

Dairy Cattle Evaluation CDE

2010 – 2011 Chairperson: Dean Weber, Retired

I. Overview

- A. To provide agricultural students with dairy interests a practical experience which will serve them well in industry positions or in management of a modern dairy herd.
- B. To develop students' skills in observation, analysis, and communication.
- C. To provide experience in the evaluation of dairy cattle type, production records, and dairy herd management.
- D. To encourage agricultural instructors to seek assistance from various resources in the dairy industry. (Example: Dairy breed associations, artificial breeding associations, state area and county extension personnel, state DHIA, dairy equipment manufacturers, local dairy farmers and breeders, etc.)

II. Rules

- A. Each school shall enter a team composed of three or four participants with the top three scores counting for the team score. Team members must all be members of the same chapter.
- B. Each participant will participate in all phases of the event.
- C. Participants and instructors shall report to the registration desk in North Fayette High School by 7:30 a.m. on event day.
- D. Judging cards, answer sheets and other written materials will be furnished for each phase of the event.

Event Activities

The event shall consist of the following seven phases:

A. Phase A – Cow and Heifer Classes

1. Animals used in the event will be representative of Ayrshire, Brown Swiss, Guernsey, Holstein, Jersey, and Milking Shorthorn breeds if available.
2. Six classes will consist of four animals each and will be placed on type using Form 2. All participants will judge six classes of animals. Participants will be allowed 12 minutes for placing each class.
3. The 12 minutes the participants are in the ring will be divided as follows:
 - a. Observe for three minutes from a distance while the cattle are moved.
 - b. Observe for three minutes from a distance (animal's head to tail).
 - c. Observe for three minutes close-up inspection.
 - d. Observe for three minutes while the cattle are again moved.
4. Individual animals in all classes will be identified by numbers.
5. Placing cards will be provided at time of registration.

B. Phase B – Oral Reasons

1. There will be one set of oral reasons given by each participant on one of the dairy cow classes. The Oral Reasons class will be designated at the start of the event. Oral Reasons will be given after all classes have been placed.
2. Participants will have at least 12 minutes to prepare Oral Reasons, and not more than two minutes in which to deliver the reasons before the judges.
3. Participants will use special oral reasons cards (Form 5) while delivering oral reasons; nothing

other than the placing can be written on this card and no other notes will be permitted while giving Oral Reasons. However, a plain sheet of paper may be used while analyzing the reasons class and for study in preparation of Oral Reasons.

C. Phase C – Production-Management Questions and Problems

Phase C shall consist of three parts:

1. Participants will check a series of 25 objective-type test items (2 points each) on dairy production and management practices, and on dairy farming.
2. Five questions (5 points each) will require an understanding of DHIA records. Students will analyze individual cow production and herd management summaries for use in making management decisions.
3. Participants will calculate five problems (5 points each):
 - a. dairy cattle feeding and management
 - b. milk production and marketing.

Examples of types of possible problems, but not inclusive include:

- i. milk price per Cwt. Based on 3.5 percent butterfat, above or below
 - ii. cost per ton of feed based on ingredients listed at various prices per pound, 100 pounds, ton, bushel, etc.
 - iii. net income per cow when given sufficient information
 - iv. calculating percent protein in a ration
 - v. income over feed costs
 - vi. recommend the amount and kind of concentrate to feed per cow per day
 - vii. balancing a dairy ration
 - viii. calculating energy level in feed ingredients and of a ration
 - ix. determining a cow's total protein and energy requirements
 - x. improved profits from milk quality
 - xi. determining the best feed to purchase.
4. Sire Summary – Five questions (5 points each)
 5. Participants will answer five questions (5 points each) over a pedigree. Individuals will need to understand data about a pedigree.

D. Phase D – Linear Evaluation

All team members will individually use linear evaluation to score a cow. Members will score the cow in the following areas with a possible score of 1-50 points in each area.

Stature	Fore Udder Attachment
Width of Chest	Rear Udder Height
Body Depth	Rear Udder Width
Dairyness	Suspensory Ligament
Rump Side View	Udder Depth
Rump Width	Fore Teat Placement
Rear Legs (side view)	Teat Length
Foot Angle	

When all members have evaluated the cow, the team will work together to complete a composite linear trait evaluation form for the 15 traits to turn in for evaluation. Only one set of scores per team will be accepted.

*The scores will be calculated as follows:

Exact score: 10 points
 One point away either side: 10 points
 Two points away either way: 10 points
 Three points away either way 9 points
 etc.

Example of Scoring:	38-10	39-10
	37-10	40-10
	36-10	41-9
	35-9	42-8
	34-8	43-7
	33-7	44-6
	32-6	45-5
	31-5	46-4
	30-4	47-3
	29-3	48-2
	28-2	49-1
	27-1	50-0
	26-0	
Total Possible Score is 150 Points Per Team		

E. Phase E – Pedigree Evaluation

Participants should be able to read and understand the material in a pedigree and rank four pedigrees. (25 points)

F. Phase F – Sire Evaluation

Information will be provided on the cow and four bulls. Participants will choose the best sire and place the class 1-2-3-4 based on the data and given scenario. (50 points)

G. Phase G – Culling Class

Participants will select which cows to cull (1-2-3-4) based on a given scenario. For instance, to keep cows with higher milk quality, cows with high somatic cell counts will be culled. This phase will be based on DHIA data sheets. (50 points)

III. References

- A. Techniques of Judging Dairy Cattle by Dennis A. Hartman, Ph.D., 2709 Mt. Vernon Lane, Blacksburg, Virginia 24060
- B. Dairy Judging, DYS 2094, ISU
- C. National FFA Career Development Events – 2001-2005 (National FFA Organization rules).
- D. Dairy Cows & Management, Extension Publication 96
- E. Dairy Cows & Heifers, Extension Publication 97
- F. Guide to Using DHIA Records: How to Interpret the Herd Summary
- G. Dairy Cow Unified Score Card
- H. Dairy Sire Summary Lists (Check magazines such as Hoard's Dairyman and Dairy Herd Management for the January and July listings each year.)
- I. Linear Classification Program – Holstein Association
- J. MAP (Mating Appraisal for Profit), 21st Century Genetics, P.O. Box 469, 100 MBC Drive, Shawano, WI 54166-9988.

IV. Scoring and Ranking of Teams and Participants

- A. To determine the individual and team winner over all classes, the participants will be ranked on the basis of the total score for

Phase	Points Per	Maximum Score
Live Cattle Evaluation	6 classes x 50 points	300 points
Oral Reasons	50 points	50 points
Pedigree (Placing)	25 points	25 points
Pedigree Questions	5 questions x 5 points	25 points
Management Questions	20 questions x 2 points	50 points
DHIA Questions	5 questions x 5 points	25 points
Sire Questions	5 questions x 5 points	25 points
Math Problems	5 questions x 5 points	25 points
Sire Evaluation (Placing)	50 points	50 points
Culling Class (Placing)	50 points	50 points
Total Points Possible		625 points
3 Participants Total Score Possible		1,875 points
Linear Evaluation		150 points
Total Team Score Possible		2,025 points

- B. Teams and individuals will be ranked into groups designated “Gold,” “Silver,” and “Bronze.” Teams which do not have three members will be listed as “Participants.” Teams which violate any rule will also receive a “Participation” rating.
- C. In the event of a tie in the total point score of an individual or team, the tie shall be broken by awarding the highest placing to the individual or team having the highest score in the oral reasons. If a tie still exists, the highest ranking will be awarded to the individual or team having the highest combined score of all dairy cow and heifer classes. The third tie breaker will be the production-management questions and problems score.
- D. The high FFA team in cattle judging, oral reasons, production-management questions and problems, pedigrees, and linear evaluation will be named the “Iowa Champion FFA Dairy Cattle Judging Team” and will be eligible to enter the National FFA Dairy Cattle Career Development Event in Indianapolis, IN, the following October.

V. AWARDS

Awards listed below are at the discretion of the sponsor and pending availability of sponsorship. It is vitally important that participants write thank you letters to sponsors in order to retain their support. A thank you list naming current sponsors will be provided to each participating chapter at the event site.

Awards Sponsored Through the National FFA Foundation	
Champion Team	State Winning Plaque
Awards Sponsored Through the Iowa FFA Foundation	
Champion Team	Cash Award for Travel to National FFA Convention
Reserve Champion Team	Plaque
Top Ten Teams	Rosettes
Members of Top 10 Teams	Rosettes
Top Ten Individuals	Rosettes
1st and 2nd Place Individuals	Plaques
Top Team and Top Individual	Plaques
a. Dairy Cattle Classes	
b. Oral Reasons	
c. Production Management Test	
d. Pedigree Evaluation (Team Only)	
All Teams/Individuals	Certificates