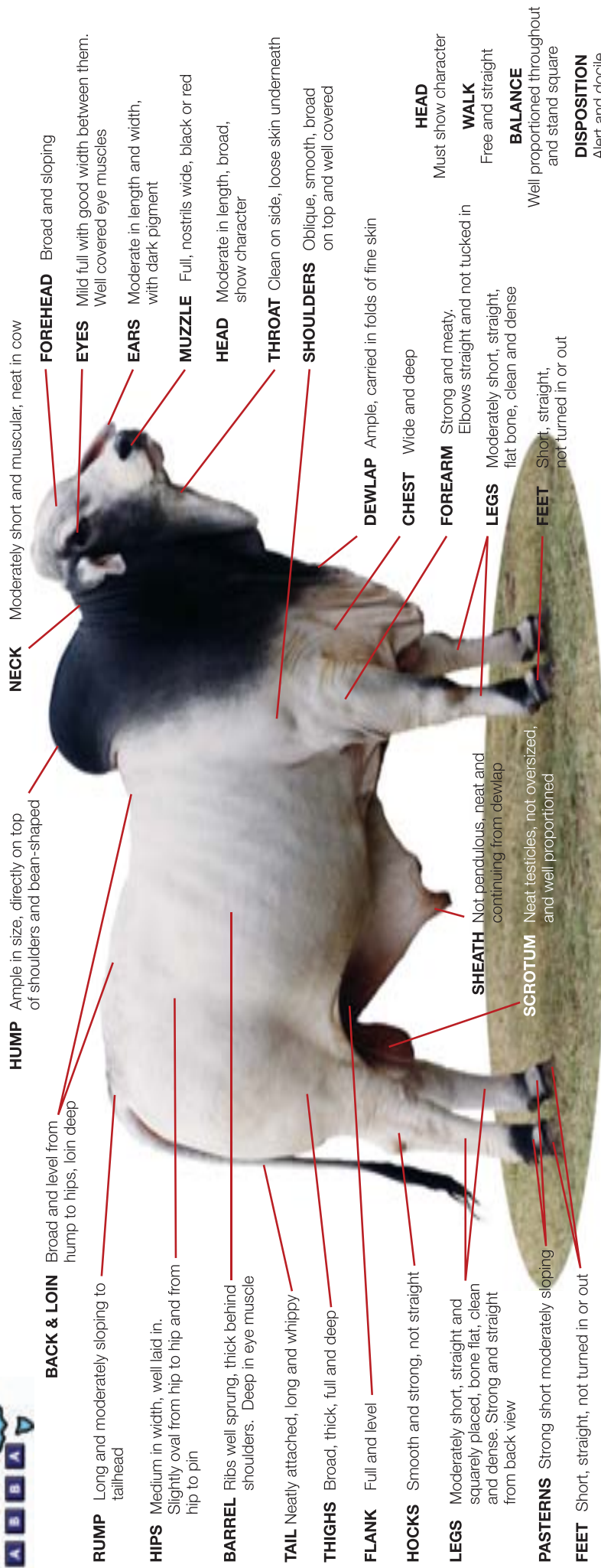


Compiled by the Australian Brahman Breeders' Association Ltd

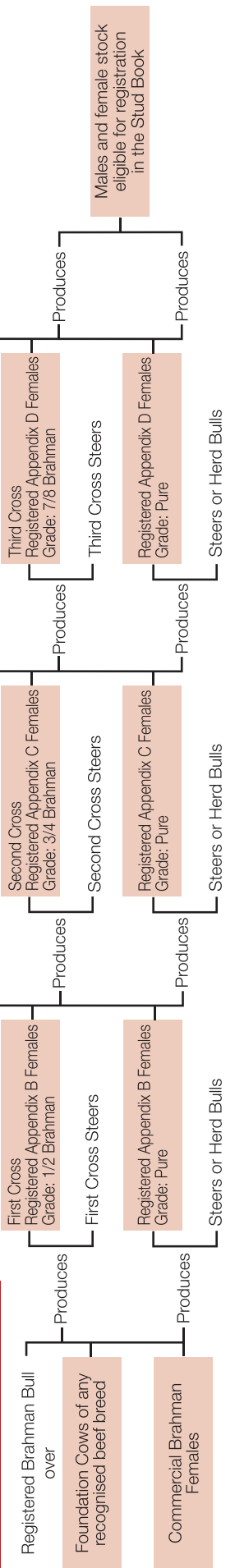
VERSION 06



Phenotypic Standard of Australian Brahman Cattle



Appendix Registration System



INTERPRETATION AND EVALUATION OF DEFECTS

Feet



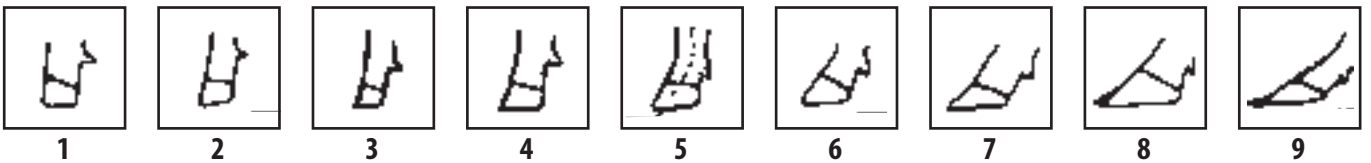
A score of 5 is ideal

Scores of 4 and 6 show some variation but are acceptable in any breeding programme.

Scores of 3 and 7 are not acceptable for stud breeding but may be considered for commercial breeding

Scores of 1,2, 8 and 9 are considered extreme and should be culled

Pastern



Reference: Strength of pastern, depth of heel and length of foot.

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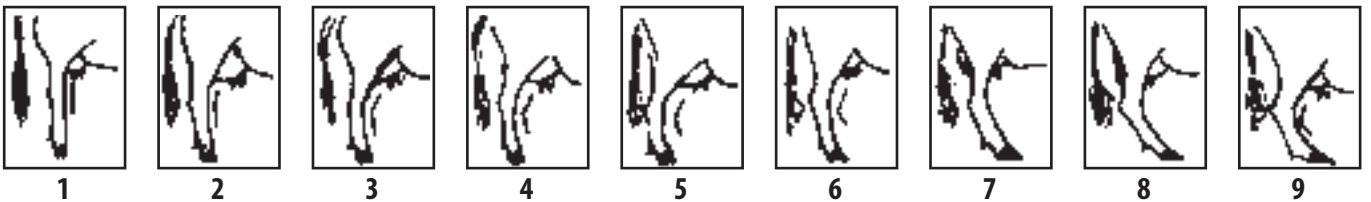
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Hind Legs

Hock Setting

Side View



Reference: Angle measured at the front of the hock

A score of 5 is ideal

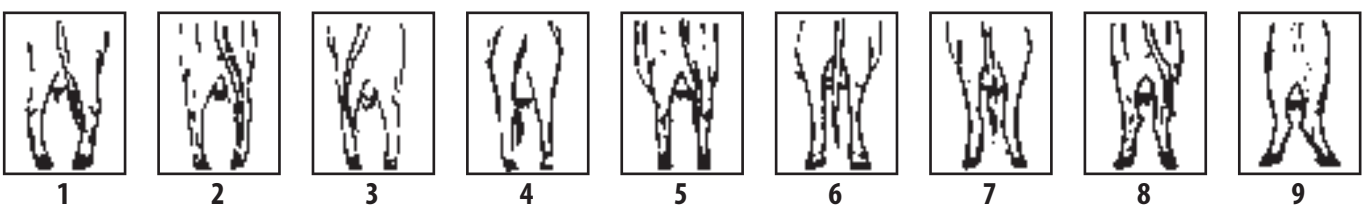
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Animals showing symptoms of Stringhalt should be culled.

Hind Leg Rear View



Reference: Direction of the feet when viewed from the rear.

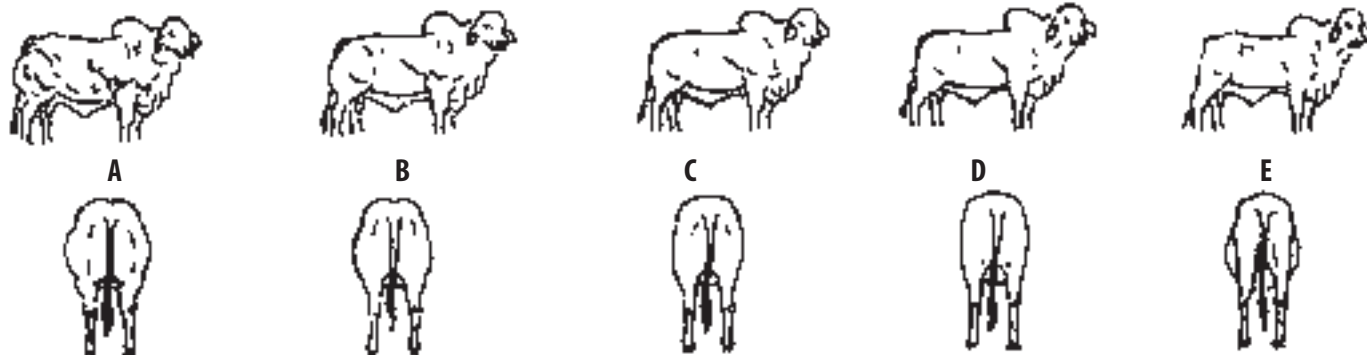
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Muscling



A+ = Double-muscled

A = Extremely heavy muscle
- pronounced creasing between muscles

B = Heavily muscled
- well rounded hindquarter

C = Average muscle
- hindquarter slightly rounded

D = Poor muscle
- narrow concave hindquarter

E = Extremely poor muscle
- angular

Animals with a muscle score A+ & E should not be considered for stud breeding. The amount of muscling should be considered in conjunction with other traits of importance.

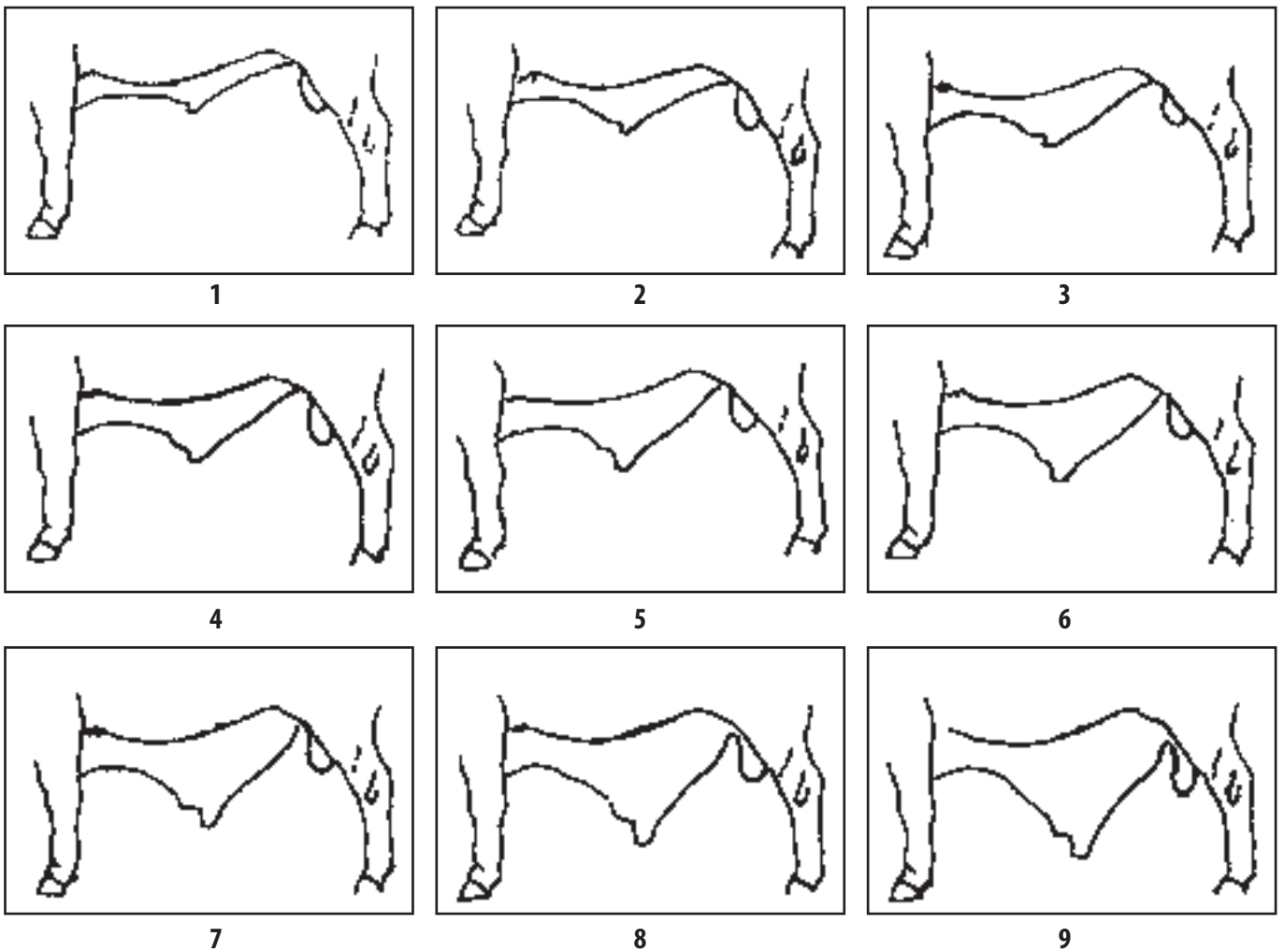
Sheath

Score	Description	Detailed description
1-3	Tight	Moderately tight sheath, fairly close to abdominal wall, depth up to 10cm with obvious retractor prepuce muscle, moderate sized preputial opening
4	Small	Sheath hangs at 45 angle, depth up to 15cm, moderate umbilicus
5-6	Moderate	Sheath hangs at 45 angle, slightly more pendulous than score 4, with depth less than 20cm, and larger umbilicus
7	Large	Sheath hangs at up to 90 angle, excessive looseness of umbilical area, with depth just above hock-knee horizontal line
8-9	Very large	Sheath hangs at up to 90 angle, excessive looseness and length of umbilicus, sheath depth at or below hock-knee horizontal line, often with eversion of the preputial mucosa

Sheath scores 1- 6 are acceptable for stud breeding

Sheath score 7 acceptable for commercial breeding

Sheath scores 8 - 9 should be culled

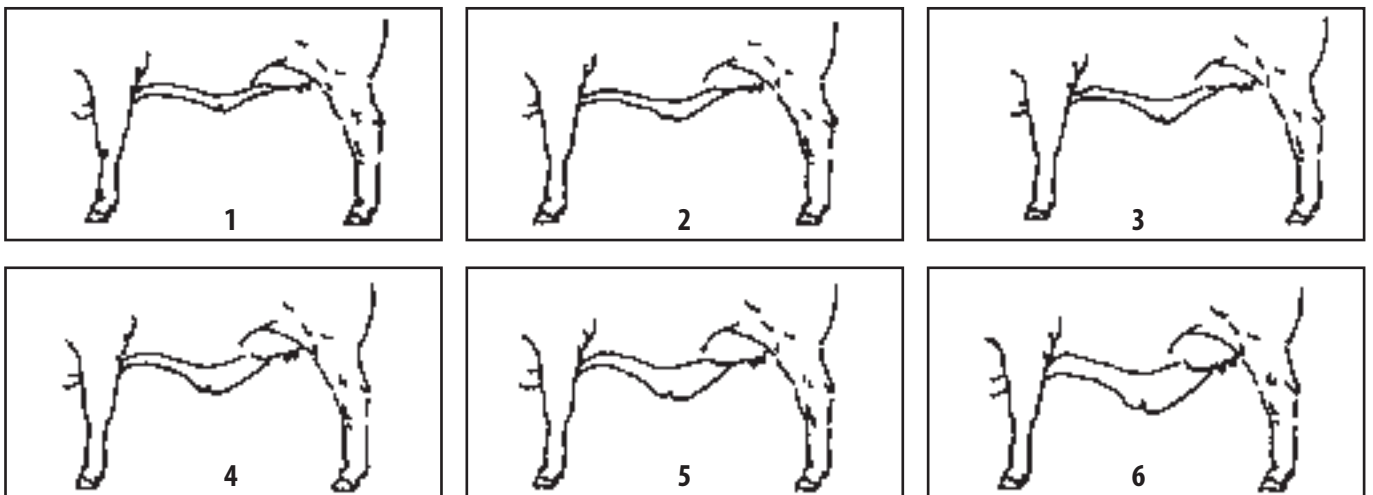


Sheath size for stud breeding should be above the line from the knee to the bottom of the hock joint.

Other considerations

- The sheath opening should not be excessively large
- The presence of a rosette in the navel region is a discrimination
- The sheath weight should be light and able to be controlled
- The prepuce should be under control and not protrude for excessive periods

Navel flap in Females



Navel flap in females is believed to be correlated with sheath size in bulls.

Scores 1 - 4 are acceptable for stud breeding

Scores 5 - 6 are acceptable for commercial breeding where male progeny are castrated

Udder Evenness



Reference: Even distribution of the fore and hindquarters of an udder viewed from both sides

A score of 5 is ideal

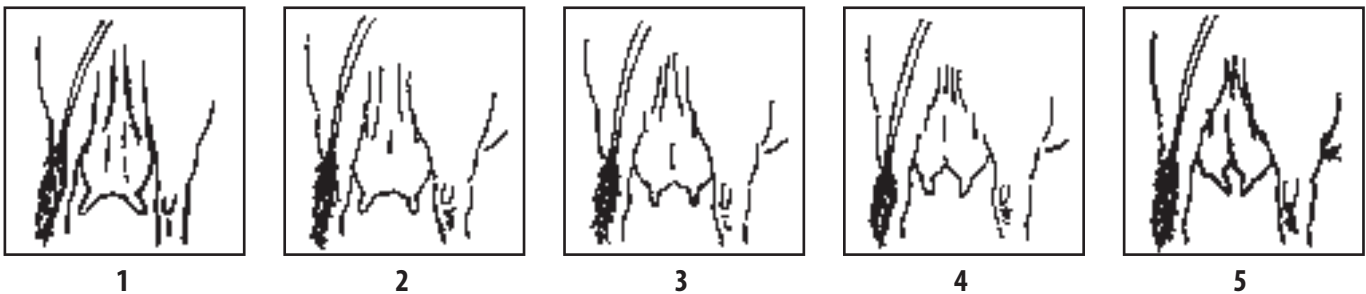
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Udder Attachment

1-5: 1 - low or weak attachment; 5 - strong or high attachment



Reference: Strength of the median and lateral suspensory ligaments or rear udder attachment firmness. The strength of the attachment of the fore udder to the abdominal wall is also considered.

A score of 3 is ideal

Scores of 2 and 4 are acceptable in any breeding programme

Scores of 1 and 5 are not acceptable for stud breeding but may be acceptable for commercial breeding.

Teats



Reference: Size and shape of four main teats for first calf heifers.

Scores 2-5 are acceptable in any breeding programme

Scores 6 and 7 are not acceptable for stud breeding but may be considered for commercial breeding

Scores 1, 8 and 9 should be culled

Discretion should be shown with respect to deterioration with successive calvings, however the objective is to have a female capable of rearing at least seven calves through a productive life of at least 10 years.

Front Legs



NORMAL



KNOCK KNEED

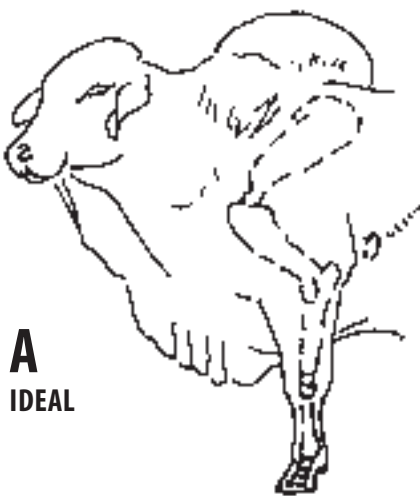


BOW LEGGED

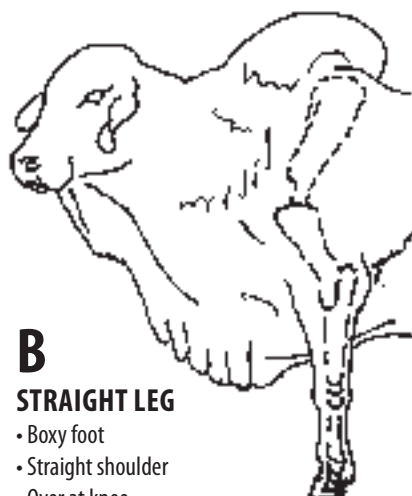
The front legs of the bull should be straight when viewed from in front. On a structurally sound animal, a vertical line may be drawn from the point of the shoulder to the middle of the claw. This line should intersect the knee. It is normal structure for front feet to be slightly turned out.

As the knee joints carry over half the bull's body weight, deviations from this line will cause excessive wearing of these joints.

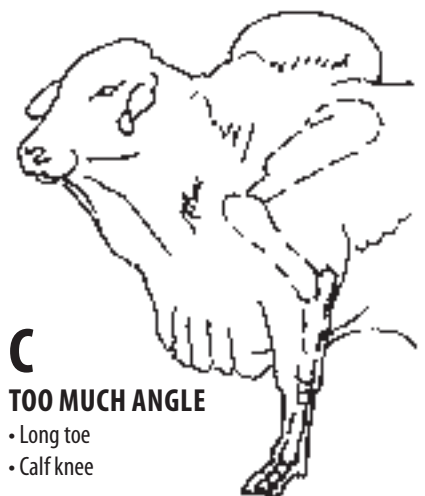
Shoulders



A
IDEAL

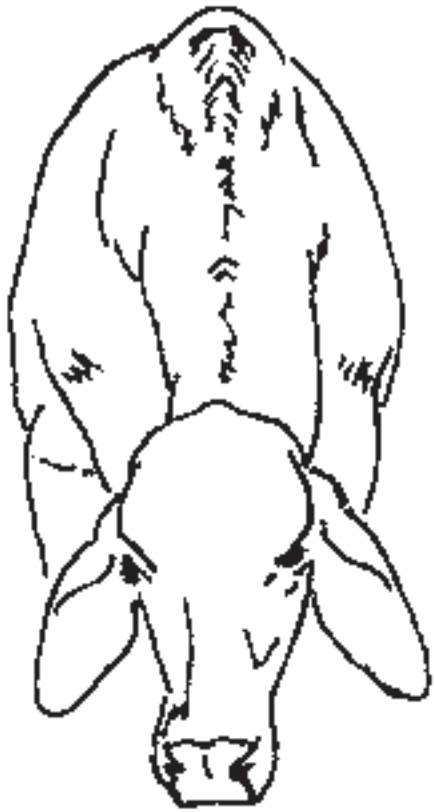


B
STRAIGHT LEG
• Boxy foot
• Straight shoulder
• Over at knee
• Head down

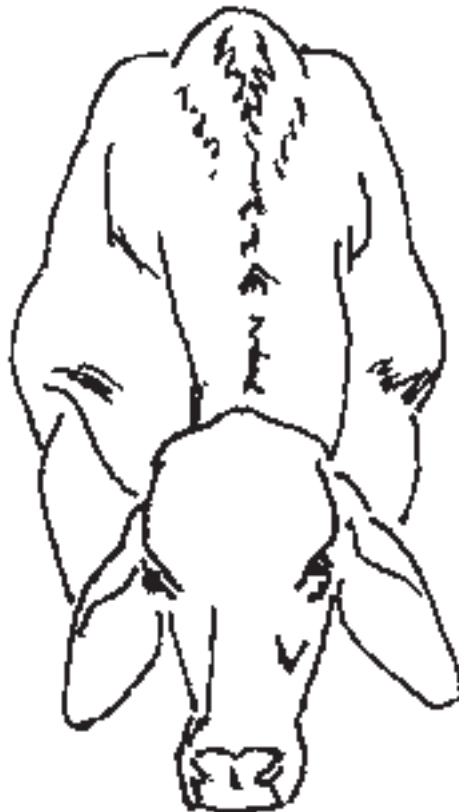


C
TOO MUCH ANGLE
• Long toe
• Calf knee

The shoulders are naturally sloping with a shape of 45-60% considered acceptable.



SMOOTH SHOULDERS

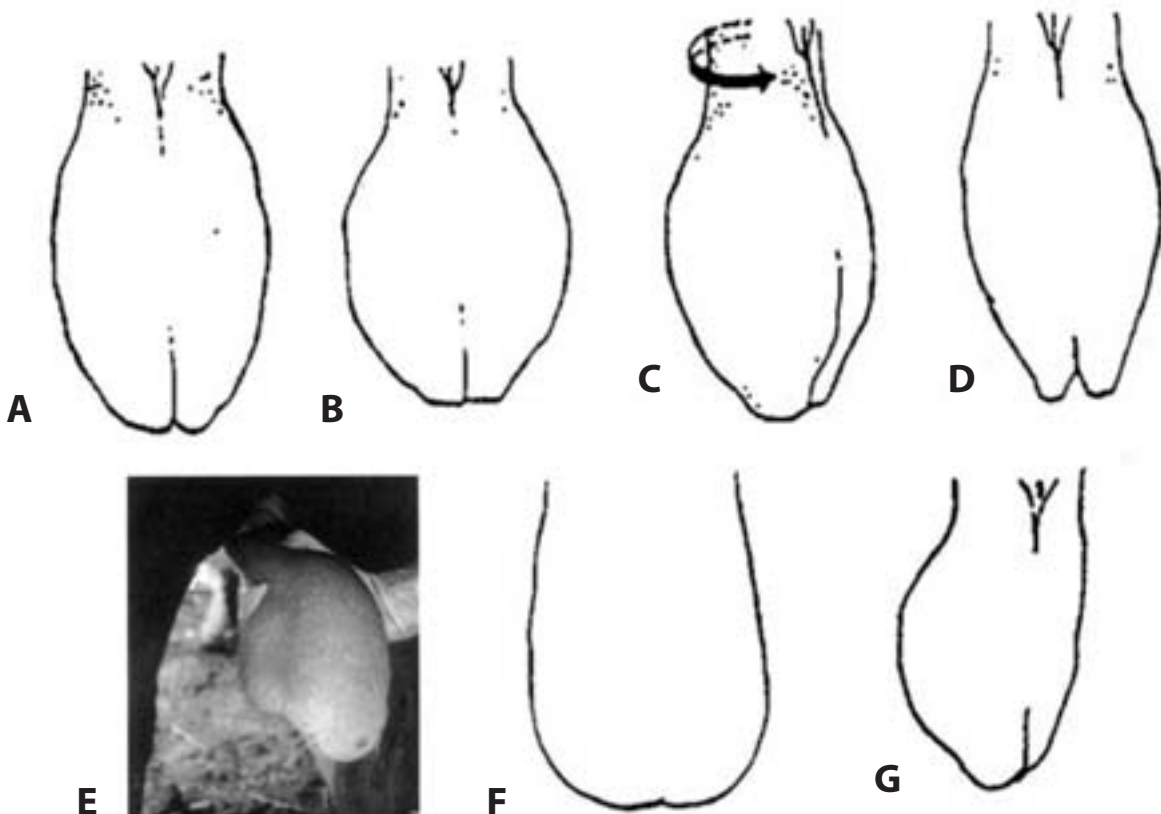


PROMINENT SHOULDERS

An animal with straight shoulders will have the shoulder blade tipped forward. The shoulder should be smooth against the rib cage.

Scrotum and testicles

The scrotum should allow the testicles to hang free from the body. A pendulous scrotum is susceptible to injury and should be avoided particularly in young bulls. There can be a natural distension of the scrotum with age due to relaxation of the Cremaster Muscles.



Examples of variations in scrotal conformation:

- A** normal (elongated)
- B** normal (rounded)
- C** lateral rotation
- D** distinctly cleaved scrotum
- E** unilateral hypoplasia
- F** scrotal hernia
- G** incomplete descent of one testicle

Testicles

Research has shown there is a positive correlation between scrotal development in young bulls and improved female reproduction.

Adequate scrotal size is also required for bulls to impregnate an acceptable number of females during a normal mating period.

Testicle size will vary according to age and weight of the animal.

The minimum requirements for scrotal circumference are:

Scrotal size (cm)	Max weight (kg) at which scrotal size is acceptable
28	425
29	450
30	475
31	525
32	575
33	625
34	725
35	950

Caution should be used with testicle sizes above 45cm.

Temperament

Temperament is a highly heritable trait and can be measured as “flight speed” and analysed in Breedplan. This is the amount of time an animal takes to pass between two measuring points after being released from a crush. The higher the reading, the slower the animal moves, the more docile is its temperament.

Commercial producers rate the importance of temperament highly and stud breeders need to do likewise.

The value of flight speed recording is that it will quantify sires that produce progeny with good temperament as well as those which produce progeny with poor temperament .

Culling animals with poor temperament will achieve genetic gain, but does not identify the animals with the best temperament.

Animals with poor temperament are not only dangerous, but have also been shown to have a negative impact on meat tenderness.

Abnormalities

Abnormalities occur periodically in any breeding programme. There can be a wide range of causes which are not always of a genetic origin.

However unless a disease agent can be identified, the cause should be considered of possible genetic origin and members should err on the side of caution and cull affected animals.

Examples include Hernia, Stringhalt, Twisted nose.

Genetic defects

As beef industry requirements and production environments become more defined with a selection focus on production and product quality end points, there is a trend among all breeds for genetic diversity to be reduced.

This increases the risk of recessive genetic diseases becoming more prevalent. Examples in the Brahman breed are Pompes disease and Congenital Myasthenic Syndrome.

Improvements in gene marker technology will make the identification and management of these diseases simpler.

Horned, Scurred & Polled animals are acceptable

Polled animals have a distinctive raised crown on the top of the head and no evidence of horn growth what so ever.

Scurred animals exhibit the distinctive raised crown of polled animals with some evidence of horn growth.

This can range from small button to an appendage which continues to grow.

A scur is usually loose and does not attach to the head, however on some occasions the scur will attach to the head as the animal matures.

In these instances the horn will remain short and not grow to normal length.

Attachment of a scur does not change the genetic status of the animal.

Scurred animals usually carry 1 copy of the polled gene, which makes the heterozygous for the trait.



POLLED



SCURRED



DEHORNED

Recording Polled/Scurred animals

The beef industry places value on the polled and scurred trait in animals and it is therefore important that the genetics of the trait are not misrepresented.

To be recorded as a poll, the animal must have no evidence of any scur (even a small button).

To be recorded as a scurred animal, the animal must display evidence of the characteristic raised crown and the horn growth should be loose.

In young calves it can at times be difficult to distinguish some animals as the horn buds in young animals are also loose.

It is strongly recommended that scurs not be removed. If they are removed, they should be tested with the polled gene test to confirm the true genetics.

Polled Gene Test

A polled gene test is available through the Association.

The test is a DNA based linked marker test. The result is reported as the likelihood of the animal carrying 2 copies of the polled gene, PP or homozygous for the trait.

The terminology PP can not be used to describe animals unless the test has been performed.

Acknowledgements

The Australian Brahman Breeders' Association acknowledges the use of content from The Beef Class Structural Assessment System and Australian Cattle Vets Evaluation and Reporting Bull Fertility in this document.

