

## Recording Muscle Scores

### 1. Why should Muscle Scores be recorded?

More heavily muscled cattle have higher dressing percentages and higher retail beef yields, both of which are drivers of profitability. It is therefore desirable to select for increased muscling.

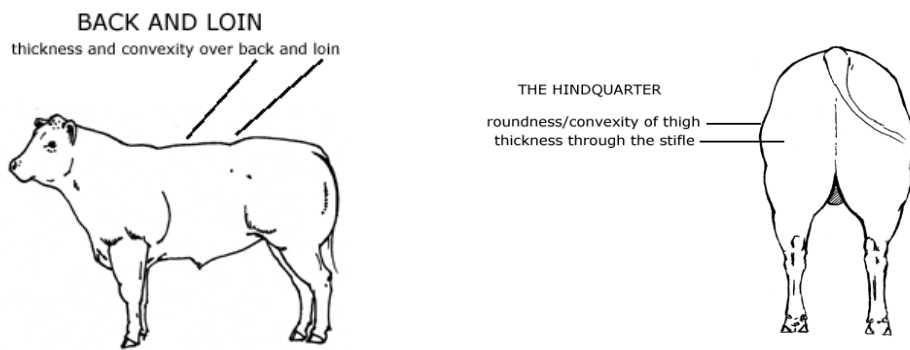
### 2. How do I record Muscle Scores?

The recommended time of scoring is when the animals are in good condition and aged around 400 – 600 days.

The best places to assess muscling are those least affected by fat, including:

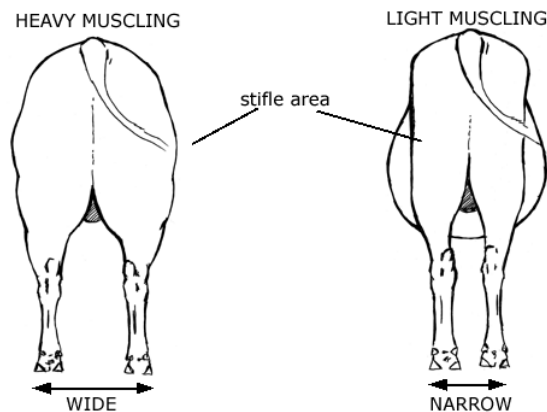
- the thickness and roundness of the hindquarter;
- the thickness of the stifle and width in the twist and
- the width across the back and loin.

*Figure 1. Areas of reference for assessing muscling.*



When assessing muscle score it is important to distinguish between fatness and muscling. Muscle bulges and is round, whereas fat wobbles, and tends to a smooth shape.

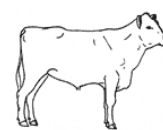
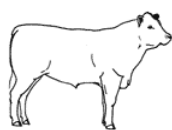
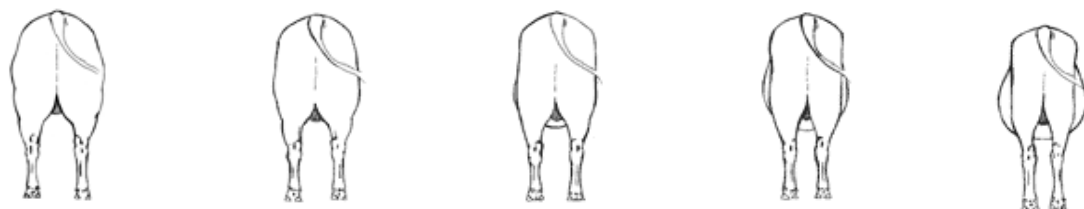
Muscle scoring is based on the shape of the animal, particularly when viewed from behind. Animals with a high degree of muscling are thicker through the stifle area than they are over the top. A fat, less muscular animal is widest over the top and appears flat through the stifle area (Figure 2).



*Figure 2. Observing cattle from behind.*

There are 5 basic muscle scores: A, B, C, D and E (Figure 3), and the muscle scoring system is extended to a 15 point system by introducing a plus and minus for each score. Eg: B+, B and B-.

Figure 3. Five basic muscle scores.



**A. Very Heavy Muscling**

- Extremely thick through stifle area
- Muscle seams or grooves between muscles are evident.
- ‘Apple bummed’ - when viewed from the side, hindquarters bulge like an apple.

**B. Heavy Muscling**

- Thick stifle
- Rounded thigh viewed from behind
- Some convexity in hindquarter from side view
- Flat & wide over top line – muscle is at the same height as backbone

**C. Medium Muscling**

- Flat down thigh when viewed from behind
- Flat, tending to angular over top line

**D. Moderate Muscling**

- Narrow stance
- Flat to convex down the thigh
- Thin through stifle

**E. Light Muscling**

- Dairy type – very angular
- Sharp “tent topped” over top line
- Virtually no thickness through stifle at all
- Stands with feet together; concave thigh

**3. What considerations should be made when recording Muscle Scores?**

- There needs to be some variation in the scores for them to be used effectively by the BREEDPLAN analysis. That is, scoring all animals in a group with a muscle score of [B] will not identify any genetic differences in muscularity.
- It is important to record management groups if the animals have been managed differently prior to muscle scoring.
- When recording muscle scores, it is important that both a consistent scoring method is used and that the same person scores all animals that are being assessed in the herd on that particular day.

**4. How do I submit Muscle Scores?**

While muscle scores are not currently being used in the calculation of EBVs, the scores will be stored on the database for use in the possible development of EBVs for muscularity. Muscle scores should be submitted directly to the BREEDPLAN office at ABRI.

For more information regarding how to record muscle scores please contact staff at BREEDPLAN.

