#4. SELECTING DAIRY CATTLE
Dairy Cow Unified Score Card

- Frame - 15%
- Dairy Character - 20%
- Body Capacity - 10%
- Feet and Legs - 15%
- Udder – 40%
FRAME 15%

• Top Line
  – Straightness from the side and width from the rear

• Front End
  – Width of chest

• Stature
  – Tall with deep body

• Breed Character
  – Color, Size and Shape of Head
Dairy Character - 20%

- **Ribs**
  - Wide apart
- **Thighs**
  - Lean, incurving to flat
- **Withers**
  - Sharp
- **Neck**
  - Long and Lean
- **Skin**
  - Thin, loose, and pliable
Body Capacity 10%

• Barrel
  – Long, deep and wide

• Chest
  – Deep and wide
Feet and Legs  15%

- Feet
  - Steep angle and deep heel

- Rear Legs
  - Straight, wide apart, moderate angle to the hock

- Hocks
  - Free from coarseness and puffiness

- Pastern
  - Short and strong with flexibility
Parts of the Mammary System

**Mammary system** -
parts of the cow directly responsible for producing and storing milk

**Mammary Vein** -
The vein that runs down the belly of a cow and supplies blood to the mammary system

**Teats** -
The part of the udder where milk is made available to the young animal

**Median Suspensory Ligament** -
The cleft or indentation that lifts and separates the two halves of the udder and holds them in place.

**Fore Udder Attachment** -
Muscles/ligaments where the front portion of the udder is attached to the abdominal areas of the cow.

**Rear Udder Attachment** -
Muscles/ligaments that hold the rear udder in place.
Udder  40%

- Udder Depth
  - Moderate depth relative to the hock

- Teat Placement
  - Squarely placed

- Rear Udder
  - Wide and High
Udder 40%

- Udder Cleft
  - Strong Suspensory Ligament

- Fore Udder
  - Firmly attached
Udder  40%

• Teats
  – Uniform Size, cylindrical shape

• Udder Balance and Texture
  – Level floor
  – Evenly balanced
  – Soft and Pliable
CHOOSING A BREED

• All cattle breeds, and some goat breeds, have the ability to supply milk surplus to the needs of their young. If one is keeping just one or two cows for purely household purposes then it is not essential to keep dairy cows, since even beef cows can be milked. However, for commercial milk production, consistently high yields are essential if a dairy enterprise is to retain its viability. In the major dairy countries of the world, such as Israel, the production tendency was towards high yields within a short lifetime. However, certain problems arose, as a result of which the trend throughout the world has changed towards selection for high yields with a good butterfat and protein composition, essential under the emphasis for high component pricing for protein, over a long lifetime.

• In selecting a breed, the farmer will do well to examine his farming enterprise with care and to choose a breed that suits his requirements. The availability of both cows and bulls is an important consideration in this choice. Jerseys are far more heat resistant than Holstein-Frieslands and are also better foragers. Therefore, Jerseys are more suited to hot areas such as the Transvaal Lowveld, and to more extensive dairying. Ayrshires are also said to be good foragers but they are more sensitive to bad stockmanship than are Holstein-Frieslands or Jerseys.

• Animals can usually adapt to a new environment, but this can be a lengthy process. Buying animals from an area with similar climatic conditions, preferably close afield, is therefore a commendable practice.

• Is it all in The Breed? You have a wide choice, choose wisely.

• With more than 250 breeds of cattle grazing at any given time worldwide, the process of selecting a breed can seem like a daunting task; almost like picking a needle out of a stack of needles.

• A Few Rules of Thumb
  There are two types of breeds: dairy and beef. Though the initial definitions may seem blatantly obvious, beef cows require a little more study to determine what breed is right for you. Any breed can produce dairy or beef, but different breeds have been bred over decades, sometimes hundreds of years to achieve certain desired results.

• According to the University of Georgia College of Agriculture and Environmental Sciences, generally, British breeds are known for their fertility, disposition, and easy fleshing or finishing at medium weights. Continental breeds are larger with faster growth rates, and have leaner carcasses unless fed to heavy weights. American breeds are noted for heat tolerance and longevity.

• No single breed reigns above another, and none are superior in terms of feed efficiency or overall efficiency. As a result, crossbreeding programs have proved the most successful for most ranchers. If properly planned and conducted, crossbreeding allows producers to combine the desirable characteristics of several breeds.
Objectives

• Know the main purpose for dairy cattle breeds and beef cattle breeds.
• Be able to differentiate between a dairy cattle breed and beef cattle breed.
• Know at least three different breeds of dairy cattle and beef cattle.
Other Names of Dairy and Beef Cattle

- Dairy cattle are sometimes referred to as “milk cows” since milk production is their main purpose in life.
- Beef cattle are often referred to as “stocker cattle” or just simply “stockers”.
Purposes of Dairy Cattle

• PRODUCE MILK!!!!
• Reproduce to provide replacement milk cows in future years.
• Provide a means of living for farmers in the dairy business by providing the most milk at the least possible cost.
DAIRY CATTLE CONFORMATION

• MUSCLE DEVELOPMENT IS LACKING
• UDDER NEEDS TO BE WELL ATTACHED: HOLDS 50-70 POUNDS OF MILK
• FOUR TEATS UNIFORMLY SPACED
• GOOD EATERS
• REPRODUCE REGULARLY
  – MILK FOR 305 DAYS AFTER CALVING
  – DRY COW FOR 50-60 DAYS
UDDER STRUCTURE

• UDDER: BAG LIKE STRUCTURE THAT CONTAINS THE MAMMARY GLANDS
• COWS HAVE 4 MAMMARY GLANDS OR QUARTERS. EACH QUARTER HAS A TEAT AND A CANAL
• THE MILK IS PRODUCED IN THE ALVEOLI
• TREVOR IS AWESOME!!!!!!!
• TRIZ & G9NE – PHIN LIFE IN STORES THIS MARCH
Sapi Tahan Panas

• Kulit dan bagian-bagiannya seperti: Rambut, kelenjar keringat, warna kulit dan rambut mempunyai peran penting untuk melindungi kulit dari berbagai macam sumber infeksi, menjaga panas tubuh, dan lain-lain.

• Thahar, Moran dan Soeripto dari Balai Penelitian dan Pengembangan Ternak, Ciawi Bogor telah melakukan penelitian tentang kulit pada sapi dan kerbau di Indonesia. Berikut ini adalah beberapa informasi yang berkaitan dengan kulit pada sapi dan kerbau di Indonesia:

• Ukuran panjang Rambut: rambut sapi terpanjang ada pada sapi Grati (peranakan/turunan sapi FH).
• Diameter Rambut: terbesar ada pada sapi Ongole. Terkecil pada sapi Grati.
• Ketebalan kulit: Kulit kerbau lebih tebal dari kulit sapi yaitu 6,3 (invivo) dan 7,9 (slide), sedangkan tebal kulit sapi 3,2 (invivo) dan 4,0 (slide).
• Kelenjar keringat: sapi Ongole menduduki peringkat jumlah kelenjar keringat tertinggi yaitu 2327, sedangkan sapi Grati 1990. Sedangkan kerbau mempunyai jumlah kelenjar keringat paling sedikit (95).
• Kemiringan akar rambut: lebih kecil pada kerbau (44 derajat) dibanding sapi (53 derajat).
• Kedalaman kelenjar keringat, rambut dan panjang akar rambut pada sapi dan kebau mempunyai urutan yang serupa sesuai ketebalan kulit. Banyaknya kelenjar keringat per sentimeter persegi, panjang rambut dan kedalaman kulit ini mempunyai hubungan erat terhadap “ketahanan panas”. Oleh sebab itu, kerbau memang lebih tidak tahan panas dibandingkan dengan sapi. Meskipun demikian kerbau mempunyai kemampuan adaptasi tertentu untuk menghadapi panas, salah satunya adalah dengan cara berendam di dalam air.
• Untuk jenis Sapi, ketahanan panas tinggi ada pada sapi Ongole, paling rendah adalah pada sapi Grati. Sapi Grati adalah turunan dari sapi Bos taurus yang memang berasal dari daerah dingin.
Dairy Breeds and Selection Terms

Bull-
Mature male dairy animal

Cow-
Mature female dairy; shows evidence of having produced one or more calves

Heifer-
Female dairy animal that has not borne a calf

Calf-
Male or female dairy animal under one year of age

Steer-
Castrated male beef animal.

Springer -
Cow showing signs of pregnancy
Dairy Breeds and Selection
Terms

**Dairy character** -
characteristics indicating the animal will be useful in the dairy industry

**Butterfat (milkfat)** -
percent of fat in the milk

**Milk production** -
amount in pounds of milk that a cow produces during a lactation period

**Lactation** -
span of time that a cow is giving milk

**Pedigree** -
register of lines of ancestry

**Dairy Herd Improvement records (DHI)** -
production records kept on producing dairy cattle

*provided by Hoard's Dairyman*
Dairy Breeds and Selection Terms

**Freshen**-
When a dairy cow gives birth to a calf

**Dry Cow**-
A cow that is between lactations

**Body Capacity**-
The length, depth and width of the body

**Withers**-
The part where the shoulders and back come together

**Hooks**-
The two bones that stick out at the hip of a dairy cow

**Pins**-
Bones on either side of the tail at the back of the rump.
Dairy Breeds and Selection Terms

Mammary system -
parts of the cow directly responsible for producing and storing milk

Mammary Vein-
The vein that runs down the belly of a cow and supplies blood to the mammary system

Teats-
The part of the udder where milk is made available to the young animal

Median Suspensory Ligament-
The cleft or indentation that lifts and separates the two halves of the udder and holds them in place.

Fore Udder Attachment-
Muscles/ligaments where the front portion of the udder is attached to the abdominal areas of the cow.

Rear Udder Attachment-
Muscles/ligaments that hold the rear udder in place.
### Milk Production Facts

<table>
<thead>
<tr>
<th>Breed</th>
<th>Percent Butterfat</th>
<th>Pounds Butterfat</th>
<th>Pounds Milk Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holstein</td>
<td>3.66</td>
<td>703</td>
<td>19,185</td>
</tr>
<tr>
<td>Ayrshire</td>
<td>3.95</td>
<td>569</td>
<td>14,398</td>
</tr>
<tr>
<td>Jersey</td>
<td>4.75</td>
<td>618</td>
<td>13,020</td>
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<tr>
<td>Brown Swiss</td>
<td>4.03</td>
<td>606</td>
<td>15,062</td>
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<tr>
<td>Guernsey</td>
<td>4.57</td>
<td>611</td>
<td>13,363</td>
</tr>
</tbody>
</table>

Think about this?
1. Which breed produced the most total pounds of milk? Why do you think this is so?
2. Why would butterfat be important to milk?
3. What breed produced the lowest total pounds of butterfat?
4. What would you think the most popular breed of Dairy cattle would be judging from this data? Why?
5. What is the definition of milk production? Why would a cow be lactating?
Dairy Breeds and Selection
Traits and Selection (Dairy Evaluation System)

1. **Stature** (measured at withers)
   - Best - extremely tall
   - Worst - extremely short

2. **Chest and body** (considering age and stage of lactation)
   - Best - wide chest, deep rib, long body
   - Worst - extremely narrow and frail
3. Dairy character (independent of performance)
4. Best - extremely sharp
5. Worst - extremely thick
6. Foot and shape (angle)
7. Best - extremely steep angle
8. Worst - extremely low angle
Dairy Breeds and Selection
Traits and Selection (Dairy Evaluation System)

5. **Rear legs (side view)**
   - Best: extremely sickled
   - Worst: extremely posty

6. **Pelvic angle**

7. **Best:** severe slope

8. **Worst:** pins higher than hooks
### Dairy Breeds and Selection

**Traits and Selection (Dairy Evaluation System)**

7. **Rump width**
   - Best - extreme width
   - Worst - extremely narrow

8. **Fore udder attachment**

9. **Best** - extremely tight attachment

10. **Worst** - extremely broken
Dairy Breeds and Selection
Traits and Selection (Dairy Evaluation System)

9. Rear udder width (at attachment)
   Best- extreme width
   Worst- extremely narrow

10. Rear udder height (at attachment)
    Best- extremely high
    Worst- extremely low
11. Teat placement (rear view)
   
   Best- extremely close placement
   Worst- extremely wide placement

12. Suspensory ligament (cleft)
   
   Best- extremely cleft
   Worst- cleft is broken
13. Udder depth (relative to point of hock)

- Best- extremely shallow
- Worst- extremely deep
Dairy Breeds and Selection

“Use What you have learned”

2 Which animal would be considered desirable?
2 What terms would you use to describe the differences?
2 Which animal shows the best general appearance?
2 Are these cows or heifers? Why?
Dairy Breeds and Selection

“Use What you have learned”

2. Which animal would be considered desirable?
2. What terms would you use to describe the differences?
2. Which shows more dairy character? What are the indicators?
2. What about the udder?
Dairy Breeds and Selection
Suggested Activity

• Aquire 3 gallons (what ever is needed for the size of the class). Milk must have the cream included. 1/2 gallon of homogenized milk. 1/2 gallon of 2% milk. A number of small dixie cups. Small glass containers with tight lids.

• Discuss the differences between fresh milk and milk from the supermarket.

• Divide the students into pairs of teams of 3.

• Have them separate the cream out of the fresh milk.

• Taste test the three samples of milk and describe the differences in writing.

• Place the separated cream in the glass containers with lids.

• Have the students shake the cream until it turns to butter.

Note: This activity could be team taught with the Family and Consumer Science instructor. Bread could be made available for sampling the butter. A field trip to a dairy to view the milking process are other possible activities.
#4. SELECTING DAIRY CATTLE
FRAME 15%

- Top Line
  - Straightness from the side and width from the rear

- Front End
  - Width of chest

- Stature
  - Tall with deep body

- Breed Character
  - Color, Size and Shape of Head
Dairy Character - 20%

- Ribs
  - Wide apart
- Thighs
  - Lean, incurving to flat
- Withers
  - Sharp
- Neck
  - Long and Lean
- Skin
  - Thin, loose, and pliable
Body Capacity 10%

- Barrel
  - Long, deep and wide
- Chest
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Feet and Legs 15%

- **Feet**
  - Steep angle and deep heel
- **Rear Legs**
  - Straight, wide apart, moderate angle to the hock
- **Hocks**
  - Free from coarseness and puffiness
- **Pastern**
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Parts of the Mammary System

**Mammary system** -
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Udder 40%

- Udder Depth
  - Moderate depth relative to the hock
- Teat Placement
  - Squarely placed
- Rear Udder
  - Wide and High

[Images of udder depth and teat placement with examples of different positions]
Udder 40%

- Teats
  - Uniform Size, cylindrical shape

- Udder Balance and Texture
  - Level floor
  - Evenly balanced
  - Soft and Pliable
Selection Review

• What part of the dairy cow is most valuable when selecting?
  – Udder 40%

• Physical evidence of milking ability is evaluated when looking at:
  – Dairy Character 20%

• When evaluating the Frame 15% and Body Capacity 10% what parts of the animal do you exclude?
  – Feet and Legs 15%
  – Udder 40%
• Selection of Dairy Cows
  – Avg. productive life is short (3-4 yrs.)
    • Many culled due to:
      – Reproductive failure
      – Low milk yield
      – Udder breakdown
      – Poor feet/legs
      – Mastitis
    
    – Heifers should be chosen from families that are superior in these categories
INDEPENDENT PRACTICE

Select one of the breeds (dairy or beef) discussed today in class and write a one page report tonight about the breed and its overall characteristics. Be sure to tell whether it is a beef breed or dairy breed and tell what its top two uses are in agriculture.
**UDDERS**
The udder must be pliable, silky in texture and sack-like in nature. Ideally, the udder, when viewed from the side, ideally, should not hang below the cow's hock. The single most important part of the udder is the central, or median, suspensory ligament. This must be extremely strong and well attached. It is an accepted fact that an udder with an excellent central ligament is a long-lasting one.

Teat placement is next in importance. Ideally, the front teats should be even and centrally placed on each quarter of the udder. Simple as this may seem, many cows in South Africa suffer from the inherent problem of wide front teats. Teat size (over- and undersized teats should be avoided), shape and placement are highly heritable.

What does this all mean when selecting a bull? Great emphasis must be placed on a bull that breeds improvement in all udder traits, or characteristics, especially a strong central ligament and acceptable teat placement and size.
FEET AND LEGS
South African dairy farmers have always boasted how tough and extensive their farming conditions are. Our cows may have to walk long distances to and from their feed, unlike cows elsewhere in the world. It is therefore imperative that the cow has good feet and strong legs.
What are good feet and legs? Quite simply, one is looking for a hind leg which is slightly sickle-shaped (from the side view) with a steep (strongly-attached) pastern. Only bulls breeding good feet and legs should be used in a dairy herd.
Cows with weak pasterns are a curse to any dairy farmer, because the cow then walks on the soft part of her "heel" (actually on flesh), and not on her hoof as she is supposed to. One can conclude that she will only be able to walk with great difficulty, and will suffer from numerous infections.
Cows with straight, or post hocks, are to be avoided, because they are highly heritable (passed on from generation to generation), and cause cows to walk with an abnormal stiff-legged gait.
Any cow which is unable to stand up and/or walk with ease is useless, even if she has the most perfect udder in the world. Functional legs are very necessary on a dairy cow. Cows which are able to walk properly are long lasting, "no hassle" cows which are definite economic units in the dairy enterprise.
**BODY CAPACITY**

Viewed from the side, a cow with a deep, long body with wide, well-sprung ribs is said to have a large body capacity. Large body capacity is associated with ample space for the rumen and digestive system, and this, in turn, is associated with superior milk production.

It should be obvious, but still needs to be stated, that a dairy cow with little body capacity cannot be a great milk producer. This is because the gut size is limited by the capacity of the abdominal cavity.

Besides a deep body, what are the other pointers of capacity? These are:

- **A broad muzzle** ("shovel-nose" the Americans call it). A broad, strong muzzle implies the ability to get the food into her mouth and to masticate (chew her cud) effectively.
- **Width between the fore legs.** This shows whether, or not, there is plenty of room for the vital organs situated between the shoulders and front legs. Cows with a narrow chest are not normally good producers.
- **Width of rib.** If at least two fingers, can be placed between the ribs of a dairy cow, she is said to have a fair degree of capacity. Ideally, in any cow, three flattened fingers would indicate great capacity.

These pointers are quite acceptable rules-of-thumb to measure body capacity. The bulls ability to breed capacity should be considered in any breeding programme. However, milk yield, fat and protein content, feet and legs, and udders, are most important, whereas with body capacity a certain amount of leniency is allowed.
DAIRYNESS
Dairyness is a subjective evaluation made on dairy cows. It is extremely difficult to measure, and equally difficult to describe. It is not more important than the preceding five criteria.

Dairy cows are refined animals which produce milk. Beef cattle produce beef, and are solid and well muscled. We hardly expect beef cows to produce the same volumes of milk as do dairy cows.

What, then, is the refinement we want to see in dairy cows? The following are good pointers:

• Refinement can be related to sharpness across the shoulders (or crops) instead of being broad (thick) and beefy.
• It can also be related to flatness of bone, seen especially on the inner thigh where the bone should be flat and "clean" rather than strong and coarse.
• A thin, fine tail instead of a thick, robust and coarse tail.

These are subjective judgements, arising from the observations of practical dairymen, rather than scientific facts.

Bulls which breed high-producing daughters, tend to breed "dairy" looking daughters, with good feet and legs, a functional udder, great capacity and is sharp over the chines and has a clean, flat bone on the inner thigh. Emphasis should therefore be placed on bulls breeding dairyness (or sharpness).

If these are our goals in dairy-cattle breeding, how can we tie this all together into a practical breeding policy?
CHOOSING A BREED

All cattle breeds, and some goat breeds, have the ability to supply milk surplus to the needs of their young. If one is keeping just one or two cows for purely household purposes then it is not essential to keep dairy cows, since even beef cows can be milked. However, for commercial milk production, consistently high yields are essential if a dairy enterprise is to retain its viability. In the major dairy countries of the world, such as Israel, the production tendency was towards high yields within a short lifetime. However, certain problems arose, as a result of which the trend throughout the world has changed towards selection for high yields with a good butterfat and protein composition, essential under the emphasis for high component pricing for protein, over a long lifetime.

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Animals can usually adapt to a new environment, but this can be a lengthy process. Buying animals from an area with similar climatic conditions, preferably close afield, is therefore a commendable practice.
What should you know about breeds of dairy cattle and buffalo

What do you look for in different breeds?
Animals that are:

- happy in local conditions

- have good production.
What are the major groups of dairy cattle?
There are two major groups:
- Zebu (Bos indicus)
- European or temperate (Bos taurus).

What are the major types of dairy buffalo?
There are two major types:
- River buffalo
- Swamp buffalo.

What do you look for in different breeds? You want a breed that:
- does well on your own farm and gives high milk yields
- can stand the heat
- is a strong draught animal (if you use for draught as well as milk production)
Ideal Diary Cow

- When first looking at a class of animals, it is desirable to view from a distance so that all four animals can be seen as a group.

- This is the best method to pick out strong and weak points of cows relative to each other. Often, a more correct evaluation can be made from a distance than up close.

- Aside view permits the judge to evaluate depth of heart, length of body, spring of rib, straightness of top line, levelness of rump, straightness of rear legs, fore udder attachment and levelness of udder floor.

- Afront view permits evaluation of chest width, breed character of head, broadness of muzzle, flare of nostril, thickness of shoulders, etc.

- The rear view allows the judge to examine height, width, and strength of rear udder attachment, depth of rear udder, thickness of thighs, straightness of rear legs, width of rump, width of pins and hips.
Order Of Observation

1. GENERAL APPEARANCE: Attractive individuality with vigor, stretch, scale and a blending of all parts with impressive style and carriage.
   a. BREED CHARACTERISTICS See Breed Chart for descriptions
   b. STATURE height including moderate length in the leg bones with a long bone pattern throughout the body structure.
   c. FRONT END adequate constitution with strength and dairy refinement.
      ➢ Shoulder Blades and elbow set firmly and smoothly against the chest wall and withers to form a smooth union with the neck and body.
      ➢ Chest deep and full with ample width between front legs.
d. BACK straight and strong

- Loin broad, strong and nearly level
- Rump long, wide and nearly level with pin bones slightly lower than hip bones.
- Thurls high and wide apart;
- Tail Head set nearly level with topline and with tail head and tail free from coarseness.

e. LEGS AND FEET bone flat and strong.

- Front Legs straight, wide apart and squarely placed;
- Hind Legs, nearly perpendicular from hock to pastern from a side view and straight from the rear view;
- Hocks cleanly molded free from coarseness and puffiness;
- Pasterns short and strong with some flexibility;
- Feet short, well rounded with deep heel and level sole.
2. DAIRY CHARACTER: Angularity and general openness without weakness, freedom from coarseness, and evidence of milking ability with udder quality giving due regard to stage of lactation.

NECK long, lean and blending smoothly into shoulders; clean cut throat, dewlap, and brisket:

- **Withers sharp with chine prominent;**
- **Ribs wide apart, rib bones wide, flat and long;**
- **Thighs incurring to flat and wide apart from the rear view, providing ample room for the udder and its rear attachment;**
- **Skin thin, loose and pliable.**
A cow's potential for milk production may be limited by the amount of feed the cow is able to consume. Therefore, it is desirable for the cow to have a large digestive capacity. A large space is also desirable for great lung capacity for adding oxygen to the blood and for the heart and blood supply which carries nutrients to the udder for milk synthesis. For these reasons, dairy cattle judges desire cows with a large body capacity. Body Capacity is indicated by length of body; length and depth of fore and rear rib increasing in the rear ribbing; width of chest; spring of rib as viewed from the rear; fullness at the crops and at the elbow; and openness of ribbing as viewed from the side. Judges also like dairy cattle tall at the point of withers; wide across the hips; long from hooks (hips) to pins; and displaying a lengthy head with a broad muzzle and large open nostrils.
Body Capacity

Good Body Capacity

- Deep chest, deep heart girth, deep in rear rib and flank, open ribbing, full thurls.

Poor Body Capacity

Lack of depth and length of body and spring of rib.
• Deep, wide chest floor.

• Shallow and narrow chest with limited capacity.
Dairy Character

- Acceptable Dairy Character
  - Note her length of neck, sharpness over the withers and cleanliness throughout.

- Poor Dairy Character
  - This heifer has a short heavy neck and throat, is thick in the thighs, patchy over the pins and meaty over the rump.
• This heifer has a long clean neck.

• This heifer shows an extremely short neck and heavy throat.
• Outstanding. Note the sharpness of withers and cleanness over the hips and pins and flatness of the thigh.

• Over Conditioned Carrying to much flesh. She is smooth and round over the withers and lacks bold and clean hips and pins.
General Appearance Topline and Rump

• General appearance is the overall attractiveness and beauty signified by correct structure and smooth blending of all parts. Breed character, feminity, vigor, stretch, scale, impressive style and carriage are also important in evaluating general appearance.

• Topline and Rump. The back and rump should be strong and straight. The vertebrae should be clearly defined in the back. The rump should be wide from one hip bone to the other and wide at the pins. The rump should be long and level from hips to pins with a smooth, squarely set tail head. The thurls should be high and full and the rump clean and free of excess flesh.
Excellent Topline that is strong and straight with high full thurls.

Acceptable strong and straight topline, but a bit rough with weak thurls.

Weak at the loin and high at the tail.

Sloping from hook to pins and patchy across the rump.
Excellent rump that is long a level from hooks to pins. High and wide thurls.

High tail head setting with low, weak thurls.

Weak in chine and a sloping rump

Prominent hooks and pins. Wide at the pins.