AUSTRALIAN PINZGAUER

BREEDERS ASSOCIATION

LIMITED

STANDARDS OF EXCELLENCE

STANDARDS OF EXCELLENCE FOR PINZGAUER CATTLE

General Appearance

Pinzgauers should have unified body structures, a deep and wide but not too wide chest firm shoulders and good depth and length of flank. There should be a long, wide pelvis with well-muscled hindquarters and good development of the valuable beef cuts. The upper line should be firm but not stiff.

Colour and Marking

The basic colours permissible, are Red and White or Black and White. In the red colour the deeper reddish pigments are preferable, lighter and darker red variations may occur.

In both Red and White or Black and White animals, the entire area of the non-pigmented part should be predominantly the Pinzgauers typical white markings, beginning on the withers and extending over the back, the spine, tail and belly, as well as appearing on the front and back legs. The white should not be dominant and especially behind the shoulders, the red or black colour should not be interrupted. Hooves should be dark. White coloured legs and hooves are not permitted.

Skin

An elastic, but not too thin skin is desirable. Dewlaps should not be too large.

Hair Covering

In summer, the hair should be short, sleek and shiny, Curly and very coarse hair is undesirable.

Head

Should be of medium size, not longish or dished and the muzzle should be wide and straight. Undershot or overshot jaw is not permitted.

Eyes should not protrude and. the eyebrow should be prominent and should hood the eye. Ears should be oval, not round.

Shoulders

Shoulder should be long and sloping, with shoulder blades smooth against the body, not be too broad, flat on top, well covered and filled behind the shoulder. The points should not be prominent especially in Bulls.

Legs

The legs should be robust (not coarse) and dry (flexible), Feet should be large and deep at the heel and the hooves dark, hard and closed. The ability to stand correctly and walk freely with an adequately angled (not spongy) hock (the tibia should enter the hock at an angle of 130-145 degrees) is also part of these requirements.

Loins

Loins should be broad thick and well covered with flesh

Ribs

Ribs should be well sprung, deep and well covered with flesh

Hindquarter

The rump should be slightly rounded and well developed with good length hip to pin. Rump is to be full and extend well down to hocks. Thighs and round should be thick.

Deep twist, high tail-heads and short length hip to pin are objectionable.

Flanks

Flanks should be full and deep

Genital Organs in Bulls

Testes should be well developed, of equal size and hang evenly. The sheath should be evenly attached and not pendulous.

One high or non-descended Testicle, poorly attached or pendulous Sheath or protruding Penis is objectionable.

Udder

The udder should be glandular, firmly suspended, equally quartered and should have a good capacity. It should amply reach to the front and to the back, but not hinder movement. The teats should be equally spread out and properly sized in order to ensure that the calf can be fed without any problems, particularly during the first few days after birth.

Poorly attached, pendulous or unevenly developed udders are undesirable. Overly large teats are undesirable.

Temperament

Cattle should be docile but alert. Nervous or agitated cattle are not desirable.

REASONS FOR EXCLUSION FROM THE HERD BOOK

Exterior faults

- Extreme sway-back
- Extreme hump-back
- Steep Legs
- Weak fetlocks
- Poor musculature
- Poor bone development
- No pigment on eye rims

Colouring

Purebred animals displaying the following colour faults can only be registered as an F3.

- White legs or white leg marking down hock and reaching the hoof.
- White Hoof
- Base colour not as per Standards of Excellence
- Black muzzle and nose.

Dental deficiencies

- Undershot jaw
- Overshot jaw
- Twisted Muzzle

Defects of the reproductive organs

SERIOUS FAULTS

- Out of Condition
- Coarseness
- Wedge head
- Any deviation from the standard on all colouration
- Narrow mouth
- Mongolian eyes
- Narrow Chest
- Narrow rib-cage
- Barrel rib-cage
- Loose shoulders
- Loaded shoulders
- Coarse shoulders
- Steep shoulders
- Elbow turned inwards
- Elbow turned outwards
- Receding back
- Back high in rear
- Too sloping in pelvis
- Too narrow pin-bone
- Too narrow hook-bone
- Barrel legs
- Excessively dull hair
- High set tail

Structural Assessment of Pinzgauer Cattle

The purpose of a structural assessment system is to help breeders to identify problems in their cattle and give them the information to be able to eliminate faults and improve the quality of their herd and the breed in general. It also allows potential buyers of either live animals or semen, greater confidence in the soundness of animals that they may be considering purchasing.

When the structural assessment system has been applied to a number of generations, it provides information that allows breeders to select the right animal to use in breeding programs to strengthen certain aspects. The structural assessment can confirm soundness in the required aspects over a number of generations giving breeders confidence in the genetics.

How to use the Beef Class Structural Assessment System

The Beef Class Structural Assessment System uses a 1-9 scoring system for feet and leg structure:

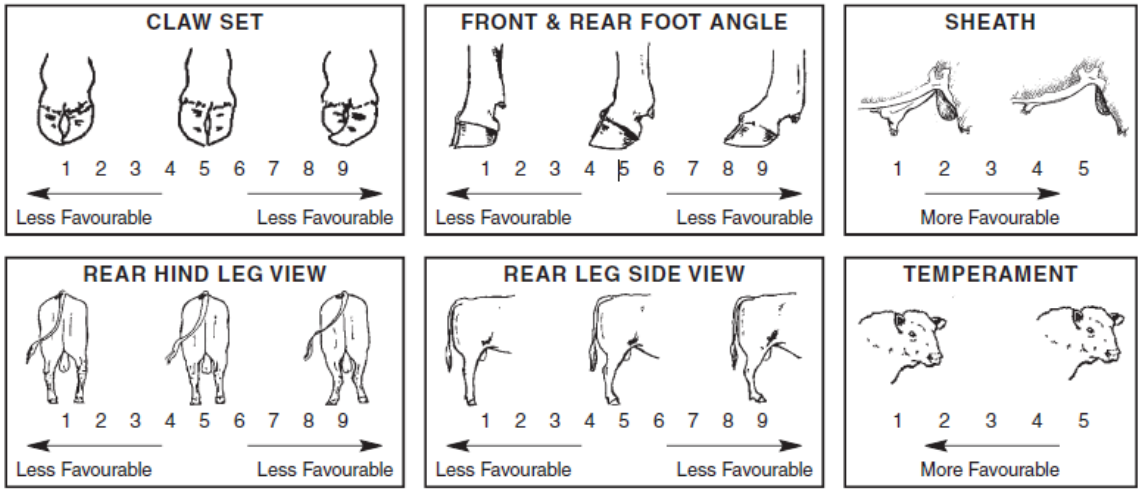
Excellent – A score of 5 is ideal. (Note: Temperament Score of 1 is preferable).

Very Good – A score of 4 or 6 shows slight variation from ideal, but this includes most animals. An animal scoring 4 or 6 would be acceptable in any breeding program.

Good – A score of 3 or 7 shows greater variation but would be acceptable in most commercial programs. However, breeders should be vigilant and understand that this score indicates greater variation from ideal.

Poor – A score of 2 or 8 are low scoring animals and careful consideration should be given to how these animals are used.

Very Poor – A score of 1 or 9 should not be registered and are considered culls.



In addition, Pinzgauer cattle should have a Muscle Score B.

This is as described in the NSW Department of Primary Industries Primefacts No 328, full copy attached as Appendix A.

Assessment of Cattle

There should be a progressive movement towards all Pinzgauer cattle being assessed but this will need to be implemented over a period of time.

Initially, Bulls, from whom semen is collected for sale, will need to be assessed together with progeny from that Bull prior to approval being given by the Society to the sale of semen. Such Bulls should be classified as Excellent or Very Good in all assessable criteria. Details of such assessments must be available and given to prospective buyers if requested.

It is also recommended that any Pinzgauer offered for sale should be accompanied by a Structural Assessment.

Assessments will be carried out by persons appointed from time to time by the Society. Independent assessments will ensure the integrity of the process.

Appendix A

NSW DPI primefacts
PROFITABLE & SUSTAINABLE PRIMARY INDUSTRIES www.dpi.nsw.gov.au
JANUARY 2007 PRIMEFACT 328 (REPLACES AGFACT A2.3.35)

Muscle scoring beef cattle

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Introduction

The muscle or red meat content of a beef animal is the most valuable part of the carcase. To help identify the red meat content in cattle, a method of evaluating shape termed 'muscle scoring' is used. Muscle score describes the shape of catt independent of the influence of fatness. Muscling is the degree of thickness or convexity of an animal relative to its frame size, after adjustments have been made for subcutaneous fat.

Muscle scores are an accepted part of live animal appraisal in Australia. The National Livestock Language includes muscle score, as does the National Livestock Market Reporting Service. Research, both within Australia and overseas, has shown that when shape is assessed in this way it is an aid in predicting an animal's worth. The degree of muscling affects dressing percentage and meat yield in a positive way indicating the greater value of the more heavily muscled animals

Analysis of saleyard reports in NSW and Victoria has shown a clear price incentive for better muscled cattle and an even clearer price discount for poorer muscled cattle.

This publication describes the method of evaluating animals for muscling to encourage its adoption by the industry.

NSW DEPARTMENT OF PRIMARY INDUSTRIES

Evaluating muscling

Subjective and objective measures of muscling

Muscle scoring is a subjective skill which needs to be honed by continual practice and evaluation against an experienced assessor. Muscle scoring is cheap, easy and quick to obtain but the skill of the assessor is particularly important.

Butt Profile as used in the AUS-MEAT carcase language was developed as a simplified two dimensional assessment of shape. It is a different assessment of shape, being affected significantly by fat, and cannot be compared with live muscle score.

Eye muscle area, measured by a real time ultrasound scanning device on the live animal or directly measured on the carcase (equally accurate) is an objective measure of muscling. However, eye muscle area per se is not very useful as an indicator of animal or carcase muscularity size of the animal – as an animal gets bigger its eye muscle area gets bigger. It becomes more useful when considered in proportion to the weight of an animal or carcase and hence becomes an estimate of meat content.

Eye muscle area is probably of more use for breeding purposes where it can be adequately adjusted (as in Breedplan EBVs). It is expensive and slow to measure on the live animal, relative to a visual appraisal of muscle score.

Muscle or fat

Muscling can be confused with fat if assessors are not trained in distinguishing the two. Muscle bulges and is round, fat wobbles, shrouds and flattens shape (smooths out). Muscle is round and curved and animals with a high degree of muscling when viewed from behind, are thicker through the stifle area than they are over the top. A fat, less muscular animal is widest over the top and tends to appear flat down the stifle muscle when viewed from behind (see Fig. 1).

Muscling and eye muscle area

Eye muscle area and shape (at the same weight) in cattle are related to muscle score. It is not a perfect relationship but it is reasonable to expect that as muscle score increases so too will eye muscle area, at the same animal weight.

Eye muscle area could increase due to an increase in size of the animal, but muscle score could stay the same, increase or decrease depending on the true muscularity of the animal. Muscle score is an evaluation of the proportion of red meat in the body, whereas eye muscle area is a surface area measurement of a sample muscle cross-section.

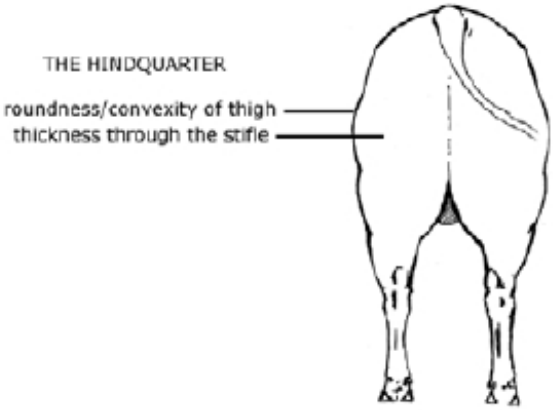


Figure 1. Areas of reference for assessing muscling

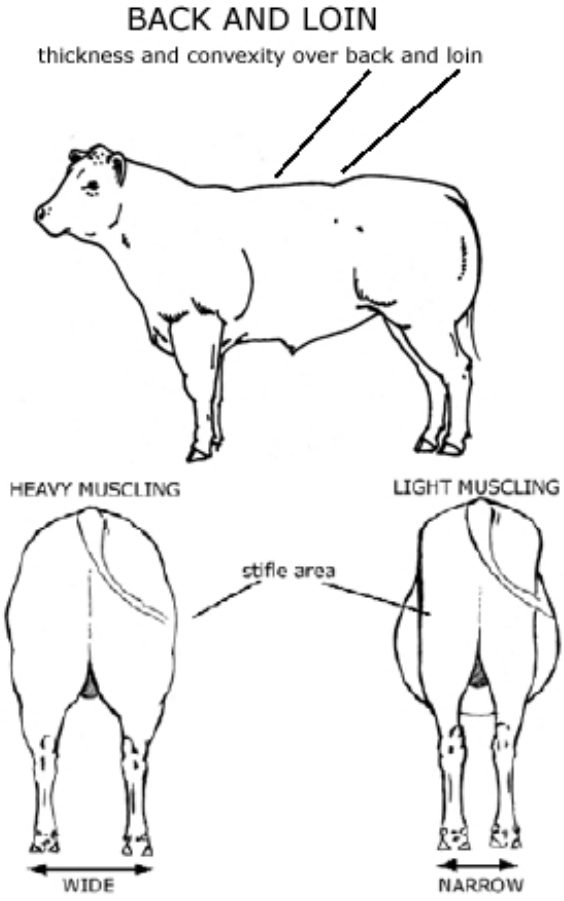


Figure 2. Observing cattle from behind

Bone

From an appraisal point of view, bone is very difficult to assess. Quite often, what appears to be thicker, heavier bones is in fact less dense bone and may well weigh the same as smaller, thinner bones.

Bone accounts for roughly 16–20% of the carcase weight. Bones are important from a structural and functional point of view but because of the difficulty of appraisal in terms of carcase value, it is best to regard it as relatively constant between animals and concentrate on variations in muscle and fat.

Assessing muscle score

When determining muscle score one must first estimate the level of fatness covering the body.

A pre-requisite of accurate muscle evaluation is the accurate appraisal of fatness. Once an animal's fatness is known, allowance can be made visually and mentally to ensure that fatness does not hinder the evaluation of the animal's shape.

Closely examining those areas of the body where fat is most visible or actually feeling those areas of the animals body, it is possible, with training and practice, to become extremely accurate insubjectively determining the level of subcutaneous fat.

The best places to assess muscling are those areas least influenced by fat, i.e. the hindquarter, the round and the top line.

Indicators of muscling in order of importance are:

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

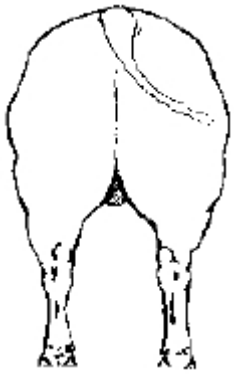
Forearm thickness and leg stance are useful only when differences in muscularity are large. When forearm circumference can be measured then it is the best measurement indicator of muscle score.

Observe cattle from behind to assess thickness through the lower hindquarter (stifle area). Heavily muscled stock are thickest here. They also stand with their hind legs further apart than lightly muscled stock.

There are three broad categories of shape – average, poor and good. Picking the differences when they are as simple and clear as this is not difficult (see Fig 3)

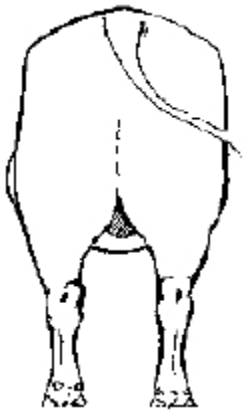
Good

Wide, well-rounded topline; maximum width through stifle; has a wide stance and the stomach cannot be seen.



Average

Not as wide or well-rounded over the topline; hip bones can be seen; has a narrow stance and the stomach is clearly visible.



Poor

Narrower over topline, tapering through stifle; narrower stance; more prominent hip bones; stomach is more clearly visible.

Figure 3. The three simple shape categories

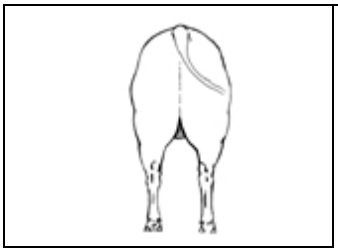
Most British-type steers would be classified as average shape. If an animal appears better than average then the assessor needs to distinguish whether this change is due to an increase in subcutaneous fat cover, or to an increase in muscle. Fatter animals generally do not exhibit the roundness or convexity which is present in more heavily muscled animals. Well-muscled, leaner cattle display clearly evident seams between the muscles of the hindquarter. Poorly-muscled cattle are thin through the stifle and are clearly widest across the hip area

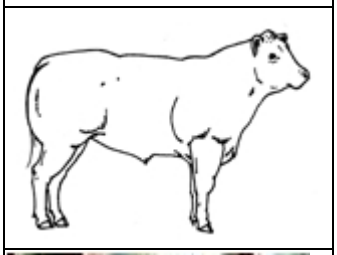
When shape differences are as clear as in figure 3, assessment is easy. However, within the normal cattle population differences in shape are far less distinctive. It is these situations which can cause confusion. To help separate animals with smaller differences a more expansive descriptive scoring system (5 scores) was developed based on the three levels as in figure 3, but expanded to include quite good muscle development (e.g. heavily muscled European breed bull) and quite low muscle development (e.g. poorly muscled dairy breed cow).

Muscle Score Categories

A score from A (very heavily muscled) to E (lightly muscled) can be given based on the roundness (convexity) and thickness of the body due to muscle (see the illustrations below).

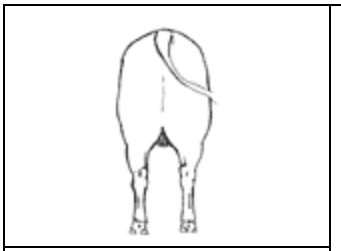
To help distinguish smaller differences between animals, and add continuity to the scoring system, the five scores can be further extended to 15 by adding plus and minus to each score (A+ to E-).

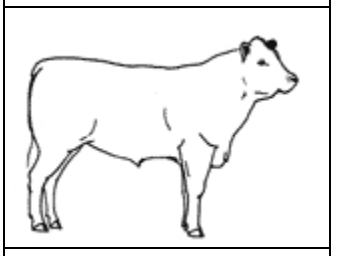




A. Very heavy muscling

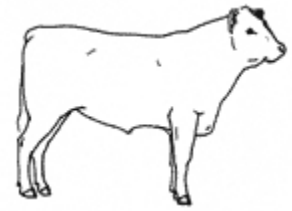
- Extremely thick through stifle area
- Muscle seams or grooves between muscles are evident
- 'Apple bummed' – when viewed from the side, hindquarters bulge like an apple
- Butterfly top line - loin muscles along the top of the animal are actually higher than the backbone





B. Heavy muscling

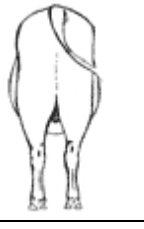
- Thick stifle
- Rounded thigh viewed from behind
- Some convexity in hindquarter from side view
- Flat and wide over top line – muscle is at the same height as backbone

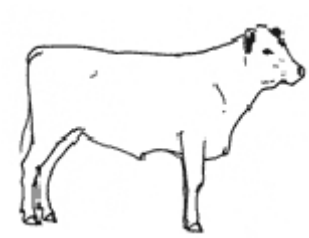


C. Medium Muscling

• Flat down thigh when viewed from behind

• Flat, tending to angular over top line





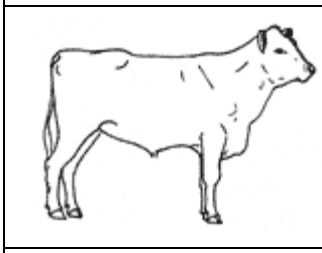
D. Moderate Muscling

• Narrow stance

• Flat to convex down the thigh

• Thin through Stifle

• Sharp, angular over the top line (except when very fat)



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

Further reading

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Acknowledgments

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PRIMEFACT 328, MUSCLE SCORING BEEF CATE