



THE GLOBAL STANDARD
FOR LIVESTOCK DATA

Appendix 3 of Section 5 of the ICAR Guidelines - The standard trait definition for Beef Breeds

Appendix 3 of Section 5 – Standard Trait Definition for Beef Breeds

Version November, 2021

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Change Summary

Date of Change	Nature of Change
November 2021	Creation of document. Rewrite of guidelines. Relationship between conformation and functional traits added. Standard trait definitions and relationship between conformation and functional traits moved to separate appendices.

1 Approved Standard Traits

Frame traits

1. Body Length
2. Back Length
3. Chest Width
4. Thurl Width
5. Body Depth
6. Chest Depth
7. Flank Depth
8. Length of Rump
9. Height at Withers
10. Height at rump
11. Rounding of ribs
12. Rump Angle
13. Tail Set
14. Width at Hips
15. Width at Pins

Muscularity traits

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17. Muscularity Shoulder side view
18. Back Width
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20. Thigh Rounding side view
21. Thigh Width rear view
22. Thigh Length
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Type traits

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25. Top Line
26. Skin Thickness

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- 27. Front Legs front view
- 28. Fore Pasterns side view
- 29. Rear Legs rear view
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Udder traits

- 34. Thickness of Teat
- 35. Teat Length
- 36. Udder Balance
- 37. Udder Depth

2 Standard trait definition

The precise description of each trait is well defined and it is essential that the full range of linear scores to identify the intermediate and extremes of each trait be used. The assessment parameters for the calculations should be based on the expected biological extremes of the same category animals in terms of sex and age scored. The scale must cover the biological extremes of the current population or category. The extremes and the intermediates are ordered according to the degree of expression of the trait. For example thin and thick, long and short etc. A high or a low score has no particular meaning and it is not necessarily desirable or undesirable.

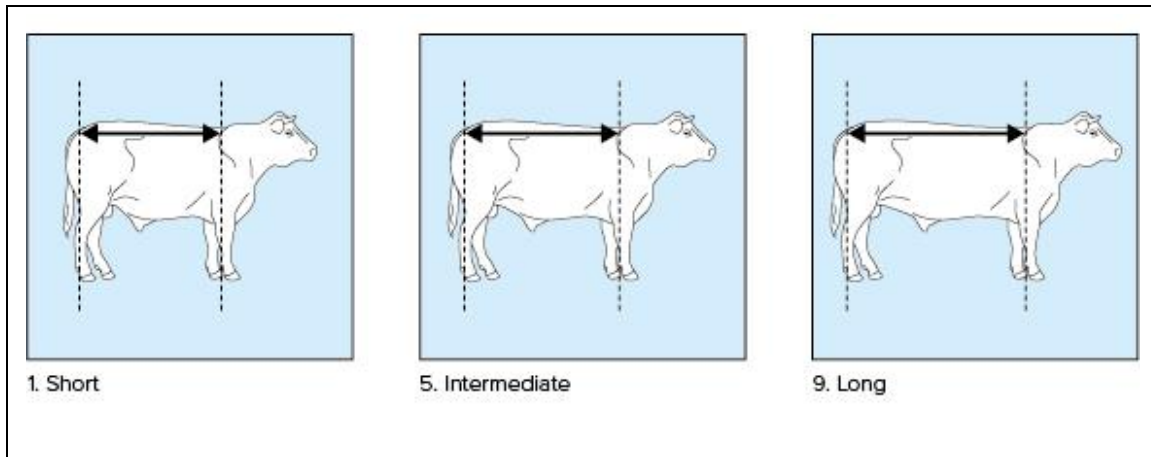
Recommended Scale 1 - 9

Note

The linear scale used, must cover the expected biological extremes of the population in the country of assessment.

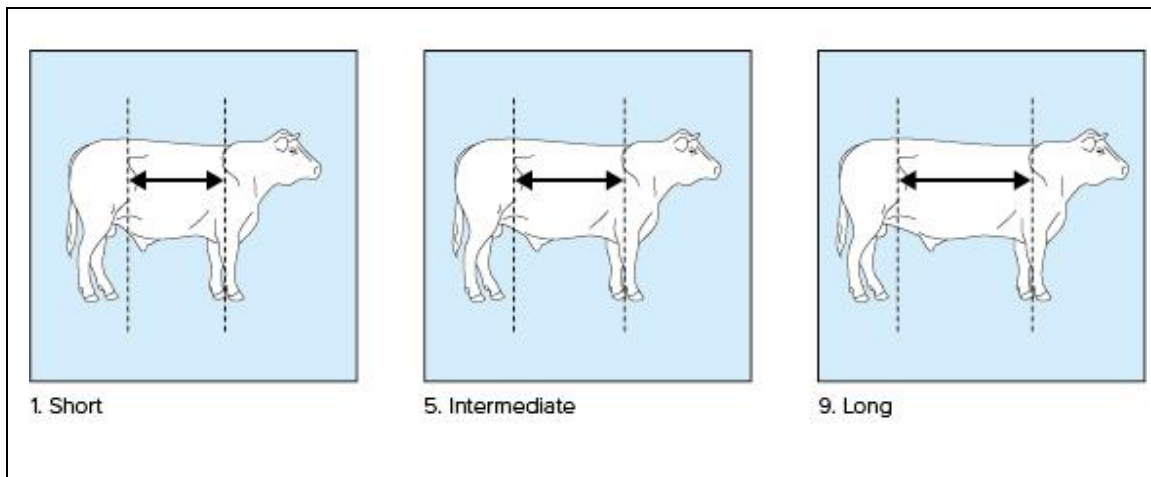
1. Body Length

Reference point: Length from shoulder to pins.
1 - Short
5 - Intermediate
9 - Long



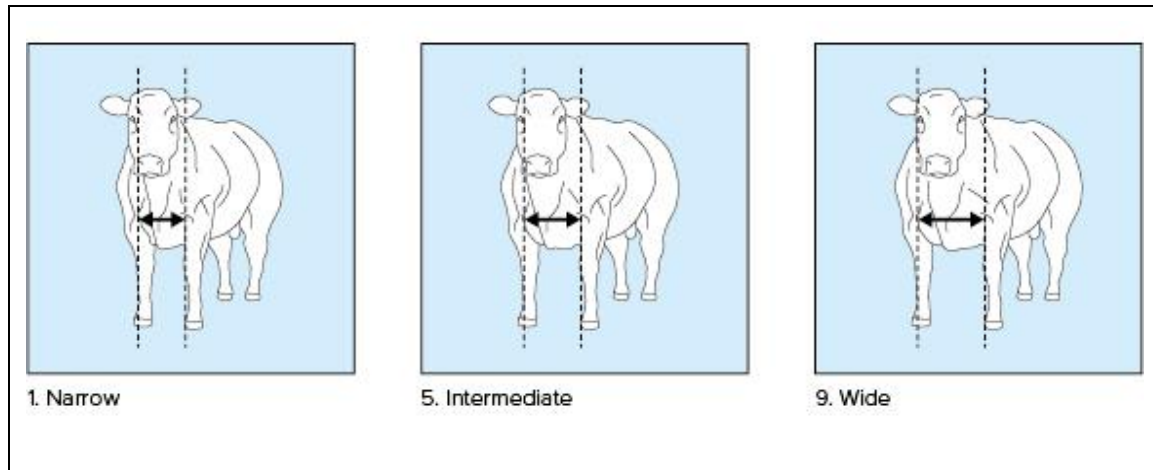
2. Back Length

Reference point: Length from shoulder to hips.
1 - Short
5 - Intermediate
9 - Long



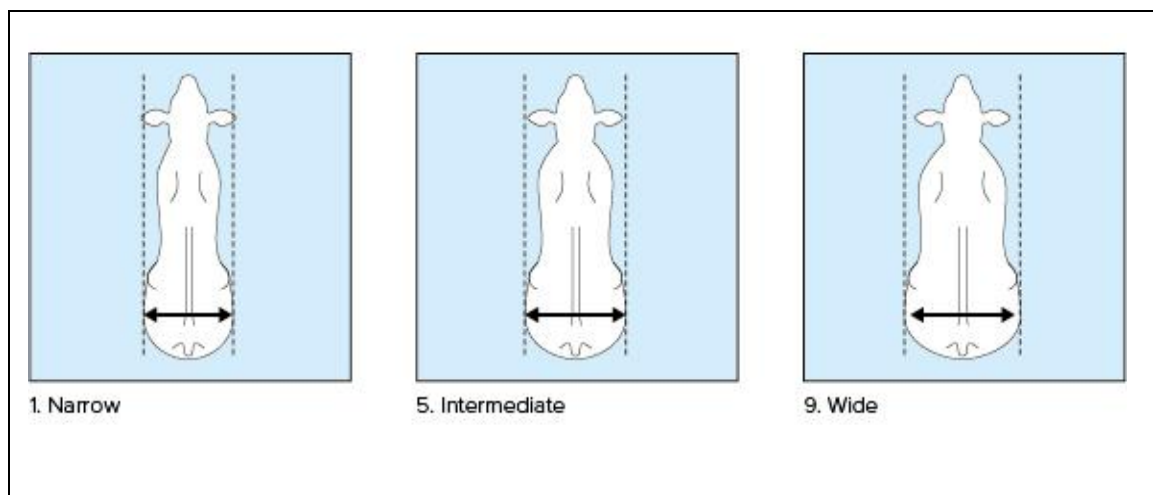
3. Chest Width

Reference point: Measured from the inside surface between the top of the front legs.
1 - Narrow
5 - Intermediate
9 - Wide



4. Thurl Width

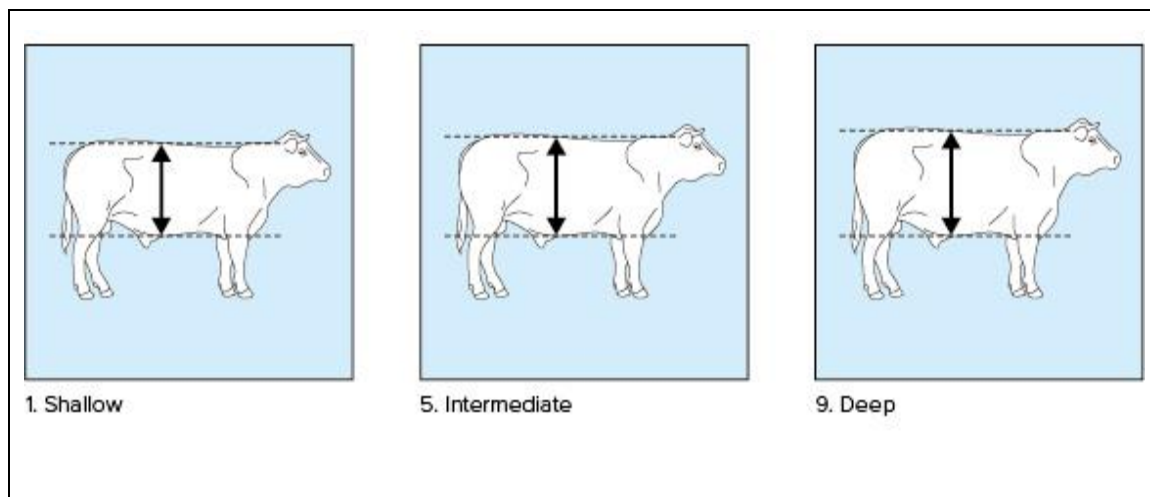
Reference point: Distance between thurls.
1 - Narrow
5 - Intermediate
9 - Wide



5. Body Depth

Reference point: Distance between top of back and bottom of barrel at the deepest point: independent of stature.

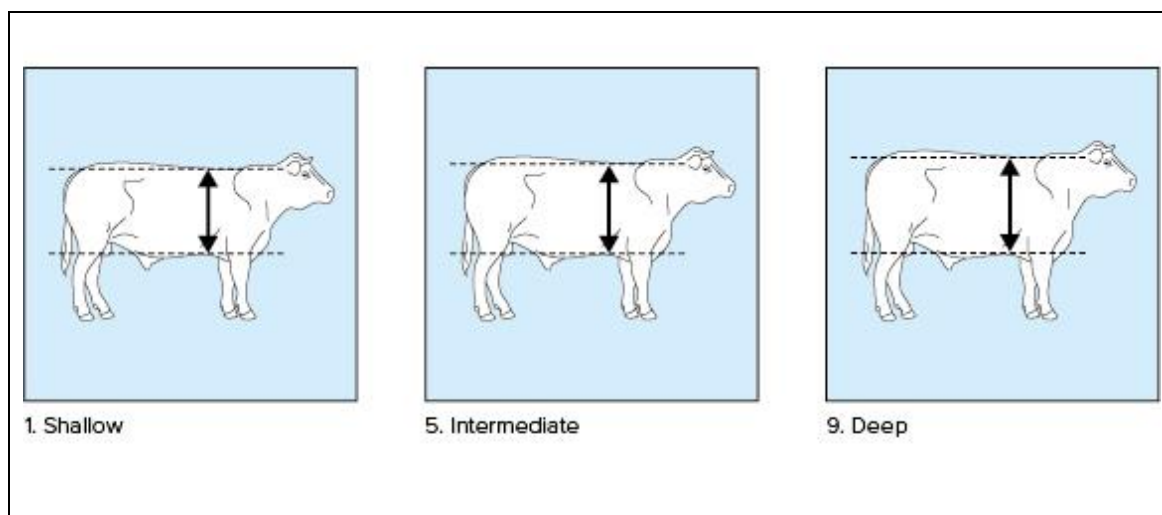
- 1 - Shallow
- 5 - Intermediate
- 9 - Deep



6. Chest Depth

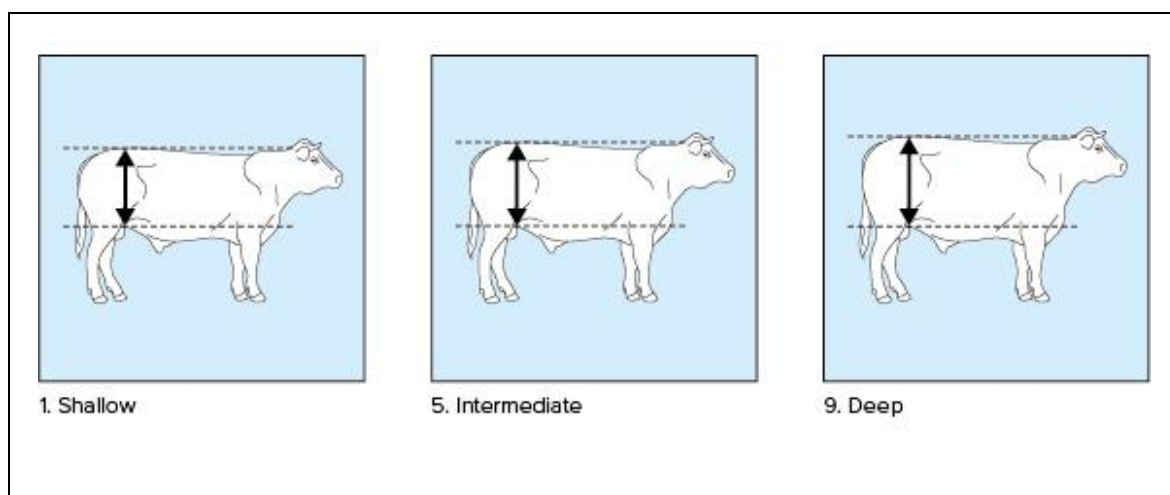
Reference point: Distance between top of back just behind shoulder and bottom of barrel behind the front leg.

- 1 - Shallow
- 5 - Intermediate
- 9 - Deep



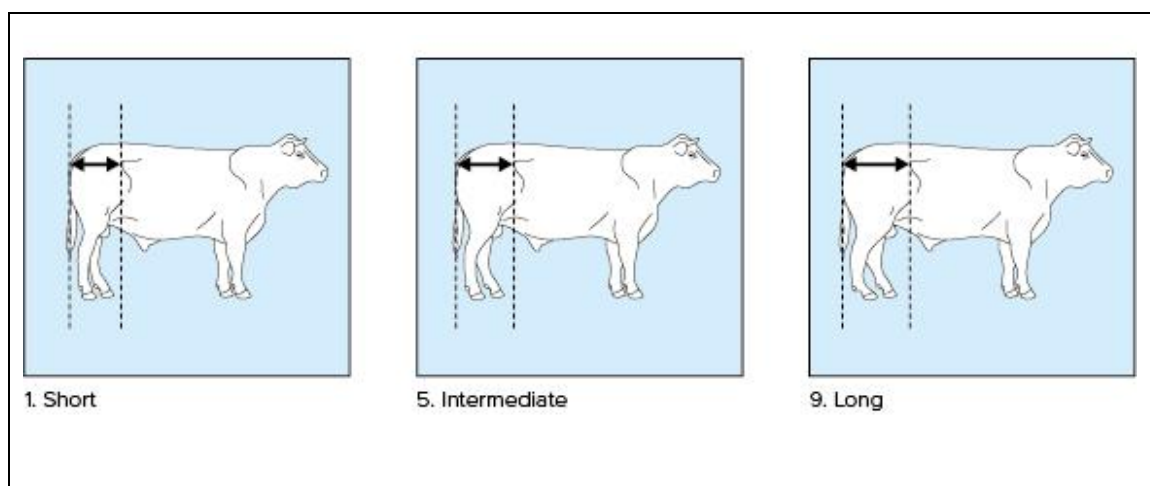
7. Flank Depth

Reference point: Distance between top of back just before hips and bottom of barrel just before the rear leg.
1 - Shallow
5 - Intermediate
9 - Deep



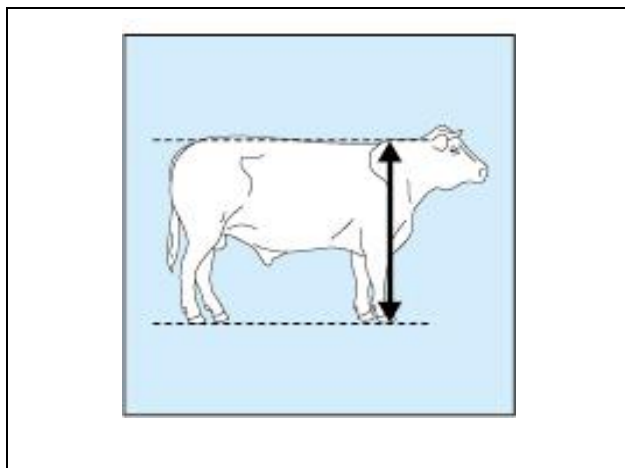
8. Length of Rump

Reference point: Distance from hips to pins
1 - Short
5 - Intermediate
9 - Long



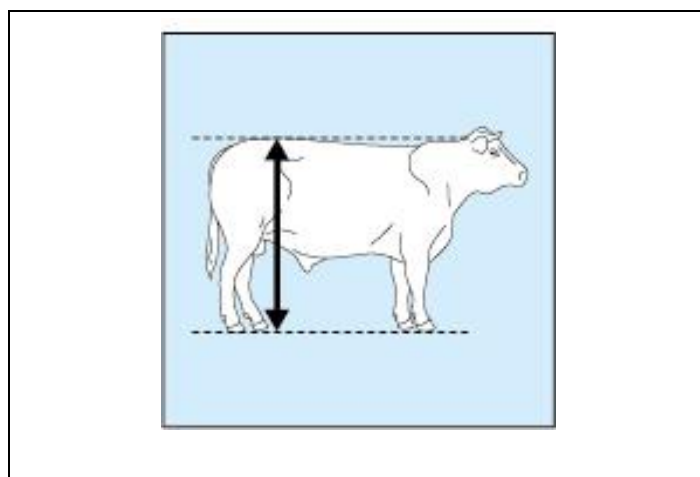
9. Height at Withers

Reference point: Measured from the top of the back in between the shoulders to the ground.
1 - Short
5 - Intermediate
9 - Tall



10. Height at Rump

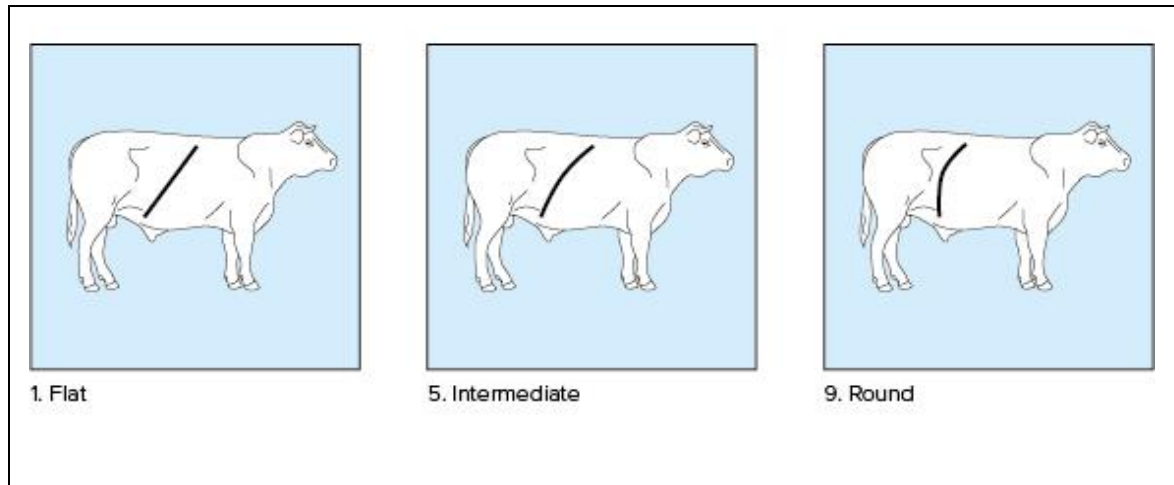
Reference point: Measured from the top of the back in between the hips to the ground.
1 - Short
5 - Intermediate
9 - Tall



11. Rounding of ribs

Reference point: The curving of the ribs.

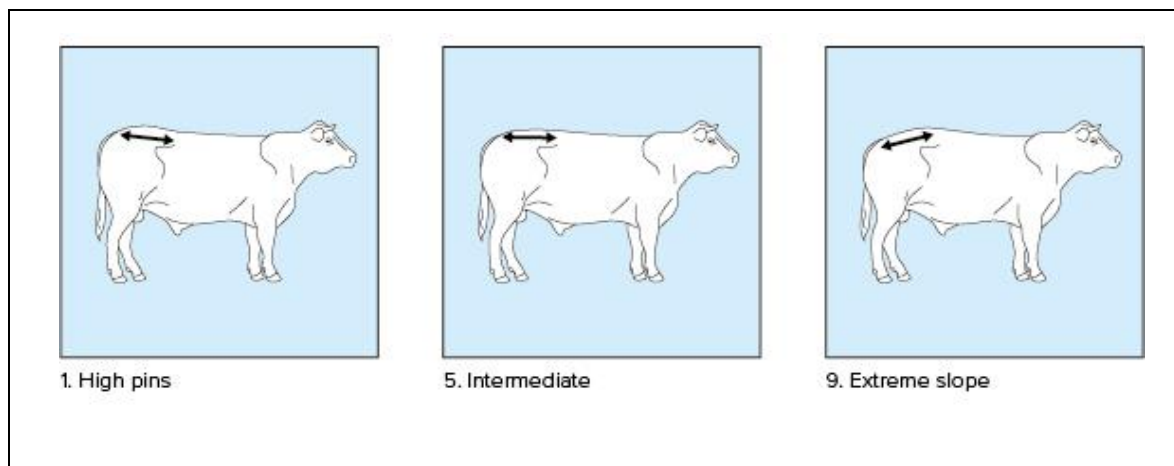
- 1 - Flat
- 5 - Intermediate
- 9 - Round



12. Rump Angle

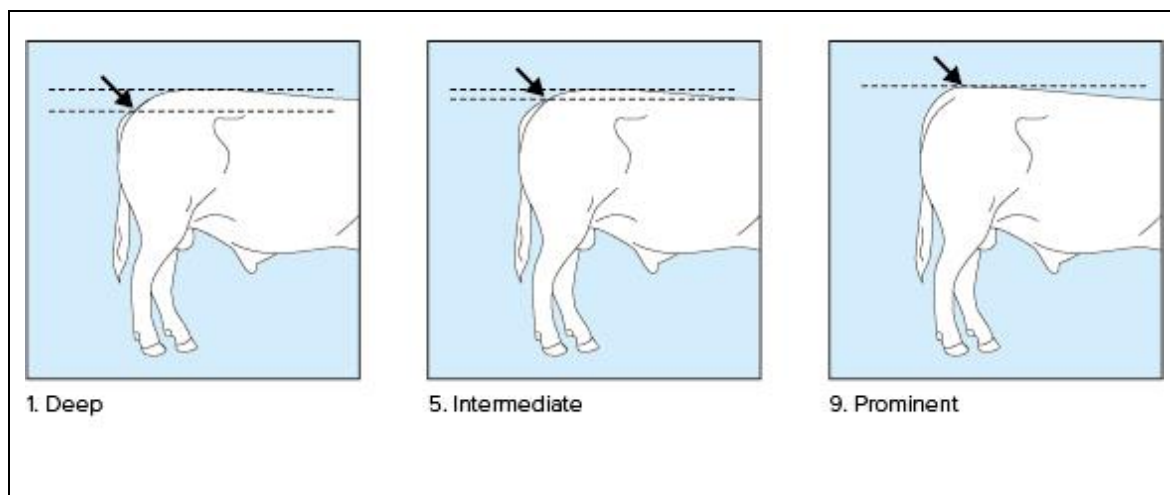
Reference point: Measured as the angle of the rump structure from hooks (hips) to pins.

- 1 - High pins
- 5 - Intermediate
- 9 - Extreme slope



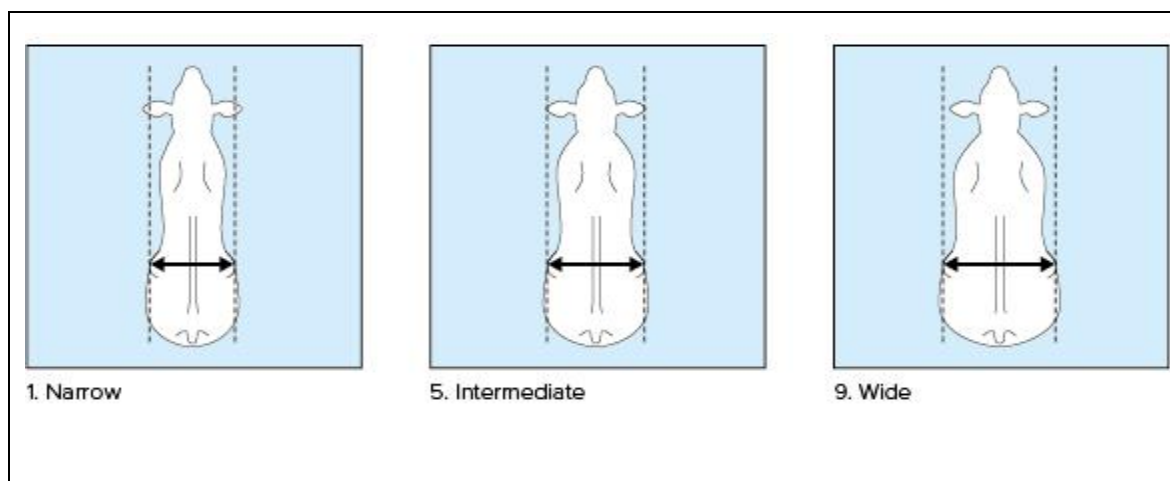
13. Tail Set

Reference point: Insertion of the tail.
1 - Deep
5 - Intermediate
9 - Prominent



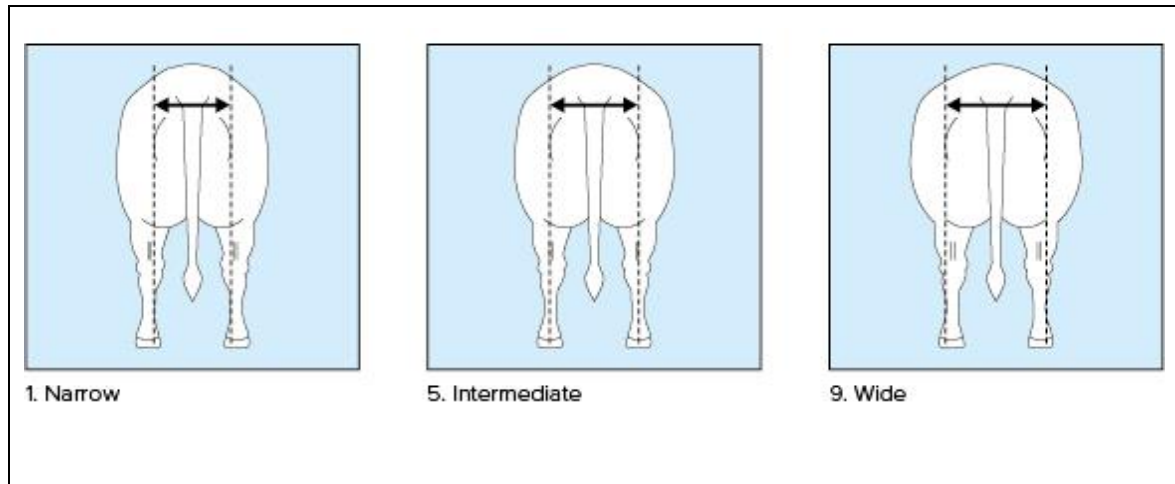
14. Width at Hips

Reference point: Distance between the hips.
1 - Narrow
5 - Intermediate
9 - Wide



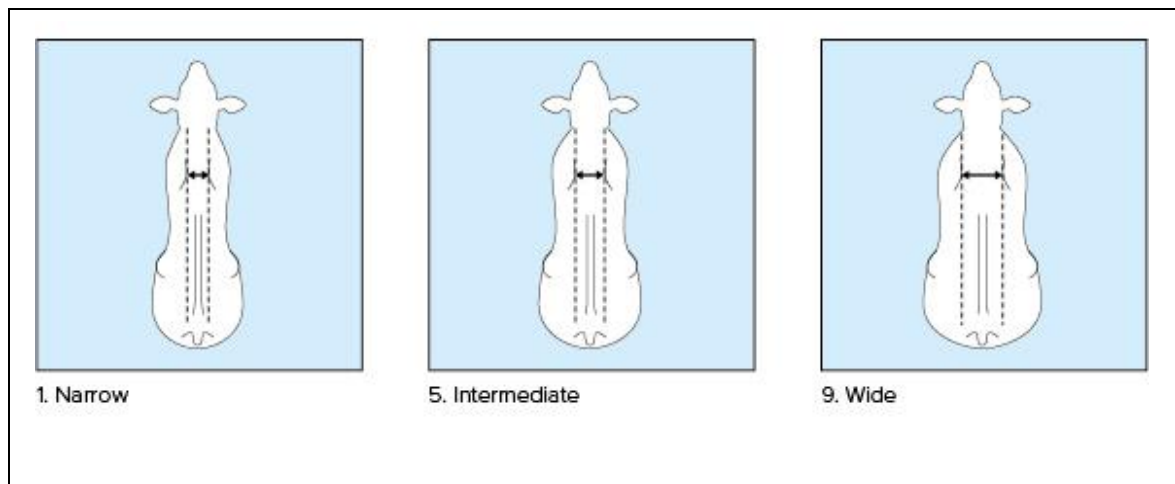
15. Width at Pins

Reference point: Distance between the pins.
1 - Narrow
5 - Intermediate
9 - Wide



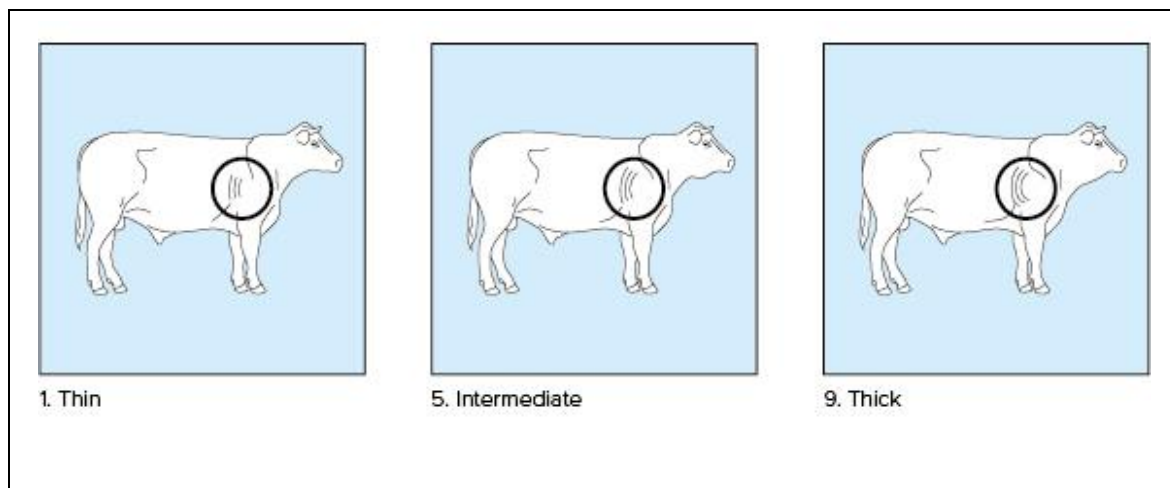
16. Muscularity Shoulder top view

Reference point: Distance and muscularity between the tops of shoulders, top view.
1 - Narrow
5 - Intermediate
9 - Wide



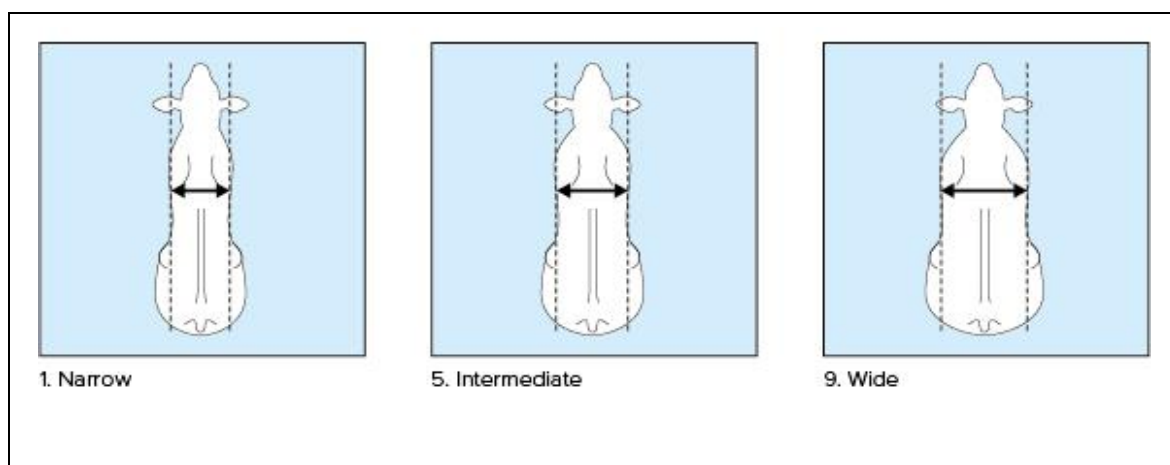
17. Muscularity Shoulder side view

Reference point: Thickness of the muscles of the shoulders.
1 - Thin
5 - Intermediate
9 - Thick



18. Back Width

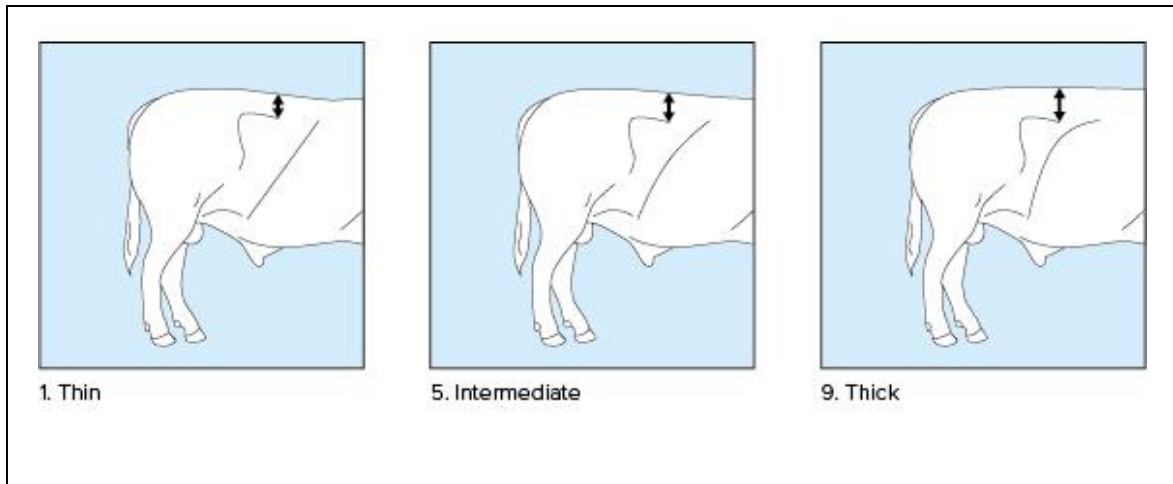
Reference point: Width of the back behind the shoulders.
1 - Narrow
5 - Intermediate
9 - Wide



19. Thickness of Loin

Reference point: Thickness of the loins just before the hips and after the last rib, side view on the right.

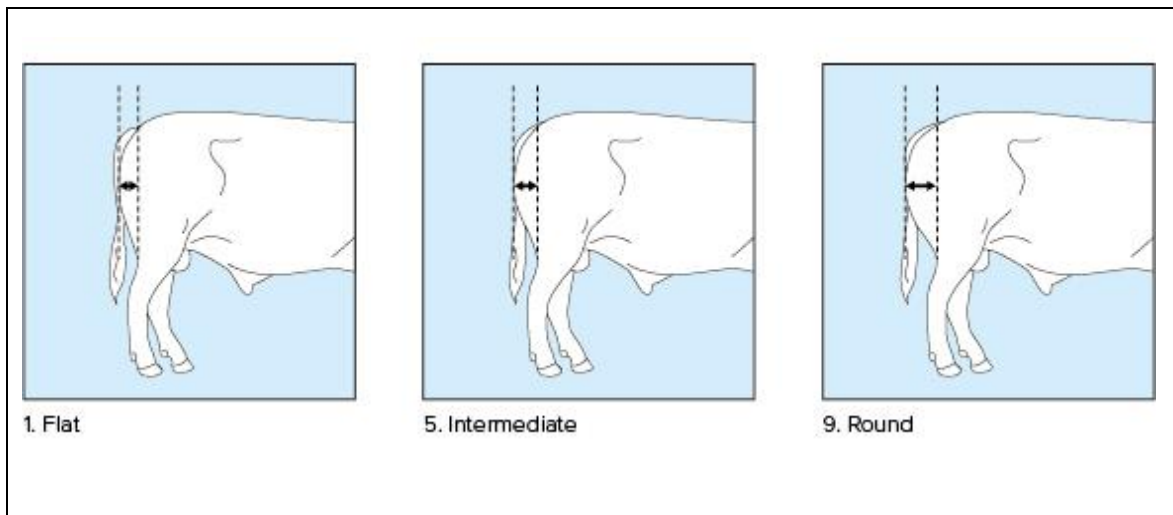
- 1 - Thin
- 5 - Intermediate
- 9 - Thick



20. Thigh Rounding side view

Reference point: Curving of the thigh behind the vertical line between pins and hock, side view.

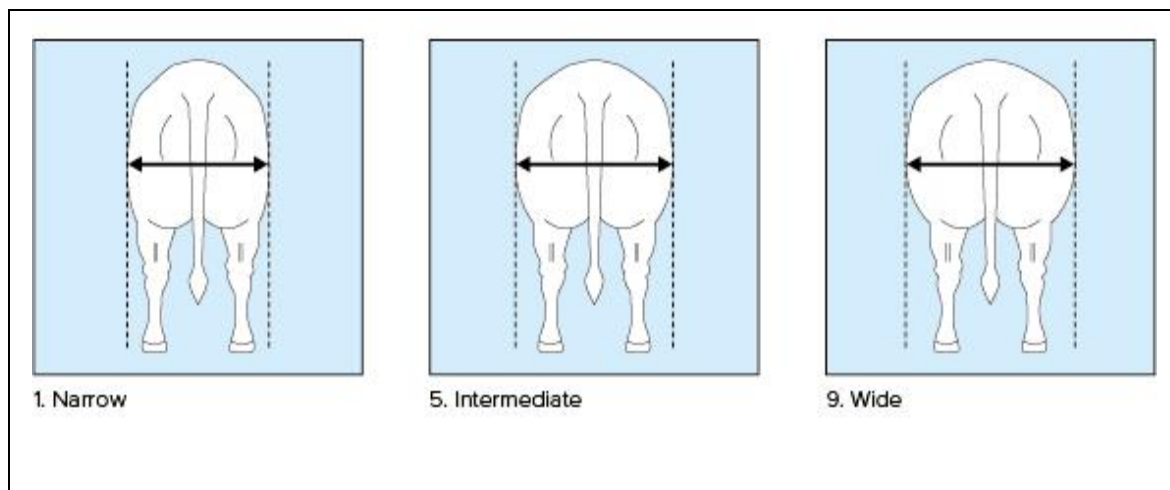
- 1 - Flat
- 5 - Intermediate
- 9 - Round



21. Thigh Width rear view

Reference point: Width of the thighs, rear view, halfway. Represents the outside curving of the thighs.

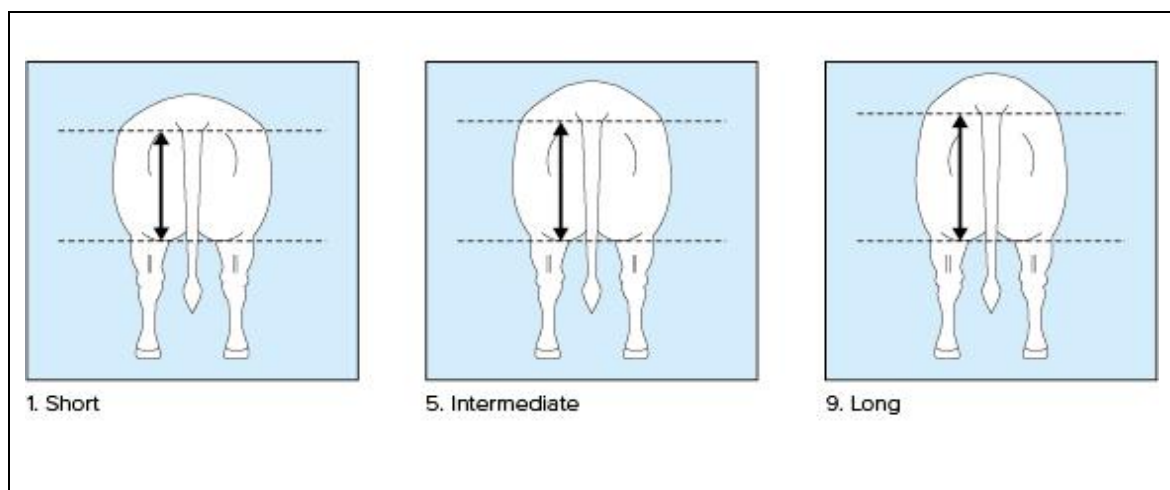
- 1 - Narrow
- 5 - Intermediate
- 9 - Wide



22. Thigh Length

Reference point: Length of the thigh between pins and thigh attachment to the leg.

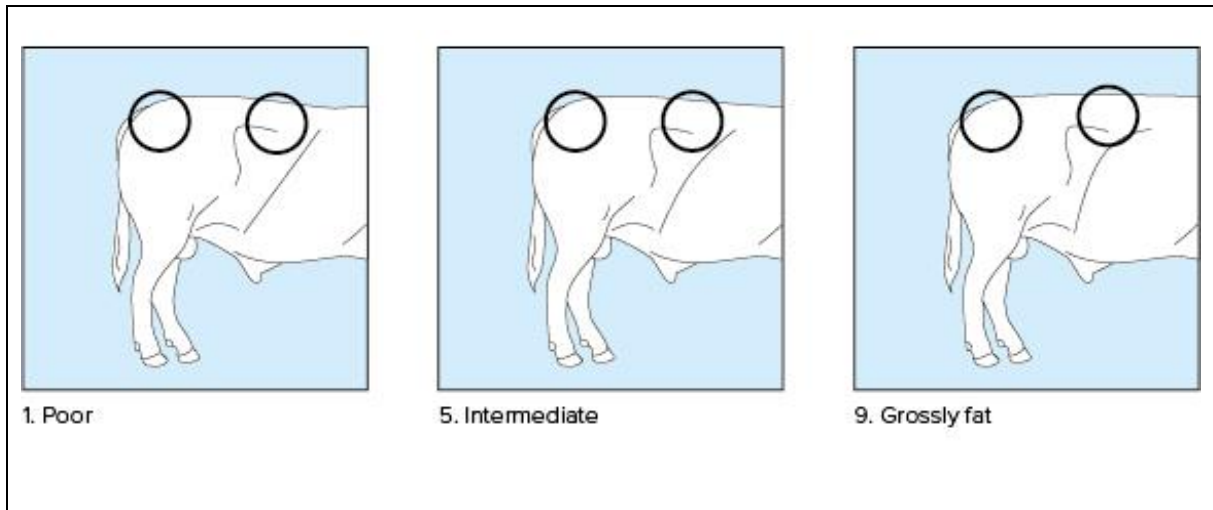
- 1 - Short
- 5 - Intermediate
- 9 - Long



23. Body Condition Score

Reference point: The covering of fat over the tail head and rump. Not a true linear trait.

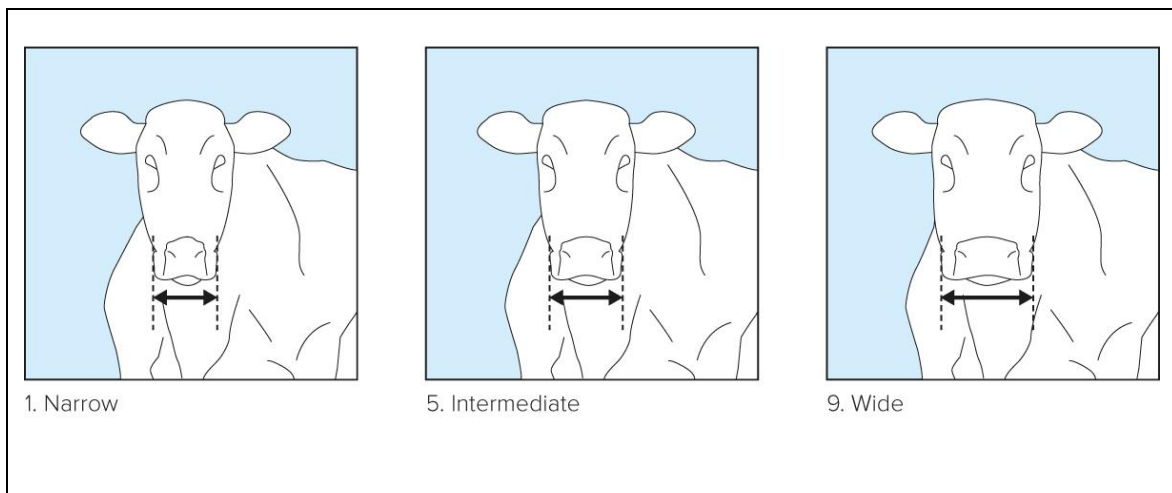
- 1 - Poor
- 5 - Intermediate
- 9 - Grossly fat



24. Muzzle Width

Reference point: Width of the muzzle.

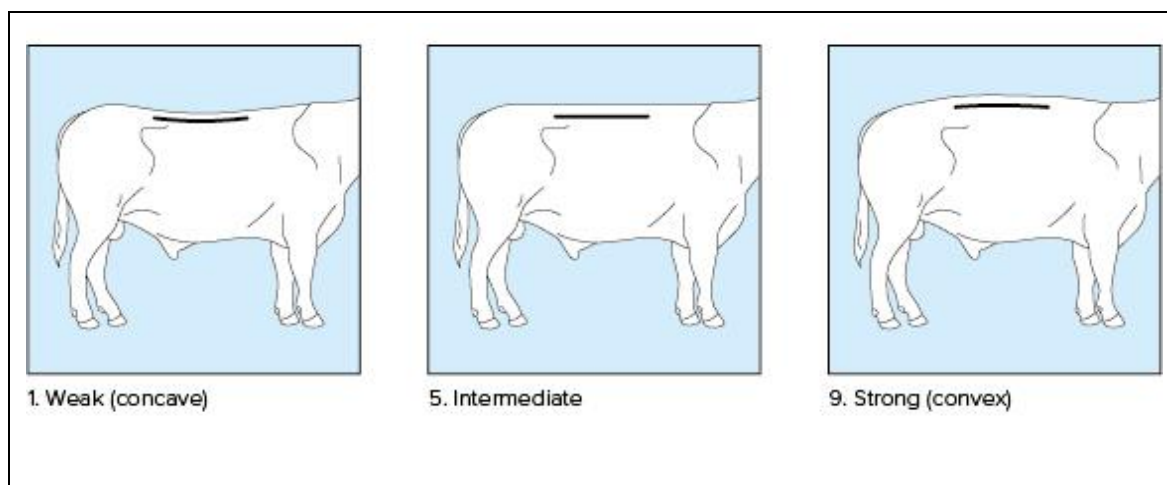
- 1 - Narrow
- 5 - Intermediate
- 9 - Wide



25. Top Line

Reference point: Curving of the back between shoulders and hips.

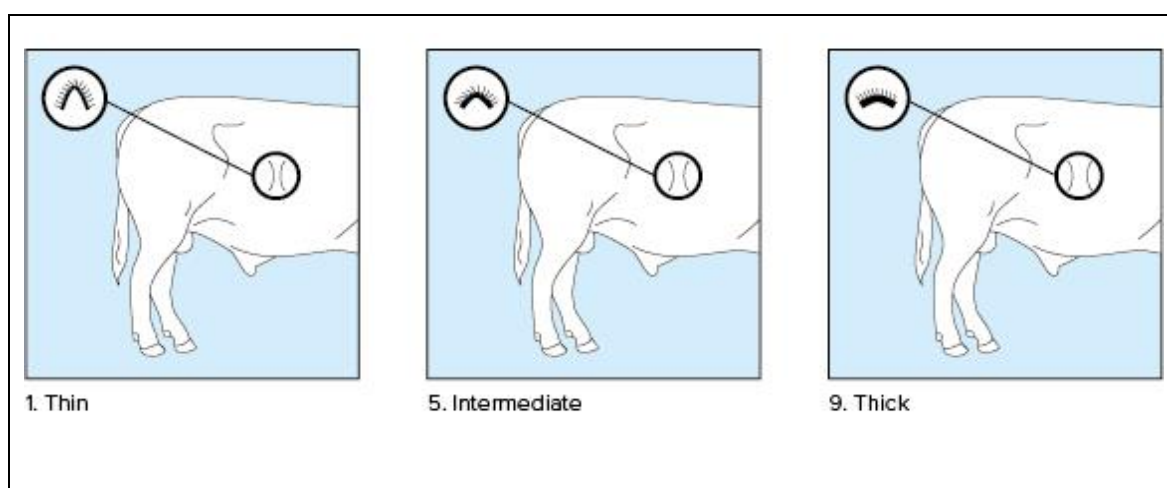
- 1 - Weak (concave)
- 5 - Intermediate
- 9 - Strong (convex)



26. Skin Thickness

Reference point: Thickness of skin.

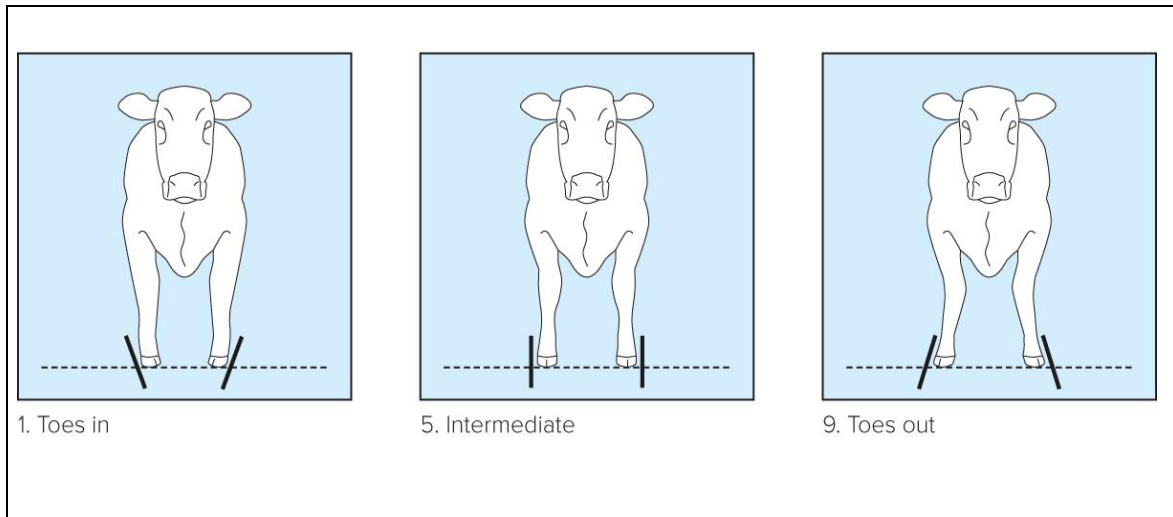
- 1 - Thin
- 5 - Intermediate
- 9 - Thick



27. Front Legs front view

Reference point: Direction of the feet of the forelegs viewed from the front.

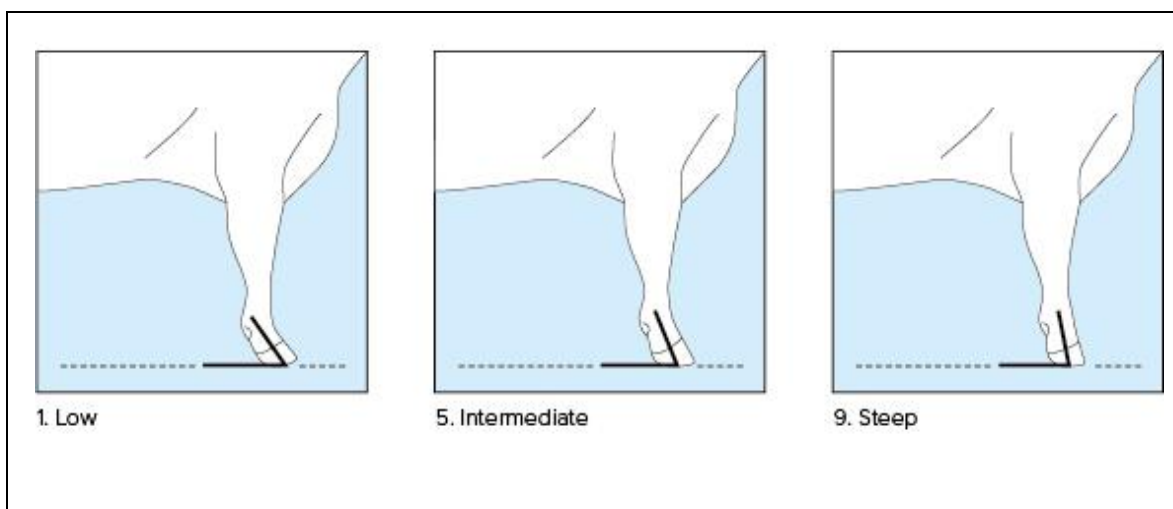
- 1 - Toes in
- 5 - Intermediate
- 9 - Toes out



28. Fore Pasterns side view

Reference point: Angle of the pasterns of fore legs with the floor.

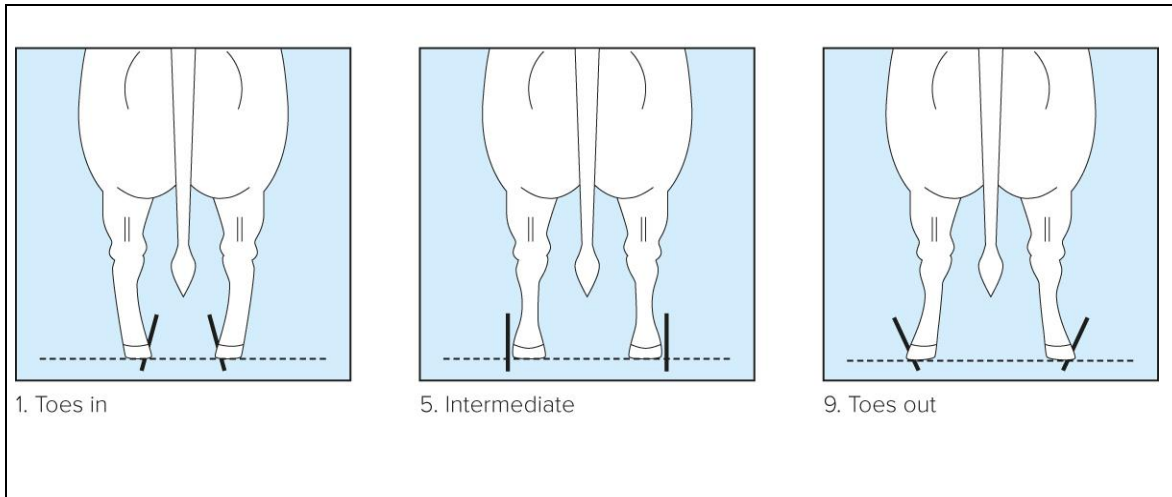
- 1 - Low
- 5 - Intermediate
- 9 - Steep



29. Rear Legs rear view

Reference point: Direction of the feet of the rear legs, viewed from the rear.

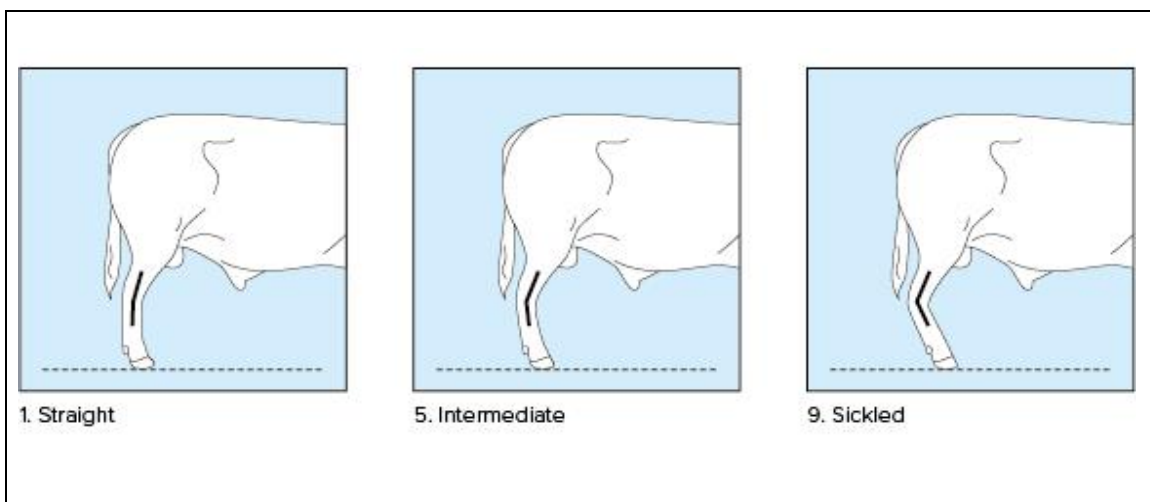
- 1 - Toes in
- 5 - Intermediate
- 9 - Toes out



30. Rear Legs side view

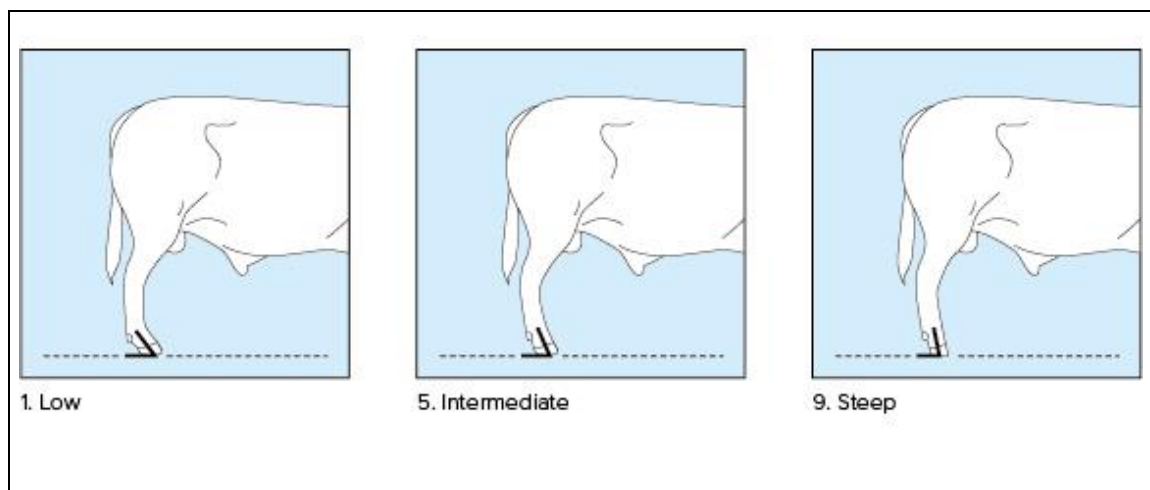
Reference point: Angle measured at the front of the hock.

- 1 - Straight
- 5 - Intermediate
- 9 - Sickled



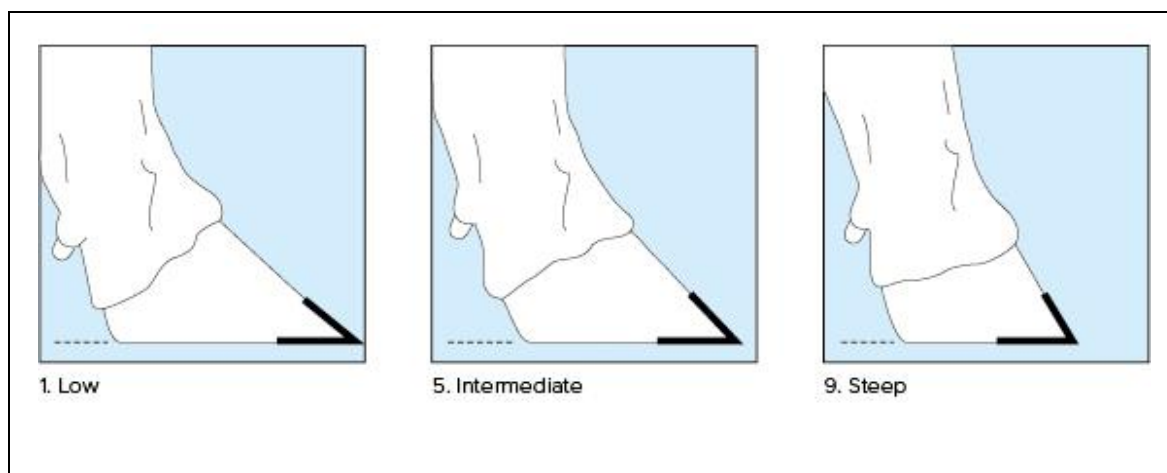
31. Hind Pasterns side view

Reference point: Angle of the pasterns of the rear legs with the floor 1 - Low
5 - Intermediate
9 - Steep



32. Claw Angle

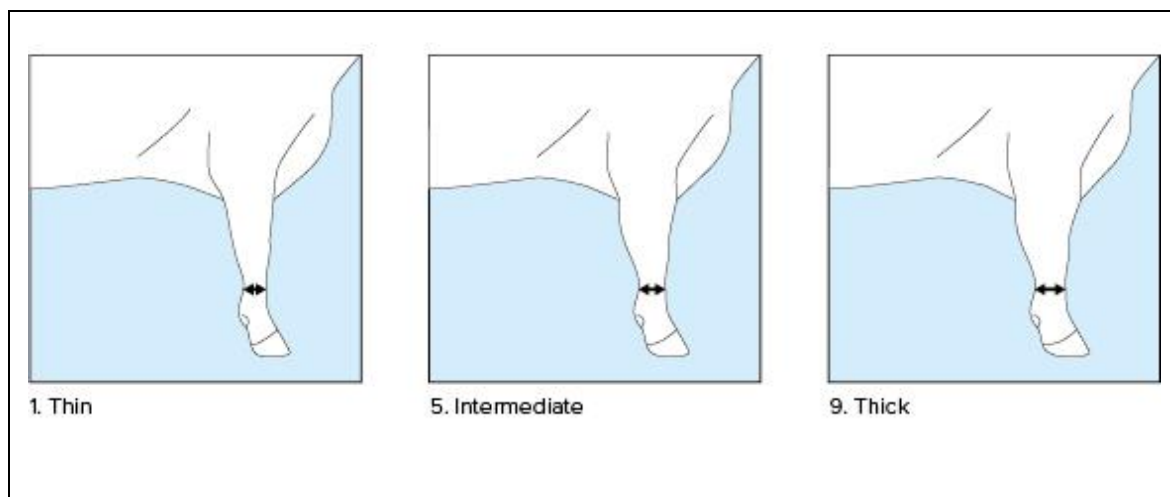
Reference point: Angle at the front of the rear hoof measured from the floor to the hairline.
1 - Low
5 - Intermediate
9 - Steep



33. Thickness of Bone

Reference point: Thickness of the canon bone the forelegs.

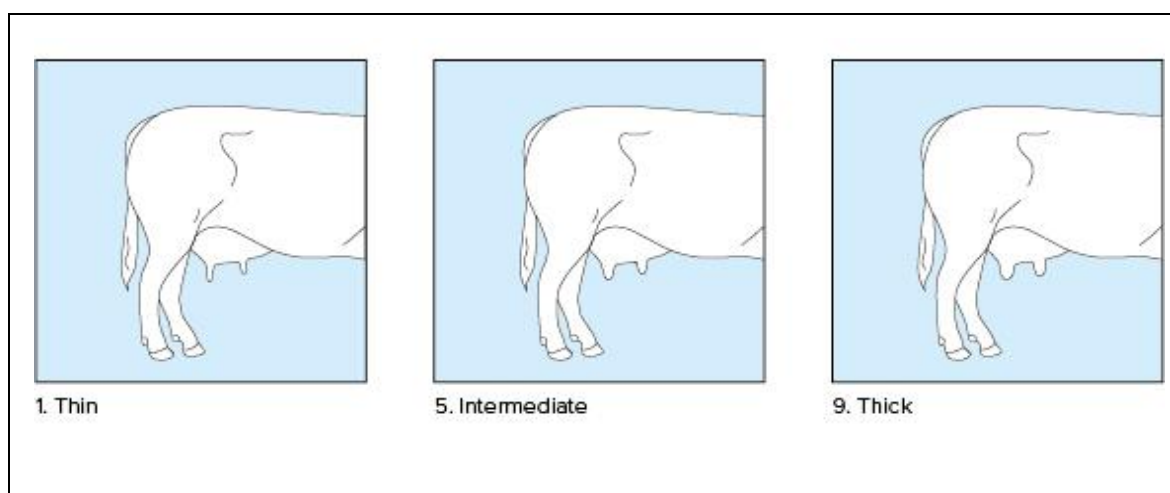
- 1 - Thin
- 5 - Intermediate
- 9 - Thick



34. Thickness of teat

Reference point: Thickness of the teat in the middle of the front teat.

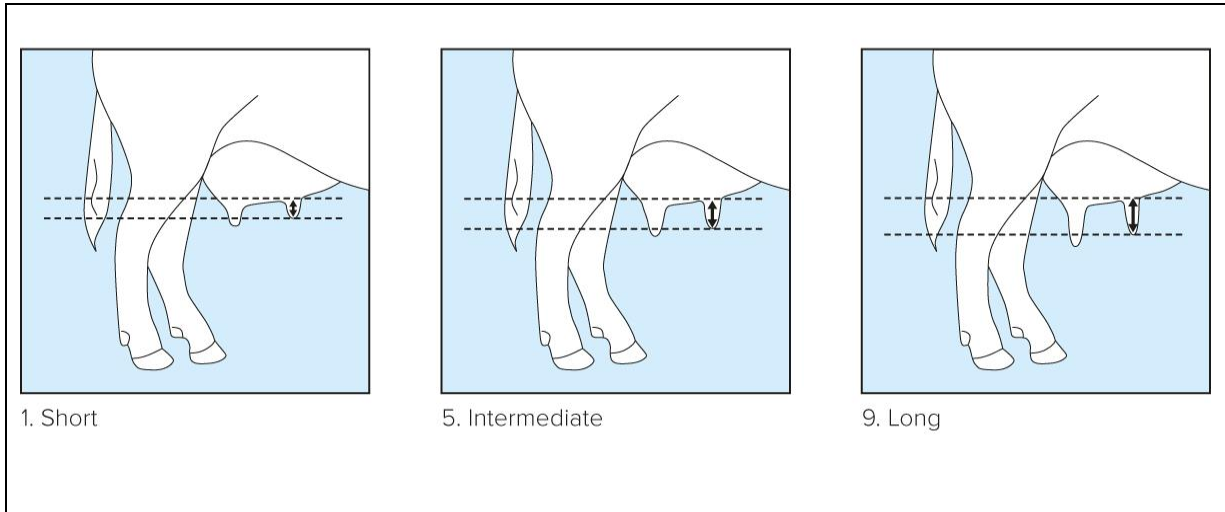
- 1 - Thin
- 5 - Intermediate
- 9 - Thick



35. Teat Length

Reference point: The length of the front teat.

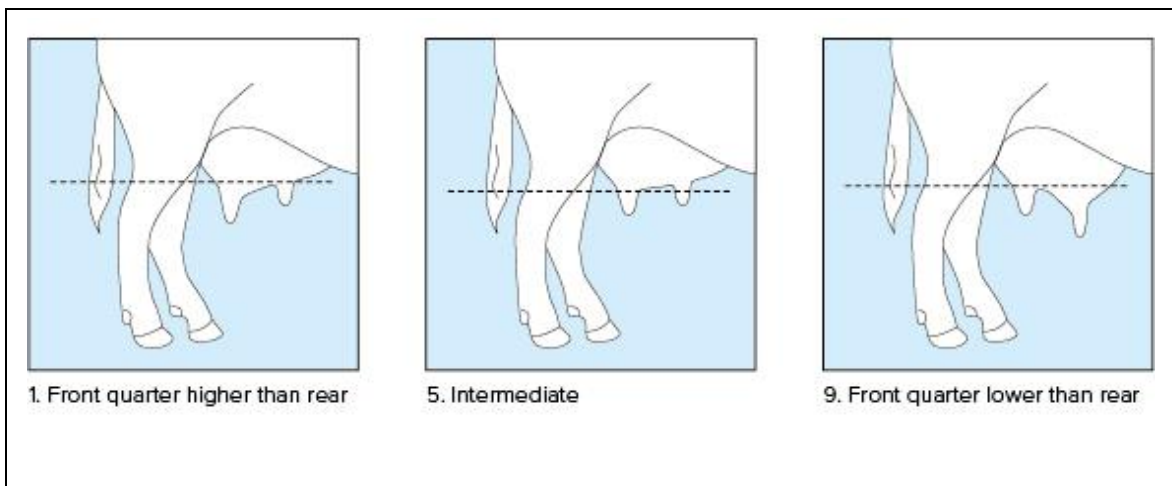
- 1 - Short
- 5 - Intermediate
- 9 - Long



36. Udder Balance

Reference point: The balance of the udder floor between front and rear udder.

- 1 - Front quarter higher than rear quarter
- 5 - Intermediate
- 9 - Front quarter lower than rear quarter



37. Udder Depth

Reference point: The distance from the top of the udder to the lowest part of the udder floor, side view.

- 1 - Deep
- 5 - Intermediate
- 9 - Shallow

