

## **SOUTHERN AFRICAN BRAHMAN SHEATH/NAVEL SCORING METHOD**

***After various consultations within the Southern African Brahman Breed Improvement Forum and BREEDPLAN it was decided that the scoring method for Sheath/Navel is summarized as follows.***

**The scoring system will now be 1 – very undesirable and 9 – very clean underline, and the trait code will be SH for both male (sheath) and female (navel).**

Sheath/navel is scored between 80 and 300 days of age – the main reason being that the contemporary weaning group is shortly after weaning still intact. The recommended time of scoring is at weaning or shortly afterwards. The heritability of sheath is average and scoring this trait will eventually lead to EBVs for sheath and those promote more desirable sheaths in Brahmans. Studies have found a high correlation between navel score of females and sheath score of their progeny. Of fundamental importance is:

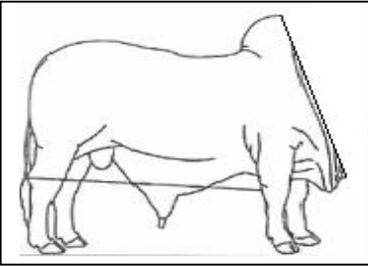
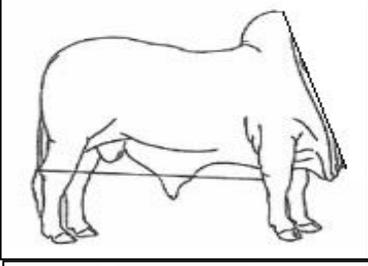
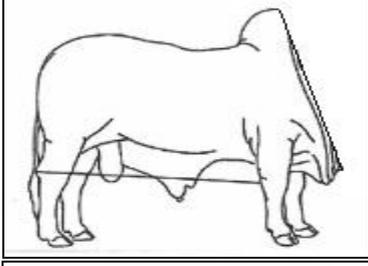
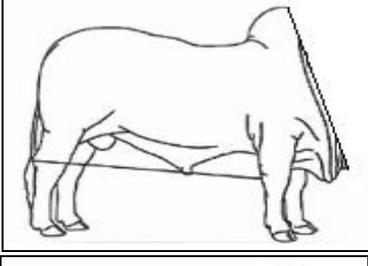
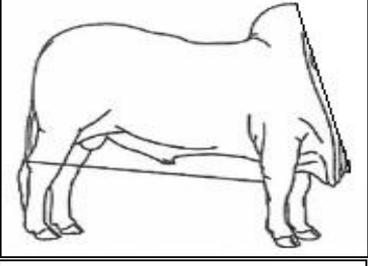
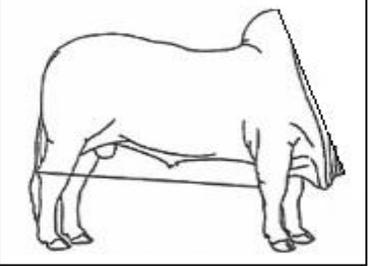
- The scoring should preferably be done shortly after weaning (not on the day of weaning with all the stress associated with it)
- The method of scoring should entail the minimum of handling and it must be similar for every animal. Ideally the score should be taken when the animal stands relaxed or moves quietly.
- All calves must be scored by the same person. Score them all or don't score at all.
- There needs to be some variation in the scores for them to be used effectively by the analysis. Scoring all animals in a group with a sheath or navel score of e.g. 6 will not identify any genetic difference.

Sheath/navel could be scored simultaneously with docility.

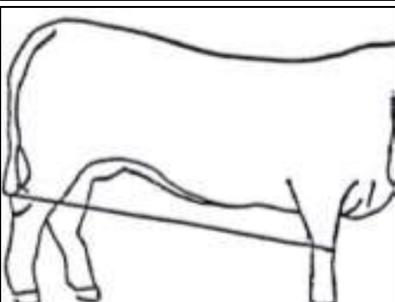
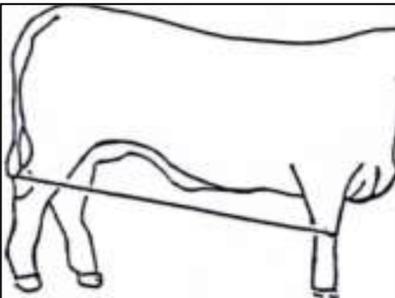
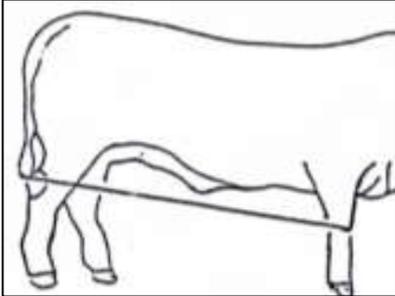
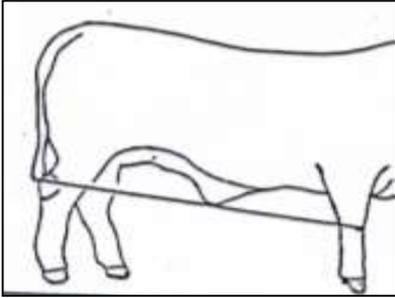
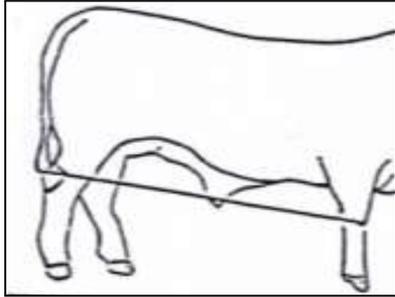
## SA BRAHMAN SHEATH AND NAVEL SCORING METHOD

Scores are from 1 (with a large, pendulous sheath that opens at 90 degrees angle to the body) to 9 (with a very clean underline, possibly much too clean for a Zebu) as shown below.

### Sheath

	<p>Score 1 – The preputial spout appears pendulous, projects ventrally, far below the knee. Eversion of the Lamina interna pars parietalis (prolapse) visible.</p>
	<p>Score 2 - A large portion of the preputium lies beneath the 'hock-to-knee' line. The preputium is pendulous and has heavy untidy appearance. Eversion of the Lamina interna pars parietalis is the rule, rather than the exception.</p>
	<p>Score 3 - The cranial preputium lies beneath the 'hock-to-knee' line. The pre-preputial skin appears over-developed and heavy. The preputial spout (sheath opening) projects ventrally.</p>
	<p>Score 4 – The preputial spout lies beneath the 'hock-to-knee' line. The preputial spout is long, appears flabby or atonic. The sheath opening (preputium) is large, not tightly shut. The pre-preputial skin is mostly overdeveloped, hangs like a curtain in front of the preputium.</p>
	<p>Score 5 – The preputial spout lies on the 'hock-to-knee' line, or is bisecting it. The pre-preputial skin is more developed. The preputium is more pendulous, loose folds of skin visible, it still appears light in weight.</p>
	<p>Score 6 – The preputial spout lies just above the 'hock-to-knee' line. The pre-preputial skin is minimally developed. The preputium is slightly pendulous, loose folds of skin visible, projects cranio-ventrally.</p>
	<p>Score 7 - The entire Preputium is above the 'hock-'line. The preputium is slightly pendulous but no loose folds are visible. The sheath opening (spout), tightly closed, projects cranio-ventrally.</p>
	<p>Score 8 - A small and firm preputial spout (sheath opening), tightly closed. There is a minimal amount of pre-preputial skin.</p>
	<p>Score 9 – Extremely clean, no sign of excessive skin, opening very small and tight.</p>

# Navel



Score 1 – Excessive skin, pendulous (Y shaped). Long, umbilicus, flabby umbilical skin, stretching from the back right through to the front legs.

Score 2 – Moderate skin development, but not in front of the udder. Prominent Y-shaped navel. Unacceptable form of umbilical skin.

Score 3

Score 4 - Less skin, no sign of pendulous navel development.

**Score 5 – Moderate skin development, with a good angle to the body.**

Score 6 – Average navel form, moderate navel development, no skin in front of udder.

Score 7 – Little skin, no sign of skin development in front of the udder.

Score 8

Score 9 – Excessively clean, no skin development.