## *Dairy Cattle Management and Evaluation*

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|---|---|---|
| Maximum Number of Team Members | 4 | |
| Number of Team Members Scored | 4 | |
| Scantron | Dairy Cattle – Form Number – 239560-2 | |
| **Committee:** Hattie DeBolt Kelsey Flinn Jeremy Greene Joseph Hymes Josh Porto | | |

C*ontest results will be announced immediately following the tabulation activities. This is approximately 30-60 minutes following the time the last student presents his/her oral reasons.*

*Schools must provide a "bag" lunch for the contestants. It will handed to the students at the time they leave the arena to participate in the team activity and reasons.*

The Dairy contest will consist of:

A. Materials student must provide: Each participant must have:

1. A clean, free of notes clipboard
2. Two sharpened No. 2 pencils
3. An electronic calculator. Calculators used in this event should be battery operated, nonprogrammable and silent with large keys and displays. Calculators should only have these functions: addition, subtraction, multiplication, division, equals, percent, square root, +/- key and one memory register. No other calculators are allowed to be used during the event.

B. Team Activity - Dairy Management Activity - 600 points

1. Each team will be provided with a dairy farm management scenario to identify problems and determine possible improvements. All necessary information will be provided. Teams should assume the role of a hired consultant advising a producer (judges). Teams will be given 40 minutes to prepare their recommendations to be presented to a panel of judges. It is not necessary to describe the scenario to the judges since they are the producer. Teams will be allowed 10 minutes to present their recommendations, followed by 5 minutes of clarifying questions from the judges.

2. The scenario will be based on the following rotating topic areas:

- 2012 & 2016: Genetics/Reproduction

- 2013: Feeds/Nutrition
- 2014: Housing/Facilities
- 2015: Health/Diseases

3. Each scenario may include animal welfare, biosecurity, business management, current issues, environmental management, and safety concerns related to the topic area.

C. Individual Activities

1.  General Knowledge Exam - 150 points
    1.  The exam will consist of a 50 question exam involving dairy management practices and DHI records.
    2.  Forty questions will cover various dairy management and industry related topics.
    3.  Ten questions will be answered using a dairy herd record evaluation data sheet to analyze individual cows.
    4.  Appropriate information necessary to answer the DHI questions will be provided.
    5.  Participants will have 30 minutes to complete the exam.

2.  Evaluation and Selection - 300 points
    1.  Six classes of four dairy animals will each be placed on type. Classes will be selected from the recognized breeds of dairy cattle. The class selection committee, however, shall give priority to selecting quality cattle in the breeds available and not be obligated to having all breeds represented in the evaluation classes. Classes will consist of heifers, young cows or mature cows.
    2.  Participants will be permitted to view the animals from all angles but will not be permitted to handle them.
    3.  The handlers/cattle will wear numbers which identify the animals.
    4.  Each class is worth 50 points maximum for a correct placing.
    5.  Participants will have 12 minutes to place each class. For classes on which oral reasons will be given, participants will be given 15 minutes.

3.  Oral Reasons - 150 points
    1.  Oral reasons will be required on two to three classes. These classes will be designated by the event superintendent prior to the actual evaluation of the class.
    2.  Oral reasons will be given in another location immediately following the evaluation classes.
    3.  Participants may not use notes during delivery of reasons. Points will be deducted for the use of notes.
    4.  Each class is worth 50 points maximum for each set of reasons.
    5.  Participants will have 12 minutes to prepare each set of oral reasons.

**NOTE:** All team activity answers must be placed on the scantron of team member #1.

# DAIRY COW UNIFIED SCORECARD

**Perfect Score**

Breed characteristics should be considered in the application of this scorecard.

## MAJOR TRAIT DESCRIPTIONS

There are four major breakdowns on which to base a cow's evaluation. Each trait is broken down into body parts to be considered and ranked.

### 1) Frame - 15%

The skeletal parts of the cow, with the exception of rear feet and legs. Listed in priority order, the descriptions of the traits to be considered are as follows:

**Rump (5 points):** Should be long and wide throughout. Pin bones should be slightly lower than hip bones with adequate width between the pins. Thurls should be wide apart. Vulva should be nearly vertical and the anus should not be recessed. Tail head should set slightly above and neatly between pin bones with freedom from coarseness. **Front End (5 points):** Adequate constitution with front legs straight, wide apart, and squarely placed. Shoulder blades and elbows set firmly against the chest wall. The crops should have adequate fullness blending into the shoulders. **Back/Loin (2 points):** Back should be straight and strong, with loin broad, strong, and nearly level. **Stature (2 points):** Height including length in the leg bones with a long bone pattern throughout the body structure. Height at withers and hips should be relatively proportionate. Age and breed stature recommendations are to be considered. **Breed Characteristics (1 point):** Exhibiting overall style and balance. Head should be feminine, clean-cut, slightly dished with broad muzzle, large open nostrils and strong jaw.

**15**

### 2) Dairy Strength - 25%

A combination of dairyness and strength that supports sustained production and longevity. Major consideration is given to general openness and angularity while maintaining strength, width of chest, spring of fore rib, and substance of bone without coarseness. Body condition should be appropriate for stage of lactation. Listed in priority order, the descriptions of the traits to be considered are as follows:

**Ribs (8 points):** Wide apart. Rib bones wide, flat, deep, and slanted towards the rear. Well sprung, expressing fullness and extending outside the point of elbows. **Chest (6 points):** Deep and wide floor showing capacity for vital organs, with well-sprung fore ribs. **Barrel (4 points):** Long, with adequate depth and width, increasing toward the rear with a deep flank. **Thighs (2 points):** Lean, incurving to flat and wide apart from the rear. **Neck (2 points):** Long, lean, and blending smoothly into shoulders; clean-cut throat, dewlap, and brisket. **Withers (2 points):** Sharp with chine prominent. **Skin (1 point):** Thin, loose, and pliable.

**25**

### 3) Rear Feet and Legs - 20%

Feet and rear legs are evaluated. Evidence of mobility is given major consideration. Listed in priority order, the descriptions of the traits to be considered are as follows:

**Movement (5 points):** The use of feet and rear legs, including length and direction of step. When walking naturally, the stride should be long and fluid with the rear feet nearly replacing the front feet. **Rear Legs-Side View (3 points):** Moderate set (angle) to the hock. **Rear Legs-Rear View (3 points):** Straight, wide apart with feet squarely placed. **Feet (3 points):** Steep angle and deep heel with short, well-rounded closed toes. **Thurl Position (2 points):** Near central placement between the hip and pin bones. **Hocks (2 points):** Adequate flexibility with freedom from swelling. **Bone (1 point):** Flat and clean with adequate substance. **Pasterns (1 point):** Short and strong with some flexibility, having a moderate, upright angle.

**20**

### 4) Udder - 40%

The udder traits are evaluated. Major consideration is given to the traits that contribute to high milk yield and a long productive life. Listed in priority order, the descriptions of the traits to be considered are as follows:

**Udder Depth (10 points):** Moderate depth relative to the hock with adequate capacity and clearance. Consideration is given to lactation number and age. **Rear Udder (9 points):** Wide and high, firmly attached with uniform width from top to bottom and slightly rounded to udder floor. **Teat Placement (5 points):** Squarely placed under each quarter, plumb and properly spaced. **Udder Cleft (5 points):** Evidence of a strong suspensory ligament indicated by clearly defined halving. **Fore Udder (5 points):** Firmly attached with moderate length and ample capacity. **Teats (3 points):** Cylindrical shape; uniform size with medium length and diameter; neither short nor long is desirable. **Udder Balance and Texture (3 points):** Udder floor level as viewed from the side. Quarters evenly balanced; soft, pliable, and well collapsed after milking. **(Note: In the Holstein breed, an equal emphasis is placed on fore and rear udder (7 points each). All other traits are the same as listed above.)**

**40**

**TOTAL** **100**
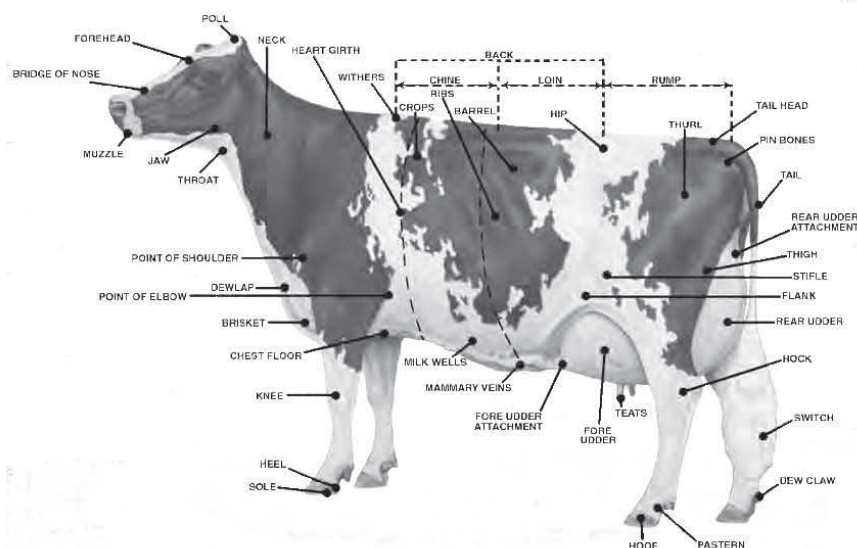


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## THE SEVEN BREEDS

**Ayrshire**

**Brown Swiss**

**Guernsey**

**Red & White**

**Holstein**

**Jersey**

**Milking Shorthorn**

## BREED CHARACTERISTICS

*Except for differences in color, size, and head character, all breeds are judged on the same standards as outlined in the Unified Score Card. If any animal is registered by one of the dairy breed associations, no discrimination against color or color pattern is to be made.*

**Ayrshire** Strong and robust, showing constitution and vigor, symmetry, style and balance throughout, and characterized by strongly attached, evenly balanced, well-shaped udder.
**HEAD-** clean cut, proportionate to body; broad muzzle with large, open nostrils; strong jaw; large, bright eyes; forehead, broad and moderately dished; bridge of nose straight; ears medium size and alertly carried.
**COLOR-** light to deep cherry red, mahogany, brown, or a combination of any of these colors with white, or white alone, distinctive red and white markings preferred.
**SIZE-** a mature cow in milk should weigh at least 1200 lbs.

**Brown Swiss** Strong and vigorous, but not coarse. Adequate size with dairy quality. Frailness undesirable.
**HEAD-** clean cut, proportionate to body; broad muzzle with large, open nostrils; strong jaw; large, bright eyes; forehead, broad and slightly dished; bridge of nose straight; ears medium size and alertly carried.
**COLOR-** body and switch solid brown varying from very light to dark; muzzle has black nose encircled by a white ring; tongue and hooves are dark brown to black.
**SIZE-** a mature cow in milk should weigh at least 1400 lbs.

**Guernsey** Strength and balance, with quality and character desired.
**HEAD-** clean cut, proportionate to body; broad muzzle with large, open nostrils; strong jaw; large, bright eyes; forehead, broad and slightly dished; bridge of nose straight; ears medium size and alertly carried.
**COLOR-** shade of fawn and white markings throughout clearly defined.
**SIZE-** a mature cow in milk should weigh 1200-1300 lbs.; Guernsey does not discriminate for lack of size.

**Red & White** Rugged, feminine qualities in an alert cow possessing adequate size and vigor.
**HEAD-** clean cut, proportionate to body; broad muzzle with large, open nostrils; strong jaw; large, bright eyes; forehead, broad and slightly dished; bridge of nose straight; ears medium size and alertly carried.
**COLOR-** must be clearly defined red and white; black-red and brindle is strictly prohibited.
**SIZE-** a mature cow in milk should weigh at least 1400 lbs. and be well balanced.

**Holstein** Rugged, feminine qualities in an alert cow possessing Holstein size and vigor.
**HEAD-** clean cut, proportionate to body; broad muzzle with large, open nostrils; strong jaw; large, bright eyes; forehead, broad and moderately dished; bridge of nose straight; ears medium size and alertly carried.
**COLOR-** black and white or red and white markings clearly defined
**SIZE-** a mature cow in milk should weigh at least 1400 lbs.
**UDDER-** equal emphasis is placed on fore and rear udder (7 points each), all other traits are the same as listed on the PDCA scorecard.

**Jersey** Sharpness with strength indicating productive efficiency.
**HEAD-** proportionate to stature showing refinement and well chiseled bone structure. Face slightly dished with dark eyes that are well set.
**COLOR-** some shade of fawn with or without white markings; muzzle is black encircled by a light colored ring; switch may be either black or white.
**SIZE-** a mature cow in milk should weigh at least 1000 lbs.

**Milking Shorthorn** Strong and vigorous, but not coarse.
**HEAD-** clean cut, proportionate to body; broad muzzle with large, open nostrils; strong jaw; large, bright eyes; forehead, broad and slightly dished; bridge of nose straight; ears medium size and alertly carried.
**COLOR-** red or white or any combination (no black markings allowed).
**SIZE-** a mature cow in milk should weigh 1400 lbs.

## FACTORS TO BE EVALUATED

*The degree of discrimination assigned to each defect is related to its function and heredity. The evaluation of the defect shall be determined by the breeder, the classifier or judge, based on the guide for discrimination and disqualifications given below.*

**HORNS**
  *No discrimination for horns.*
**EYES**
  1. Blindness in one eye: *Slight discrimination.*
  2. Cross or bulging eyes: *Slight discrimination.*
  3. Evidence of blindness: *Slight to serious discrimination.*
  4. Total blindness: *Disqualification.*
**WRY FACE**
  *Slight to serious discrimination.*
**CROPPED EARS**
  *Slight discrimination.*
**PARROT JAW**
  *Slight to serious discrimination.*
**SHOULDERS**
  Winged: *Slight to serious discrimination.*
**CAPPED HIP**
  *No discrimination unless affects mobility.*

**TAIL SETTING**
  Wry tail or other abnormal tail settings: *Slight to serious discrimination.*
**LEGS AND FEET**
  1. Lameness- apparently permanent and interfering with normal function: *Disqualification.* Lameness- apparently temporary and not affecting normal function: *Slight discrimination.*
  2. Evidence of crampy hind legs: *Serious discrimination.*
  3. Evidence of fluid in hocks: *Slight discrimination.*
  4. Weak pastern: *Slight to serious discrimination.*
  5. Toe out: *Slight discrimination.*
**UDDER**
  1. Lack of defined halving: *Slight to serious discrimination.*
  2. Udder definitely broken away in attachment: *Serious discrimination.*
  3. A weak udder attachment: *Slight to serious discrimination.*
  4. Blind quarter: *Disqualification.*
  5. One or more light quarters, hard spots in udder, obstruction in teat (spider): *Slight to serious discrimination.*

  6. Side leak: *Slight discrimination.*
  7. Abnormal milk (bloody, clotted, watery): *Possible discrimination.*
**LACK OF ADEQUATE SIZE**
  *Slight to serious discrimination. (Note: Guernsey does not discriminate for lack of size.)*
**EVIDENCE OF SHARP PRACTICE**
  (Refer to PDCA Code of Ethics)
  1. Animals showing signs of having been tampered with to conceal faults in conformation and to misrepresent the animal's soundness: *Disqualification.*
  2. Uncalved heifers showing evidence of having been milked: *Slight to serious discrimination.*
**TEMPORARY OR MINOR INJURIES**
  Blemishes or injuries of a temporary character not affecting animal's usefulness: *Slight to serious discrimination.*
**OVERCONDITIONED**
  *Slight to serious discrimination.*
**FREEMARTIN HEIFERS**
  *Disqualification.*