



Selecting Angus Bulls for Structural Soundness

Bull selection is an important investment decision for your business.

It is your best opportunity to make genetic progress in your herd & will shape its profitability for many years to come, especially if you're breeding your own replacement heifers.

With the Spring Angus Bull Selling Season soon to launch, we'd like to share some thoughts & perspective on Selecting Angus Bulls for Structural Soundness.

Importantly, when selecting for any production trait, be aware there is a distinction between phenotype & genotype; both are important in bull selection, but they are not the same nor interchangeable!

It is well recognised feet & structural issues filter through the beef supply chain, negatively affecting productivity & profitability all along it. Whatever claims that may be made about the feet & structure of a sale draft of Angus Bulls, we urge buyers to look for independent, objective information about these traits in a Bull Sale Catalogue to support & validate those claims.

What do we mean by "independent, objective information about these traits"?

Firstly, we mean "independent, objective information" describing the feet & structural soundness of that Angus Bull himself; his own feet & structure, not those of his progeny. That is, *phenotype*.

A bull needs to cover a lot of ground during joining if he is to do his job properly. Though he may offer superior genetics for carcase, growth, calving ease, fertility traits etc, his feet & structure are fundamental to him getting progeny on the ground for you to realise the most PROFIT from those superior genetics.

A bull's ability to serve & get his fair share of females in calf will be compromised by feet & structural issues. Being sound of feet & structure helps him avoid injury & maintain adequate body condition during the joining period, both of which can impact on his fertility. It enables him to better cope with & 'recover' from the rigours of joining, setting him up for subsequent joining seasons & greater longevity in his working life.

We use & recommend the Beef Class Structural Assessment System to objectively describe the feet & structure of an Angus bull, ie to objectively describe his *phenotype* for these traits.

This Assessment is conducted by an independent, professional assessor, accredited with Angus Australia, according to a published set of guidelines. Buyers can be confident the Assessment is unbiased & is more than just the personal opinion of the seedstock vendor. The Assessment details 9 scores:-

- Front & Rear Claw Set: scoring the shape of the inside edge of each claw as well as the space or separation between them.
- Front & Rear Foot Angle: scoring for the angle of the pastern joint, indicated by the depth of heel & angle of the front of the claws.
- Rear Leg Hind View: a reference to the direction of the feet when viewed from the rear; whether feet angle away from the body; 'cow hocked', or angle into the body; 'bow legged'.
- Rear Leg Side View: angle measured at the front of the hock ranging from extremely straight or post-legged, to sickle hocked.
- The above six Scores use a 1 – 9 scoring system, where a score of 5 is the ideal.
- Muscle Score: on scale of A+ to E; A+ is double muscled, down to E being very poorly muscled.
- Temperament: scored on a scale of 1 to 5 where a score of 1 is the ideal.
- Sheath: scored on a scale of 1 to 5 where a score of 5 is the ideal.
- [CLICK HERE](#) for a pictorial illustration of scores which may also be useful.

Of course, we recognise buyers are well equipped to assess a sale draft of Angus bulls for these traits themselves. In providing Beef Class Structural Assessment System raw scores, our aim is to offer an additional tool to assist buyers in objectively comparing & ranking bulls for these traits with greater confidence.

Secondly, we mean "independent, objective information" describing the genetic merit of an Angus Bull for feet & structural soundness. That is, *genotype*.

Beef Class Structural Assessment System raw scores describe the feet & structure of the bull himself, not his progeny. They do not mean he will similarly pass these traits onto his progeny, nor infer his genetic merit for them. Be mindful of this important distinction!

To make reliable selection decisions for the genetic merit of an Angus Bull for feet & structure, we urge buyers to refer to the TACE* EBV's. TACE currently publish 3 x EBV's describing *genotype* for structure in Angus cattle, ie the 'potential' to pass these traits onto progeny:-

1. **CLAW SET (Claw):** Genetic differences in claw set structure. Lower EBV's indicate a bull is expected to produce progeny with more even claws & less curl.
2. **FOOT ANGLE (Ang):** genetic differences in foot angle. Lower EBVs indicate a bull is expected to produce progeny who exhibit a straighter pastern joint with more heel depth.
3. **LEG ANGLE (Leg):** genetic differences in rear leg structure when viewed from the side. Lower EBVs indicate a bull is expected to produce progeny with less angle through the hock joint.

Claw Set, Foot Angle & Leg Angle EBV's take into account not only the Beef Class Structural Assessment System raw scores of that Angus Bull himself, but also, to a lesser extent, those for all his TACE recorded relatives. Thus, a huge number of raw scores have contributed to calculating structural EBV's for that Angus Bull. This is why they are a better indicator of his genetic merit for these traits, over & above his own Beef Class Structural Assessment System raw scores alone.

Unequivocally, Claw Set, Foot Angle & Leg Angle EBV's will help you more accurately & reliably identify Angus Bulls more likely to breed progeny sound of feet & structure. Or put differently, they will help you identify Angus Bulls more likely to breed progeny to improve your PROFIT!

Thirdly & finally, to give buyers the 'full story' about the *phenotype* & *genotype* of an Angus Bull for structural soundness, the complete 9 x Beef Class Structural Assessment System raw scores *plus* all 3 x structural EBV's should appear in the Lot Details for each Angus Bull in a Bull Sale Catalogue. Their inclusion signals & demonstrates that seedstock vendor is genuinely committed to helping buyers make informed decisions about structural traits. Their omission hmmm?

Please [CLICK HERE](#) to view our Bull Sale Catalogue. It includes all 9 x Beef Class Structural Assessment System raw scores + all 3 x structural EBVs for every bull in our Bull Sale Team. We hope this information will assist you in making more informed, reliable, & accurate breeding & bull selection decisions - the kind that help drive PROFIT in your herd.

*TransTasman Angus Cattle Evaluation (TACE) - the genetic evaluation program adopted by Angus Australia for Angus & Angus influenced beef cattle. It includes pedigree, performance & genomic information from the Angus Australia & Angus New Zealand databases, along with selected information from the American & Canadian Angus Associations in the case of structural EBV's.