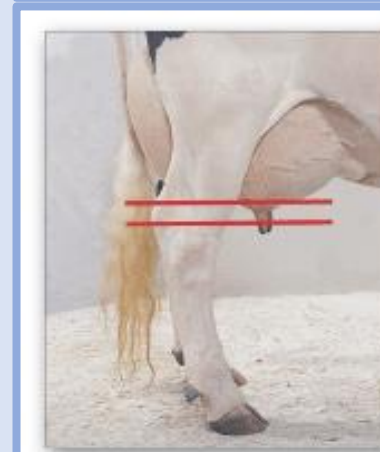
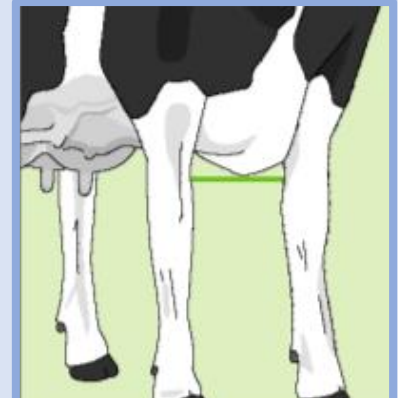
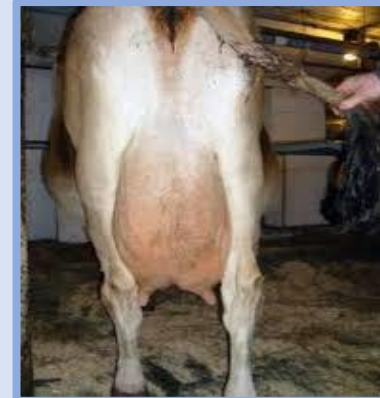


Theme 5: Fertility and Breeding

CONFORMATION, TYPE CLASSIFICATION AND JUDGING (Level 2)

Topic	Training & information Content
5.1	Dairy Cattle Breeds and Breeding
5.2	Breeding program for a dairy farm (medium & large)
5.3	Conformation, Type classification and judging
5.4	Cow handling
5.5	Milk production recording
5.6	Heat Detection
5.7	Artificial Insemination
5.8	Pregnancy Diagnosis
5.9	Fertility Management
5.10	Cows with abnormal discharge
5.11	Fertility disease recording
5.12	Calving recording
5.13	Use of Key Performance Indicators



1. You will learn about (learning objectives):

- Importance of body parts of a cow in judging cattle
- Key body parts to evaluate when judging cattle



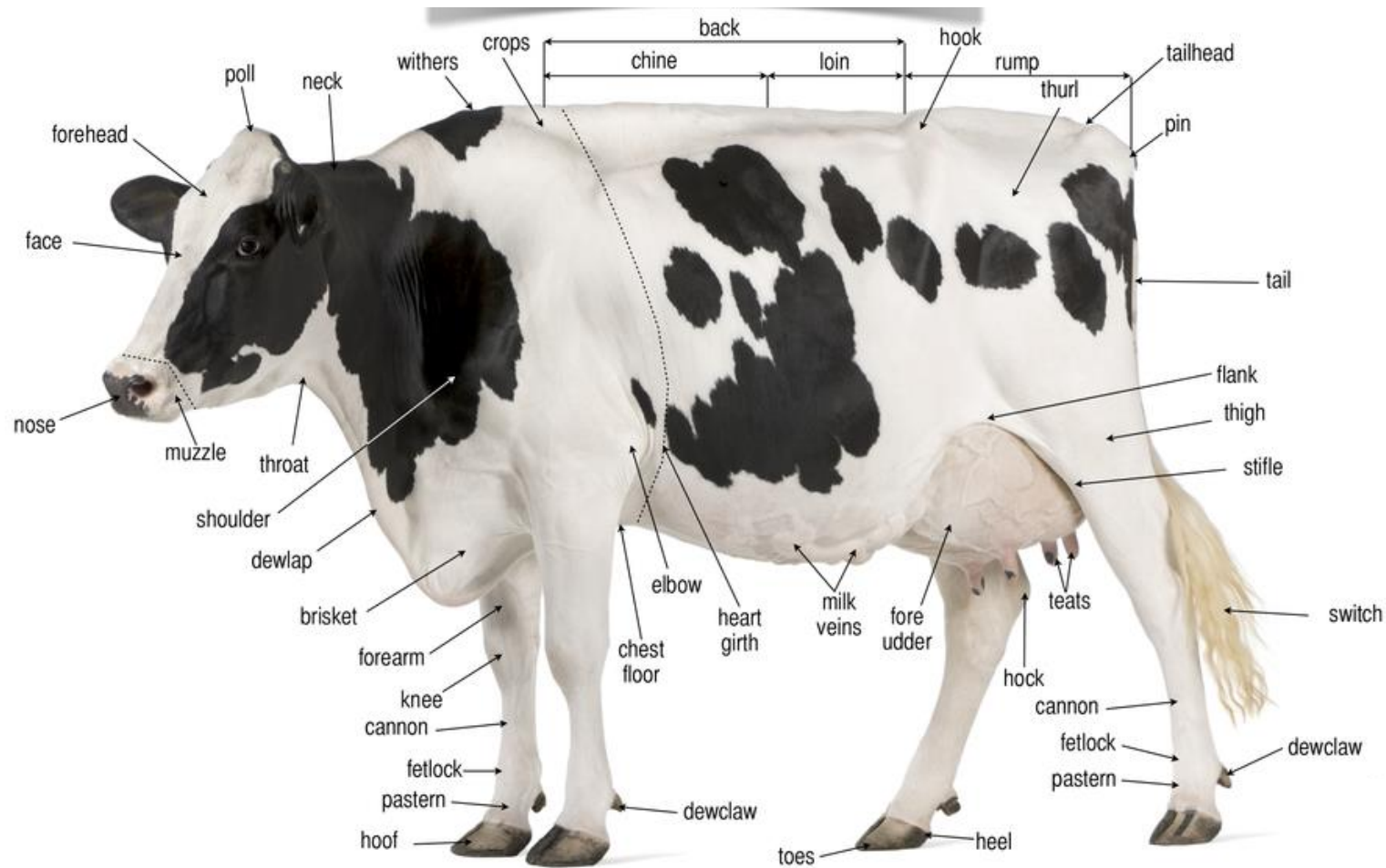
2. Background

- The exterior look (conformation) of the cow is for many farmers, not the most important part to emphasize when it comes to cattle judging.
- Cattle judging is important in influencing decision making e.g. during selection. Judging entails evaluating and ranking/scoring cattle based on their closeness to 'ideal' dairy conformation.
- Of course, breeding values are much more reliable, but in case breeding values are not available more emphasis should be given to linear traits of the cow and bull.



3. Parts of a dairy cow

- Familiarizing with (thorough knowledge of) the body parts of a cow is a key step in successful cattle judging.



4. Classification of body parts

- The judging exercise can be broken down into major classes that entail specific body parts to be evaluated and ranked/scored namely;

Udder. = Tilted, Nice texture, Slightly deep

Fertility. = Steep rump angle, strong loin.

Capacity. = Wide and Deep, low stature.

Feet & **L**egs. = Straight and coarse

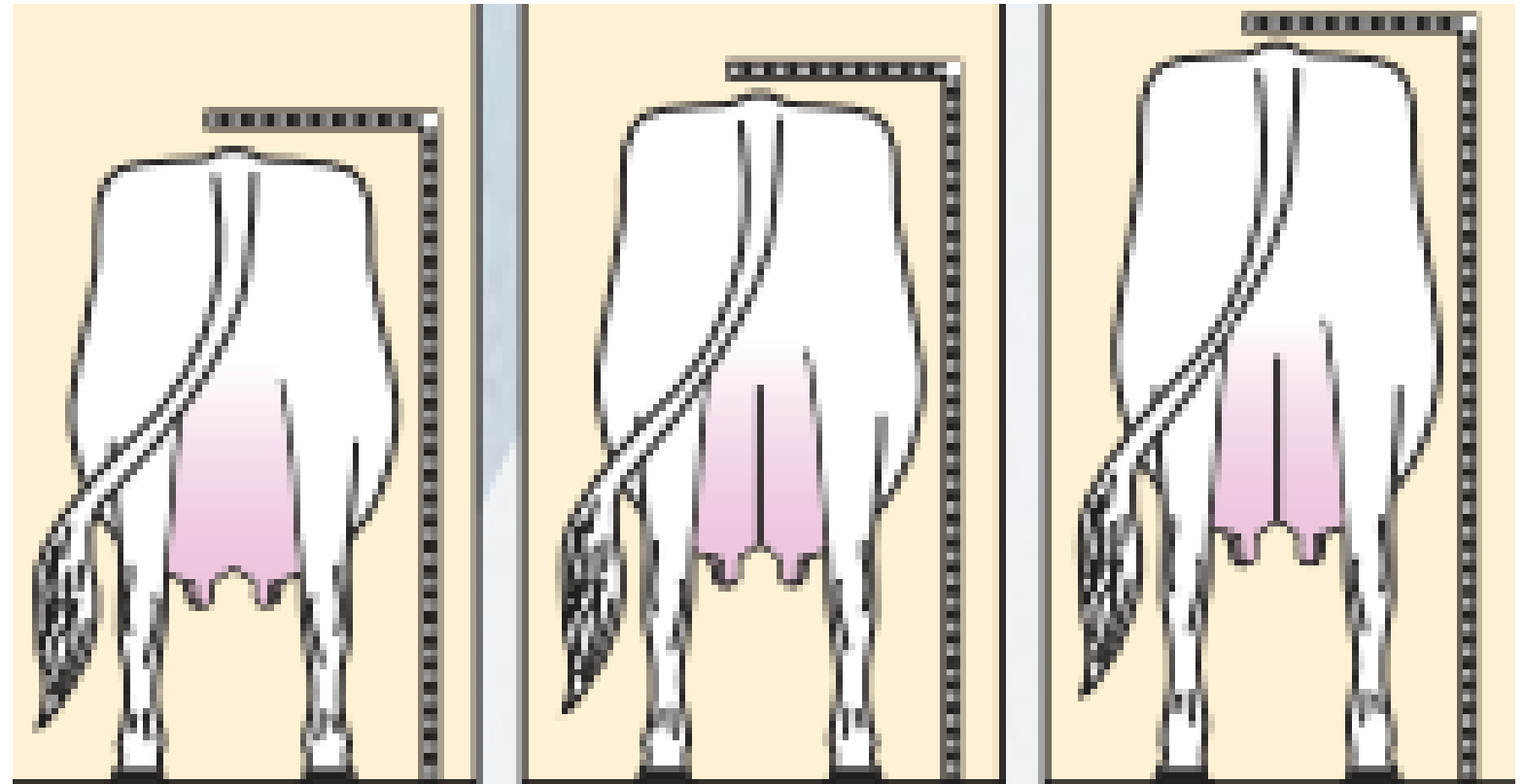


5. Body frame

- It is important to have an impression of the body of the cow. This is done by assessing the [Rump height](#).

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Scores (1, 5 and 9)



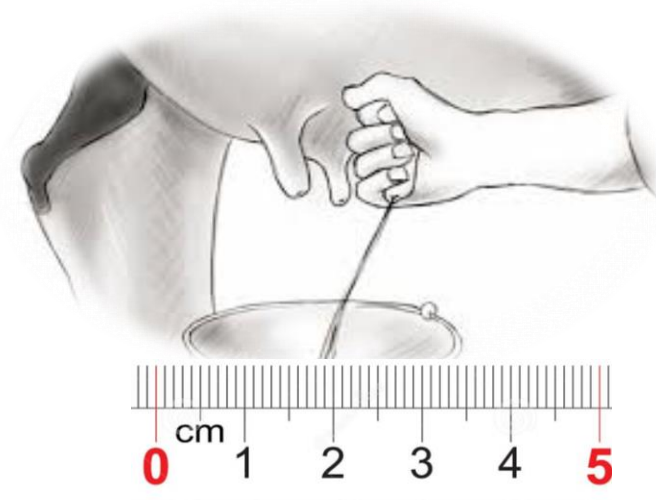
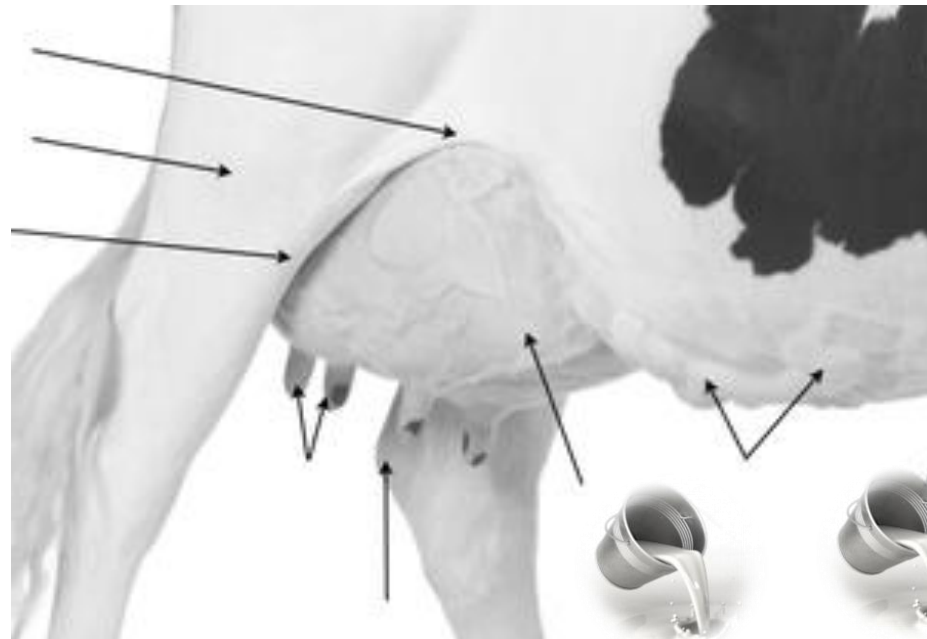
1; **Short.**

5; **Intermediate.**

9; **Tall.**

6. Udder

- Major consideration is given to the traits that contribute to high milk yield and a long productive life.



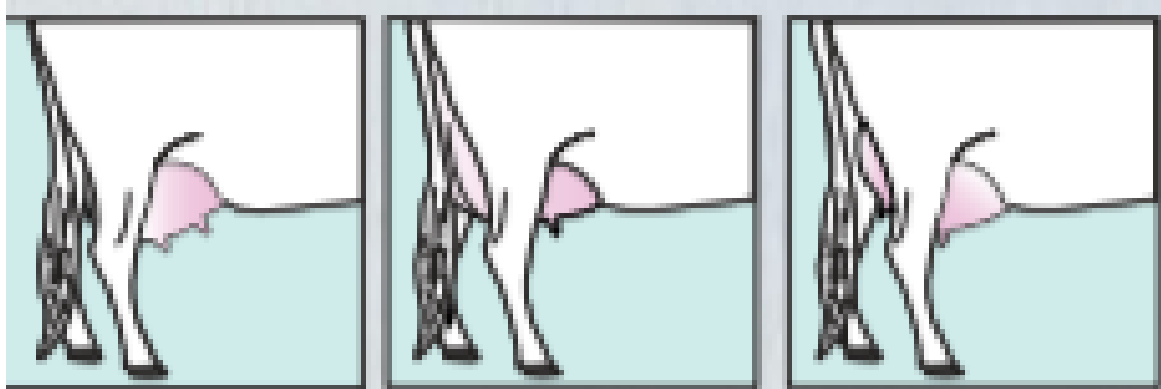
(Fore) udder should be firmly attached with moderate length and ample capacity

Udder



6.1 Udder cont'd: Floor and depth

1



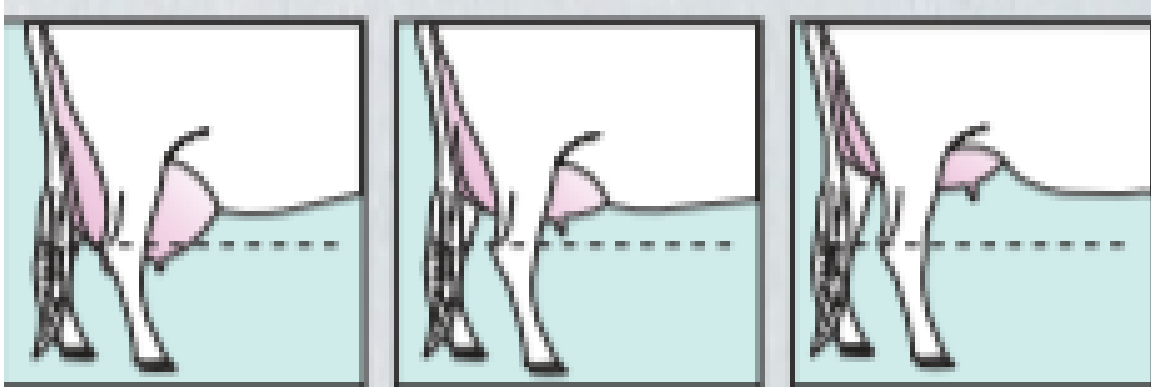
1; **Tilt.**

5; **Intermediate.**

9; **Reverse Tilt**

Udder Floor.

2



1; **Deep.**

5; **Intermediate.**

9; **Shallow.**

Udder Depth.

6.2 Udder cont'd: Suspensory ligament and Udder attachment

3



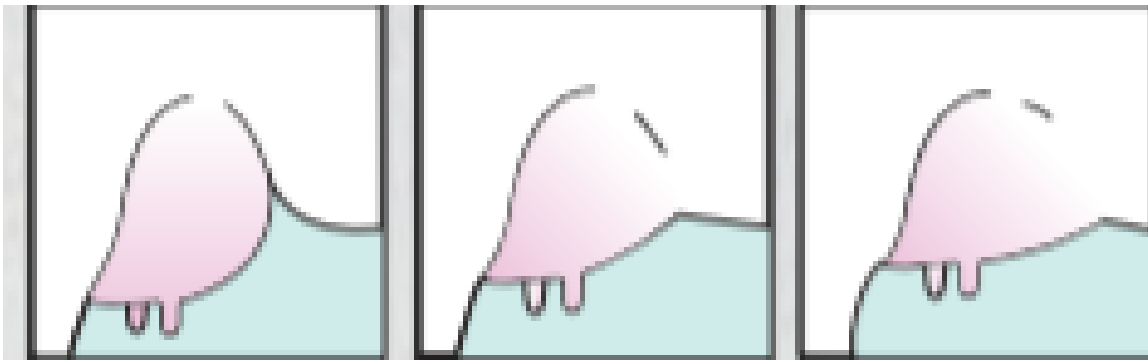
1; **Weak.**

5; **Intermediate.**

9; **Strong.**

Median Suspensory Ligament.

4



1; **Weak**

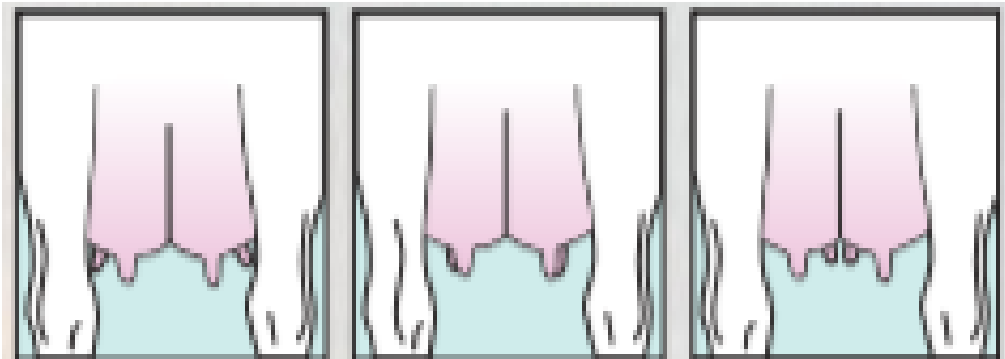
5; **Intermediate.**

9; **Strong**

Fore Udder Attachment.

6.3: Udder cont'd: Front and rear teats placement

5



1; **Wide**

5; **Centre.**

9; **Close**

Front Teat Placement.

6



1; **Wide**

5; **Centre.**

9; **Close**

Rear Teat Placement.

6.4 Udder cont'd: Teat length and Udder texture

7



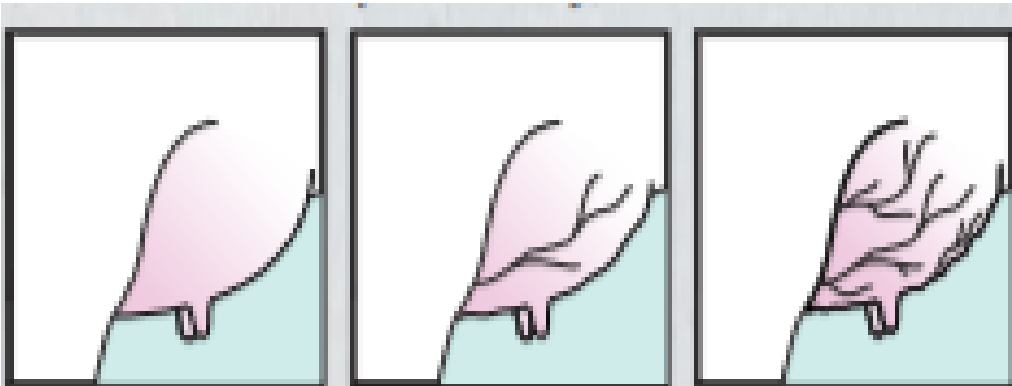
1; **Short.**

5; **Intermediate.**

9; **Long.**

Teat Length.

8



1; **Fleshy.**

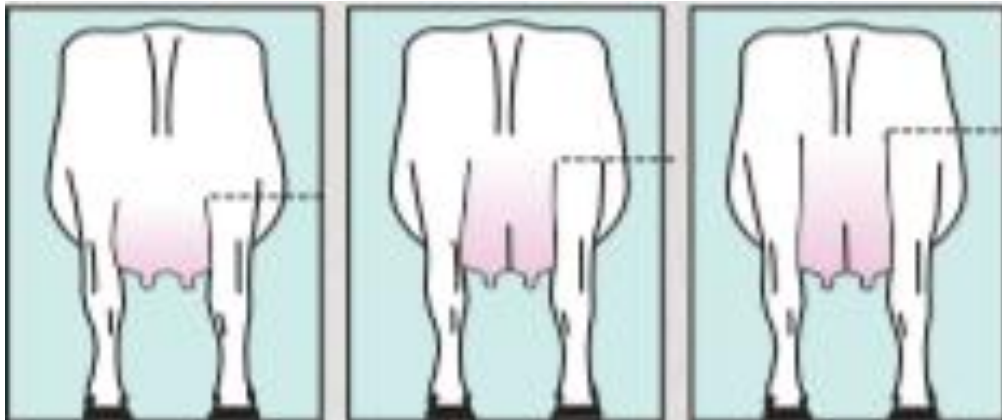
5; **Intermediate.**

9; **Soft**

Udder Texture.

6.5 Udder cont'd: Rear udder height and width

9



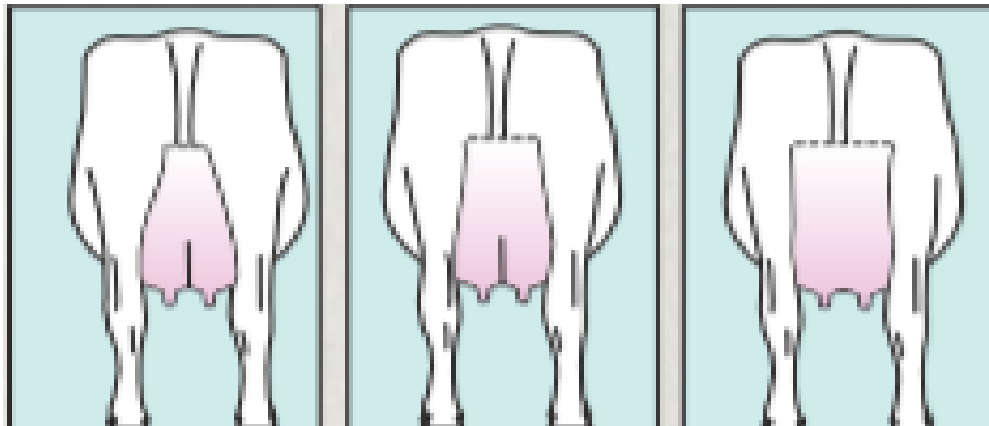
1; Low

5; Intermediate.

9; High

Rear Udder Hight.

10



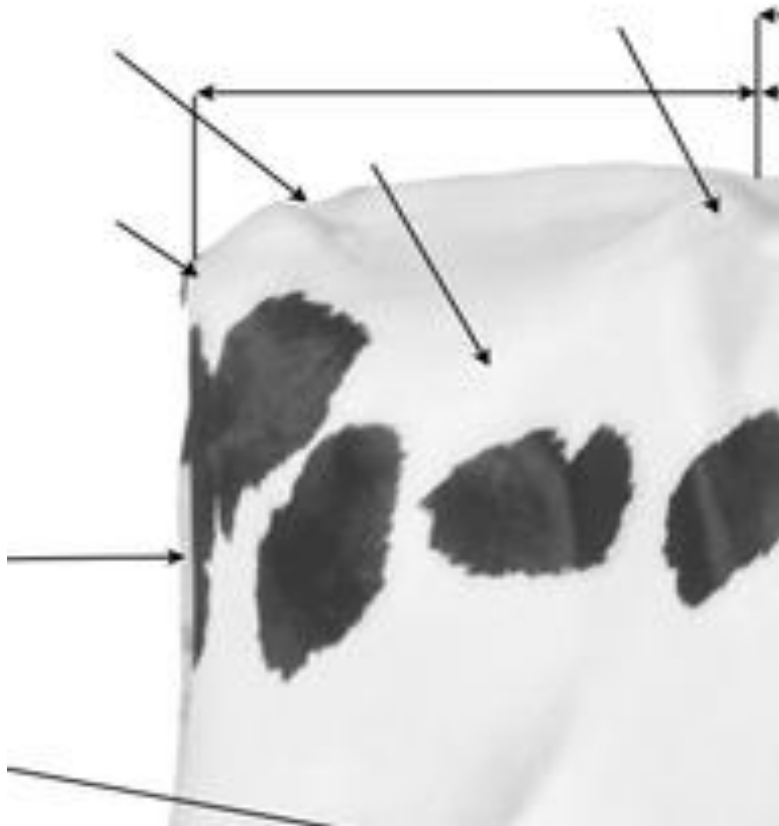
1; Narrow

5; Intermediate.

9; Wide.

Rear Udder Width.

7. Fertility



Assessing
Thurl
placement



Assessing
Rump angle

Fertility relates to calving with ease and having annual calving



Fertility

7.1 Fertility cont'd: Thurl placement and Rump angle

11



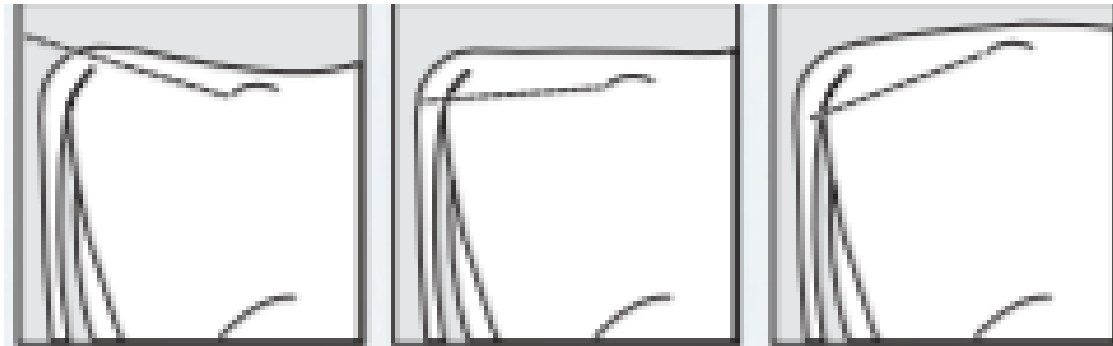
1; Back.

5; Intermediate.

9; Ahead

Thurl Placement.

12



1; High.

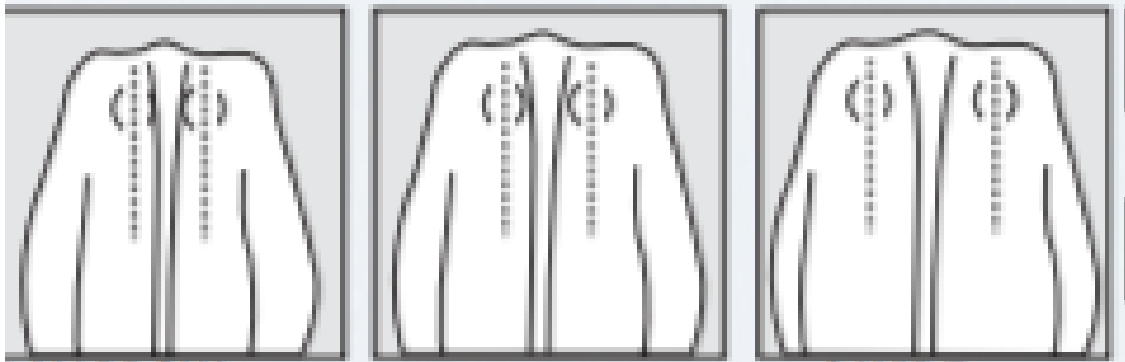
5; Intermediate.

9; Low

Rump Angle.

7.2 Fertility cont'd: Rump width and Loin strength

13



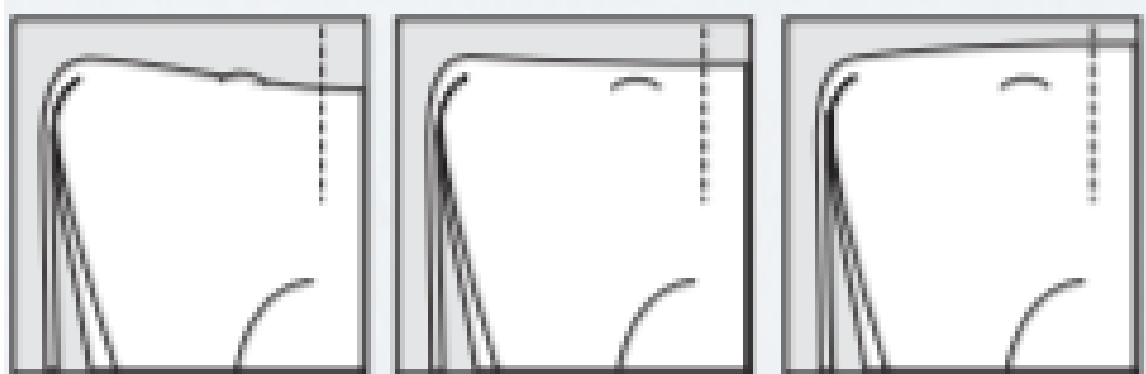
1; **Narrow.**

5; **Intermediate.**

9; **Wide.**

Rump Width.

14



1; **Weak.**

5; **Intermediate.**

9; **Strong.**

Loin Strength.

8. Capacity



Body depth relates with enough capacity to consume roughages

Capacity

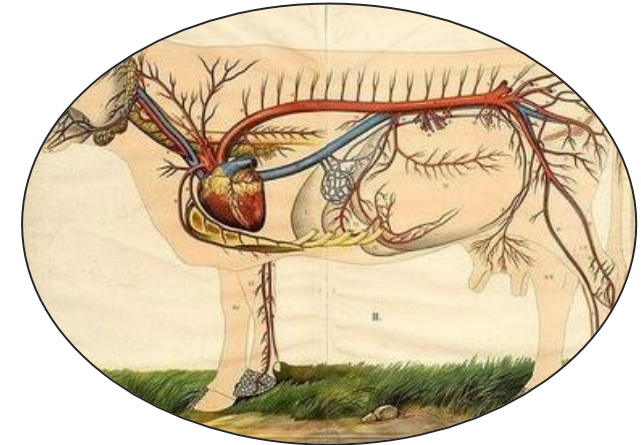


1 litre milk

=



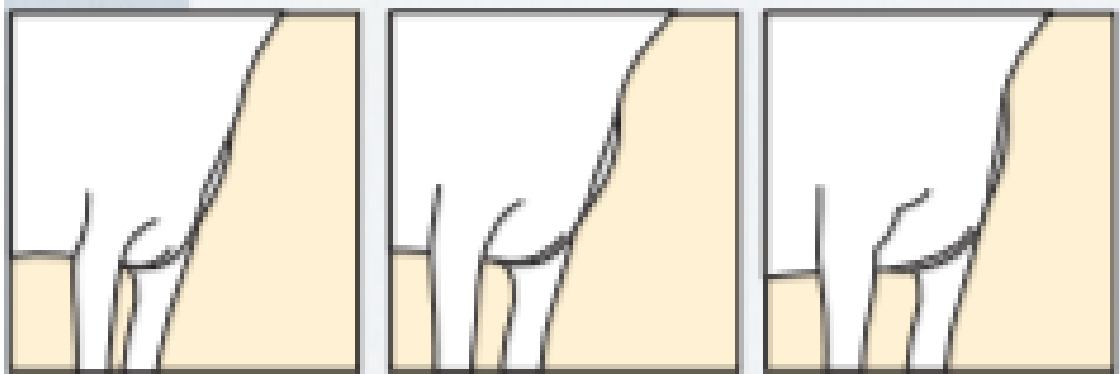
400 litre blood circulation



Chest width relates to enough space for heart and lungs

8.1 Capacity cont'd: Chest width and body depth

15



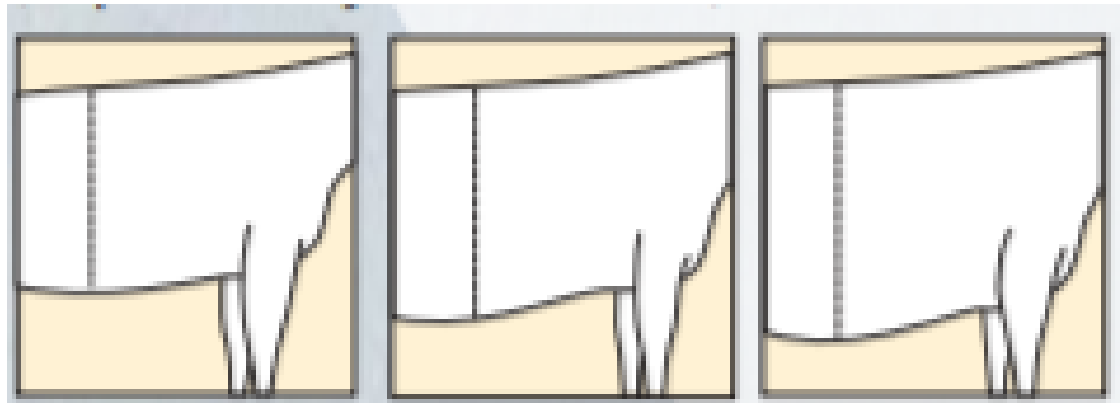
1; **Narrow.**

5; **Intermediate.**

9; **Wide.**

Chest Width

16



1; **Shallow.**

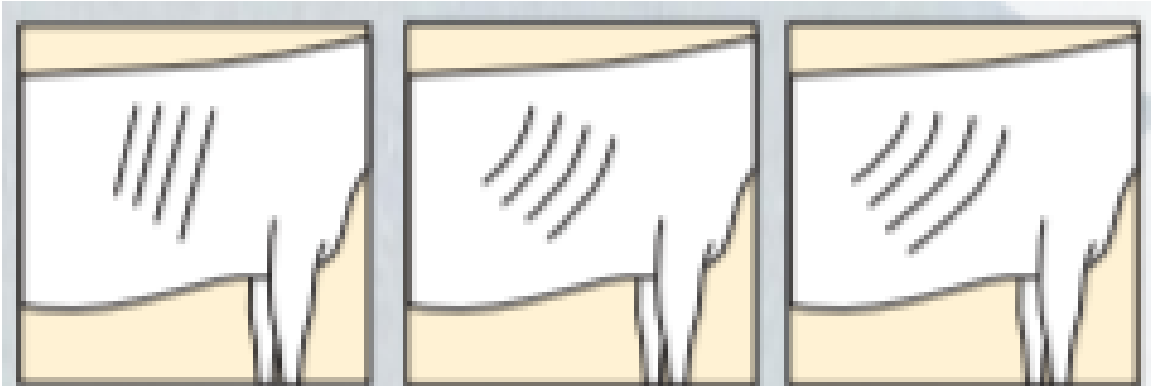
5; **Intermediate.**

9; **Deep.**

Body Depth.

8.2 Capacity cont'd: Angularity and Body Condition Score

17



1; **Non Angular.** 5; Intermediate. 9; **Angular.**

Angularity.

18



1; **Low.** 5; Intermediate. 9; **High.**

Body Condition Score.

9. Legs and feet



Foot angle and heel depth are evaluated



Locomotion is also given consideration

Legs & **F**eet

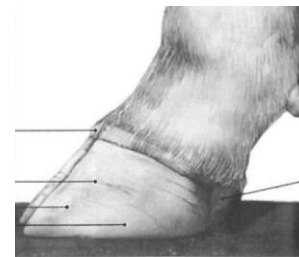
Degree of curvature is considered for Rear Leg Set side view



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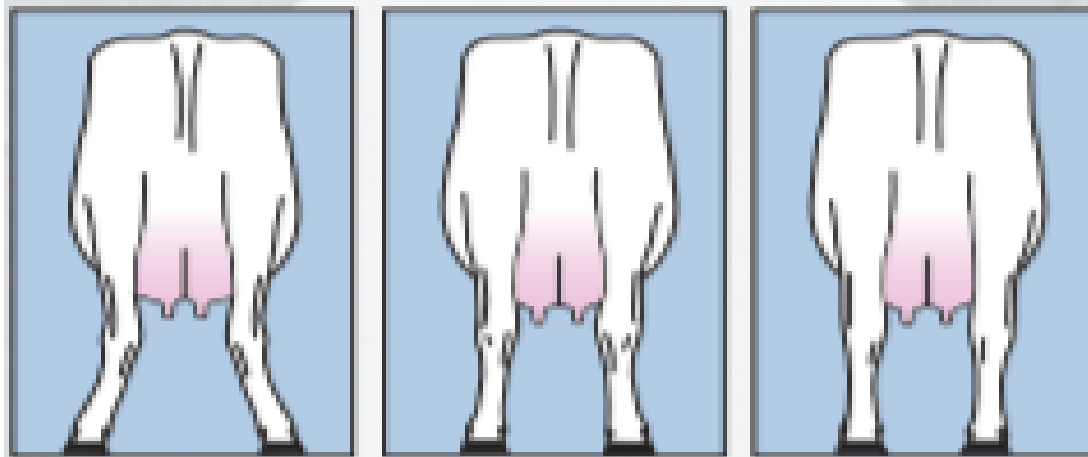
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Desired trait eases locomotion, equals walking in comfortable pair of shoes

9.1 Legs and feet cont'd: Rear leg set view

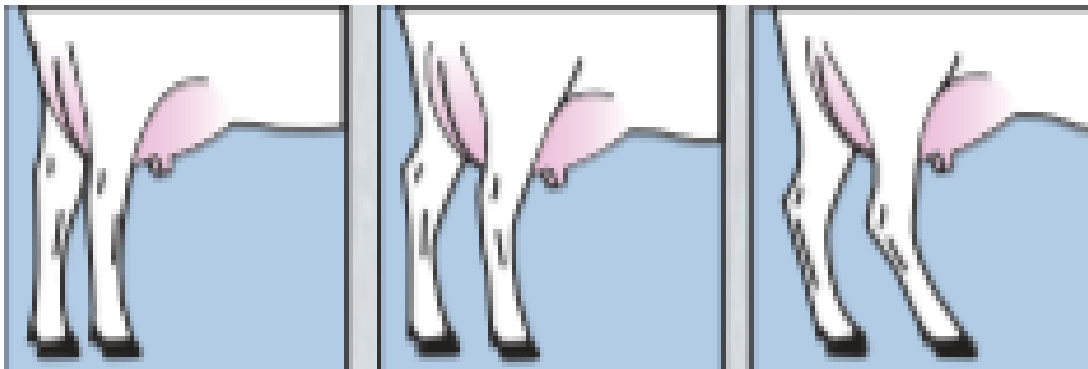
19



1; **Hocked inn.** 5; Intermediate. 9; **Straight.**

Rear Leg Set Hind View.

20

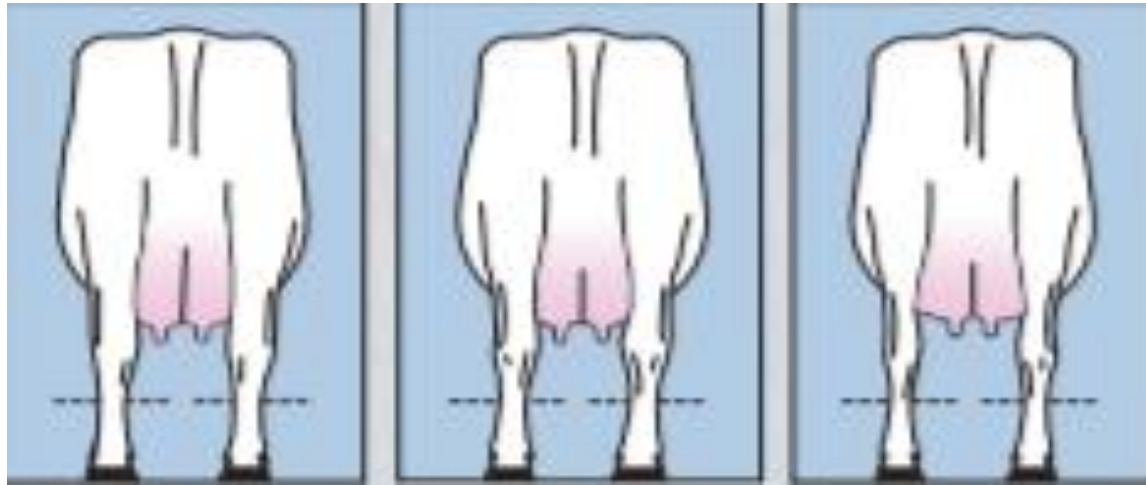


1; **Straight.** 5; **Intermediate.** 9; **Sickled.**

Rear Leg Set Side View.

9.2 Legs and feet cont'd: Bone quality and locomotion

21



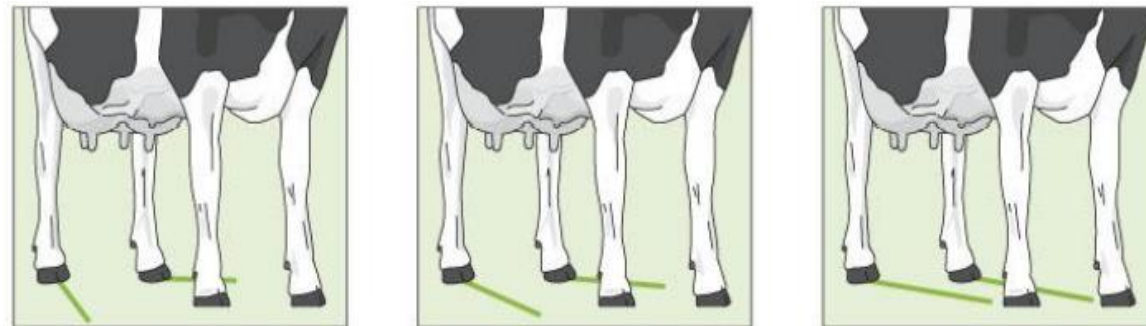
1; Coarse.

5; Intermediate.

9; Flat.

Bone Quality.

22



1; Severe abduction short stride.

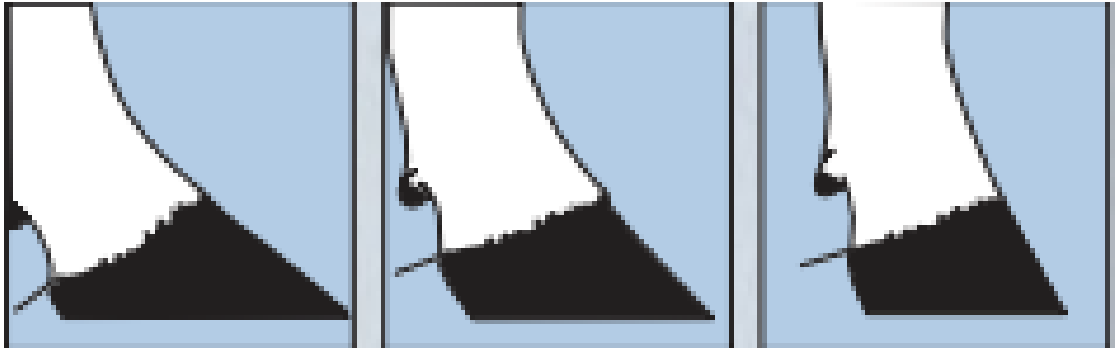
5; Intermediate.

9; No abduction long stride.

Locomotion.

9.3 Legs and feet cont'd: Foot angle and heel depth

23



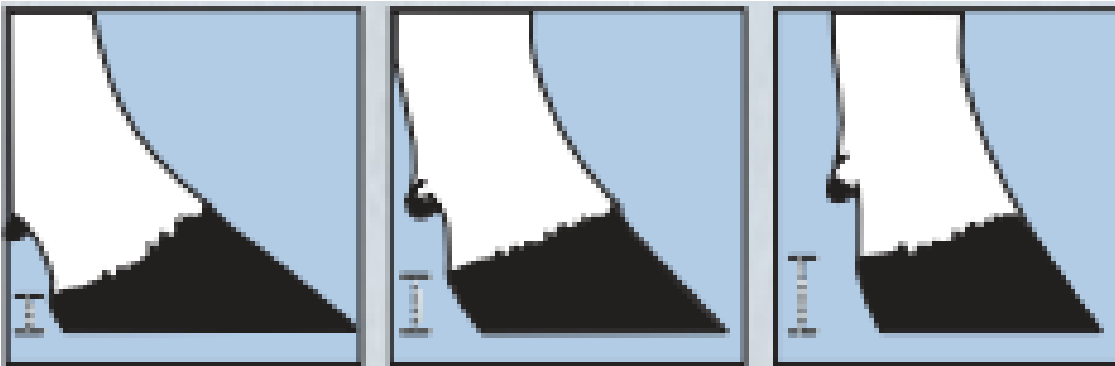
1; **Low.**

5; **Intermediate**

9; **Steep.**

Foot Angle.

24



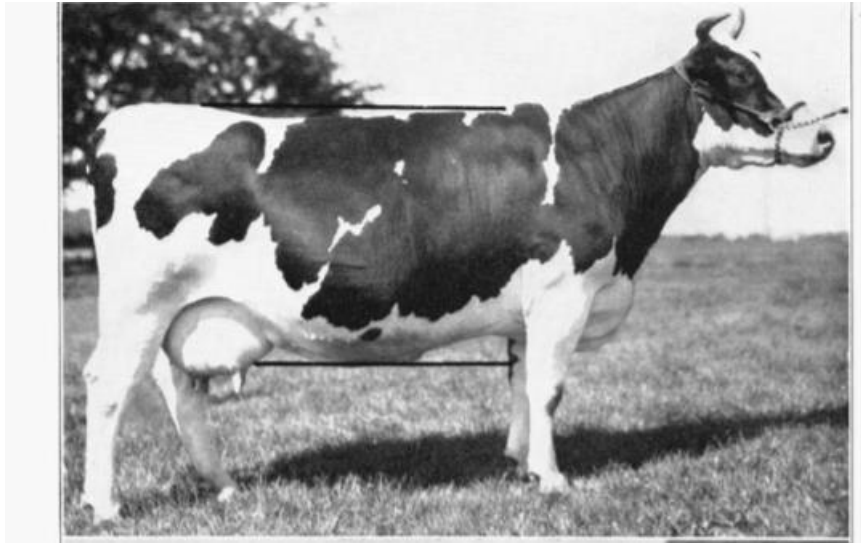
1; **Shallow.**

5; **Intermediate.**

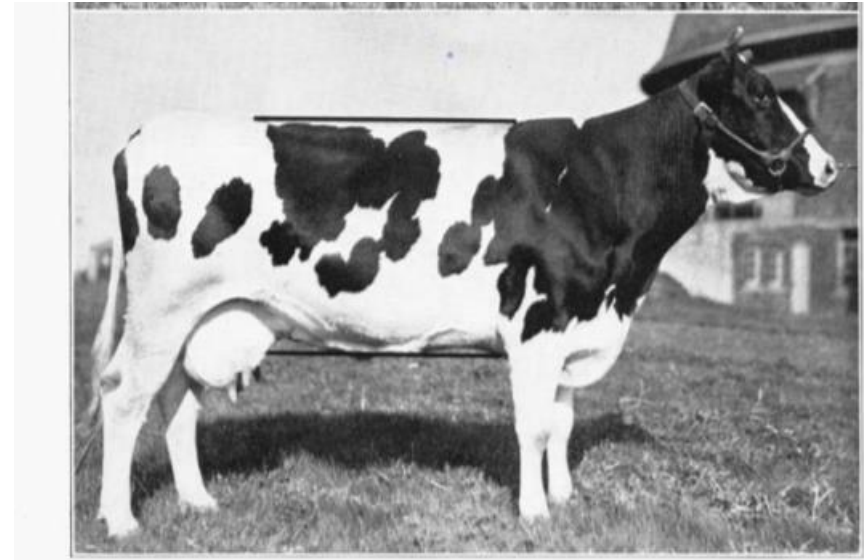
9; **Steep.**

Heel Depth.

10. Example of a cattle judging



Udder	=	-
Fertility	=	0
Capacity	=	++
Feet & Legs	=	+



Udder	=	---
Fertility	=	+
Capacity	=	---
Feet & Legs	=	+