



National FFA Career Development Events

*A Special Project of the
National FFA Foundation*

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General Information

Contact:

Career Development Events
Education Specialist
National FFA Center
6060 FFA Drive
PO Box 68960
Indianapolis, Indiana 46268-0960
(317) 802-4288

Technical Writer:

Jessica Scholer
Indianapolis, Indiana

These are the official rules and regulations for National FFA Career Development Events for 2012-2016. Refer to the CDE webpage on ffa.org for the most up-to-date edition of the career development event handbook.

Prepared and published by the National FFA Organization. The National FFA Organization is a resource and support organization that does not select, control or supervise state association, local chapter or individual member activities except as expressly provided for in the National FFA Organization Constitution and Bylaws. The National FFA Organization affirms its belief in the value of all human beings and seeks diversity in its membership, leadership and staff.

FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education. National FFA Online, www.ffa.org, FFA's Internet web site, can provide information about the National FFA Organization.

Philosophy of National FFA Career Development Events

The National FFA Organization is dedicated to organizing experiences that will meet the future needs of students while accomplishing the current purposes of agricultural education. The primary goal of career development events is to develop individual responsibilities, foster teamwork and promote communication while recognizing the value of ethical competition and individual achievement.

The activities in each career development event:

- include problem solving, critical thinking and teamwork skills, where appropriate.
- encourage appreciation for diversity by reducing barriers to participation among members.
- develop general leadership and recognize individual and team achievement.
- promote concentrated focus on future needs of members and society.

The National FFA Organization assumes the leadership role in developing and continuously improving relevant FFA career development events. National career development events should reflect instruction that currently takes place in the entire agricultural education program, including classroom instruction, laboratory instruction, individualized instruction and/or supervised agricultural experience. Career development events and awards are intended to be an outgrowth of instruction. Also, it is appropriate for the national organization to develop career development events and awards that stimulate instruction in emerging areas that reflect both current and future community, national and global work force needs. National FFA Career Development Events should be developed with significant input from FFA members, teachers, partners, respective industry sponsors and others involved in agricultural education. The National FFA Organization continues to encourage accessibility and provide opportunities for achievement and recognition for students with diverse backgrounds.

Career development events that include team activities should be based on cooperation and teamwork while recognizing the value of competition and individual achievement. Where appropriate, team activities will be included that require two or more members from one chapter working cooperatively.

Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards

Agriculture is a highly technical and ever-changing industry upon which everyone is dependent. In order to maintain agriculture as the nation's number one industry, it is crucial to understand the importance of agrisciences, marketing strategies, safe food production and continuous research. Strong, relevant agriscience programs are one way to can maintain the nation's agricultural edge.

The National AFNR Career Cluster Content Standards were developed as part of the National FFA 10 x 15 project to provide state agricultural education leaders and teachers with a forward-thinking guide for what students should know and be able to do through the study of agriculture. The National AFNR Career Cluster Content Standards should be used as a guide to develop well-planned curriculum in agriscience education to be delivered to students throughout the country. For a complete copy of the AFNR Career Cluster Content Standards please visit www.agedlearning.org.

National FFA Organization has adopted the AFNR Career Cluster Content Standards and integrated them into all national award and recognition programs for the benefit of the members, school administration and agriculture as a whole. Details outlining the incorporation of the standards in career development events can be found at the end of each event chapter in the CDE handbook.

Official CDE Rules and Policies – 2012-2016

General Rules

Violations of any of the following rules may be grounds for the event superintendent to disqualify the participants. National FFA staff and event superintendents will use the published rules and procedures to organize and implement the National FFA Career Development Events. Event activities may not be conducted due to lack of necessary materials, expertise or extreme impact to event budgets. Teams that are certified to compete will receive the current event format in a team orientation packet prior to the convention.

Official Dress Recommendations, Number of Participants and Number of Scores for Team Total

Event	Official Dress Appropriate	Number of Participants Allowed (per team)	Number of Scores Counted for Team Score
Agricultural Communications	Yes	3	3
Agricultural Issues Forum	Optional	3-7	Team Score Event
Agricultural Technology and Mechanical Systems	No	4	Top 3 Scores
Agricultural Sales	Yes	4	4
Agronomy	Yes	4	4
Creed Speaking	Yes	1	N/A
Dairy Cattle Management and Evaluation	Yes	4	4
Dairy Cattle Handlers	Yes	1	N/A
Environmental and Natural Resources	No	4	4
Extemporaneous Public Speaking	Yes	1	N/A
Farm Business Management	Yes	4	Top 3 Scores
Floriculture	Yes	4	4
Food Science and Technology	Yes	4	4
Forestry	No	4	4
Horse Evaluation	Yes	4	Top 3 Scores
Job Interview	Yes	1	N/A
Livestock Evaluation	Yes	4	4
Marketing Plan	Yes	3	Team Score Event
Meats Evaluation and Technology	No	4	Top 3 Scores
Milk Quality and Products	Yes	4	4
Nursery/Landscape	Yes	4	Top 3 Scores
Parliamentary Procedure	Yes	6	Team Score Event
Poultry Evaluation	Yes	4	Top 3 Scores
Prepared Public Speaking	Yes	1	N/A
Veterinary Science	No	4	4

Eligibility of Participants

- A. Each participant must be a current, bona fide, dues paying FFA member in good standing with the local chapter, state FFA association and the National FFA Organization during the school year which the participant qualified to participate at the national level.
 - 1. In the event a participant's name is not on the chapter's official roster for the years in which the dues were payable to the National FFA Organization, a past due membership processing fee, in addition to the dues, must be paid prior to the national event.
 - 2. National FFA membership staff will set the processing fee amount annually.
- B. The participant, at the national event, must:
 - 1. Be a high school FFA member; high school refers to grades 9-12. (A graduating senior is considered eligible to compete in state and national career development events up to and including his/her first national convention following graduation.)
 - 2. Have qualified as a 7th, 8th or 9th grade member to participate in the Creed speaking event.
 - 3. While in high school, be enrolled in at least one agricultural education course during the school year and/or follow a planned course of study; either course must include a supervised agricultural experience program, the objective of which is preparation for an agricultural career.
 - 4. If a student moves to a different chapter or a different state once a he/she has qualified as a state representative in a career development event, that student may be allowed to compete in the national event with the school he/she qualified with during the qualifying year.
- C. A student may not participate more than once in the same official National FFA Career Development Event.
- D. No student may participate in more than one National FFA Career Development Event each year.
- E. Each member participating in a National FFA Career Development Event must submit the proper *Waiver, Release of Liability and Consent to Medical Treatment Form* prior to start of event.

Selection and Certification of State Teams

- A. Each state will submit a team declaration form by **June 1** prior to the national FFA convention. An entry processing fee will be charged for participation in each declared event with the exception of the dairy cattle handlers activity.
- B. Each team will be composed of the number of members determined by the specific event rules and formats. The members of a state team must be from the same chapter. Members must qualify in the career development event in which they are to participate at the national level. Teams must be selected at a state or interstate career development event held between the immediate previous national FFA convention and prior to the national FFA convention in which they are participating. States that qualify more than one year out must request and submit a written waiver for approval by the certification deadline.
 - 1. Online certification deadline: **September 15**.
 - 2. Online add/delete deadline: **Tuesday before convention at noon (Eastern)**.
- C. With extenuating circumstances a teacher may substitute another student from the chapter who may not have participated at a state qualifying event, with the exception of Creed speaking, dairy handlers activity, extemporaneous public speaking, job interview and prepared public speaking, which must be submitted and approved by state staff.

- D. The state supervisor of agricultural education or the executive secretary must certify that participants are eligible. If an ineligible student participates in any career development event, the member will be disqualified and may result in the disqualification of the team as well.
- E. All students must be certified online by the designated deadline. Once original certification has been completed, no member may be added without first deleting a member.
- F. The national organization will certify National FFA Career Development Event winners for international competition when states request, with the understanding that the state team will provide their own travel expenses.

Emergency Conditions

Under emergency conditions a state team participating in a National FFA Career Development Event may be made up of less than the required members. States must still certify teams prior to the national FFA convention, but fewer than the required members could compete if an emergency condition such as illness, death in the family or an act of God would occur. Those individuals competing would still be eligible to qualify for individual awards, if applicable.

Disqualification

- A. Any communication, verbal or non-verbal, between participants during a career development event will be sufficient cause to eliminate the team member involved from the career development event. The only exception to this would be communications between team members during the team activity portion of a given career development event.
- B. Teams or participants arriving after the career development event has begun may be disqualified or penalized.
- C. Any assistance given to a team member from any source other than the career development event officials or assistants will be sufficient cause to eliminate the team from the career development event.
- D. Event superintendents may stop any participant if they deem their manner to be hazardous either to themselves or others. Such action shall deem the individuals disqualified for that section of the career development event.
- E. Participants who start an event and do not complete the event without notifying event officials at the time of departure will be disqualified. This can affect the overall team rank and position. In some events this will also disqualify the entire team.
- F. Participants will not be allowed to utilize personal electronic communication devices, other than those approved by the event officials, during the entire course of the event. Participants who access personal electronic communication devices without prior approval of the event officials will be disqualified.
- G. No participant shall gain access to real materials that will be utilized by the event committee during competition. Any team, participant, advisor or coach reported and proven to do so will be disqualified from the national event.

Additions/Deletions of National Events

- A. National FFA staff is expected to be proactive in developing new or initiating changes within existing career development events to ensure that they meet the needs of FFA members.
- B. If fifteen (15) state supervisors/executive secretaries develop a proposal for a new career development event, the national FFA staff will conduct a study for the validity of the career development event and make a recommendation to the chief executive officer. Representatives of these states must be from each of the FFA regions. The same process may be used to eliminate a national career development event.
- C. Three years following the initiation of a new career development event, at least fifteen (15) states should be participating. After the next three-year period, at least twenty-six (26) states should be participating in order to retain the event at the national level.

Rules Committee/Scoring Appeals Process

- A. If a written appeal is filed within the seven (7) calendar days after results announcement, national CDE staff will review the appeal. Upon receiving input from team leader and division director, national CDE staff will accept or deny the appeal. The national CDE staff's recommendation will be shared with appeals committee and National FFA Chief Executive Officer for further input, if necessary.
 1. The written appeal must be filed with the Education Division staff responsible for scoring career development events within seven (7) calendar days of the results announcement and accompanied by a \$50 filing fee. The fee will be returned if the appeal is justified.
- B. The appeals committee will be chaired by the National FFA Awards, Recognition and Career Development Events Advisory Committee chairperson who will in turn appoint a representative of each of the following organizations: National Association of Supervisors of Agricultural Education (NASAE), National Association of Agricultural Educators (NAAE) and the American Association for Agricultural Education (AAAE). The National FFA staff responsible for career development events will also serve on the committee.

Waiver of FFA Rules

Any local chapter seeking a waiver of a National FFA policy or procedure must submit in writing to the chapter's state FFA association office. If the request is approved at the state level, it must be forwarded, under the signature of the state advisor or executive secretary, to the career development events education specialist. After study by the appropriate FFA staff, a recommendation to grant or deny the appeal will be forward to the chief executive officer for his/her approval. The request must be submitted to the national FFA staff at least 30 days prior to the scheduled event or due date for which the waiver is requested. This policy does not supersede any current FFA policy for appeals already established for a particular FFA program.

Selection of CDE Superintendents and CDE Committee Members

- A. Nominations for CDE superintendents may come to National FFA staff from the following sources:
 - 1. standing CDE superintendent
 - 2. current CDE committee members
 - 3. state leadership
 - 4. Team Ag Ed partners
- B. CDE superintendents will be selected by national CDE staff and approved by the National FFA Chief Executive Officer.
- C. Each CDE superintendent will serve a three to five year term. At the end of the superintendent's term, a qualified replacement will assume the duties of superintendent.
- D. National FFA staff and CDE superintendents will select qualified individuals to serve on CDE committees. Selection of committee members will be based on:
 - 1. individual qualifications.
 - 2. recommendations from state leaders, current CDE committee members, CDE superintendents or National FFA staff.
 - 3. recommendations from Team Ag Ed partners.
 - 4. current rotational procedures developed by each CDE committee.
 - 5. provide diversity for the committee.
 - 6. commitment to serve a minimum of three years on the committee.
- E. Final approval of new committee members is the responsibility of the National FFA CDE staff with input and recommendations from CDE event superintendent and committee.

Sanctioning Events

Sanctioning of non-national FFA competitive events (those competitive events conducted by organizations other than the National FFA Organization) as National FFA Career Development Events should occur when:

- 1. The highest quality event possible is conducted.
- 2. Organization conducting event and National FFA Organization agree that event can and should be sanctioned.
- 3. Event is recommended by the National FFA Staff responsible for CDEs with input and agreement from the Award and Recognition Advisory Committee and approved by the National FFA Chief Executive Officer.
- 4. National FFA is represented by staff responsible for career development events on the planning and implementation committee for each event.
- 5. Winners of the national sanctioned event will be recognized in the same manner as national career development events winners are currently recognized.

Official Dress

Participants are expected to observe the National FFA Code of Ethics and the proper use of the FFA jacket during career development events. (Please reference the latest edition of the Official FFA Manual.) Official FFA dress is highly recommended for all participants where appropriate and is required for the awards presentation and recognition.

Accessibility for All Students

All special needs requests and appropriate documentation as outlined in the special needs request policy must be submitted at time of certification.

- 1. Special needs policy is posted on the CDE program page at www.ffa.org/cde
- 2. Special needs request due: **August 15**

Written Document Penalties

A penalty of 10% of the total points allotted will be assessed for the written documents received after the postmarked deadline. If the document is still not received seven days after the postmarked deadline, the team/individual may be subject to disqualification.

1. National staff will mark late entries as such.
2. Event officials will be notified of late entries at the time written documents are provided for judging.
3. Event superintendent will ensure that penalty is applied.

National FFA Dairy Cattle Evaluation and Management Career Development Event

A Special Project of the National FFA Foundation

Important Note

Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.

I. Purpose

The purpose of the National FFA Dairy Cattle Evaluation and Management Career Development Event is to provide a competitive event for agricultural education students which emphasizes skills in dairy cattle management and evaluation.

II. Objectives

- A. To provide a practical experience to students enrolled in agricultural education with an interest in dairy cattle to help prepare for industry positions or in management of a modern dairy herd.
- B. To develop students' skills in observation, analysis, communication and team collaboration.
- C. To provide experience in the evaluation of dairy cattle type, production records and dairy herd management.
- D. To encourage agriculture instructors to seek assistance from various resources in the dairy industry. (Examples: dairy breed associations, artificial breeding associations, state extension dairy specialists, state dairy herd improvement associations, dairy equipment manufacturers, local dairy farmers and breeders, etc.)

III. Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards

With the recommendation of the National FFA Board of Directors, all national FFA programs have incorporated these standards to guide the direction and content of program materials and activities. Refer to Appendix A in this chapter of the handbook for a complete list of the measurable activities that participants will carry out in this event. For details about the incorporation of AFNR standards, refer to the Introduction chapter of the CDE handbook.

IV. Event Rules

- A. Each team will be comprised of four members. All four scores will be used to determine total team score.
- B. It is highly recommended that participants wear FFA Official Dress for this event.
- C. Participants will report to the team orientation meeting for instructions at the time and place shown in the current year's team orientation packet.
- D. The most current and updated information will be used as industry standards change.
- E. Computer score sheets will be used in the event to record all responses. These forms must be completed within the time allotted for each section of the event. No additional time will be permitted to transfer responses to computer scoring sheets. Responses that are not correctly recorded on the computer score sheets cannot be considered due to the large number of participants' responses that must be processed.

V. Event Format

- 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, non-programmable 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. (See team activity example in Appendix C.) 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
 - a. The exam will consist of a 50 question exam involving dairy management practices and DHI records.
 - i. Forty questions will cover various dairy management and industry related topics.
 - ii. Ten questions will be answered using a dairy herd record evaluation data sheet to analyze individual cows. (See sample herd record evaluation data sheet in reference section.)
 - b. Appropriate information necessary to answer the DHI questions will be provided.
 - c. Participants will have 30 minutes to complete the exam.
 2. Evaluation and Selection - 300 points
 - a. 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.
 - b. Participants will be permitted to view the animals from all angles but will not be permitted to handle them.
 - c. The handlers/cattle will wear numbers which identify the animals.
 - d. Each class is worth 50 points maximum for a correct placing.
 - e. Participants will have 12 minutes to place each class. For classes on which oral reasons will be given, participants will be given 15 minutes.

6. Oral Reasons - 150 points
- Oral reasons will be required on three classes. These three classes will be designated by the event superintendent prior to the actual evaluation of the class.
 - Oral reasons will be given in another location immediately following the evaluation classes.
 - Participants may not use notes during delivery of reasons. Points will be deducted for the use of notes.
 - Each class is worth 50 points maximum for each set of reasons.
 - Participants will have 12 minutes to prepare each set of oral reasons. No more than two minutes may be used to deliver the reasons before the judges.

VI. Scoring

Individual	Maximum Points
General knowledge exam	150
Evaluation	300
Oral reasons	<u>150</u>
Total possible score	600

Team	Maximum Points
Dairy management activity	600
Total individual score x4	<u>2,400</u>
Total possible score	3,000

VII. Tiebreakers

If a tie occurs, the following events will be used to determine award recipients:

Individual

- Oral reasons score
- General knowledge exam score
- Evaluation score

Overall Team

- Team activity score
- Total oral reasons score
- Total general knowledge exam score
- Total evaluation score

VII. Awards

Awards will be presented to individuals and/or teams based upon their rankings at the awards ceremony. Awards are sponsored by a cooperating industry sponsor(s) as a special project, and/or by the general fund of the National FFA Foundation.

The high-scoring participant in each of the following categories will also receive a certificate recognizing their accomplishment:

- High Breed total (High individual of each breed- Holstein, Jersey, Guernsey, Brown Swiss, etc.) with associated oral reasons scores as applicable
- Oral reasons score
- General knowledge exam
- Team- dairy management activity

VIII. References

This list of references is not intended to be all-inclusive. Other sources may be utilized, and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

National FFA Core Catalog—Past CDE Material (<http://shop.ffa.org/cde-qas-c1413.aspx>)

Hoard's Dairyman- Judging contest and materials, youth tests and quiz questions:
www.hoards.com

Cornell University Department of Animal Science Dairy Resources:
<http://www.ansci.cornell.edu/4H/dairycattle/dairyresources.html>

Virginia Dairy Quiz Bowl study materials: <http://www2.dasc.vt.edu/youth/bowlmat.html>

CEV Multimedia, Inc.: www.cevmultimedia.com

Holstein Association: www.holsteinusa.com

Dairy Herd Improvement: www.drms.org

2009 Dairy Unified Scorecard: [http://www.usjersey.com/Reference/PDCA Dairy Cow Unified Scorecard 2009update.pdf](http://www.usjersey.com/Reference/PDCA_Dairy_Cow_Unified_Scorecard_2009update.pdf)

Dairy Cattle Evaluation and Management Team Activity Content Scorecard - 400 points

State: _____

Indicators	Very strong evidence skill is present 10-8	Moderate evidence skill is present 7-4	Strong evidence skill is not present 3-0	Points Earned	Weight	Total Score
A. Opening statement	Begins with an impact statement or question that articulates the focus of the topic area.	Begins with an impact statement or question that is vague concerning the topic area.	Begins with a statement or question that is completely irrelevant to the topic area.		X 2	
B. Identification of problem areas	4 or more problems from the scenario are accurately identified and discussed.	2-3 problems from the scenario are accurately identified and discussed.	1 or no problems from the scenario are accurately identified and discussed.		X 4	
C. Supporting information	Does an outstanding job discussing industry trends with related statistics.	Does an adequate job discussing industry trends with related statistics.	Vaguely discusses industry trends with related statistics.		X 6	
D. Factors of impact	All factors that are impacted by problems listed in the scenario are addressed. (i.e. economic impact, production factors, etc.)	Some factors that are impacted by problems listed in the scenario are addressed. (i.e. economic impact, production factors, etc.)	Little or no factors that are impacted by problems listed in the scenario are addressed. (i.e. economic impact, production factors, etc.)		X 10	
E. Identifying solutions	All solutions connect with and support industry best practices.	Some solutions connect with and support industry best practices.	Solutions do not connect with and do not support industry best practices.		X 10	
F. Implementation of solutions	All solutions are correctly prioritized for implementation; provides complete justification for the implementation process.	Few solutions are correctly prioritized for implementation; provides little justification for the implementation process.	Solutions are incorrectly prioritized for implementation; provides no justification for the implementation process.		X 6	
G. Conclusion	Provides a summary statement that provides a clear and concise overview of the topic area.	Provides a summary statement that provides a vague overview of the topic area.	Provides a summary statement that has little relevance to the topic area.		X 2	
Total Points						

Dairy Cattle Evaluation and Management Team Activity Communication Scorecard (200 points)

State: _____

Oral Communication—140 points						
Indicators	Very strong evidence skill is present 5-4	Moderate evidence skill is present 3-2	Strong evidence skill is not present 1-0	Points Earned	Weight	Total Score
A. Examples	<i>Examples are vivid, precise and clearly explained.</i> • Examples are original, logical and relevant.	<i>Examples are usually concrete, sometimes needs clarification.</i> • Examples are effective, but need more originality or thought.	<i>Examples are abstract or not clearly defined.</i> • Examples are sometimes confusing, leaving the listeners with questions.		X 4	
B. Speaking without hesitation	<i>Speaks very articulately without hesitation.</i> • Never has the need for unnecessary pauses or hesitation when speaking.	<i>Speaks articulately, but sometimes hesitates.</i> • Occasionally has the need for a long pause or moderate hesitation when speaking.	<i>Speaks articulately, but frequently hesitates.</i> • Frequently hesitates or has long, awkward pauses while speaking.		X 4	
C. Tone	<i>Appropriate tone is consistent.</i> • Speaks at the right pace to be clear. • Pronunciation of words is very clear and intent is apparent.	<i>Appropriate tone is usually consistent.</i> • Speaks at the right pace most of the time, but shows some nervousness. • Pronunciation of words is usually clear, sometimes vague.	<i>Has difficulty using an appropriate tone.</i> • Pace is too fast; nervous. • Pronunciation of words is difficult to understand; unclear.		X 4	
D. Being detail-oriented	<i>Is able to stay fully detail-oriented.</i> • Always provides details which support the issue; is well organized.	<i>Is mostly good at being detail-oriented.</i> • Usually provides details which are supportive of the issue; displays good organizational skills.	<i>Has difficulty being detail-oriented.</i> • Sometimes overlooks details that could be very beneficial to the issue; lacks organization.		X 4	
E. Speaking unrehearsed	<i>Speaks unrehearsed with comfort and ease.</i> • Is able to speak quickly with organized thoughts and concise answers.	<i>Speaks unrehearsed mostly with comfort and ease, but sometimes seems nervous or unsure.</i> • Is able to speak effectively, has to stop and think and sometimes gets off focus.	<i>Shows nervousness or seems unprepared when speaking unrehearsed.</i> • Seems to ramble or speaks before thinking.		X 4	
F. Connecting and articulating facts and issues	<i>Exemplary in connecting facts and issues and articulating how they impact the issue locally and globally.</i> • Possesses a strong knowledge base and is able to effectively articulate information regarding related facts and current issues.	<i>Sufficient in connecting facts and issues and articulating how they impact the issue locally and globally.</i> • Possesses a good knowledge base and is able to, for the most part, articulate information regarding related facts and current issues.	<i>Has difficulty with connecting facts and issues and articulating how they impact the issue locally and globally.</i> • Possesses some knowledge base but is unable to articulate information regarding related facts and current issues.		X 4	
G. All team members participated	• All team members took an active role in the presentation.	• Three team members took an active role in the presentation.	• Two or less team members took an active role in the presentation.		X 4	
Non-verbal Communication—60 points						
A. Attention (eye contact)	<i>Eye contact constantly used as an effective connection.</i> • Constantly looks at the entire audience (90-100% of the time).	<i>Eye contact is mostly effective and consistent.</i> • Mostly looks around the audience (60-80% of the time).	<i>Eye contact does not always allow connection with the speaker.</i> • Occasionally looks at someone or some groups (less than 50% of the time).		X 3	
B. Mannerisms	<i>Does not have distracting mannerisms that affect effectiveness.</i> • No nervous habits.	<i>Sometimes has distracting mannerisms that pull from the presentation.</i> • Sometimes exhibits nervous habits or ticks.	<i>Has mannerisms that pull from the effectiveness of the presentation.</i> • Displays some nervous habits – fidgets or anxious ticks.		X 3	
C. Gestures	<i>Gestures are purposeful and effective.</i> • Hand motions are expressive and used to emphasize talking points. • Great posture (confident) with positive body language.	<i>Usually uses purposeful gestures.</i> • Hands are sometimes used to express or emphasize. • Occasionally slumps; sometimes negative body language.	<i>Occasionally gestures are used effectively.</i> • Hands are not used to emphasize talking points; hand motions are sometimes distracting. • Lacks positive body language; slumps.		X 3	
D. Well-poised	<i>Is extremely well-poised.</i> • Poised and in control at all times.	<i>Usually is well-poised.</i> • Poised and in control most of the time; rarely loses composure.	<i>Isn't always well-poised.</i> • Sometimes seems to lose composure.		X 3	
Total Points						

Sample Dairy Herd Evaluation Data Sheet

1000's	scc	date bred	X-b r H e P d O	BCS	Test Day Production.....			Cowis..... No.	Current Lactation.....			days in milk	milk #	fat #	prot milk #	...Mature Equivalent....			Rel. Value %PTA..... milk \$\$\$			
					milk %	fat %	protein %		code	days	age @ calving					#	fat #	prot milk #			fat #	prot #	fat #
67	1-3	2 O	2 O	2.5	26.4	4.3	2.5	333	4-25	8	0	6-9	5	180	16180	551	457	21290	725	607	93	+632	+74
974	11-12	2 P	2 P	4.5	42.2	3.4	3.4	349	4-22	1	0	5-9	4	20	840	38	22	12130	486	331	55	+1131	+94
8	8-3	3 P	3 P	4.0	37.7	3.5	3.4	374	6-9	6	181	6-7	5	337	18570	692	611	17120	643	564	76	+113	+40
81	2-19	2 P	2 P	2.0	81.9	3.8	3.0	402	3-5	1	0	4-10	3	66	28590	983	946	25490	857	832	114	+353	+14
2267	3-9	2 P	2 P	1.5	90.7	3.0	2.8	404	11-19	1	82	4-5	3	174	19400	658	549	27490	897	790	120	+1932	+209
38	1-29	6 P	6 P	3.5	55.2	3.3	3.6	405	11-23	1	64	4-5	3	170	19280	626	546	27770	686	798	121	+2134	+216
223	1-2	2 P	2 P	3.5	43.9	2.4	3.0	419	6-9	1	103	3-5	2	337	26150	907	875	26950	931	874	119	+1362	+152
122	1-4	4	4	4.0	31.7	5.8	4.1	428	4-25	8	54	3-3	2	262	18570	618	618	23360	779	762	102	+2096	+198
77	2-20	3	3	3.5	48.9	3.4	3.4	430	9-10	1	128	3-3	2	244	14960	683	526	18570	856	639	86	+782	+114
37	3-31	3 O	3 O	3.0	61.3	2.5	3.1	431	9-23	1	81	3-2	2	231	16780	712	540	22050	899	688	100	+1618	+203
130	2-24	2 O	2 O	2.5	68.0	4.4	3.5	432	11-17	1	0	3-2	2	176	16120	531	482	23870	734	704	103	+1694	+170
9-20	4	4	4	5.0	68.0	4.4	3.5	433	10-2	1	0	3-1	2	222	17700	705	586	24310	970	784	110	+1172	+194
22	1-10	1 P	1 P	2.0	86.9	4.0	3.5	434	4-28	6	234	2-5	1	455	23190	922	786	22570	800	689	89	+1676	+191
166	2-11	1 P	1 P	2.0	96.8	2.8	3.3	435	11-21	1	122	3-2	2	172	16970	663	558	27460	1066	890	123	+1412	+176
9	7-29	4 P	4 P	2.0	106.6	3.7	3.0	439	3-8	1	0	3-3	2	65	7370	290	221	23870	903	724	107	+1896	+200
8-10	1 P	1 P	1 P	3.5	44.3	2-7	3.0	443	2-7	6	287	2-0	1	362	17790	842	636	19930	929	676	96	+1628	+206
186	3-12	4	4	3.0	48.3	3.9	3.4	445	3-23	6	260	2-2	1	322	15960	582	536	19250	698	633	86	+1507	+189
153	12-10	1 P	1 P	2.0	79.1	2.5	3.2	448	9-22	2	61	2-5	1	232	12840	509	417	18510	720	596	83	+1561	+190
9-17	3 P	3 P	3 P	3.5	450	4-2	3.0	449	6-29	2	153	2-2	1	317	21980	574	719	25270	662	808	107	+1881	+187
22	2-5	2 O	2 O	3.0	64.9	3.3	3.0	450	10-4	2	0	2-2	1	288	13380	417	387	17560	548	492	76	+1406	+120
27	2-4	2 O	2 O	2.5	51.4	3.6	3.1	452	10-4	2	0	2-2	1	220	14390	492	428	22370	745	656	98	+1979	+209
17	12-24	1 P	1 P	2.5	63.0	3.5	3.2	453	10-7	2	139	2-0	1	215	14450	488	428	21610	727	634	95	+1779	+182
19	3-1	2 P	2 P	2.0	76.4	3.4	3.3	455	10-9	2	0	2-1	1	173	14800	603	481	23600	919	751	106	+2133	+215
75	1-7	1 P	1 P	2.5	66.3	2.8	3.0	460	11-20	2	72	1-11	1	175	13090	492	406	25730	925	792	114	+2200	+239
21	2-6	2 P	2 P	4.0	26.9	3.9	3.5	461	10-31	2	125	1-10	1	193	14300	394	424	25470	703	763	109	+1911	+192
71	262	4-30	1	2.5	54.8	2.7	3.0	463	9-30	2	95	1-9	1	224	10570	414	344	16300	639	517	73	NA	NA
273	12	4-8	3	1.5	70.9	3.3	2.8	465	2-18	2	12	1-11	1	83	4690	223	144	18830	767	576	85	NA	NA
16	3-2	1 P	1 P	1.0	91.5	2.1	2.9	467	4-23	2	0	2-0	1	19	2150	74	64	22020	739	620	96	NA	NA
27	2-17	1 P	1 P	2.5	43.9	2.0	3.5	471	1-6	1	34	3-4	2	126	12940	420	374	24750	747	720	107	+1456	+142
152	1-27	1 O	1 O	2.5	58.6	3.8	3.6	481	12-21	1	71	3-1	2	142	14930	433	432	26760	729	782	114	+1868	+198
188	12-16	1 P	1 P	2.0	72.4	3.2	3.3	482	12-30	1	84	3-2	2	133	11150	268	374	18270	466	616	77	+1318	+148
55	1-15	1 P	1 P	3.0	47.4	4.2	4.0	505	11-9	1	0	3-9	2	184	15710	653	535	21550	866	728	97	+1458	+182
199	1-20	1 P	1 P	3.0	47.4	3.9	3.3	517	9-17	2	147	2-0	1	237	16420	510	549	25430	777	828	110	+1028	+153
548	4-13	3	3	2.5	56.0	3.3	3.4	526	10-30	2	117	2-4	1	194	9340	395	365	15800	652	609	72	+1792	+217
9	2-6	2 P	2 P	1.5	82.9	3.1	3.4	527	10-4	2	29	2-3	1	220	15360	504	528	22730	730	516	71	+694	+82
39	1-6	1 P	1 P	2.0	74.9	3.1	3.5	529	10-7	2	95	2-3	1	217	16090	566	546	25790	857	860	113	+1452	+179
				3.5	93	2	10.05	530	10-11	2	126	2-3	1	213	15770	530	545	25080	804	853	109	+1325	+156

Appendix A: AFNR Career Cluster Content Standards

	Performance Measurement Levels	Event Activity Addressing Measurement	Related Academic Standards
ABS.07.02. Performance Indicator: Develop a production and operational plan.			Language Arts: 4, 5, 6 and 12
	ABS.07.02.01.b. Evaluate the components of a production and operational plan and then revise an existing plan.	team activity	
	ABS.07.02.02.a. Identify common resources needed to operate a production facility.	team activity	
ABS.07.03. Performance Indicator: Utilize appropriate techniques to determine the most likely strengths, weaknesses and inconsistencies in a business plan and relate these to risk management strategies.			Language Arts: 12
	ABS.07.03.01.b. Describe approaches to use in revising a business plan for improved consistency and realism.	team activity	
AS.01.01. Performance Indicator: Evaluate the development and implications of animal origin, domestication and distribution.			Science: C3 Social Studies: 7h
	AS.01.01.02.a. Define major components of the animal industry.	exam	
AS.02.02. Performance Indicator: Apply principles of comparative anatomy and physiology to uses within various animal systems.			Science: C1, C5 and F2
	AS.02.02.01.c. Explain how the components and systems of animal anatomy and physiology relate to the production and use of animals.	team activity	
AS.02.03. Performance Indicator: Select animals for specific purposes and maximum performance based on anatomy and physiology.			Science: C5
	AS.02.03.01.c. Evaluate and select animals to maximize performance based on anatomical and physiological characteristics that affect health, growth and reproduction.	evaluation	
	AS.02.03.02.c. Develop efficient procedures to produce consistently high-quality animals, well suited for their intended purposes.	team activity	
AS.03.01. Performance Indicator: Prescribe and implement a prevention and treatment program for animal diseases, parasites and other disorders.			Science: C4, F1 and F5
	AS.03.01.02.a. Identify common diseases, parasites and physiological disorders that affect animals.	exam, team activity	
	AS.03.01.03.b. Evaluate preventive measures for controlling and limiting the spread of diseases, parasites and disorders among animals.	team activity	

AS.03.02. Performance Indicator: Provide for the biosecurity of agricultural animals and production facilities.		Science: F5 and F6 Social Studies: 9d
	AS.03.02.01.a. Explain the importance of biosecurity to the animal industry.	exam
	AS.03.02.01.b. Discuss procedures at the local, state and national levels to ensure biosecurity of the animal industry.	team activity
AS.04.01. Performance Indicator: Formulate feed rations to provide for the nutritional needs of animals.		Math: 1C and 6B Science: A4 and C5
	AS.04.01.01.b. Determine the relative nutritional value of feedstuffs by evaluating their general quality and condition.	exam
	AS.04.01.01.c. Select appropriate feedstuffs for animals based on factors such as economics, digestive system and nutritional needs.	team activity
	AS.04.01.02.a. Explain the importance of a balanced ration for animals.	exam
	AS.04.01.02.b. Appraise the adequacy of feed rations using data from the analysis of feedstuffs, animal requirements and performance.	team activity
AS.04.02. Performance Indicator: Prescribe and administer animal feed additives and growth promotants in animal production.		Science: C5
	AS.04.02.01.b. Discuss how feed additives and growth promotants are administered and the precautions that should be taken.	exam, team activity
AS.05.01. Performance Indicator: Evaluate the male and female reproductive systems in selecting animals.		Science: C1 and C3
	AS.05.01.01.a. Explain the male and female reproductive organs of the major animal species.	exam
AS.05.02. Performance Indicator: Evaluate animals for breeding readiness and soundness.		Science: C6
	AS.05.02.02.c. Treat or cull animals with reproductive problems.	exam, team activity

AS.05.03. Performance Indicator: Apply scientific principles in the selection and breeding of animals.		Math: 6C Science: A4, C2 and E2
AS.05.03.01.c. Select a breeding system based on the principles of genetics.	team activity	
AS.05.03.02.c. Select animal breeding methods based on reproductive and economic efficiency.	team activity	
AS.05.03.03.a. Explain the use of quantitative breeding values (e.g., EPDs) in the selection of genetically superior breeding stock.	exam	
AS.05.03.03.c. Select animals based on quantitative breeding values for specific characteristics.	team activity	
AS.05.03.04.b. Explain the processes of major reproductive management practices, including estrous synchronization, superovulation, flushing and embryo transfer.	exam, team activity	
AS.05.03.05.b. Explain the materials, methods and processes of artificial insemination.	exam, team activity	
AS.07.01. Performance Indicator: Design animal housing, equipment and handling facilities for the major systems of animal production.		Science: C6 and F6
AS.07.01.01.b. Critique designs for an animal facility and prescribe alternative layouts and adjustments for the safe and efficient use of the facility.	team activity	
AS.07.01.02.b. Explain how modern equipment and handling facilities enhance the safe and economic production of animals.	team activity	
AS.08.01. Performance Indicator: Reduce the effects of animal production on the environment.		Science: C4 and F4
AS.08.01.01.a. Evaluate the effects of animal agriculture on the environment.	exam	
AS.08.01.01.b. Outline methods of reducing the effects of animal agriculture on the environment.	team activity	
AS.08.02. Performance Indicator: Evaluate the effects of environmental conditions on animals.		Science: C6 and F4
AS.08.02.01.a. Identify optimal environmental conditions for animals.	exam	
AS.08.02.01.b. Describe the effects of environmental conditions on animal populations and performance.	team activity	
CS.01.05. Performance Indicator: Awareness: Desire purposeful understanding related to professional and personal activities.		Language Arts: 1 Social Studies: 1e, 4e, 10b and 10j
CS.01.05.01.c. Articulate current issues that are important to the local, state, national and global communities.	presentation	

CS.02.02. Performance Indicator: Social Growth: Interact with others in a manner that respects the differences of a diverse and changing society.		Language Arts: 12 Social Studies: 1e
	CS.02.02.02.c. Present oneself appropriately in various settings.	presentation
CS.02.05. Performance Indicator: Emotional Growth: Demonstrate healthy responses to one's feelings.		Social Studies: 4a
	CS.02.05.03.c. Exhibit self confidence while in the workplace.	presentation
CS.03.01. Performance Indicator: Communication: Demonstrate oral, written and verbal skills.		Language Arts: 4, 5 and 12
	CS.03.01.01.c. Demonstrate technical and business writing skills to communicate effectively with co-workers and supervisors.	written plan
	CS.03.01.03.c. Make effective business presentations.	presentation

Appendix B: Related Academic Standards

National academic standards for mathematics, science, English language arts and social studies related to this event are reported below. The statements are based on information in reports of the respective associations/organizations in the academic areas. Some adjustment of numbering was done to facilitate the process of alignment with the standards that have been developed in the pathways of the Agriculture, Food and Natural Resources (AFNR) Career Cluster.

The approach was to determine the presence of alignment between the content standards, expectations or thematic strands of the four academic areas and the performance indicators of the AFNR Standards. Supporting statements have been included to clarify content of the respective content standards, expectations or thematic strands. The statements were initially developed independently by the respective organizations and, therefore, are not parallel in wording and presentation. Occasionally minor editing was done to adjust the background or stem of a statement but not the statement itself.

Mathematics

1. Standard and Expectations: Number and Operations
 - 1C. Compute fluently and make reasonable estimates.
6. Standard and Expectations: Problem Solving
 - 6B. Solve problems that arise in mathematics in other contexts.
 - 6C. Apply and adapt a variety of appropriate strategies to solve problems.

Science

- A. Content Standard: Science as an Inquiry
 - A4. Formulate and revise scientific explanations and models using logic and evidence.
- C. Content Standard: Life Science
 - C1. The cell.
 - C2. Molecular basis of heredity.
 - C3. Biological evolution.
 - C4. Interdependence of organisms.
 - C5. Matter, energy and organization in living systems.
 - C6. Behavior of organisms.
- E. Content Standard: Science and Technology
 - F4. Environmental quality.
 - F5. Natural and human-induced hazards.
 - F6. Science and technology in local, national and global challenges.
 - E2. Understanding about science and technology.
- F. Content Standard: Science in Personal and Social Perspectives
 - F1. Personal and community health.
 - F2. Population growth.

English Language Arts

4. Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
5. Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

6. Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language and genre to create, critique and discuss print and non-print texts.

12. Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information).

Social Studies

7. Thematic Strand: Production, Distribution and Consumption

7h. apply economic concepts and reasoning when evaluating historical and contemporary social developments and issues;

Appendix C: Dairy Cattle Evaluation and Management Team Activity Example Scenario

Directions: Please read the dairy farm management scenario and supplemental information provided for the scenario, identify problems and determine possible improvements. Your team should assume the role of a hired consultant advising the producer (judges). Then, you have 10 minutes to respond orally to the judges. Your team has 40 minutes to prepare your 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.

You will be provided with an additional worksheet to assist you with your presentation. This worksheet will be turned in to the judges after the completion of your presentation and responses to the judges' questions. All four team members are expected to participate in the oral presentation. You may make and take notes for the presentation.

This scenario, your responses and evidence of team work are worth 600 points (400 points on content and 200 points on communication).

Scenario: A dairy producer in Western Kentucky calls you indicating he is having some production problems with his dairy herd. Unfortunately, budget constraints have dictated that you will be unable to visit his herd in person. You do have access to his DHI records, however. Using the DHI-202 Herd Summary below, answer the following questions.

1. Production (Provide data/numbers to support your observations).
 - Using standardized 150 day milk, describe any trends you observe with regard to seasonality of milk production.
 - Discuss what might contribute to these differences.
 - Examine peak milk and summit milk trends by age group and describe any differences you observe. Are these differences what you would expect?
 - Describe the difference between peak milk and summit milk.
2. Mastitis/Somatic Cell Count
 - Describe any trends you see in somatic cell count by month.
 - What factors might contribute to this trend?
 - Cows with a somatic cell score >3.9 percent are generally considered to be experiencing some level of infection. Using this cut-off, what percentage of this herd had some type of infection during the November 2009 test day?
 - What is the value (\$) of the unrealized milk production resulting from somatic cell count during the current test period?

HERD SUMMARY DHI-202

HERD CODE AND TYPE OF RECORD	DATE TESTED
ST. CO. HERD NO.	MO. DAY YEAR
DHI-OS	18 11 4 09

REPRODUCTIVE SUMMARY OF CURRENT BREEDING HERD

BK OF HERD	HO	TOTAL COWS IN BREEDING HERD	35
VOLUNTARY WAITING PERIOD (VWP)	60	NUMBER COWS IN BREEDING HERD	60
COWS WITH NO SERVICE DATES OR DIAG. OPEN	OPEN OVER 100 DAYS	NUMBER OPEN	6
	VWP TO 100 DAYS	NUMBER OPEN	17
	OTHER	NUMBER OPEN	14
		NUMBER OPEN	17
		NUMBER OPEN	40
		NUMBER OPEN	110

PRODUCTION, INCOME, & FEED COST SUMMARY

DESCRIPTION	DAILY AVERAGE PER COW ON TEST DAY	ROLLING YEARLY HERD AVERAGES
TOTAL COWS	103	109.7
COWS IN MILK	82	86
MILK LBS. (ALL COWS)	50.3	19,589
FAT PERCENT	3.9	3.5
PROTEIN LBS. (ALL COWS)	1.69	616
PROTEIN PERCENT	3.4	3.1
MILK LBS. (MILKING COWS)	63.6	
MILK LBS. (ALL COWS)		
LBS. CONSUMED		
LBS. CONSUMED		
LBS. CONSUMED		
LBS. CONSUMED		
LBS. CONSUMED		
PASTURE (YES OR NO)		
LBS. CONSUMED		
CONCENTRATES		
VALUE OF CONCENTRATES \$	8.46	2,774
TOTAL FEED COST \$		
FEED COST PER COW		
FEED COST PER COW		
MILK BLEND PRICE	12.85	3.5

REPRODUCTIVE SUMMARY OF TOTAL HERD

1ST LACT	11	8	10	110	2.1	2.7	15.3	184
2ND LACT	8	7	5	84	2.7	3.1	14.5	162
3+ LACTS	3	13	10	98	2.3	2.8	14.4	157
ALL LACTS	22	28	25	99	2.3	2.8	14.7	168
% OF ALL 1ST SERVICES	29	37	34				15.5	

BIRTH SUMMARY

DAMS LACT NO.	MALES ALIVE	MALES DEAD	FEMALES ALIVE	FEMALES DEAD	OFFSPRING BORN	CALVING DIFFICULTY SCORE
1	14		17	4	7	1
2+	34		22	1	34	2
TOTAL	48		39	5	41	3

COWS TO BE MILKING, DRY, CALVING, BY MONTH

MONTH	DEC	JAN	FEB	MAR	APR	MAY
* MILKING	87	86	94	99	99	95
DRY	22	23	14	10	7	8
COWS TO CALVE	11	9	12	6	4	6
HEIFERS TO CALVE	5	2	3	4		

* ASSUMES 3.1% PER MONTH CULLING RATE.

MISCELLANEOUS HERD INFORMATION

ASSOC. SAMPLES	IBPC
990	MAILED
SUPV. MO. DAY	NO. DAY
998	11 10 11 10
SHIPPED-TEST DAY COMPARISON	YEARLY AVERAGE
5085	5920
REPORTED AV. DAILY BULK TANK WTS (LBS)	5835
% DEVIATION	+2.0
	+1.5

REMARKS:

YEARLY REPRODUCTIVE SUMMARY

DATE OF TEST	% HEATS SUCCESSFUL	% PREG. RATE	NUMBER SERVICES	NUMBER CONFIRM. PREG.	NUMBER CALVING	TOTAL PREGNANT COWS
MONTH DROPPED	32	25	5	12	3	12
1-14-09	45	64	24	39	9	38
2-18-09	62	21	14	34	12	18
3-25-09	56	42	18	36	6	5
4-21-09	45	40	15	20	10	6
5-27-09	43	45	19	29	14	4
7-01-09	43	33	6	18	19	7
7-28-09	47	57	5	14	1	63
9-09-09	33	31	13	5	9	57
10-06-09	39		12	8	8	48
11-04-09	47		12	8	8	51
AVERAGES	46	42	14	23	8	10
TOTALS			227	104		48

SERVICES FOR PAST 12 MONTHS

SERVICE NUMBER	NUMBER SERVICE	% SUCCESSFUL	SERVICE MERIT \$
1ST	100	44	+348
2ND	60	40	+376
3RD+	65	40	+393
TOTAL	225	42	+368

SERVICE OR HEAT INTERVALS

INTERVAL LENGTH	NUMBER INTERVALS
LESS THAN 18	3
18-24	36
25-48	20
OTHER	60

PROJECTED MINIMUM

AVG. DAYS TO 1ST SERVICE	PROJECTED MINIMUM
11	15.3
8	14.5
3	14.4
22	14.7
29	15.5

SERVICES PER PREGNANCY

ALL COWS	ALL COWS
2.1	2.7
2.7	3.1
2.3	2.8
2.3	2.8
2.3	2.8
2.8	3.1

SERVICES PER PREGNANCY

ALL COWS	ALL COWS
2.1	2.7
2.7	3.1
2.3	2.8
2.3	2.8
2.3	2.8
2.8	3.1

SERVICES PER PREGNANCY

ALL COWS	ALL COWS
2.1	2.7
2.7	3.1
2.3	2.8
2.3	2.8
2.3	2.8
2.8	3.1

SERVICES PER PREGNANCY

ALL COWS	ALL COWS
2.1	2.7
2.7	3.1
2.3	2.8
2.3	2.8
2.3	2.8
2.8	3.1

IDENTIFICATION AND GENETIC SUMMARY

HERO MERIT \$ OPTION	NM
GENETIC PROFILE	PROVEN A.L. YOUNG STRES ALL OTHER STRES
% OF HERO NUMBER OF BULLS USED	73 27
AVERAGE MERIT \$	+390 +392
HERO MERIT \$	62 66

CURRENT SOMATIC CELL COUNT SUMMARY

DCR MLK 73.9

HERO PRODUCTION LOST FROM SCC THIS TEST PERIOD \$ * 962

PRODUCTION BY LACTATION SUMMARY

NO. ANIMALS IDENTIFIED BY	NUMBER OF CHANGES	DAIRY	ANIMAL	SIRE
AGE GROUP	0-12	15	37	+151
AVG. AGE YR-MO	0-08	36	12	+130
AVG. AGE YR-MO	1-08	30	6	+175
AVG. AGE YR-MO	1-01	66	21	+247
AVG. AGE YR-MO	2-02	9	8	+97
AVG. AGE YR-MO	3-05	19	14	+143
AVG. AGE YR-MO	5-01	25	24	+137
AVG. AGE YR-MO	3-09	53	46	+133
AVG. AGE YR-MO	3-09	51	45	+196

PRODUCTION BY LACTATION SUMMARY

NUMBER OF COWS	AVG. MON.	PEAK MILK	SUMMIT MILK	PROJ ME 305 DAY	DIFFERENCE FROM HERDMATES
1ST LACT	34	26	78	72	23004
2ND LACT	28	41	93	84	23739
3+ LACTS	41	61	96	85	21248
ALL LACTATIONS	103	45	88	81	22571

STAGE OF LACTATION PROFILE

STAGE OF LACTATION (DAYS)	1 THRU 40	41 THRU 100	101 THRU 150	151 THRU 200	201 THRU 250	251 THRU 300	TOTAL AVERAGE
1ST LACT	4	13	6	23			
2ND LACT	5	3	7	8	23		
3+ LACTS	7	7	8	7	36		
ALL LACTS	11	12	10	28	21	82	
1ST LACT	56	59	47	55			
2ND LACT	67	68	70	51	62		
3+ LACTS	83	76	81	61	47	69	
ALL LACTS	73	72	77	62	49	64	

STAGE OF LACTATION PROFILE

DATE TESTED	11-04-09
HERDCODE	
BREED	HO
STRING	

STAGE OF LACTATION PROFILE

1ST LACT	4	13	6	23
2ND LACT	5	3	7	8
3+ LACTS	7	7	8	7
ALL LACTS	11	12	10	28
1ST LACT	56	59	47	55
2ND LACT	67	68	70	51
3+ LACTS	83	76	81	61
ALL LACTS	73	72	77	62

STAGE OF LACTATION PROFILE

1ST LACT	4	13	6	23
2ND LACT	5	3	7	8
3+ LACTS	7	7	8	7
ALL LACTS	11	12	10	28
1ST LACT	56	59	47	55
2ND LACT	67	68	70	51
3+ LACTS	83	76	81	61
ALL LACTS	73	72	77	62

PRODUCTION BY LACTATION SUMMARY

NUMBER OF COWS	AVG. MON.	PEAK MILK	SUMMIT MILK	PROJ ME 305 DAY	DIFFERENCE FROM HERDMATES
1ST LACT	34	26	78	72	23004
2ND LACT	28	41	93	84	23739
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ALL LACTATIONS	103	45	88	81	22571

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Key DHI Benchmarks from DairyMetrics (9-16-09)			
All KY Holstein Herds (N=73) with at least 100 cows			
	Percentile		
	50th	75th	95th
Rolling Milk	19388.6	21482.4	24494.6
Rolling Fat	702.4	778.4	887.8
Rolling Protein	595.4	657.4	746.6
Daily Milk-Milk cows	59.0	65.6	75.1
Summit Milk 1st Lactation	66.2	72.4	81.3
Summit Milk 2nd Lactation	82.1	90.3	102.2
Summit Milk 3rd+ Lactation	87.4	95.9	108.1
Peak Milk 1st Lactation	71.8	78.5	88.2
Peak Milk 2nd Lactation	88.8	98.2	111.7
Peak Milk 3rd+ Lactation	95.2	103.7	115.9
Proj 305 Day ME Milk	21502.8	23491.3	26352.0
Standardized 150 Day Milk	67.6	75.2	86.0
Days in Milk	210.9	191.4	163.4
Age of 1st Lactation Cows	26.5	24.8	22.4
Cows Left Herd-All Lactations, %	34.5	25.0	11.3
Cows Died-All Lactations, %	7.4	4.0	0.0
Cows Left Herd for Repro-All Lactations, %	5.5	1.3	0.0
SCC Actual	397.0	273.0	94.5
SCC Score	3.2	2.8	2.2
SCC Score for 1st Lact Cows	2.8	2.4	1.8
SCC Score for 2nd Lact Cows	3.1	2.6	1.9
SCC Score for 3rd+ Lact Cows	3.6	3.1	2.4
Cows (SCCS of 0-3), %	57.9	65.2	75.7
1st lact (SCCS of 0-3), %	65.0	72.7	83.8
2nd lact (SCCS of 0-3), %	60.9	70.1	83.4
3rd lact (SCCS of 0-3), %	50.1	59.4	72.8
Pregnancy Rate-Current, %	13.5	19.7	28.6
Days Open-Projected Minimum-Total Herd	180.7	155.6	119.5
Projected Calving Interval	15.2	14.3	12.9
Actual Calving Interval	14.5	13.7	12.5
Days to 1st Service-(%herd < VWP)	19.2	28.0	40.7
Days to 1st Service-(%VWP to 100D)	44.8	56.9	74.2
Days to 1st Service-(%herd > 100D)	37.5	49.9	67.8
Days to 1st Service-Total Herd	108.1	84.0	49.2
Days to 1st Service(%herd <100D)-1st Lact	62.5	76.3	96.1
Days to 1st Service(%herd <100D)-2nd Lact	65.5	79.2	98.9
Days to 1st Service(%herd <100D)-3rd+ Lact	63.0	74.1	90.1
Conception Rate for Past 12M-1st Service, %	48.4	66.5	92.6
Conception Rate for Past 12M-2nd Service, %	45.1	63.9	90.8
Conception Rate for Past 12M-3rd+ Service, %	35.0	51.9	76.3
Service per Preg-All Lact	2.5	1.8	
Service per Preg-1st Lact	2.5	1.8	
Service per Preg-2nd Lact	2.6	1.7	
Service per Preg-3rd+ Lact	2.6	1.8	
Heats Observed, %	29.7	42.1	60.0
Percentile Rank of Proven AI Bulls	40.0	61.8	93.1

Dairy Cattle Evaluation and Management Team Activity Worksheet

Strengths	Weaknesses
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
Opportunities	Threats
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

Please turn worksheet over to complete page 2

Problems or Opportunities Identified	Relevant Data and Supporting Facts	Proposed Solutions
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.