

Understanding Scrotal Size EBVs

The scrotal circumference of a bull provides an important indication of his genetic merit for several important fertility traits. Increased scrotal circumference is associated with earlier age at puberty, increased semen production and improved semen quality. Increased scrotal circumference also has a favourable relationship with female fertility, both in terms of earlier age at puberty, earlier return to oestrous and shorter days to calving.

Interpreting Scrotal Size EBVs

Scrotal Size EBVs provide an estimate of the genetic differences between animals in scrotal circumference at 400 days of age. Scrotal Size EBVs are expressed in centimetres (cm).

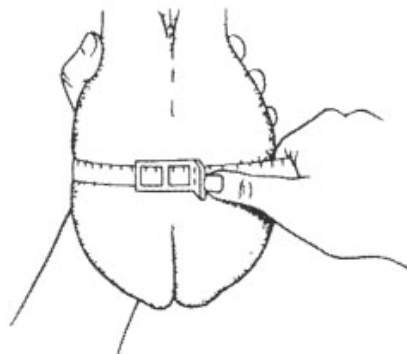
Larger, more positive, Scrotal Size EBVs are generally more favourable. For example, a bull with a Scrotal Size EBV of +4 cm would be expected to produce sons with larger testicles at yearling age and daughters that reach puberty earlier than the progeny of a bull with a Scrotal Size EBV of -4 cm.

Recording Information for Scrotal Size

Scrotal Size EBVs are calculated from the scrotal circumference information that is recorded for bull calves.

When recording scrotal circumference information, it is important to consider the following points:

- ❑ Scrotal circumference measurements should be recorded by pulling the testes firmly down into the lower part of the scrotum and placing a measuring tape around the widest point (as per diagram). Scrotal circumference measurements can be taken by anyone. They do not need to be taken by an accredited technician.



- ❑ BREEDPLAN can analyse scrotal circumference information from bulls that are between 300 – 700 days of age when measured. Subsequently, it is essential that scrotal circumference information is recorded when bulls are within this age range.

- ❑ It is recommended that you measure scrotal circumference when the bulls are reaching puberty, which will vary according to seasonal conditions and the maturity pattern of your cattle. In the majority of cases, scrotal circumference should be recorded when bulls are being weighed at 400 days.
- ❑ While more than one scrotal circumference measurement can be recorded for an individual animal, BREEDPLAN is only analysing the first measurement for each bull at this stage. Subsequently, it is only necessary to record one scrotal circumference measurement on each bull.
- ❑ Measurements should be recorded in centimetres (to one decimal place).
- ❑ While measuring techniques vary slightly, it is important to use a consistent technique for a whole group of cattle. The tension applied to the measuring tape should be just sufficient to cause a slight indentation in the skin of the scrotum. Avoid placing the thumb of the hand holding the neck of the scrotum between the cords. This will cause separation of the testes and an inaccurate measurement.
- ❑ A variety of scrotal circumference measuring devices are commercially available from agricultural supply stores or organisations such as the Australian Cattle Veterinarians. At the time of writing, the Australian Limousin Breeders Society were also offering a measuring tape for sale. Metal scrotal measuring tapes are more reliable than cloth tapes as they are not prone to stretching.

Scrotal circumference information should be submitted directly to the BREEDPLAN office at ABRI.

The main method of submitting scrotal circumference information is in association with weight performance on BREEDPLAN “performance recording forms”. Performance recording forms will be sent to you automatically or can be requested by contacting staff at BREEDPLAN.

Alternatively, scrotal circumference information can be submitted electronically via either:

- ❑ a BREEDPLAN compatible herd recording computer program
- ❑ the performance submission facility offered on some Breed Society/Association websites
- ❑ the BREEDPLAN compatible Microsoft Excel template

For more information regarding Scrotal Size EBVs, please contact staff at BREEDPLAN.