



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 March, 2022

**Network. Guidelines. Certification.**

---

## Table of Contents

---

1	Approved Standard Traits.....	3
2	Standard trait definition.....	4

## Change Summary

---

Date of Change	Nature of Change
March 2022	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

16. Muscularity Shoulder top view
17. Muscularity Shoulder side view
18. Back Width
19. Thickness of Loin
20. Thigh Rounding side view
21. Thigh Width rear view
22. Thigh Length
23. Body Condition Score

### Type traits

24. Muzzle Width
25. Top Line
26. Skin Thickness

#### Leg traits

- 27. Front Legs front view
- 28. Fore Pasterns side view
- 29. Rear Legs rear view
- 30. Rear Legs side view
- 31. Hind Pasterns side view
- 32. Claw Angle
- 33. Thickness of Bone

#### 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.

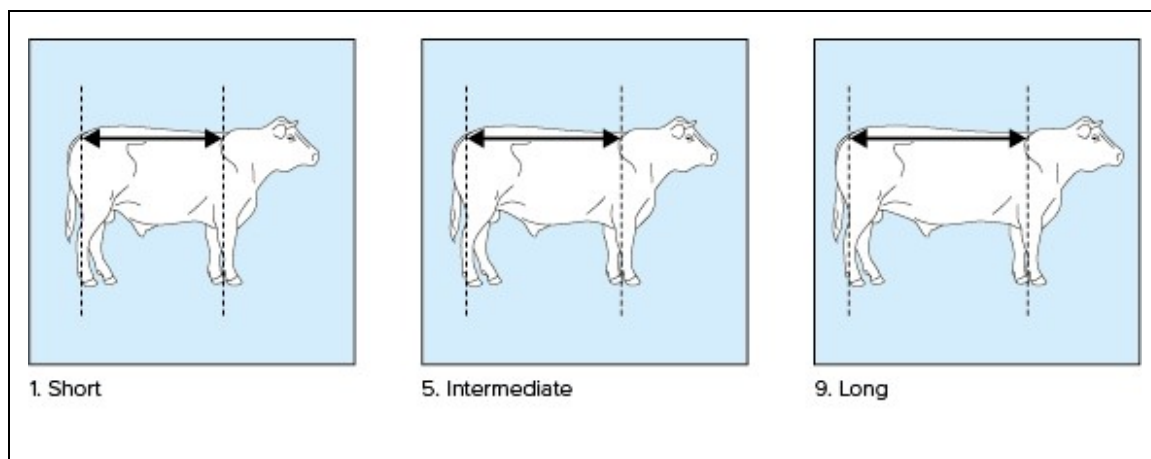
Recommended Scale 1 - 9

#### **Note**

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

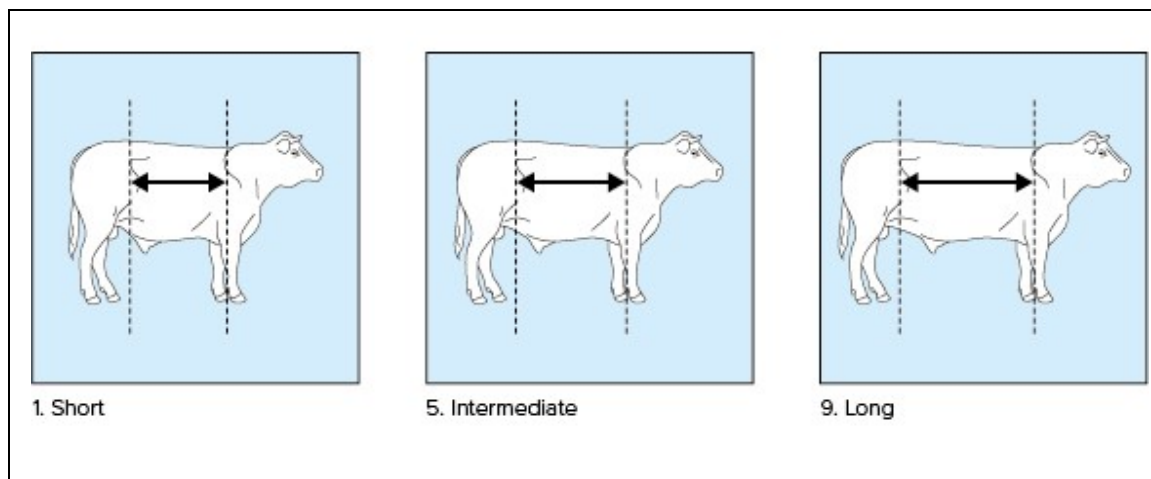
## 1. Body Length

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



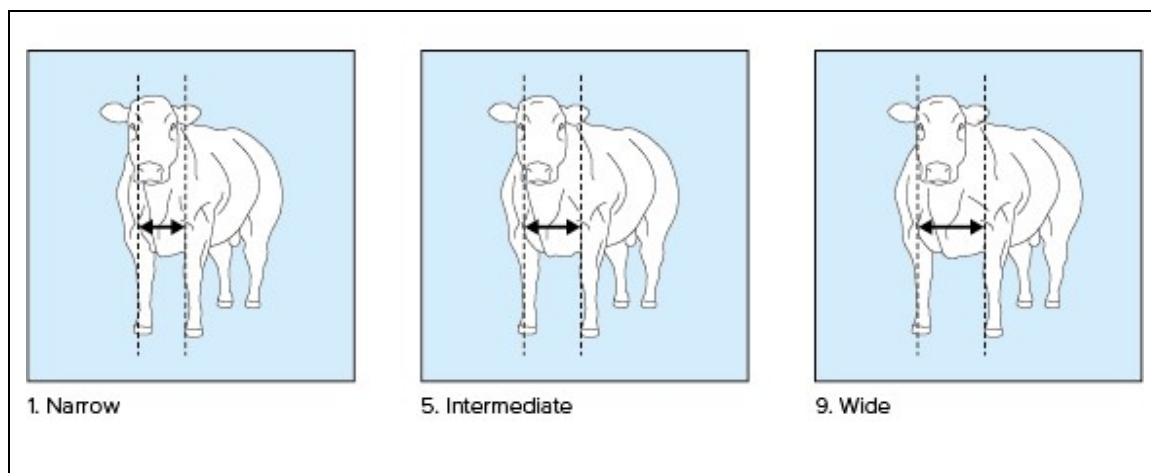
## 2. Back Length

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



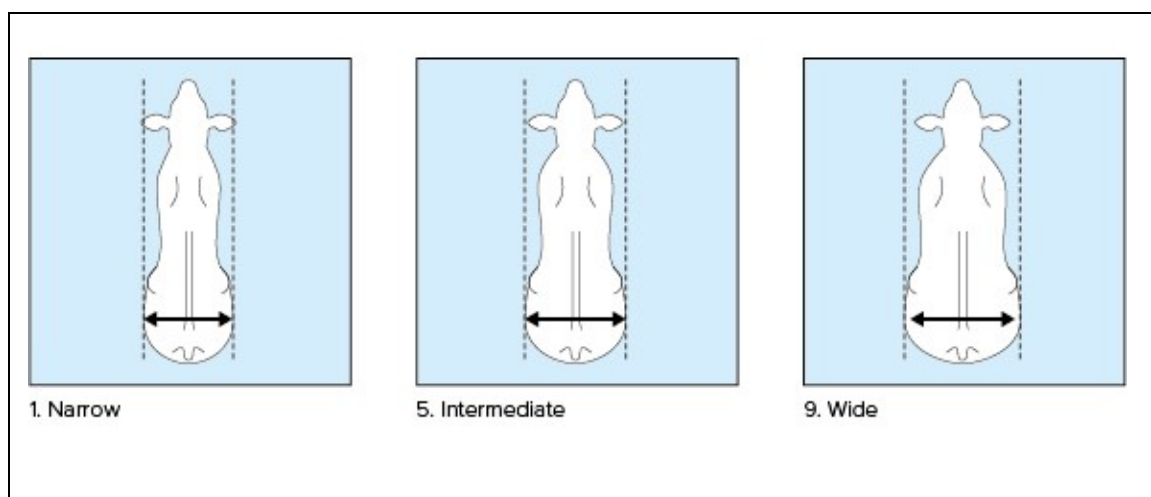
### 3. Chest Width

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



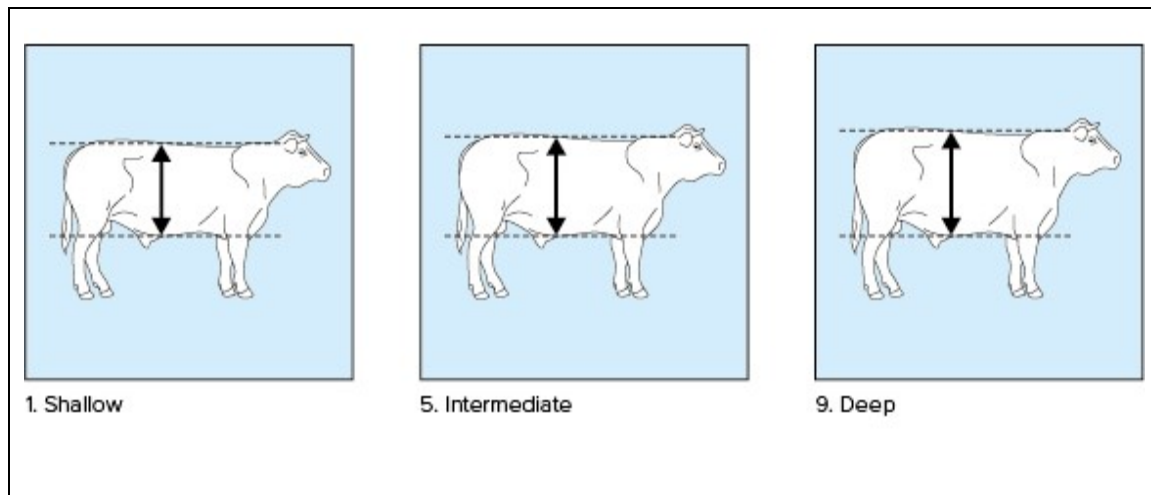
### 4. Thurl Width

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



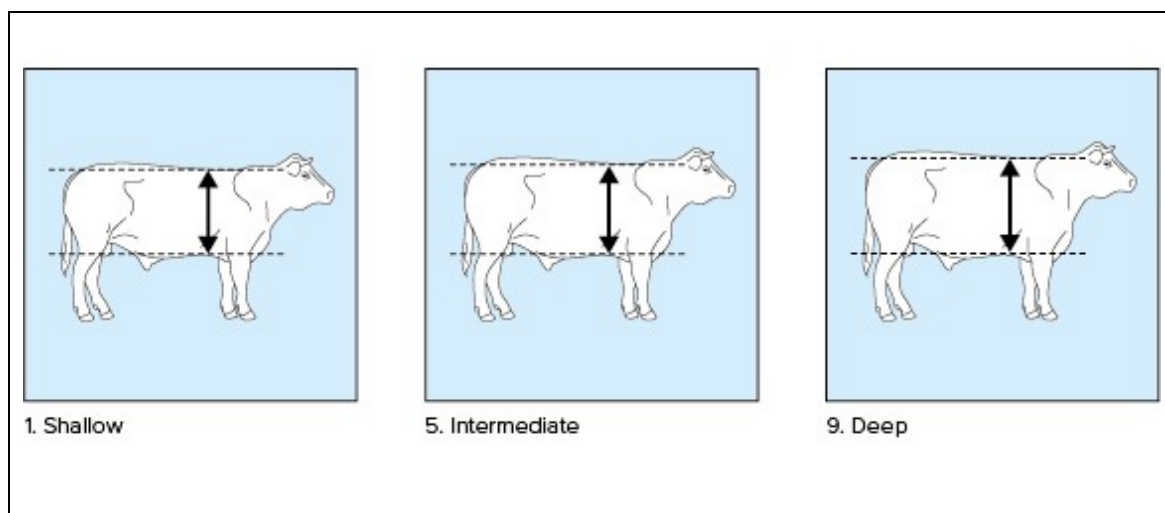
## 5. Body Depth

**Reference point:** Distance between top of back and bottom of barrel at the deepest point: independent of stature.  
1 - Shallow  
5 - Intermediate  
9 - Deep



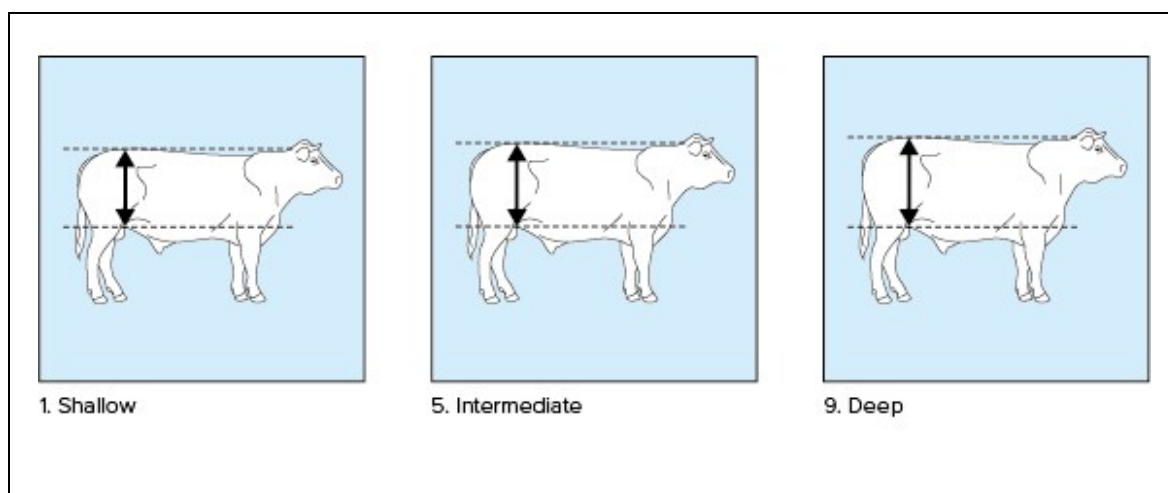
## 6. Chest Depth

**Reference point:** Distance between top of back just behind shoulder and bottom of barrel behind the front leg.  
1 - Shallow  
5 - Intermediate  
9 - Deep



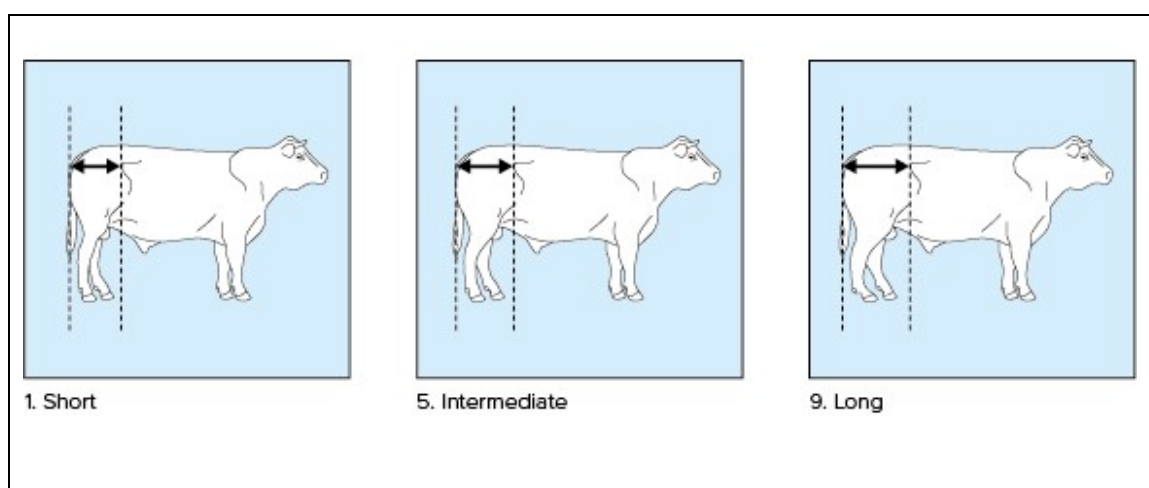
## 7. Flank Depth

**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

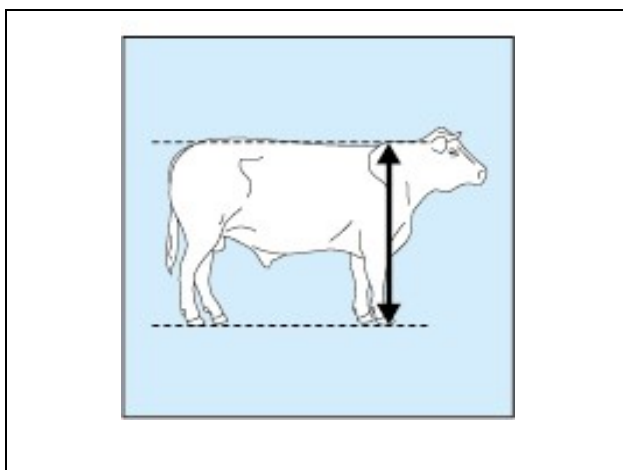
**Reference point:** Distance from hips to pins  
1 - Short  
5 - Intermediate  
9 - Long





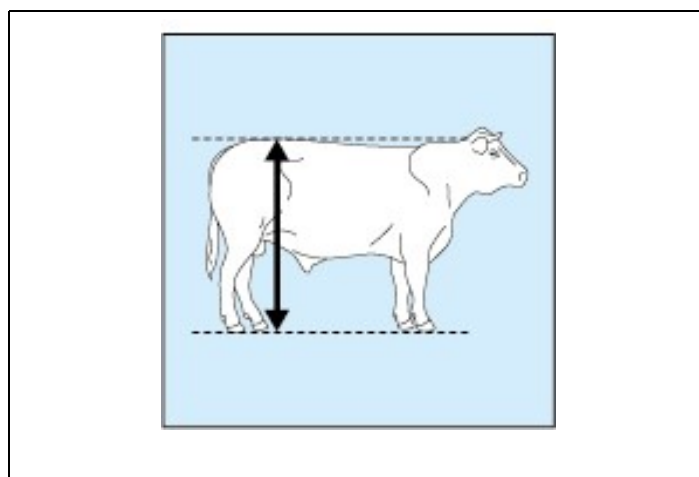
**9. Height at Withers**

**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**

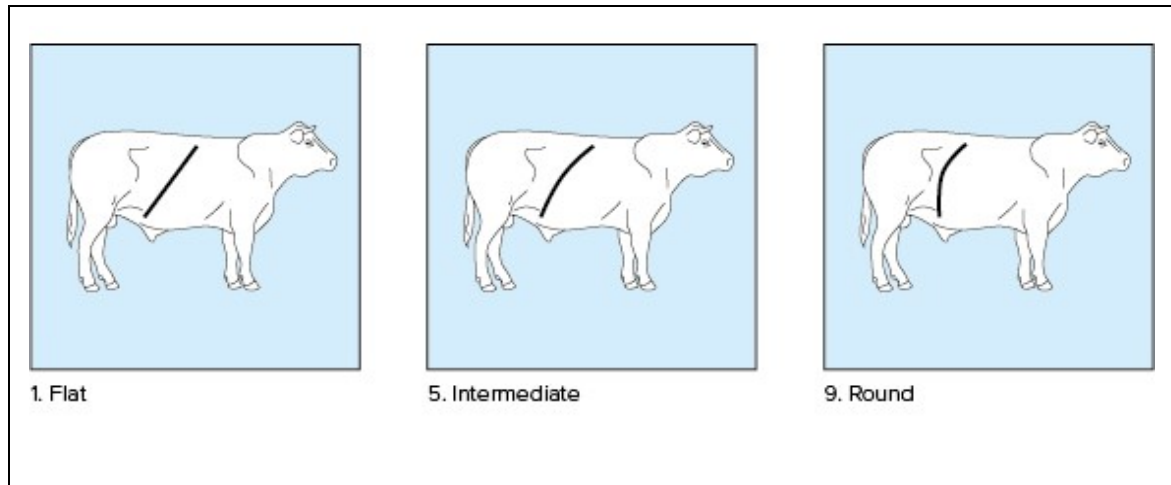
**Reference point:** Measured from the top of the back in between the hips to the ground.  
1 - Short  
5 - Intermediate  
9 - Tall



### 11. Rounding of ribs

**Reference point:** The curving of the ribs.

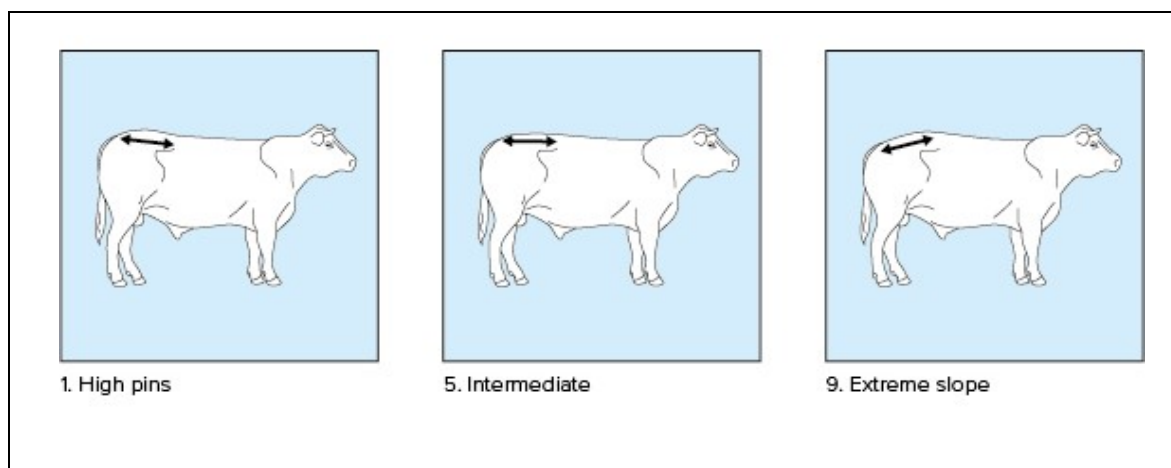
- 1 - Flat
- 5 - Intermediate
- 9 - Round



### 12. Rump Angle

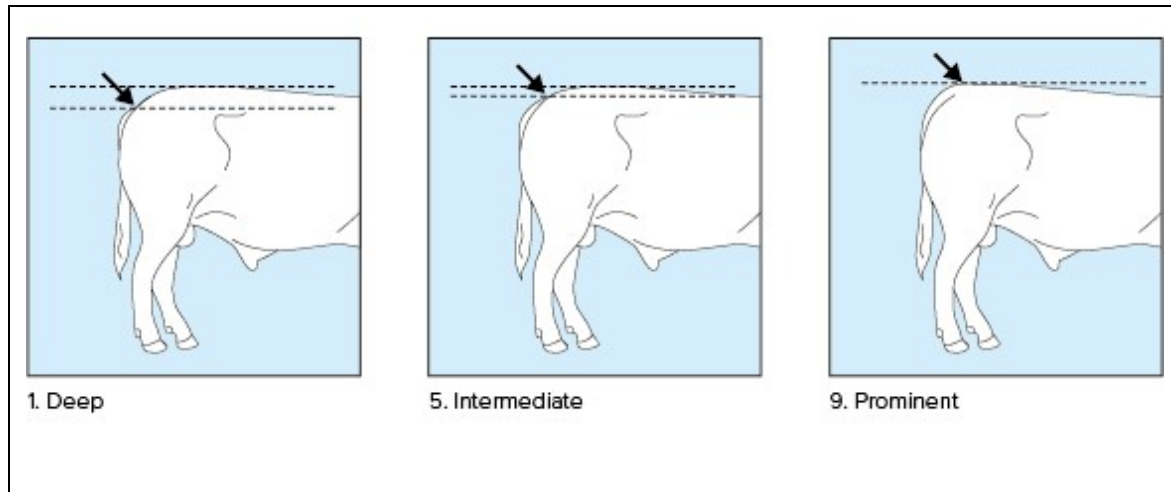
**Reference point:** Measured as the angle of the rump structure from hooks (hips) to pins.

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



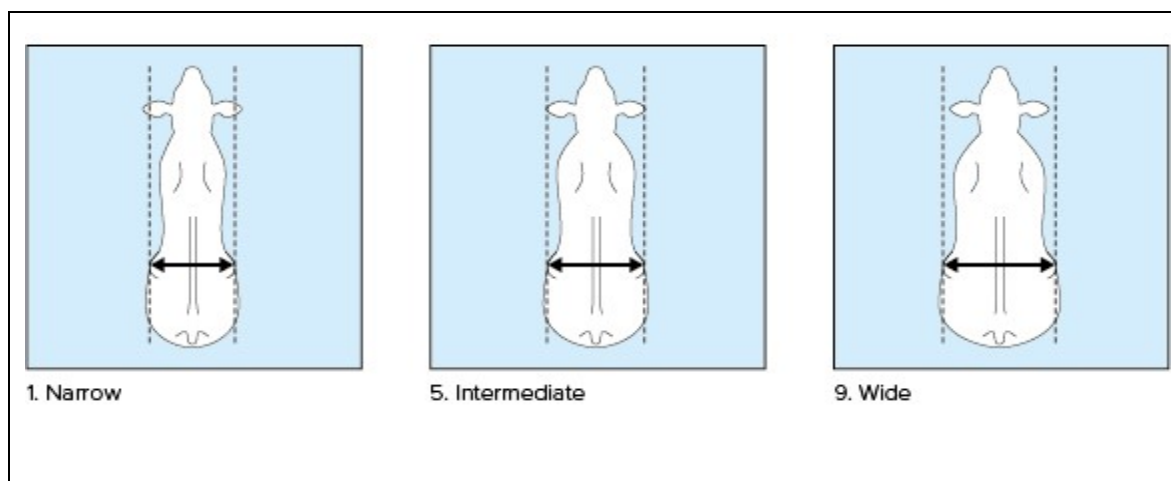
### 13. Tail Set

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



### 14. Width at Hips

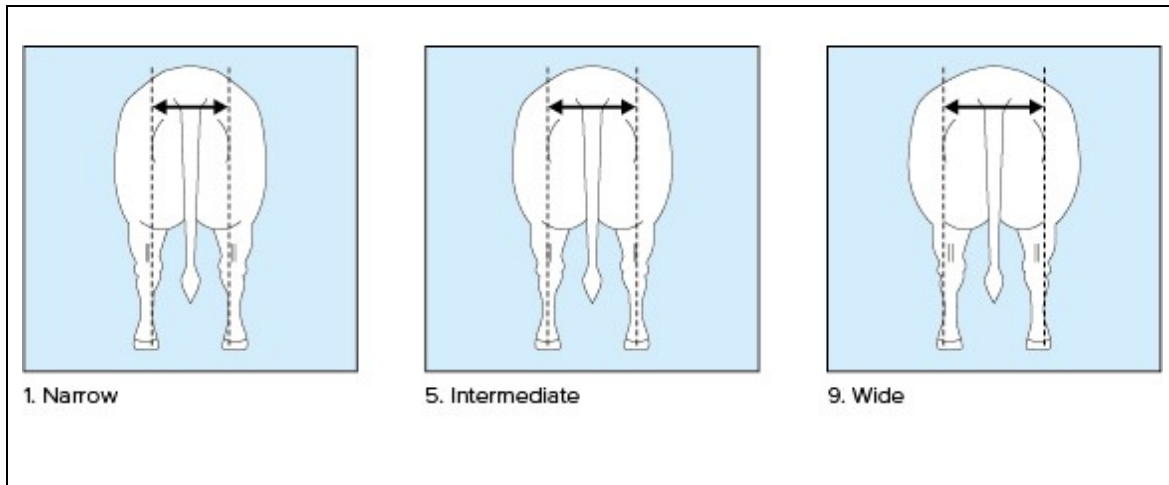
**Reference point:** Distance between the hips.  
1 - Narrow  
5 - Intermediate  
9 - Wide



**15. Width at Pins**

**Reference point:** Distance between the pins.

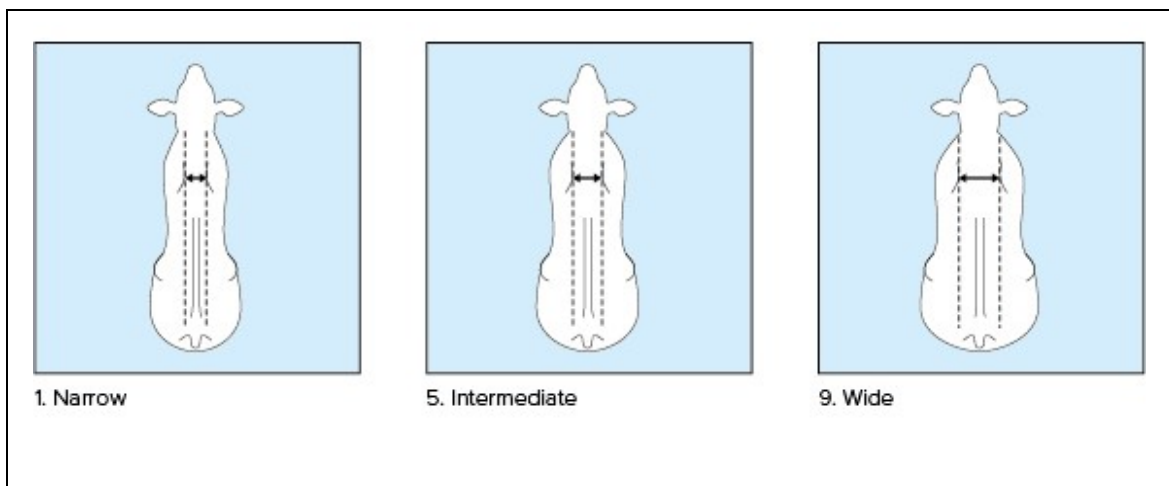
- 1 - Narrow
- 5 - Intermediate
- 9 - Wide



**16. Muscularity Shoulder top view**

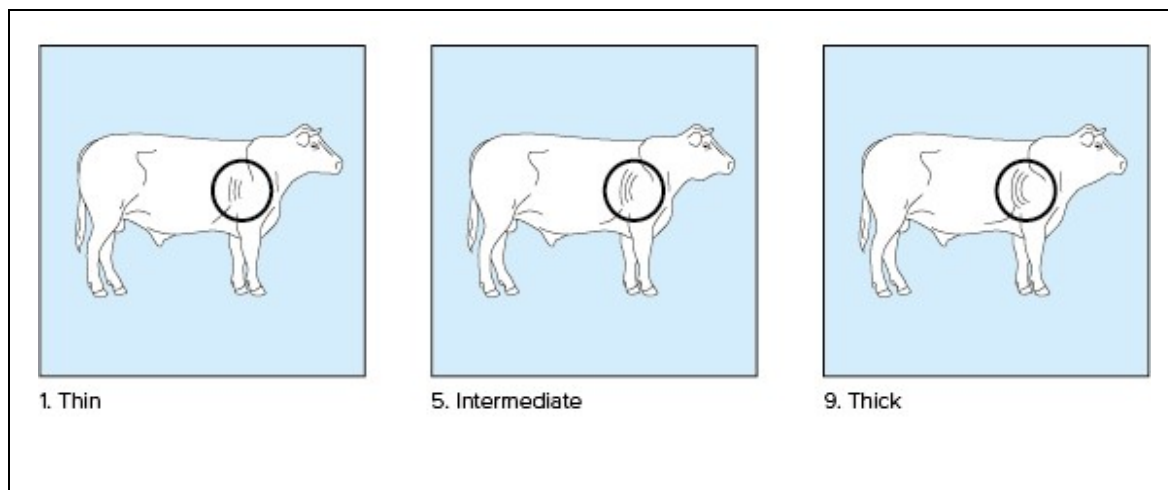
**Reference point:** Distance and muscularity between the tops of shoulders, top view.

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



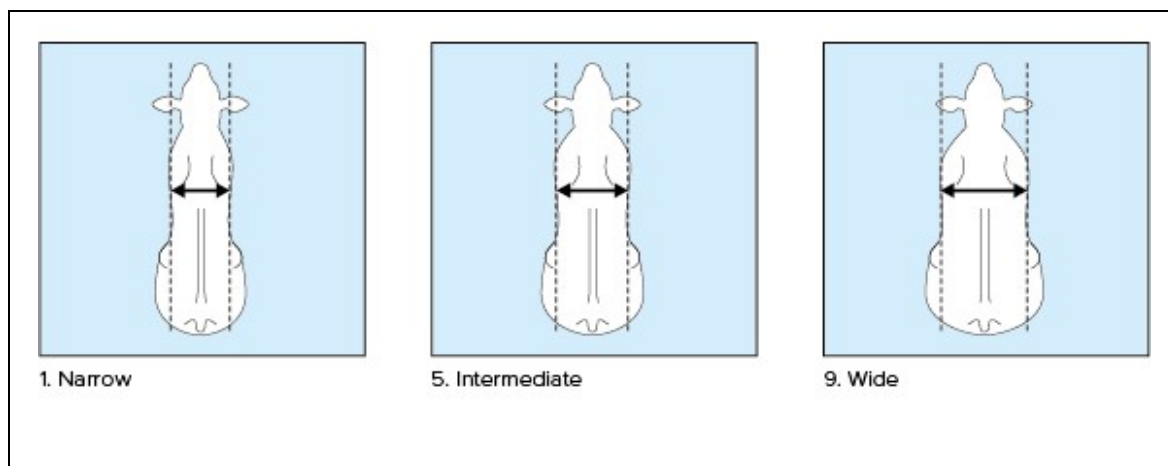
**17. Muscularity Shoulder side view**

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



**18. Back Width**

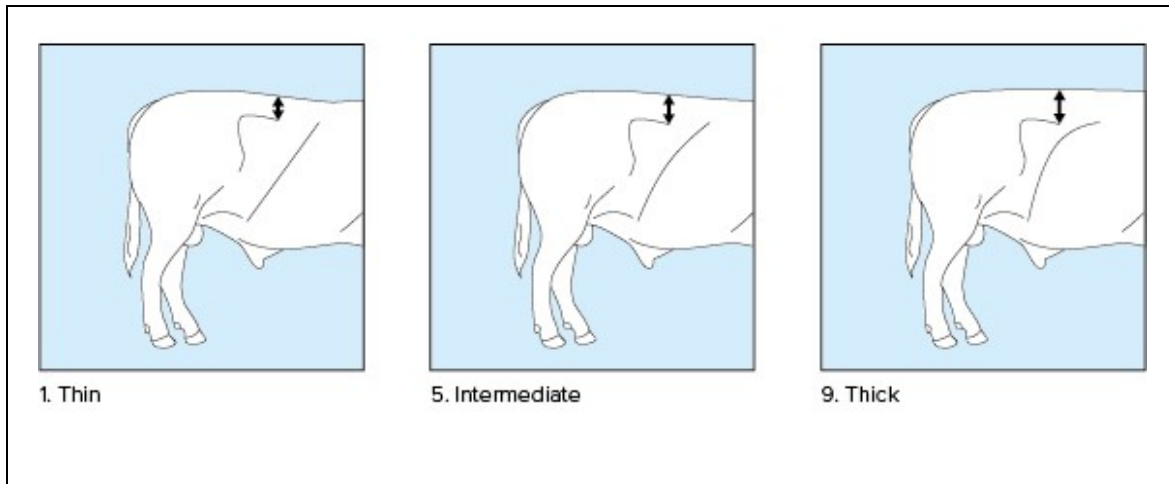
**Reference point:** Width of the back behind the shoulders.  
1 - Narrow  
5 - Intermediate  
9 - Wide



**19. Thickness of Loin**

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

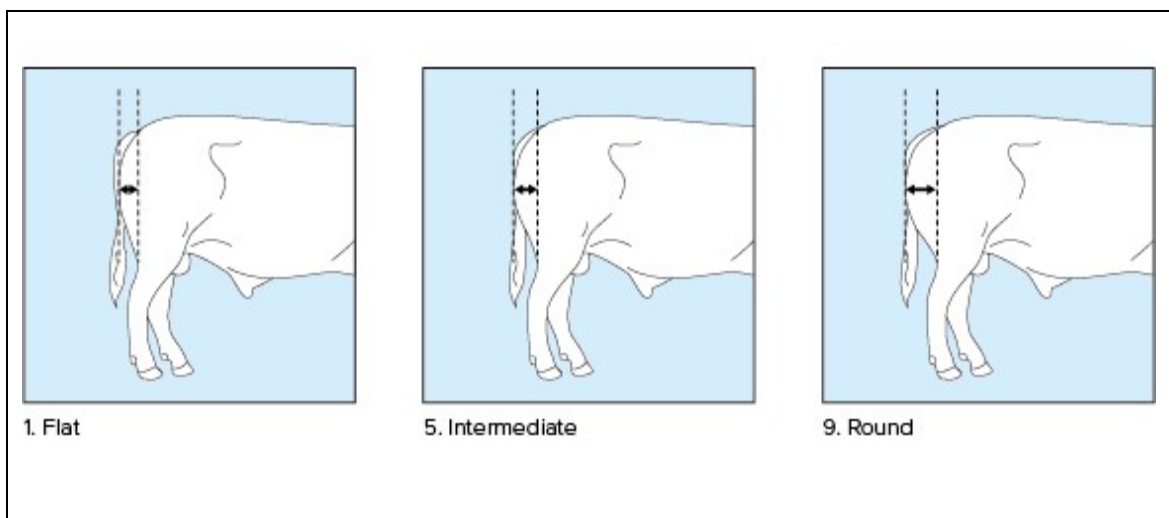
- 1 - Thin
- 5 - Intermediate
- 9 - Thick



**20. Thigh Rounding side view**

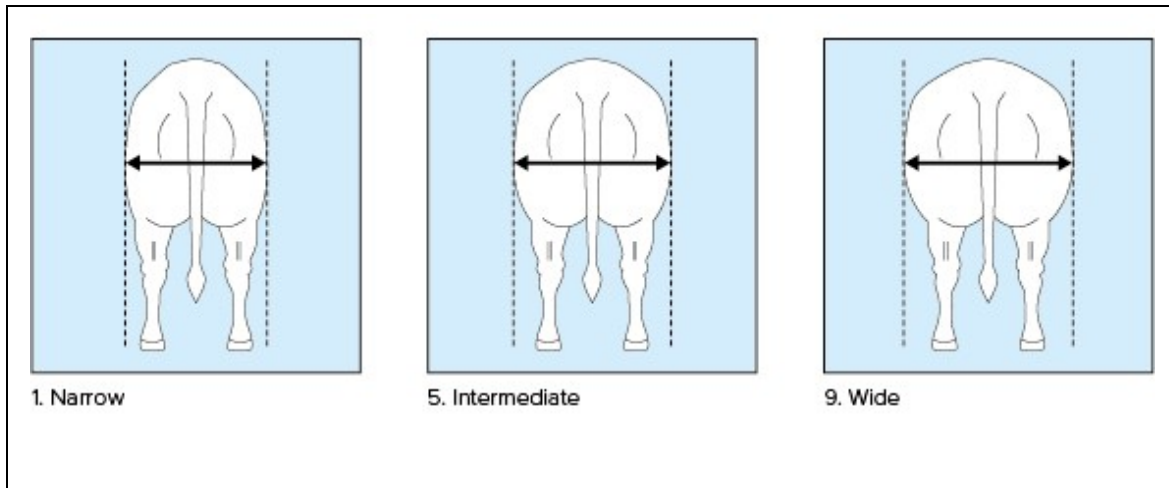
**Reference point:** Curving of the thigh behind the vertical line between pins and hock, side view.

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



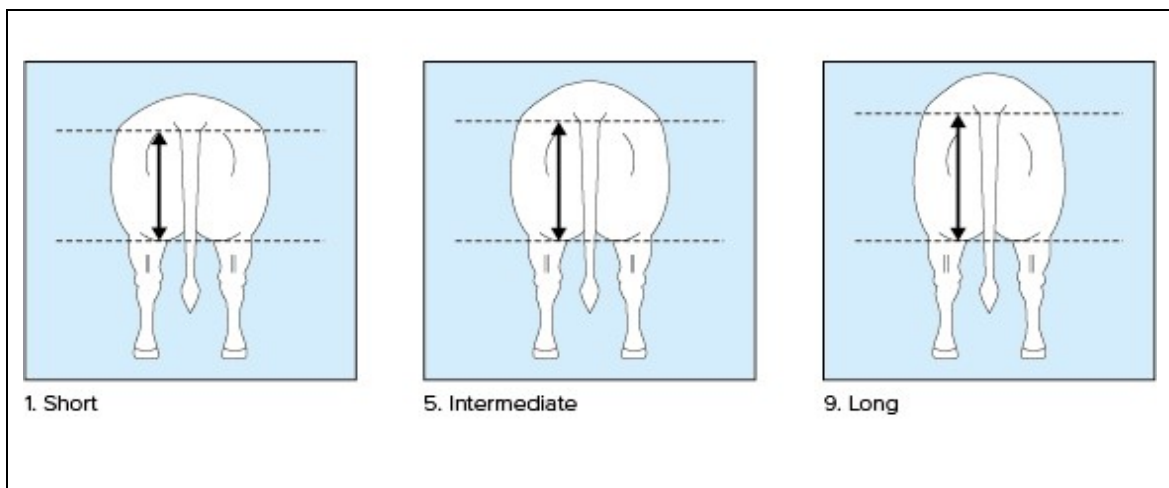
**21. Thigh Width rear view**

**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**

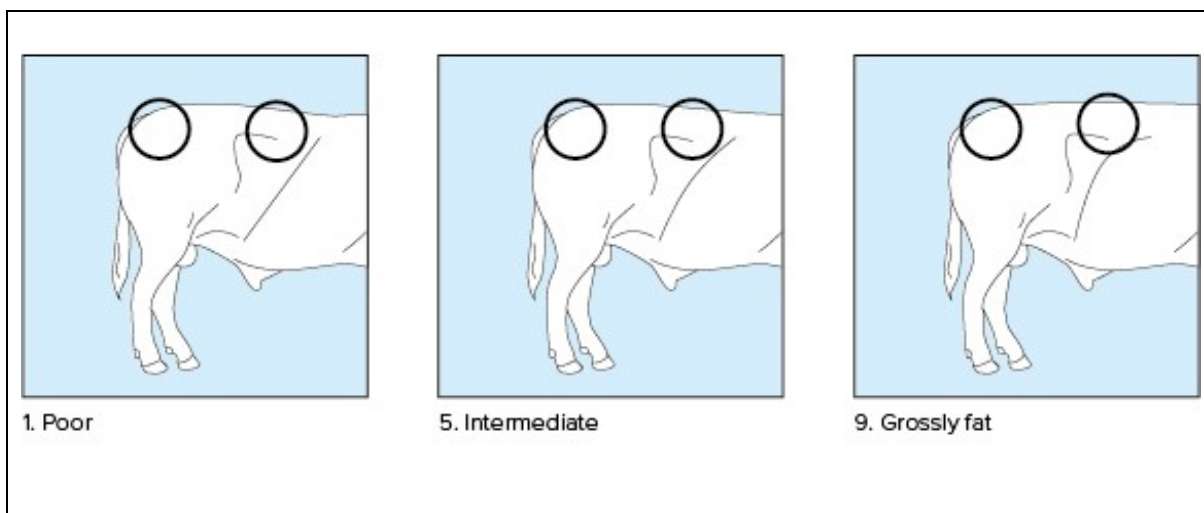
**Reference point:** Length of the thigh between pins and thigh attachment to the leg.  
1 - Short  
5 - Intermediate  
9 - Long



### 23. Body Condition Score

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

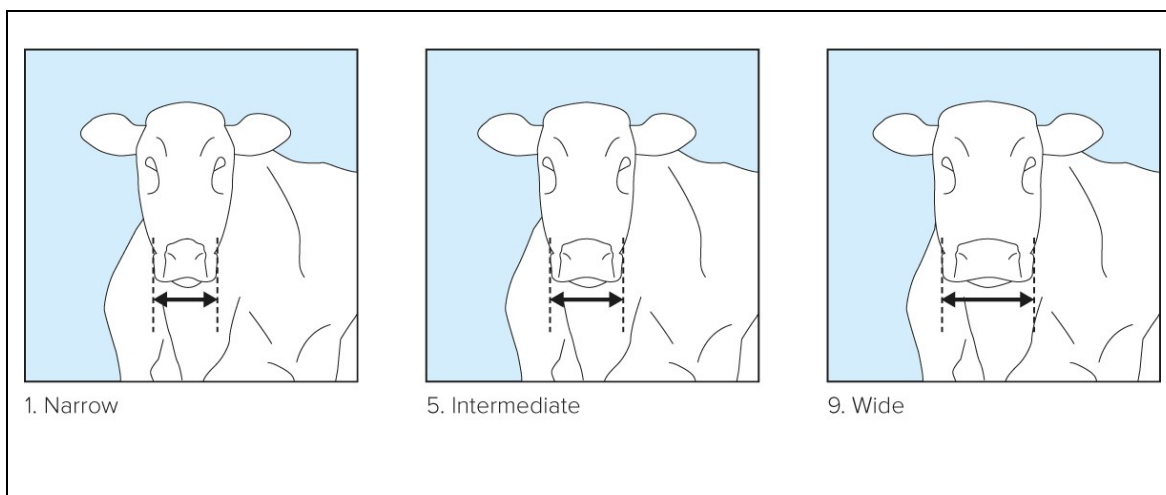
- 1 - Poor
- 5 - Intermediate
- 9 - Grossly fat



### 24. Muzzle Width

**Reference point:** Width of the muzzle.

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

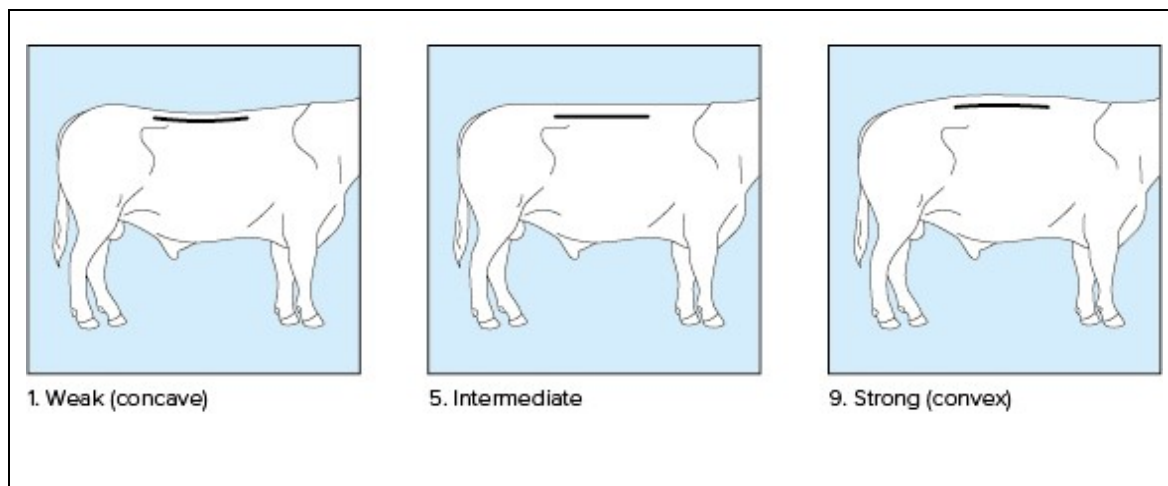




## 25. Top Line

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

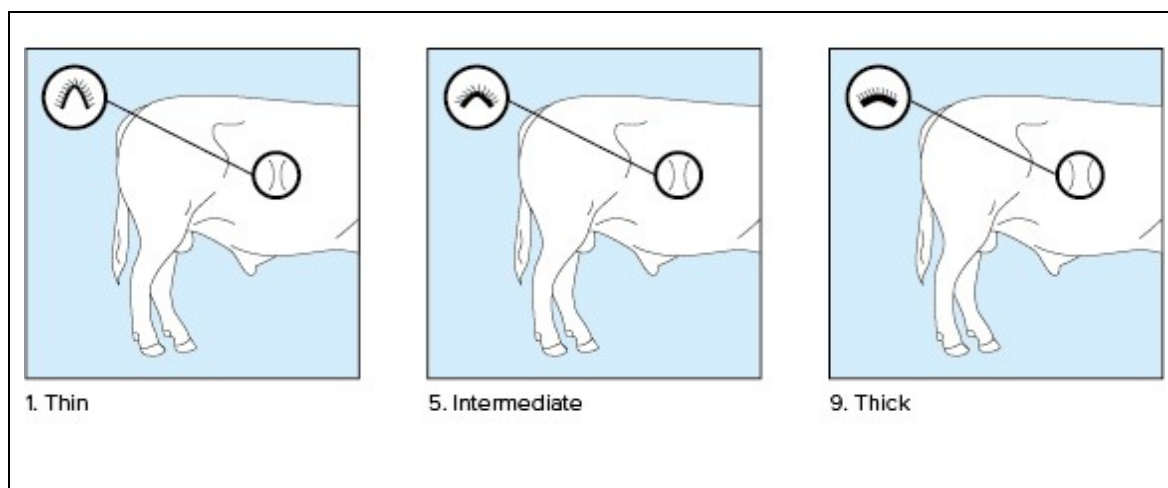
- 1 - Weak (concave)
- 5 - Intermediate
- 9 - Strong (convex)



## 26. Skin Thickness

**Reference point:** Thickness of skin.

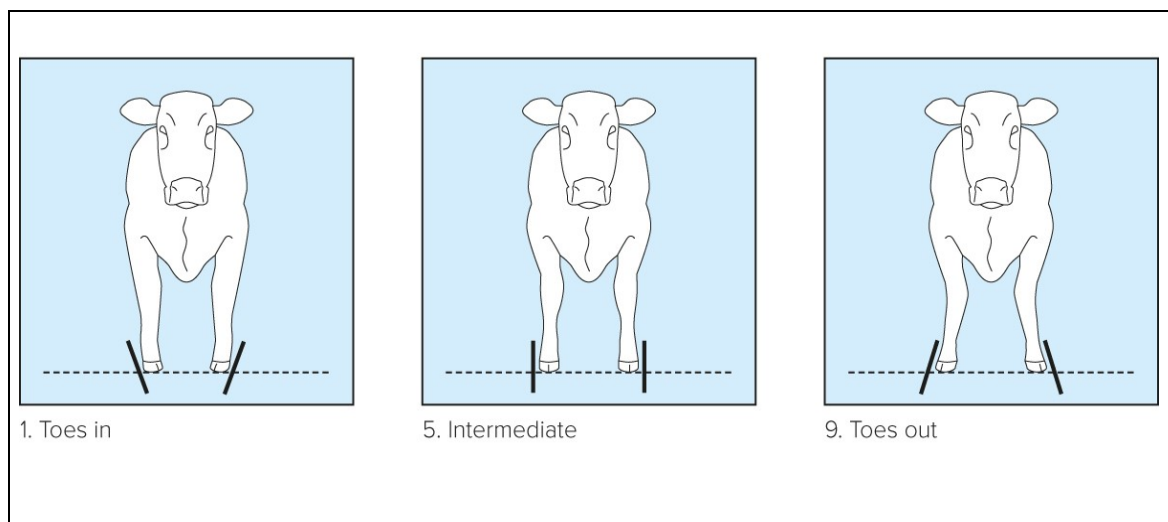
- 1 - Thin
- 5 - Intermediate
- 9 - Thick



**27. Front Legs front view**

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

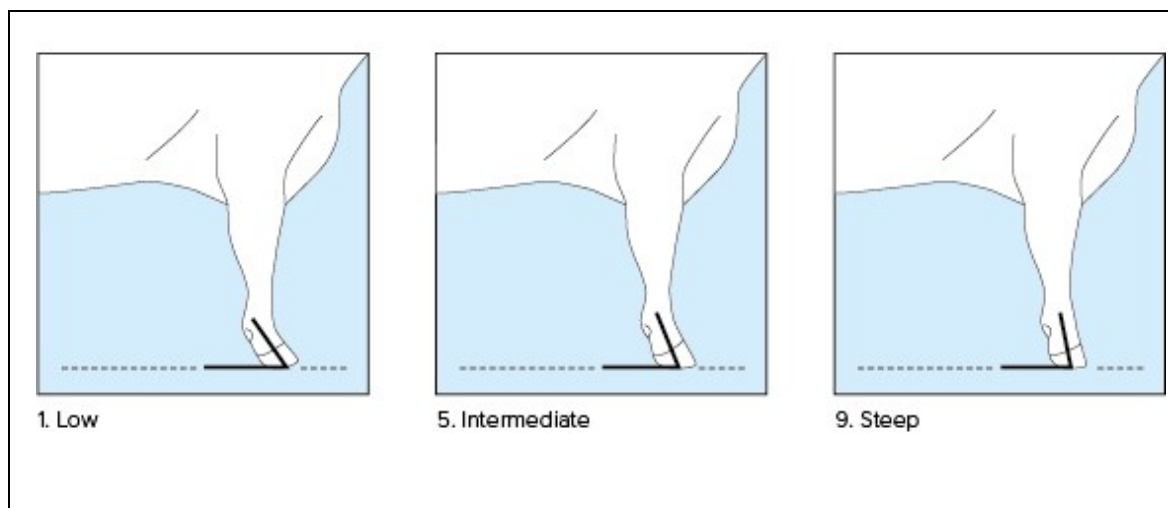
- 1 - Toes in
- 5 - Intermediate
- 9 - Toes out



**28. Fore Pasterns side view**

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

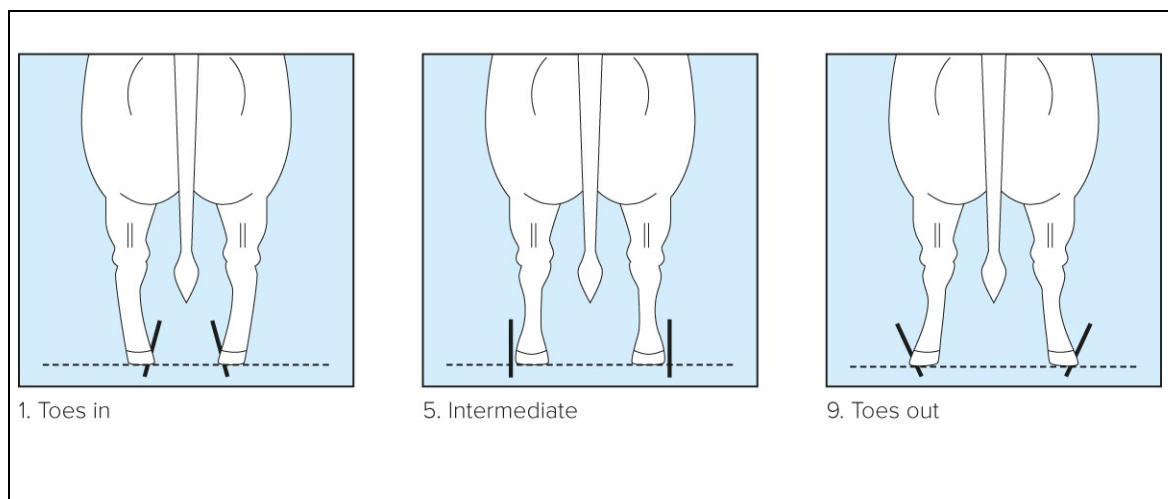
- 1 - Low
- 5 - Intermediate
- 9 - Steep



**29. Rear Legs rear view**

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

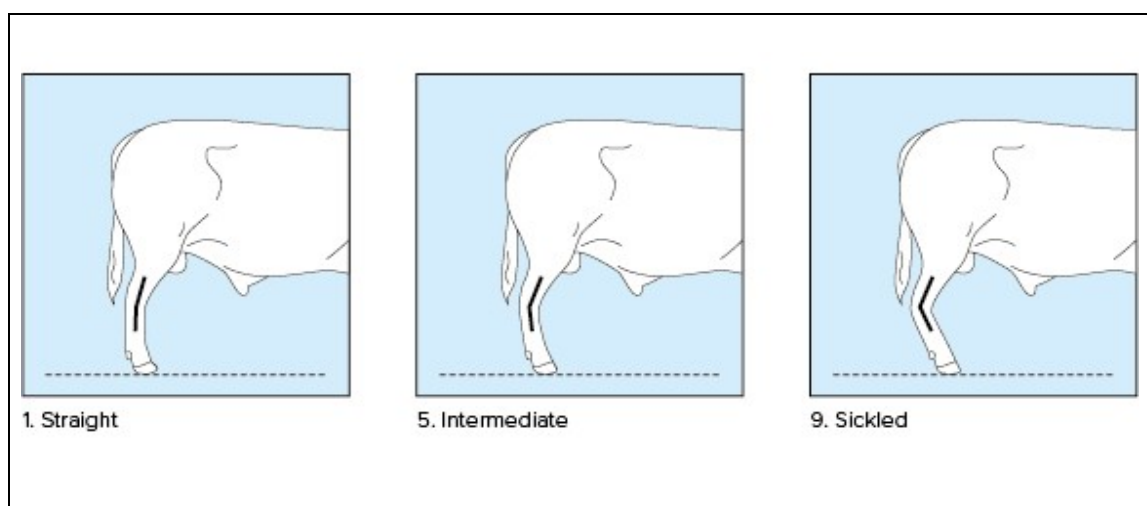
- 1 - Toes in
- 5 - Intermediate
- 9 - Toes out



**30. Rear Legs side view**

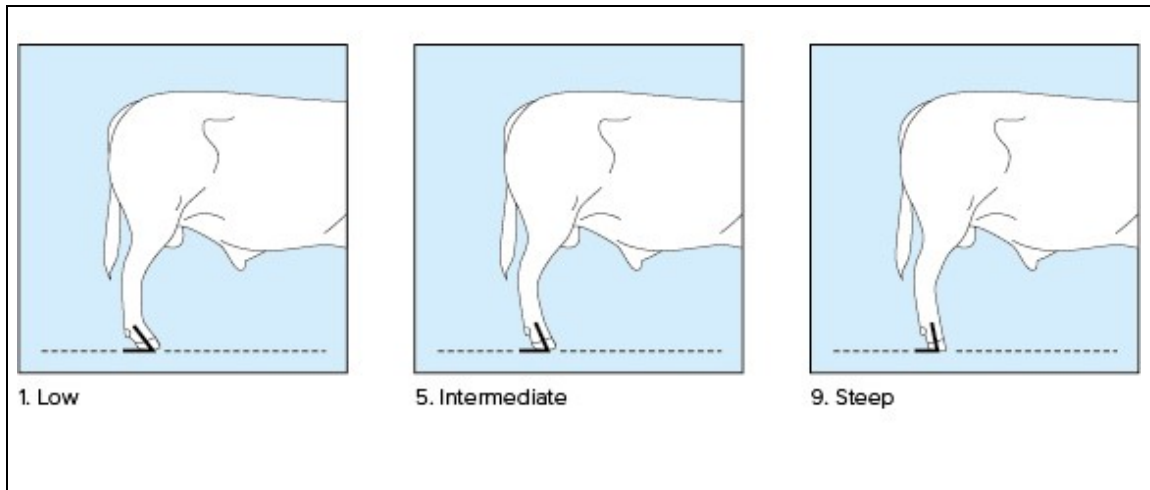
**Reference point:** Angle measured at the front of the hock.

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



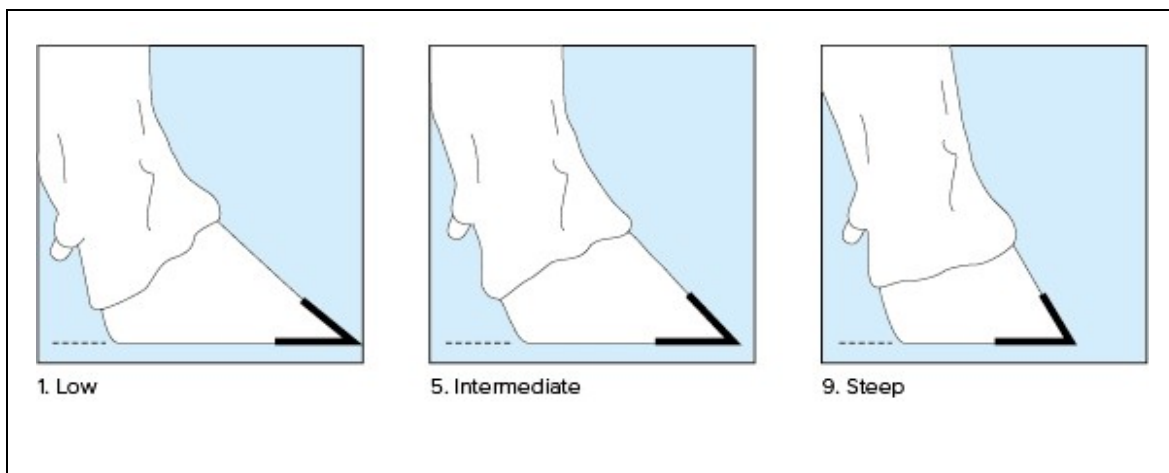
**31. Hind Pasterns side view**

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



**32. Claw Angle**

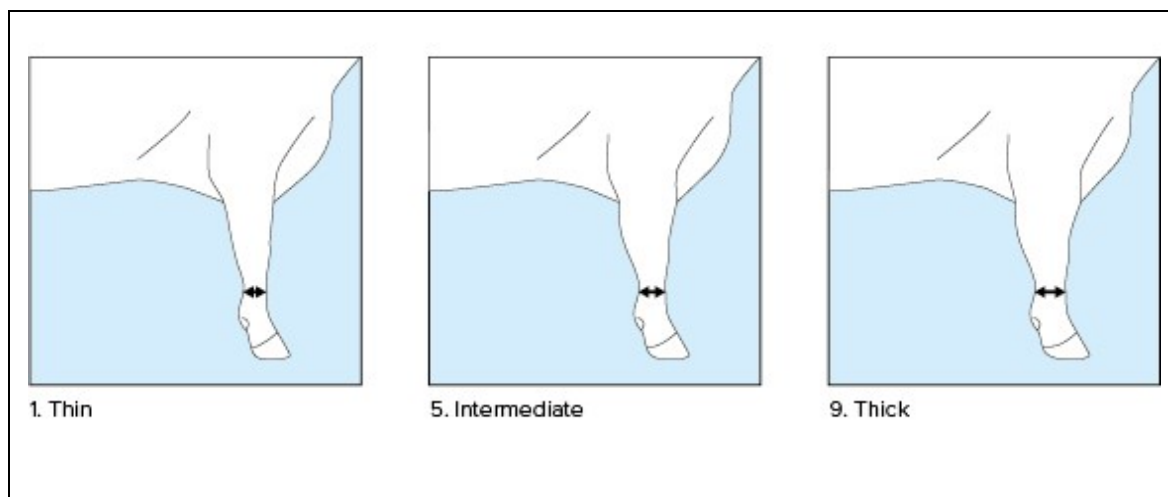
**Reference point:** Angle at the front of the rear hoof measured from the floor to the hairline.  
1 - Low  
5 - Intermediate  
9 - Steep



### 33. Thickness of Bone

**Reference point:** Thickness of the canon bone the forelegs.

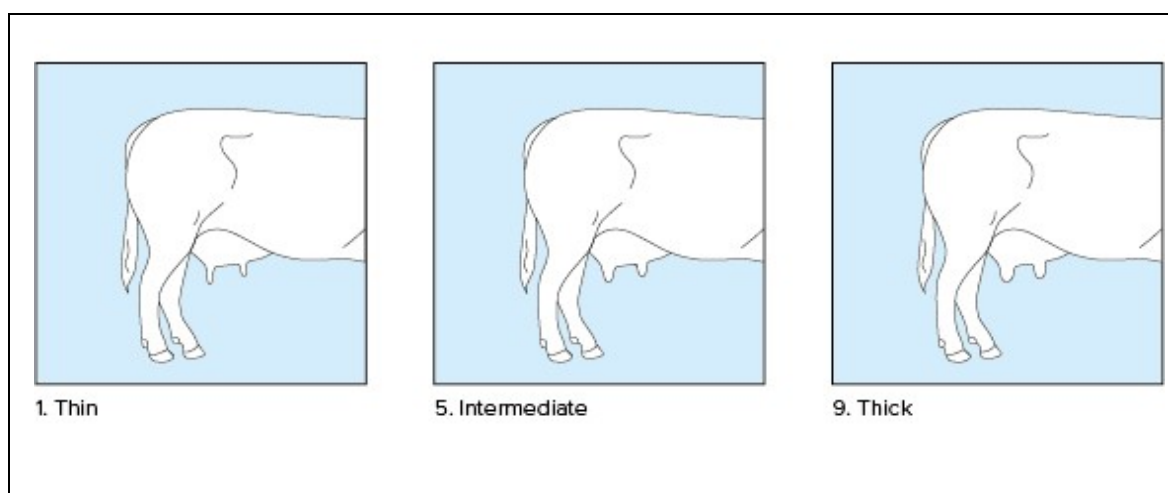
- 1 - Thin
- 5 - Intermediate
- 9 - Thick



### 34. Thickness of teat

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

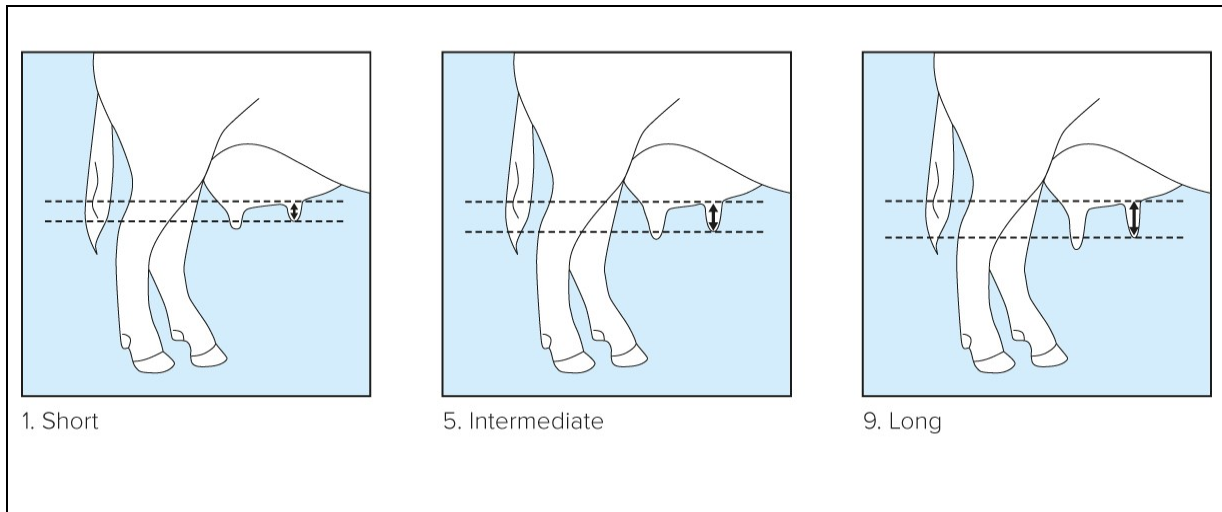
- 1 - Thin
- 5 - Intermediate
- 9 - Thick



### 35. Teat Length

**Reference point:** The length of the front teat.

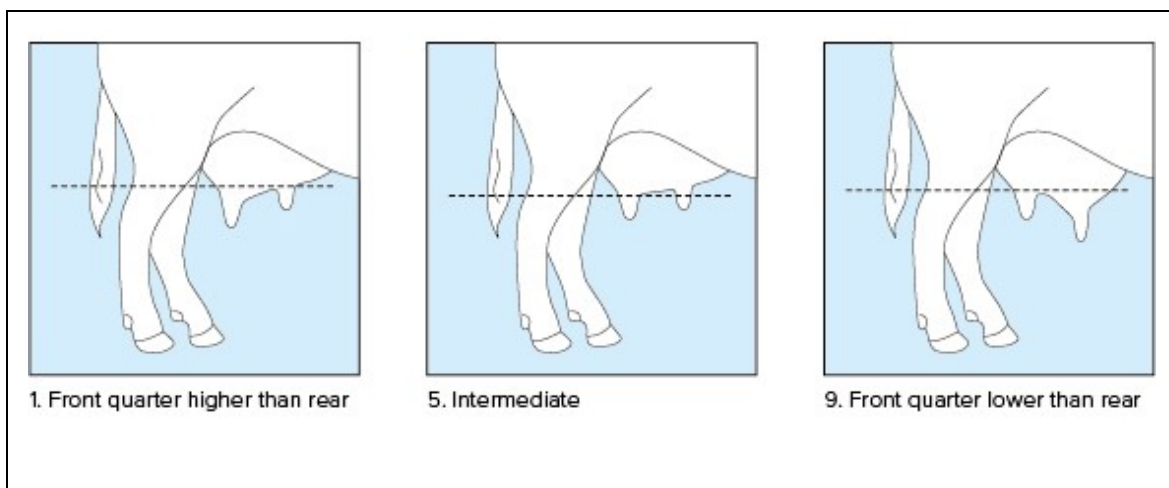
- 1 - Short
- 5 - Intermediate
- 9 - Long



### 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

