



# technical brief

## **“Scrotal Size – An Important Fertility EBV”**

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The scrotal circumference of a bull provides important information about his genetic merit for a number of commercially important fertility traits.

Whilst increased scrotal size is usually recognized as an indicator of male fertility, for example - earlier age at puberty of male progeny, increased semen production and improved semen quality; the trait is also genetically associated with female fertility traits as well, for example - earlier age at puberty of daughters, earlier return to oestrus and shorter number of days to calving.

Scrotal Size (SS) EBVs provide an estimate of the genetic differences between animals in scrotal circumference at 400 days of age, and are expressed in centimetres (cm). They are an important component of Shorthorn selection indexes.

Larger, more positive EBVs are generally more favourable. For example; a bull with a SS EBV of +4cm would be expected to produce sons with larger testicles at yearling age and daughters that reach puberty earlier than the progeny of a bull with a SS EBV of -2cm.

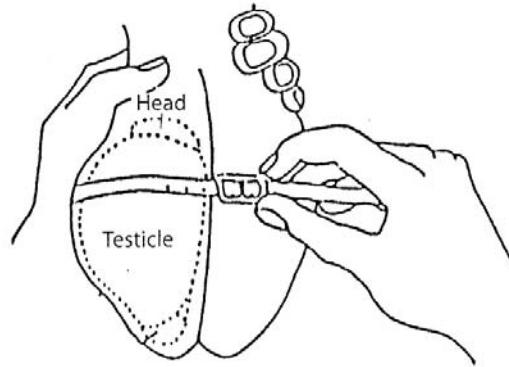
Scrotal Size EBVs are calculated from scrotal circumference information recorded for bull calves between 300 and 700 days of age.

### **Measuring Scrotal Circumference.**

The bull should be securely restrained in a crush, with a rail behind the hind legs to prevent him kicking backwards. The measurement is then taken standing behind the bull.

Scrotal measurement are made by holding the neck of the scrotum with one hand, gently forcing the testicles into the bottom of the scrotum, then placing a measuring tape around the widest point of the scrotum – see diagram

Measurements should be recorded in centimetres (cm) to one decimal place



### **Considerations for scrotal measurement.**

- \* measuring techniques can vary between operators – use a consistent technique and use the same operator to measure all the bulls measured on the same day.
- \* if you are unsure how to carry out this procedure safely, ask an experienced cattleman or your vet to demonstrate the correct and safe procedure. Do not attempt to measure scrotal circumference through rails from the side of the crush or race - it is dangerous and can result in hand or arm injury.
- \* measure all the bull calves in the drop. Measuring a selected few will result in biased EBVs and deprive you of important whole-herd information.
- \* whilst measurements can be taken between 300 and 700 days, the best time to measure bulls is around 400 days of age when they are reaching puberty. The measurement can be taken at the same time as the 400 day weight.
- \* when measuring scrotal circumference, the testicles should be palpated at the same time – they should be firm and springy. If the testicles are soft, veterinary advice should be sought as the bull may have impaired semen producing ability.
- \* Scrotal size information should be submitted directly to Breedplan, at ABRI. The information can be submitted in association with weight performance on Breedplan “performance recording forms” which are automatically sent to you by Breedplan , or can be requested by contacting Breedplan.

Alternatively, scrotal size information can be submitted electronically using a Breedplan compatible recording computer program, or a Breedplan compatible Microsoft EXCEL template.