

## 2017 National FFA Dairy Cattle Event

### Dairy Management Exercise

Select best answer for each of the following 40 questions.

1. This cheese is the most popular American-type cheese.  
A) Cheddar, B) Mozzarella, C) Swiss, D) Monterey Jack, E) Cream Cheese.
2. What type of mastitis is the primary reason antibiotics are administered to dairy cows?  
A) Sub-Clinical, B) Clinical, C) Acute, D) Chronic, E) None of the above.
3. For question two the common symptoms of this type of mastitis are?  
A) Flakes, B) Clots, C) Hot quarters, D) Watery milk, E) All of the above.
4. What is the most effective measure to prevent new cases of mastitis infections from occurring?  
A) Teat-dipping, B) Dry-cow antibiotic treatment, C) Foot trimming, D) Both A&B, E) Both B&C.
5. Lameness on a dairy farm can lead to higher culling rates, reduced reproductive performance, and lower milk yield. In order to manage lameness on your farm, you implement a locomotion scoring system using a scale from 1 to 5. What score would you give to a cow who stands and walks normally and all feet are placed with purpose?  
A) 4 or 5, B) 3, C) 2, D) 1, E) All of the above.
6. One of your recently fresh cows is ill. She has been receiving a high grain, low roughage diet. The consistency of the small amount of manure she produces is "putty-like". Your veterinarian detects a "pinging" sound when using his stethoscope. What is the most likely diagnosis?  
A) Ketosis, B) Milk Fever, C) Grass Tetany, D) Left Displaced Abomasum, E) Rumen Acidosis.
7. In order to prevent hock lesions and improve incidence of lameness, which is the best bedding material to use?  
A) Sand, B) Straw, C) Wood shavings, D) Stall mats, E) Recycled manure.
8. Tarsal hygroma is which of the following common ailments in dairy cows?  
A) Swollen hock, B) Dehydration, C) Acidosis, D) Lameness, E) Split toed.
9. This micro-mineral has been shown to be effective in decreasing the rate of foot rot, heel cracks, and laminitis in dairy cattle.  
A) Copper, B) Iodine, C) Selenium, D) Manganese, E) Zinc.
10. What dairy breed is the leader in Cheese Merit dollars?  
A) Guernsey, B) Milking Shorthorn, C) Ayrshire, D) Brown Swiss, E) Holstein.
11. Which of the following PTA traits was introduced in August 2017 for service sires representing the influence the service sire is expected to have on the number of days his mates carry their calves during their pregnancies.  
A) DPR, B) GL, C) SCR, D) SB, E) PL.

12. You recently became the manager of dry cows at a local dairy farm. Not only do you care for the dry cows but also for newborn calves. One issue that you must address immediately is decreasing calf mortality within the first 48 hours. The first purchase you make for the farm is a Brix refractometer to help estimate or measure what?  
A) Wither height, B) Colostrum quality, C) Cow's reaction time, D) Amount of bacteria in milk, E) Antibody levels in the blood.
13. At what point during the dry period does a cow's colostrum production cease?  
A) At the beginning of the dry period, B) About a week after having the calf, C) At the start of labor, D) A week before having the calf, E) None of the above.
14. Colostrum provides antibodies to newborn calves, but it is also 4 times higher in what important nutrient than normal cow's milk?  
A) Water, B) Fats, C) Carbohydrates, D) Protein, E) All of the above.
15. Absorption of antibodies from colostrum primarily takes place in which compartment of a calf's stomach?  
A) Omasum, B) Small Intestine, C) Rumen, D) Reticulum, E) Abomasum.
16. In 2015, which state had the most organic dairy farms?  
A) Idaho, B) Wisconsin, C) South Dakota, D) Washington, E) Michigan.
17. What trait is defined as adequate constitution with front legs straight, wide apart and squarely placed on the Dairy Cow Unified Scorecard?  
A) Front End, B) Rump, C) Dairy Strength, D) Chest Floor, E) Body Capacity.
18. You are the dry cow manager on your dairy farm. You begin to notice after calving cows are experiencing a loss in body condition and are not eating enough dry matter to meet their energy needs to produce milk. After discussing these symptoms with your veterinarian, a blood test also shows the cows with a lower than normal blood glucose, high ketones and free fatty acid levels. What could be the cause of these symptoms?  
A) Rumen Acidosis, B) Ketosis, C) Milk Fever, D) Johne's, E) Hardware.
19. To treat the metabolic disorder described in #18 which of the following is fed or administered to the cow?  
A) Calcium, B) Propylene glycol, C) Antibiotics, D) Water, E) Nothing the disorder will fix itself.
20. What may be added to feeds as an aid in prevention of the condition described in #18?  
A) Calcium, B) Phosphorus, C) Vitamin A, D) Vitamin K, E) Niacin.
21. For the condition described in question 18, in addition to fiber what other ration component is important in minimizing fresh cows' negative energy balance?  
A) Starch, B) Protein, C) Water, D) Calcium, E) All of the above.
22. What percent of the average U.S. dairy cow diet could be digested by a human?  
A) 0%, B) 10%, C) 20%, D) 50%, E) 100%.

23. After reviewing your recent breeding history for the past month, you contact your nutritionist because you have identified the need to improve conception rates in your herd. She suggests you add what to your rations to improve conception rates because of larger ovarian follicles capable of producing more estrogen, larger corpus luteum and a decrease in embryonic loss?  
A) Fats, B) Carbohydrates, C) Vitamins, D) Minerals, E) Protein.
24. Your favorite cow has gone off feed recently. The veterinary says she has ingested pieces of metal and has given her a magnet. In which compartment of the stomach is metal, most often found and would benefit from the magnet?  
A) Abomasum, B) Omasum, C) Reticulum, D) Rumen, E) Duodenum.
25. An example of a Class IV use for milk would be to make:  
A) Hard cheese, B) Ice cream, C) Chocolate Milk, D) Dried milk powder, E) A class IV use does not exist.
26. A poorly maintained ventilation system on your farm can result in what percent loss of air movement?  
A) 10%, B) 30 to 50%, C) 70-80%, D) 85-95%, E) There is no noticeable differences.
27. When this cell is mature, it is the largest in a dairy cow's body.  
A) Skin, B) Blood, C) Oocyte or egg, D) Somatic Cell, E) White blood cells.
28. This non-profit organization founded in 1915 funded through the national dairy checkoff program continues to be, committed to providing science-based education about the nutrition and health benefits that dairy foods provide.  
A) USDA, B) FDA, C) Federal Milk Market Orders, D) EPA, E) National Dairy Council.
29. You recently received a pedigree for a heifer in your herd. When looking at the pedigree you noticed some of the traits had a zero breeding value. So, when you compare her to the U.S. cow population, she is considered what for these traits?  
A) Above average, B) Average, C) Below average, D) An outstanding heifer, E) None of the above.
30. It is time to load your cows to bring them to come home to calve. To be successful in moving the cows you make sure to be mindful of the area where the cows do not want any foreign objects entering. This area is commonly known as?  
A) Blind spot, B) Flight zone, C) Comfort zone, D) Point of balance, E) Both A and C.
31. Which of the following is not a part of the cow's digestive tract?  
A) Esophagus, B) Omasum, C) Mouth, D) Small Intestine, E) Alveoli.
32. Getting dairy cows bred on the farm is a top priority. What process is used to determine if a cow is pregnant by inserting an arm into the rectum of a cow to feel the reproductive tract?  
A) Palpation, B) CMT, C) Prolapse, D) Parturition, E) Involution.
33. Which of the following is **NOT** considered a micro mineral?  
A) Phosphorus, B) Potassium, C) Calcium, D) Manganese, E) All but D.

34. Which of the following diseases is caused by a species of mycobacterium?  
A) Johnes, B) Brucellosis, C) Tuberculosis, D) Both A and C, E) All of them.
35. What is the “normal” rectal temperature of a dairy cow?  
A) 94-95 degrees F, B) 98-99 degrees F, C) 101-102 degrees F, D) 102-103 degrees F, E) 105-106 degrees F.
36. What is the process called whereby fat globules are broken down to a small, uniform size?  
A) Pasteurization, B) Clarification, C) Equalization, D) Homogenization, E) Standardization.
37. Milk over what somatic cell count cannot be legally shipped.  
A) 200,000, B) 400,000, C) 500,000, D) 750,000, E) 1,000,000.
38. Which hormone is responsible for milk letdown hormone?  
A) Oxytocin, B) Estrogen, C) Prolactin, D) Adrenalin, E) Progesterone.
39. Which of the following is not an annual plant used as a source of forages for dairy?  
A) Corn, B) Alfalfa, C) Wheat, D) Oats, E) Ryegrass.
40. Which of the following factors should be considered when planning a waste management system?  
A) Environmental, B) Social, C) Operational, D) Legal Requirements, E) All of the above.

***2017 National FFA Dairy Cattle Career Development Event***

**Official answers for Dairy Management Exercise:**

- |       |       |
|-------|-------|
| 1. A  | 21. A |
| 2. B  | 22. C |
| 3. E  | 23. A |
| 4. D  | 24. C |
| 5. D  | 25. D |
| 6. D  | 26. B |
| 7. A  | 27. C |
| 8. A  | 28. E |
| 9. E  | 29. B |
| 10. E | 30. B |
| 11. B | 31. E |
| 12. B | 32. A |
| 13. C | 33. E |
| 14. D | 34. D |
| 15. E | 35. C |
| 16. B | 36. D |
| 17. A | 37. D |
| 18. B | 38. A |
| 19. B | 39. B |
| 20. E | 40. E |

## 2018 National FFA Dairy Cattle Event

### Dairy Management Exercise

Select best answer for each of the following 40 questions.

1. An example of a Class I use for milk would be to make:  
A) Hard cheese, B) Ice cream, **C) Chocolate Milk**, D) Dried milk powder, E) Butter.
2. Welcome to F.F.A. Dairy as the new calf manager taking care of calves from birth to weaning. The first change you make on the dairy is in regards to the preparation of the calving pen. You decide to use sand as the base for the pen and then bed the pen with how many of inches of long straw?  
A) 2 inches, B) 4 inches, **C) 6 inches**, D) 10 inches, E) 12 inches.
3. F.F.A. Dairy has had many issues with newborn calves getting sick within the first 4 weeks. The first step you take to address this issue is to measure the quality of colostrum using which instrument?  
**A) Brix refractometer**, B) Thermometer, C) pH Meter, D) Plate Meter, E) Cryoscope.
4. To successfully deliver colostrum to newborn calves, you feed them using which of the following tools that the USDA has identified as the most common:  
**A) Bottle**, B) Tube, C) Bucket, D) Letting the calf nurse the cow, E) All of the above.
5. After the quality of colostrum is determined and fed to the newborn calf, immunoglobulins are absorbed in what part of the digestive system?  
A) Omasum, **B) Small Intestine**, C) Rumen, D) Reticulum, E) Abomasum.
6. Calves are born with a natural insulator trapping air and creating a boundary between the body and chilly outside air. Which part of the calf is this?  
A) Head, B) Feet and legs, C) Depth of rib, D) Rump, **E) Hair Coat**.
7. As the calf manager keeping the calves healthy is a high priority, to achieve this you install this common item used to bring in fresh air, while removing moisture, dust and gases in warm weather?  
A) Doors, **B) Fans**, C) Insulation, D) Individual calf stalls, E) All of the above.
8. For the common item you installed in question 7, how often should the housings and individual parts be cleaned for optimal performance?  
A) Every 6 months, **B) Every year**, C) Every 2 years, D) Every day, E) It is not needed because it is self-maintaining.
9. A poorly maintained ventilation system on your farm can result in what percent loss of air movement?  
A) 10%, **B) 30 to 50%**, C) 70-80%, D) 85-95%, E) There is no noticeable differences.
10. This has been identified as the most visible well-being problem in the dairy industry today?  
A) Dehorning, B) Breeding cows by A.I., C) Feeding calves with a bucket, **D) Lameness**, E) All of the above.

11. If the heat detection rate is 60% and the conception rate is 30%, what is the pregnancy rate? A) 9%, B) 20%, **C) 18%**, D) 30% E) 45%.
12. Lameness on a dairy farm can lead to higher culling rates, reduced reproductive performance, and lower milk yield. In order to manage lameness on your farm, you implement a locomotion scoring system using a scale from 1 to 5. What score would you give to a cow who has pronounced arching of back, reluctant to move with almost complete weight transfer off the affected limb?  
**A) 5**, B) 3, C) 2, D) 1, E) All of the above.
13. Which milk protein is being marketed as a new dairy product that is easily digestible and comparable to human breast milk? A) Whey, B) A1 beta-casein, **C) A2 beta-casein**, D) Kappa casein, E) Beta-lactoglobulin.
14. What tissue is monitored for residual drug levels at slaughter?  
**A) Kidneys**, B) Liver, C) Large Intestine, D) Rumen, E) Heart.
15. Which dairy breed has the highest percentage of the A2 milk protein gene and which has the least? A) Holstein, Jersey, B) Brown Swiss, Holstein, C) Brown Swiss, Guernsey, D) Guernsey, Jersey, **E) Guernsey, Holstein**.
16. You have been invited to a local dairy to consult on locomotion issues that several of the cows have been having. The hoof trimmer tells you he is finding a smelly infection of the foot between the claws and toes, long, overgrown and deformed toes, and heel cracks during trimming. In order to prevent these type of problems in the future, you recommend which micro-mineral to be added to the ration.  
A) Selenium, **B) Zinc**, C) Copper, D) Manganese, E) Iodine.
17. What is considered the universal standard criteria for breeding dairy heifers?  
**A) Body weight**, B) Age, C) Height at the withers, D) Rump Width, E) All of the above.
18. F.F.A Dairy has recently been experiencing lower milk production, higher somatic cell counts, and slower milk time. You have been asked to help solve this problem. After you observe the milking procedures, the cause of the problem is identified as:  
A) No pre-dip being used prior to milking, B) Dirty udders, **C) Too long pre-milking stimulation**, D) Milking dry teats, E) All of the above.
19. To help address the problems identified in #18, you help the milkers adopt a new milking procedure. Here are 5 steps you have suggested: 1) Dry teats completely with an individual towel, 2) Dip teats immediately after unit removal, 3) Pre-dip teats and provide 20-30 second contact time, 4) Attach milking unit within 1 minute after the start of stimulation, 5) Check foremilk and udder for mastitis. The order the milkers should perform these steps are:  
A) 1, 2, 3, 4, 5, B) 5, 4, 3, 2, 1, C) 5, 3, 2, 4, 1, **D) 5, 3, 1, 4, 2**, E) Order doesn't matter as long as all 5 steps happen.
20. During step 5 listed in #19, the milkers find milk with flakes, clots, and the presence of blood. This is an indication of what problem:  
A) Sub-clinical mastitis, **B) Clinical mastitis**, C) Acute mastitis, D) Chronic mastitis, E) All of the above.

21. What type of mastitis is the primary reason antibiotics are administered to dairy cows?  
A) Sub-clinical mastitis, **B) Clinical mastitis**, C) Acute mastitis, D) Chronic mastitis,  
E) All of the above.
22. In 2017, which state produced the most milk per cow?  
A) Idaho, B) Wisconsin, C) South Dakota, D) Washington, **E) Michigan**.
23. What trait is defined as deep and wide showing capacity for vital organs, with well sprung fore ribs on the Dairy Cow Unified Scorecard?  
A) Front End, B) Heart Girth, C) Dairy Strength, **D) Chest Floor**, E) Body Capacity.
24. What is known as the use of technologies to measure physiological behavioral, and production indicators on individual animals to improve management strategies and farm performance?  
A) On site dairy production, **B) Precision dairy farming**, C) GMOs, D) DHIA,  
E) Individual cow side dairy farming.
25. Examples of the type of farming described in #24 are:  
A) Pedometers, B) Accelerometers, C) Milk Conductivity indicators, D) Daily body weight measurements, **E) All of the above**.
26. A benefit of the type of farming described in #24 is?  
A) Decreased efficiency, B) Increased Costs, **C) Improved animal health and well-being**, D) Less objective observations, E) None of the above.
27. What metabolic disorder is caused by a deficiency of blood calcium related to an imbalance of calcium, phosphorus, and Vitamin D?  
**A) Parturient paresis**, B) Ketosis, C) Grass Tetany, D) Fatty Liver, E) Displaced Abomasum.
28. As a cow's lactation begins, the disorder described in # 27 usually occurs how many hours after calving?  
A) Less than 12 hours, **B) 24 to 72 hours**, C) 80 to 120 hours, D) more than 120 hours,  
E) Immediately after birth.
29. F.F.A Dairy has turned out their high producing cows on lush, green pastures earlier this spring. The herds person went to get the cows for milking and noticed the cows exhibiting an uncoordinated gait, nervousness, muscle spasms, staggering, and after milking decreased milk yield. What could be causing these symptoms?  
A) Parturient paresis, B) Ketosis, **C) Grass Tetany**, D) Fatty Liver, E) Displaced Abomasum.
30. The condition described in #29 is caused by a deficiency in what?  
**A) Magnesium**, B) Calcium, C) Phosphorus, D) Potassium, E) Protein.
31. 80% of the stomach is made up by this compartment where fermentation occurs and carbon dioxide and methane are produced.  
A) Abomasum, B) Omasum, C) Reticulum, **D) Rumen**, E) Duodenum.



32. What is the process called that heats raw milk to 161 degrees Fahrenheit for 15 seconds to destroy any disease producing bacteria that might be present?  
**A) Pasteurization**, B) Clarification, C) Equalization, D) Homogenization, E) Standardization.
33. What dairy breed has been noted to have the following strengths: high fertility, young age at first calving, calving ease, and excellent heat tolerance?  
A) Guernsey, B) Milking Shorthorn, C) Ayrshire, D) Brown Swiss, **E) Jersey**.
34. If you are providing water in the return alley from the milking parlor for cows, how many linear feet of watering space is required per cow?  
A) 6 inches, B) 1 foot, C) 18 inches, **D) 2 feet**, E) 40 inches.
35. What disaccharide is formed from the combination of glucose and galactose?  
A) Fructose, B) Sucrose, **C) Lactose**, D) Glucagon, E) Lactase.
36. Recently your cows have been experiencing less production, lower butterfat, and sick cows that never seem to recover. What could be the cause of these symptoms?  
A) Ketosis, B) Milk Fever, C) Johne's, D) Hardware, **E) Rumen Acidosis**.
37. Which of the following would be considered a voluntary reason for culling a dairy cow?  
A) non-breeder, B) mastitis, **C) low production**, D) crippled, E) All of the above.
38. The freezing point of milk can be altered by adding water to milk. What instrument is used to determine the freezing point of milk?  
A) Brix refractometer, B) Thermometer, C) pH Meter, D) Plate Meter, **E) Cryoscope**.
39. Which condition is a result of the fetal membranes remaining within the uterus for an extended period of time after calving?  
**A) Retained Placenta**, B) Involution, C) Separation of tissues, D) Metritis, E) Endometritis.
40. SPC is a measure of bacteria counts in milk. What do the letters SPC stand for?  
**A) Standard plate count**, B) Somatic pasteurization count, C) Secondary preliminary count, D) Super plate count, E) Super preliminary count.



# **Dairy Cattle Evaluation and Management Career Development Event**

*Created: Jan-20*

*Select the best answer for each of the following 40 questions. Best of luck!*

## **DAIRY MANAGEMENT EXERCISE**

1. Holstein heifers should calve at \_\_\_\_\_ months of age.
  - A. 15
  - B. 18
  - C. 12
  - D. 24
  - E. 26
  
2. You are dealing with an environmental mastitis problem on the farm. Your vet noticed that the milking staff has incorrect predip technique. He recommends that the predip should stay on the teats \_\_\_\_\_ for effective environmental mastitis causing pathogen control.
  - A. 5-10 seconds
  - B. 15-30 seconds
  - C. 30-60 seconds
  - D. 60-90 seconds
  
3. Which one of the following is the minimum amount of silage that should be removed from the exposed surface of a bunker silo each day to prevent spoilage?
  - A. 2 inches
  - B. 6 inches
  - C. 12 inches
  - D. 24 inches

4. High concentrate and low roughage rations may result in
  - A. displaced abomasum
  - B. acidosis
  - C. rumen parakeratosis
  - D. low milk fat
  - E. all of the above
5. If a cow ate 38 lbs of silage that was 64% moisture, how many pounds of dry matter were consumed?
  - A. 14
  - B. 24
  - C. 40
  - D. 67
6. Excess Ca fed during the dry period may induce which of the following metabolic problems?
  - A. Ketosis
  - B. Metritis
  - C. Displaced Abomasum
  - D. Parturient Paresis
7. Fat contains \_\_\_\_\_ times more calories per unit than a similar amount of carbohydrates, based on gross energy.
  - A. 9
  - B. 5
  - C. 4.25
  - D. 2.25
8. What is the highest possible percent reliability in a sire proof?
  - A. 60%
  - B. 80%
  - C. 90%
  - D. 99%
  - E. 100%

9. What hormone is released by a CIDR?
- A. Estrogen
  - B. Progesterone
  - C. Prostaglandin
  - D. GnRH
10. The corpus luteum produces progesterone to maintain pregnancy and is located:
- A. On the ovary
  - A. On the uterus
  - B. On the oviduct
  - C. Near the hypothalamus
11. On the anterior pituitary Genomic testing is having a significant impact on the dairy genetics business. Running a 3K SNP test has an average 60% reliability of genetic potential on how many genetic markers?
- A. 300
  - B. 3,000
  - C. 30,000
  - D. 300,000
12. Which of the following would be a typical VWP?
- A. 10-30 day
  - B. 45-60 days
  - C. 60-70 days
  - D. 80-100 days
13. You send a sample of corn silage from your trench silo to the lab for nutrient analysis. The report lists the dry matter of the silage at 28%. How many pounds of dry matter are in one ton (2000 pounds) of the silage?
- A. 680
  - B. 560
  - C. 600
  - D. 280

14. Which of the following is the name of the part of a cow's back that lies between the withers and the loin?
- A. Rump
  - B. Thurl
  - C. Poll
  - D. Chine
15. Switching from 2X to 3X milking, it can be expected to increase production by how much?
- A. No change
  - B. About 5%
  - C. About 15%
  - D. About 30%
16. The dairy industry average cull rate is \_\_\_\_\_ %.
- A. 5-8
  - B. 10-15
  - C. 25-35
  - D. 35-50
17. How many pounds of water does a cow need to consume to produce one pound of milk?
- A. 5 to 1 pounds
  - B. 4 to 6 pounds
  - C. 2 to 3 pounds
  - D. 10 to 12 pounds
18. The hormone involved with long-day lighting, is released by the pineal gland and is used to set
- A. an animal's "internal clock."
  - B. melatonin
  - C. bovine somatotropin progesterone
  - D. estrogen oxytocin

19. What is the maximum length of time a cow should be in the holding area for one milking?
- A. 30 minutes
  - B. 60 minutes
  - C. 120 minutes
  - D. 180 minutes
20. What is the minimum bunk space per fresh cow in a fresh cow group?
- E. 12 inches
  - A. 18 inches
  - B. 24 inches
  - C. 30 inches
21. Which of the following could be fed to specifically improve hoof health and hardness?
- A. Carotene Biolyte
  - B. MGA
  - C. Vitamin R
  - D. Biotin
22. Soybean meal contains about                      % CP.
- A. 32
  - B. 38
  - C. 48
  - D. 54
23. If you are lacking this trace mineral RP's may occur more often.
- A. Ca
  - B. Selenium
  - C. Vitamin E
  - D. Potassium

24. Which of the following tests might indicate inefficient use of dietary protein?
- A. MUN
  - B. DHI
  - C. ELISA
  - D. NEFA
  - E. All of the above
25. When reading a genetic evaluation of a bull, Productive Life (PL) is indicated as the future Productive Life of the bull's daughters. The bull Henry has a PL score of +1. On average, how much longer will his daughters remain productive in the herd?
- A. 1 day
  - B. 1 week
  - C. 1 month 1 year
  - D. 2.25 years
26. You take a sample of milk from your bulk tank and test it using the Delvotest or the Penzyme test. What are you testing the milk for?
- A. Bacteria
  - B. Antibiotics
  - C. SCC
  - D. Type of mastitis
27. In a 300 cow breeding herd with a 50% conception rate, calculate how many cows would need to be bred the third time?
- A. 25
  - B. 50
  - C. 75
  - D. 100

28. The letters DHIA stand for:
- A. Dry Holstein Index Actualization
  - B. Daily Herd Increase Assessment
  - C. Dairy Herd Information Association
  - D. Double Holstein Index Agreement
  - E. Dairy Holstein Index Association
29. A dairy cow is producing 90 pounds of milk per day that contains 4% fat. How much fat is she producing daily?
- A. 4 pounds
  - B. 4.6 pounds
  - C. 3.6 pounds
  - D. 3 pounds
30. In reference to dairy and livestock farms, what does CAFO stand for?
- A. Cows and Fat Cattle Feedlot
  - B. Ordinance Cattle Animals Fending Off
  - C. Concentrated Animal Feeding Operations
  - D. California Feedlot Ordinance
31. Which of the following could be used to increase heat detection rate?
- A. Tail chalking
  - B. Ovsynch
  - C. Kamars
  - D. Milk hormone testing
  - E. All of the above
32. Calves should be weaned when they are consuming \_\_\_\_\_ pounds of calf starter for 2-3 consecutive days.
- A. 1-3
  - B. 4-5
  - C. 5-7
  - D. 7-10



33. What would be the ideal amount of time a cow would spend per day laying down?
- A. 50%
  - B. 30%
  - C. 20%
  - D. 10%
34. One milking robot should be able to handle about how many cows?
- A. 20 to 30 cows
  - B. 150 to 200 cows
  - C. 110 to 115 cows
  - D. 60 to 70 cows
35. Standard plate count is a measure of bacteria in milk. What is the legal limit?
- A. 100,000
  - B. 400,000
  - C. 750,000
  - D. 1,000,000
36. Oxytocin initiates milk let down and is important to maximize parlor efficiency. Which of these steps will initiate oxytocin production?
- A. Cleaning teat ends
  - B. Forestripping
  - C. Good cow preparation
  - D. All of the above
37. Your cooling fans in the freestall barn should be set to run continuously once the air temperature reaches \_\_\_\_\_ ?
- A. 70 F
  - B. 61 F
  - C. 83 F
  - D. 92 F

38. What tool might be used to determine proper forage length of chop?
- A. Penn State Particle Separator
  - B. Forage analysis
  - C. Ruler
  - D. CMT
  - E. None of the above
39. What is the major cause of death in calves that are scouring?
- A. alkaline stomach
  - B. lack of energy
  - C. high fever
  - D. dehydration
40. What is the term for the condition when an excessive amount of lymph fluid accumulates between the skin and the secretory tissue of the udder in a cow after calving?
- A. Edema
  - B. Ketosis
  - C. milk fever
  - D. lymphoma



## Dairy Cattle Evaluation Career Development Event

Created: Apr-20

### DAIRY MANAGEMENT EXAM KEY\HERD RECORD KEY

Question	Answer	Point Value	Standard	Standard	Standard
1.	D	3	AS.04.01.02.c		
2.	C	3	AS.07.01.010.c		
3.	B	3	AS.02.0101.c		
4.	E	3	AS.03.02.01.c		
5.	A	3	AS.03.02.02.c		
6.	D	3	AS.03.02.02.c		
7.	D	3	AS.03.02.01.c		
8.	D	3	AS.01.02.03.c		
9.	B	3	AS.06.02.03.c		
10.	A	3	AS.06.03.01.a		
11.	B	3	AS.04.02.03.c		
12.	B	3	AS.04.03.02.c		
13.	B	3	AS.03.02.01.b		
14.	D	3	AS.06.01.03.a		
15.	C	3	AS.06.03.02.b		
16.	C	3	AS.06.02.03.c		
17.	B	3	AS.03.02.02.c		
18.	A	3	AS.06.02.03.a		
19.	B	3	AS.02.02.01.a		
20.	C	3	AS.02.02.01.a		
21.	E	3	AS.03.01.01.b	AS.07.01.03.a	
22.	C	3	AS.03.02.01.a		
23.	B	3	AS.03.01.01.a	AS.07.01.03.a	
24.	A	3	AS.03.03.03.c		
25.	C	3	AS.04.02.02.c		

**DAIRY MANAGEMENT EXAM KEY\HERD RECORD KEY**

Question	Answer	Point Value	Standard	Standard	Standard
26.	B	3	AS.02.02.01.a		
27.	C	3	AS.04.03.02.c		
28.	C	3	ABS.01.03.01.c		
29.	C	3	AS.03.03.01.c		
30.	C	3	ABS.01.03.01.c		
31.	E	3	AS.04.03.03.c		
32.	A	3	AS.06.03.01.c		
33.	A	3	AS.07.01.02.a		
34.	D	3	AS.02.02.01.c		
35.	A	3	AS.02.02.01.c		
36.	D	3	AS.06.02.03.c		
37.	A	3	AS.05.01.02.b		
38.	A	3	AS.03.02.01.b		
39.	D	3	AS.07.01.03.a		
40.	C	3	AS.07.01.03.a		
41.	A	3	AS.01.02.03.a		
42.	C	3	AS.01.02.03.a		
43.	D	3	AS.07.01.02.c		
44.	D	3	AS.01.02.03.b		
45.	B	3	AS.01.02.03.b		
46.	C	3	AS.01.02.03.b	AS.02.02.01.c	
47.	A	3	AS.02.02.01.c	AS.04.03.01.c	
48.	D	3	AS.07.01.01.c		
49.	B	3	AS.04.03.04.c		
50.	A	3	AS.04.02.02.c		



# 2021 NATIONAL FFA DAIRY CATTLE EVENT

## Dairy Management Exercise

**Select best answer for each of the following 40 questions.**

1. An example of a Class III use for milk would be to make \_\_\_\_\_.
  - A. Hard cheese
  - B. Ice cream
  - C. Chocolate Milk
  - D. Dried milk powder
  - E. Butter
  
2. This has been identified as the most visible well-being problem in the dairy industry today?
  - A. Dehorning
  - B. Breeding cows by A.I.
  - C. Lameness
  - D. Feeding calves with a bucket
  - E. All of the above.
  
3. Dairy Management, Inc. (DMI) is a nonprofit organization formed by the National Dairy Board and United Dairy Association. It conducts programs in integrated marketing, communications, promotion, and research for U.S. Dairy Farmers. Which of the following organization is not a part of the DMI umbrella?
  - A. American Dairy Association
  - B. American Dairy Science Association
  - C. National Dairy Council
  - D. U.S. Dairy Export Council
  - E. None of the above because they are all a part of the DMI umbrella.

4. If the heat detection rate is 50% and the conception rate is 30%, what is the pregnancy rate?
- A. 15%
  - B. 20%,
  - C. 18%,
  - D. 30%
  - E. 45%.
5. Lameness on a dairy farm can lead to higher culling rates, reduced reproductive performance, and lower milk yield. In order to manage lameness on your farm, you implement a locomotion scoring system using a scale from 1 to 5. What score would you give to a cow who stands with flat back, but arches when walking and gait is slightly abnormal?
- A. 5
  - B. 3
  - C. 2
  - D. 1
  - E. All of the above.
6. What term describes the time span between first calving and culling?
- A. Productive life
  - B. Culling Rate
  - C. Lifetime Production
  - D. Net Merit
  - E. All of the above
7. Before applying manure to any crop field, manure testing (measuring nutrient content) is recommended to help which of the following?
- A. Reduce fertilizer purchases
  - B. Prevention of overapplication of nutrients in excess of crop requirements
  - C. Determine P and K amounts in the manure
  - D. All of the above
  - E. None of these reasons are important reasons why manure testing is needed.

8. What trace mineral is found in very low levels in all forages and is necessary for a number of body functions and disease resistance as well as being an essential constituent of blood?
- A. Potassium
  - B. Phosphorus
  - C. Zinc
  - D. Nitrogen
  - E. Copper
9. The local veterinary has invited you to do a herd visit with him to determine why there is an increase in mastitis. You are asked to observe the milking parlor and procedures. The employees yell and scream at the cows to get them to come in the parlor, while they are milking, and when they leave the parlor. Pre-dip is applied to the teats, cleaned and milking units attached within 1 minute. Milk let down is delayed after the milking unit is attached. You suspect the reason why the cows are not letting milk down and getting mastitis is a result of:
- A. Too much oxytocin being produced
  - B. The excessive screaming and yelling is causing the cows to produce too much prolactin
  - C. The excessive noise is upsetting the cows causing epinephrine to be produced interfering with milk letdown
  - D. The excessive noise is causing too much estrogen to be produced and preventing milk letdown
  - E. All of the above
10. The world's largest yogurt maker is?
- A. Prairie Farms,
  - B. Nestle USA
  - C. Danone
  - D. Horizon
  - E. Dairy Farmers of America

11. What term is used to describe a function of the total time a cow spends eating per day multiplied by the rate at which the animal consumes that feed?
- A. Rumination Rate
  - B. Feed intake
  - C. Feed Uptake
  - D. Eating Rate
  - E. Digestion
12. Which of the following dairy breeds originated from a continental European country?
- A. Ayrshire
  - B. Brown Swiss
  - C. Guernsey
  - D. Jersey
  - E. Milking Shorthorn
13. Producing milk with a SCC less than 150,000 is important because milk will have which of the following characteristics?
- A. Improved flavor
  - B. Longer shelf life
  - C. Increased cheese yield
  - D. Reduced hauling and handling costs
  - E. All of the above
14. Which state introduced a 2021 bill to eliminate artificial insemination in dairy cattle (it failed)?
- A. Oregon
  - B. Wisconsin
  - C. California
  - D. New Mexico
  - E. Colorado



15. What is the BioPRYN blood test used to test for?
- A. Mastitis
  - B. Nitrate toxicity
  - C. Pregnancy
  - D. Dystocia
  - E. Prolactin
16. Mastitis is the most costly disease in dairy cattle. The most effective procedures to prevent new infections are which of the following?
- A. Predipping and drying the teat before attaching the milking unit
  - B. Use strawbedding in the housing area
  - C. Using the same cloth towel to wipe all the cows at the same time
  - D. Teat dipping (pre and post) and dry cow antibiotic treatment
  - E. Leaving the milking until on until all the milk is completely removed from the udder
17. You are reviewing bull proofs to select the best bull to use on your dairy heifers. PTA is listed on the proof. What does the acronym PTA stand for?
- A. Predicted Transmitting Ability
  - B. Productive Transmitting Ability
  - C. Production True Ability
  - D. Predicted Transmitting Accountability
  - E. It doesn't stand for anything specific
18. The genetic base for genetic evaluations is updated every 5 years. The next base change is scheduled for which year?
- A. 2021
  - B. 2022
  - C. 2023
  - D. 2024
  - E. 2025

19. According to a Hoard's Dairyman survey of 3,000 readers in 2011 and 2021, what percent of respondents vaccinated their calves, heifers, and cows?
- A. 52%
  - B. 67%
  - C. 78%
  - D. 85%
  - E. 94.6%
20. Youth for the Quality Care of Animals (YQC) is a national level multi-species quality assurance program with a focus on which three core pillars?
- A. Food safety, animal ethics; character development
  - B. Food quality, animal well-being; character development
  - C. Food safety; animal ethics, honesty
  - D. Food safety; animal-well being, character development
  - E. Meat quality; animal ethics; character development
21. At a recent Holstein dairy farm visit with your FFA class, you observed the employees feeding new calves 6 hours after the calves were born. They used a brix refractometer to determine the quality of colostrum before feeding calves 1 bottle each. However, they are concerned because blood tests show the calves are not achieving adequate levels of antibodies to boost immunity. After discussing with your FFA class, you make which of the following recommendations to improve passive immunity of the calves:
- A. Continue to use the Brix refractometer, feed 1 bottle of colostrum within 2 hours of being born.
  - B. Continue to use the Brix refractometer, feed 1 bottle of colostrum within 12 hours of being born.
  - C. Continue to use the Brix refractometer, feed 10% of the calves body weight colostrum within 2 hours of being born.
  - D. Continue to use the Brix refractometer, feed 2 bottles of colostrum within 24 hours of being born.
  - E. Continue to use the Brix refractometer, feed 10% of calf body weight of colostrum within 18 hours of being born.

22. Which of the following is not a primary class of immunoglobulins found in colostrum?
- A. IgG
  - B. IgB
  - C. IgA
  - D. IgE
  - E. IgM
23. The jugular vein is the ideal location for what type of injection?
- A. Intramuscular injection
  - B. Intrauterine injection
  - C. Intravenous injection
  - D. Intraperitoneal injection
  - E. Intramammary infusion
24. A mature dairy cow has how many teeth?
- A. 32 teeth on both her upper and lower mouth
  - B. 10 teeth on her upper mouth and 22 on her lower mouth
  - C. 16 teeth on both her upper and lower mouth
  - D. No teeth on her upper mouth and 32 on her lower mouth
  - E. 32 on her upper mouth and no teeth on her lower mouth
25. As an A.I. sales representative a dairy producer asks you to help select bulls to improve his future heifers get pregnant. You recommend which of the following bulls to help achieve this goal:
- A. Theo DPR 1.4
  - B. Jonathan DPR 5.0
  - C. Newton PL 4.4
  - D. Toby REL 96
  - E. Kingston DPR -0.9

26. Which of the following are leading causes of death in young calves on dairy farms?
- A. Scours and pneumonia
  - B. Pink eye and scours
  - C. Scours and black leg
  - D. Infected naval and pneumonia
  - E. Overeating and pneumonia
27. The PDCA Cow Unified Scorecard allots how many points to frame and which trait is the highest priority in this category?
- A. 15 points and Rump
  - B. 20 points and Back/loin
  - C. 25 points and Front End
  - D. 15 points and Stature
  - E. 20 points and Front End
28. Which of the following does not cause a decrease in milk fat test?
- A. Estrus
  - B. Extremely Hot Weather
  - C. High Fiber content in the ration
  - D. Finely chopped feeds
  - E. Illness
29. During a dairy farm visit with your FFA advisor, the dairy farmer asks you what might be wrong with his cows. He provides the following information for you from cows experiencing problems, BSC 4.0; cows are over 8 months pregnant or in the dry period; average SCC is 350,000, and after calving over half had milk fever. Based on these symptoms and signs, you suspect which disease to be causing the problem?
- A. Hardware disease
  - B. Ketosis
  - C. Displaced abomasum
  - D. Fat Cow Syndrome
  - E. Heat Stress

30. Which of the following was the number 1 milk producing cooperative in the U.S. based on milk volume in 2019
- A. Land O'Lakes, Inc.
  - B. Edge Dairy Farmer Cooperative
  - C. California Dairies, Inc.
  - D. Northwest Dairy Association
  - E. Dairy Farmers of America
31. What is the number 1 reason for culling dairy cows in U.S. dairy herds?
- A. Low milk production
  - B. Reproductive failure
  - C. Mastitis
  - D. Lameness
  - E. Ketosis
32. You are invited to visit a 700 cow dairy in your county to learn more about how they group their cows. They currently are grouping the cows by body condition score. They ask you what other ways could they potentially group their cows. You provide the following recommendations as options for consideration.
- A. Production level
  - B. Stage of lactation
  - C. Lactation number
  - D. Health
  - E. All of the above
33. In the medicine room on the dairy where you work is a shelf of products labeled as anthelmintic products. These are used for what purpose?
- A. Dewormers
  - B. Teat Dips
  - C. Fertilizer
  - D. Sanitizers
  - E. All of the above

34. Which compartment of the ruminant stomach is located closest to the heart?
- A. Reticulum,
  - B. Omasum,
  - C. Rumen,
  - D. Abomasum,
  - E. Small intestine.
35. What is the basic unit of inheritance?
- A. Gene,
  - B. Allele,
  - C. Chromosome,
  - D. Locus,
  - E. Genome.
36. Raising dairy replacement heifers accounts for what percent of total farm expenses on many dairy operations?
- A. 5-10%
  - B. 15-20%
  - C. 35-40%
  - D. 55-60%
  - E. over 75%
37. Gestation length in dairy cattle can vary due to which of the following factors?
- A. Age of the cow
  - B. Breed of the cow
  - C. Season of the year
  - D. Number of the calves carried
  - E. All of the above

38. Budgets, balance sheets and cash flow projections are valuable and essential management tools but they do not tell the manager if the business is profitable. What is the only tool of farm business analysis that measures profitability?
- A. Bank Statement
  - B. Equity Statement
  - C. Income Statement
  - D. Schedule F
  - E. Excel spreadsheet
39. To determine the height of the udder floor on a dairy cow, what reference point is used?
- A. Pastern
  - B. Vulva
  - C. Hock
  - D. Hooks
  - E. None of the above
40. What element must be absent in order for effective fermentation to occur in a silage pile?
- A. Carbon
  - B. Oxygen
  - C. Nitrogen
  - D. Phosphorus
  - E. Potassium

***2021 National FFA Dairy Cattle Career Development Event***

**Official answers for Dairy Management Exercise:**

- |       |       |
|-------|-------|
| 1. A  | 21. C |
| 2. C  | 22. E |
| 3. B  | 23. C |
| 4. A  | 24. D |
| 5. C  | 25. B |
| 6. A  | 26. A |
| 7. E  | 27. A |
| 8. B  | 28. C |
| 9. C  | 29. D |
| 10. C | 30. E |
| 11. B | 31. B |
| 12. B | 32. E |
| 13. E | 33. A |
| 14. A | 34. A |
| 15. C | 35. A |
| 16. D | 36. B |
| 17. A | 37. E |
| 18. E | 38. C |
| 19. E | 39. C |
| 20. D | 40. B |





# 2022 NATIONAL FFA DAIRY CATTLE EVENT

## HERD RECORD EVALUATION

Select the one cow that best answers each of the following ten questions.

**For questions 1 through 10, use the "herd record evaluation" attached to the quiz.**

1. Indicate which first lactation cow has the least impact on the somatic cell count in the bulk tank.
2. Select the cow which is the most significantly overweight.
3. Determine the first lactation cow with the highest expectation among the cows for the value of a future lactation's production, relative to the herd average.
4. Select which cow will be the next to be dried off after the testing date, assuming that breeding dates are accurate.
5. Indicate the cow having the most impact on the somatic cell count in the bulk tank.
6. Indicate which first lactation cow would be culled based on her production and reproduction status.
7. Select the first lactation cow that will transmit the lowest expected breeding value to her offspring for milk.
8. Which cow has the highest mature equivalent for milk?
9. Indicate which cow has the highest index value that selects for the improvement of milk, fat, and protein yield, somatic cell score and productive life.
10. Which cow should be the next one to calve after the testing date, assuming normal gestation length?

# 2022 NATIONAL FFA DAIRY CATTLE EVENT

## DAIRY MANAGEMENT EXERCISE

Select best answer for each of the following 40 questions.

1. Consequences of inbreeding in dairy cattle are:\_\_\_\_\_.
  - A. Decreased milk production
  - B. Decreased reproductive performance
  - C. Increased calf mortality
  - D. Slower growth rate
  - E. All of the above.
2. What are the two most common minerals used in footbaths on dairy farms that are actively involved in the formation of hard keratin in hooves?
  - A. Copper and Zinc
  - B. Copper and Biotin
  - C. Zinc and Iodine
  - D. Zinc and Calcium
  - E. Aluminium and Magnesium.
3. According to the PDCA Cow Unified Scorecard, which of the following is NOT a category on the scorecard?
  - A. Frame 15 pts
  - B. Udder 40 pts
  - C. Dairy Character 25 points
  - D. Feet and Legs 20 pts
  - E. Dairy Strength 25 points.
4. One of your recently fresh cows is ill. She has been receiving a high grain, low roughage diet. The consistency of the small amount of manure she produces is "putty-like". Your veterinarian detects a "pinging" sound when using his stethoscope. What is the most likely diagnosis?
  - A. Ketosis
  - B. Milk Fever
  - C. Grass Tetany
  - D. Left Displaced Abomasum
  - E. Rumen Acidosis.

5. Stephen Babcock was responsible for developing the Babcock Test in 1890 to detect what in milk?
  - A. SCC
  - B. Protein
  - C. White blood cells
  - D. Milk fat content
  - E. Antibiotic residues.
  
6. The USDA recently announced their Climate-Smart Agriculture and Forestry Partnership Initiative to fund \$1 billion in climate-smart practices from the CCC. What does CCC stand for?
  - A. Climate Clean Corporation
  - B. Climate Central Committee
  - C. Climate Commodity Corporation
  - D. Commodity Climate Credit
  - E. Commodity Credit Corporation.
  
7. What is a factor that influences the amount of water consumed by dairy cattle?
  - A. Calving ease
  - B. Udder cleft
  - C. Water temperature
  - D. Estrus
  - E. Withers.
  
8. Your milk hauler has just completed picking up milk from your farm and the bulk tank is now empty. How often should the bulk tank be cleaned and disinfected?
  - A. Every day
  - B. Every time it is emptied
  - C. Twice a day
  - D. After every milking
  - E. Once a week.

9. The United State Department of Agriculture's Census of Agriculture started in 1840 and is taken every 5 years. When will the next census happen?
- A. 2022
  - B. 2023
  - C. 2024
  - D. 2025
  - E. It just happened in 2021.
10. Which of the following factors can cause variation in conception rates on a dairy farm?
- A. Heat Detection
  - B. Nutrition
  - C. Cow health
  - D. Semen handling
  - E. All are factors that cause variation in conception rates.
11. One of the common steps of preparing a cow to milk is forestripping because it helps to release oxytocin and aids in the detection of what type of mastitis?
- A. All forms of mastitis
  - B. Clinical
  - C. Sub-clinical
  - D. Mycoplasma
  - E. It can't help to detect mastitis at all.
12. It is your job on the farm to mix the milk replacer to feed the calves. Temperature is a critical component of mixing it properly. How should you check to make sure it has been mixed at the proper temperature?
- A. Feel
  - B. Brix-Refractometer
  - C. Colostremeter
  - D. Thermometer
  - E. If the calf is willing to drink it or not.

13. The National Animal Health Monitoring System surveyed dairy farmers to determine what the most common criteria used for weaning a calf was. The results found which of the following criteria to be most common
- A. Weight
  - B. Height
  - C. Age
  - D. Outside Temperature
  - E. How much calf starter they were consuming.
14. The temperature outside in which a cow can maintain their own core body temperature without having to exert any extra effort to regulate either their heat loss or heat gain is called what
- A. Photoperiod
  - B. Respiration
  - C. Estrus zone
  - D. Thermoneutral zone
  - E. None of the above.
15. When reading bull proofs to select the best bull to use on your dairy heifers. PTA is listed on the proof. What does the acronym PTA stand for?
- A. Probable True Ability
  - B. Productive Transmitting Ability
  - C. Production True Ability
  - D. Predicted Transmitting Accountability
  - E. Predicted Transmitting Ability.
16. A DHIA milk production record may be terminated if what has happened to the cow?
- A. Dried off
  - B. Sold at the sale barn as a cull cow
  - C. Aborted
  - D. Died
  - E. All of the above are correct.

17. After reviewing your recent breeding history for the past month, you contact your nutritionist because you have identified the need to improve conception rates in your herd. She suggests you add what to your rations to improve conception rates because of larger ovarian follicles capable of producing more estrogen, larger corpus luteum and a decrease in embryonic loss?
- A. Fats
  - B. Carbohydrates
  - C. Vitamins
  - D. Minerals
  - E. Protein.
18. An example of a Class I use for milk would be to make\_\_\_\_\_
- A. Hard cheese
  - B. Ice cream
  - C. Chocolate Milk
  - D. Dried milk powder
  - E. Butter.
19. If the heat detection rate is 40% and the conception rate is 20%, what is the pregnancy rate?
- A. 15%
  - B. 20%
  - C. 60%
  - D. 8%
  - E. 45%.
20. In U.S. dairy herds the number 1 reason for culling dairy cows is?
- A. Low milk production
  - B. Lameness
  - C. Mastitis
  - D. Reproductive failure
  - E. Ketosis.

21. Which compartment of the ruminant stomach main function is the dehydration of partially digested feed?
- A. Reticulum
  - B. Omasum
  - C. Rumen
  - D. Abomasum
  - E. Small intestine.
22. Which of the following dairy breeds originated from a British Channel Island?
- A. Ayrshire
  - B. Brown Swiss
  - C. Guernsey
  - D. Holstein
  - E. Milking Shorthorn
23. Gestation length in dairy cattle can vary due to which of the following factors?
- A. All of the following
  - B. Breed of the cow
  - C. Season of the year
  - D. Number of calves carried
  - E. Age of the cow.
24. During a dairy farm visit with your FFA advisor, the dairy farmer asks you what might be wrong with his pre-weaned calves. He provides the following information for you from calves experiencing problems: black feces that looks like engine oil, loose stools, and a few calves have died as a result. Based on these symptoms and signs, you suspect which issue to be causing the problem?
- A. Abomasal ulcers
  - B. Ketosis
  - C. Displaced abomasum
  - D. Feed Refusal
  - E. Heat Stress.

25. As an A.I. sales representative, a dairy producer asks you to help select bulls to improve his future heifers to have the best feet and legs possible. You recommend which of the following bulls to help achieve this goal:
- A. Lionel FLC -0.24
  - B. Ethics FI 2.9
  - C. Coffee FLC 1.25
  - D. Babcock REL 90
  - E. Yolo PL 2.2.
26. The local veterinary has invited you to do a herd visit with him to determine why there is an increase in cows not getting bred each month. You are asked to observe the breeding preparation and procedures. The A.I. Technician removes the straws of semen from the tank and lets them thaw in an 85 degree water bath. After the straws have been in the water bath for 15 seconds, the technician loads the breeding gun to service the cows. You suspect the reason why the cows are not getting bred is because:
- A. The water bath is not warm enough to thaw the semen
  - B. The semen straws are not staying in the water bath long enough to thaw
  - C. The A.I. Technician needs to be retrained on proper thawing procedures
  - D. There should be no reason why the cows aren't getting bred because the procedures are being correctly followed
  - E. A, B, and C are correct.
27. To help improve the conception of cows in #23, what is the recommended minimum length of time frozen semen should be thawed in a warm water bath to maximize the number of motile sperm?
- A. 15 seconds
  - B. 20 seconds
  - C. 30 seconds
  - D. 40 seconds
  - E. 2 minutes.
28. BioPRYN blood test used to determine what in dairy cattle?
- A. Pregnancy
  - B. Nitrate toxicity
  - C. Mastitis
  - D. Dystocia
  - E. Prolactin.



29. It is time to load your cows to bring them to come home to calve. To be successful in moving the cows you make sure to be mindful of the area where the cows do not want any foreign objects entering. This area is commonly known as?
- A. Blind spot
  - B. Flight zone
  - C. Comfort zone
  - D. Point of balance
  - E. Both A and C.
30. Which of the following is NOT considered a macromineral?
- A. Phosphorus
  - B. Potassium
  - C. Sodium
  - D. Iodine
  - E. Sulfur.
31. What is a more common name for erythrocytes?
- A. Red blood cells
  - B. White blood cells
  - C. Leukocytes
  - D. Somatic Cells
  - E. Peptides.
32. Which of the following is the name of the organization that is charged with evaluating genetic traits of dairy cattle?
- A. World Dairy Expo
  - B. Animal Improvement Programs Laboratory
  - C. Dairy Business Association
  - D. Dairy Herd Improvement Association
  - E. National Dairy Shrine.
33. What is the name of the hormone produced by the pituitary that is known as the milk formation hormone?
- A. Prolactin
  - B. Progesterone
  - C. Follicle Stimulating Hormone
  - D. Oxytocin
  - E. Relaxin.

34. The following information is listed concerning a cow:

**365                      3X                      44,828                      3.8                      1703                      3.0                      1344**

Which of the following is not correct.

- A. 365-day lactation
- B. Milked two times per day
- C. Milk contained 3.8 % milk fat
- D. Milk contained 3.0% protein
- E. 44,828 pounds of milk produced.

35. What reproductive hormone tends to be high in lactating, pregnant cows?

- A. Oxytocin
- B. Progesterone
- C. Prostaglandin
- D. Relaxin
- E. Estrogen.

36. If the MUN level is considered high, which nutrient is likely to be in excess?

- A. Fats
- B. Carbohydrates
- C. Vitamins
- D. Minerals
- E. Protein.

37. What metabolic disorder is caused by a deficiency of blood calcium related to an imbalance of calcium, phosphorus, and Vitamin D?

- A. Parturient paresis
- B. Ketosis
- C. Grass Tetany
- D. Fatty Liver
- E. Displaced Abomasum.

38. Recently your cows have been experiencing less production, lower butterfat, and sick cows that never seem to recover. What could be the cause of these symptoms?
- A. Ketosis
  - B. Milk Fever
  - C. Johne's
  - D. Hardware
  - E. Rumen Acidosis.
39. Which condition is a result of the fetal membranes remaining within the uterus for an extended period of time after calving?
- A. Retained Placenta
  - B. Involution
  - C. Separation of tissues
  - D. Metritis,
  - E. Endometritis.
40. What is considered the universal standard criteria for breeding dairy heifers?
- A. Body weight
  - B. Age
  - C. Height at the withers
  - D. Rump Width
  - E. All of the above.

Prepared by K.L. Heckaman, Purdue Extension, Syracuse, IN

***2022 National FFA Dairy Cattle Career Development Event***

**Official answers for Dairy Management Exercise:**

- |       |       |
|-------|-------|
| 1. E  | 21. B |
| 2. A  | 22. C |
| 3. C  | 23. A |
| 4. D  | 24. A |
| 5. D  | 25. C |
| 6. E  | 26. E |
| 7. C  | 27. D |
| 8. B  | 28. A |
| 9. A  | 29. B |
| 10. E | 30. D |
| 11. B | 31. A |
| 12. D | 32. B |
| 13. C | 33. A |
| 14. D | 34. B |
| 15. E | 35. B |
| 16. E | 36. E |
| 17. A | 37. A |
| 18. C | 38. E |
| 19. D | 39. A |
| 20. D | 40. A |

## **2017 National FFA Dairy Cattle Event**

### **Herd Record Evaluation**

Select the one cow that best answers each of the following 10 questions.

**For questions 1 through 10, use the “herd record evaluation” which is attached to the quiz.**

1. Indicate which cow is having the greatest impact on the somatic cell count in the bulk tank.
2. Which cow should be the next one to be dried off after the testing date, assuming that breeding dates are accurate?
3. Indicate which one of the first lactation cows has the lowest index value that selects for the improvement of milk, fat, and protein yield, somatic cell score and productive life.
4. Select the cow, which is most significantly overweight.
5. Determine the cow with the highest expectation among the cows for the value of a future lactation's production, relative to the herd average.
6. Select which cow will be the next one to calve after the testing date, assuming normal gestation length.
7. Indicate which first lactation cow is having the least impact on the somatic cell count in the bulk tank.
8. Which first lactation cow has the highest mature equivalent for milk?
9. Which cow has the lowest mature equivalent for protein production?
10. Select the cow that will transmit the highest expected breeding value to her offspring for milk.

# 2017 National FFA Dairy Cattle Event - Dairy Herd Record Evaluation - Management Quiz

Date of Test: 6-2-2017										Report Information current through 6-2-17										page 1			
scc	date bred	X-b r e d	Repro Code	BCS	Test Day Production				Cow No.	.....status... last calv date	code	days	age @ dry calving (months)	Current Lactation			MatureEquivalent			ERPA \$\$ Dev	PTA milk	Net Merit \$\$\$	
					milk #	fat %	protein %	s c						days in milk	milk #	fat #	prot #	milk #	fat #				prot #
1000's																							
23	5/13/2017	1		3.25	105.3	3.1	3.1	0.9	373	3/2/2017	2		37	114	9125	394	280	24151	960	763	9	-87	120
15	11/2/2016	5 P		4.25	44.6	5	3.8	0.3	375	3/3/2016	6		24	478	30978	1303	991	28191	1082	825	315	258	164
50	10/26/2016	4 P		4.50	34.1	4.5	4.1	2	376	3/5/2016	6		29	476	35985	1432	1159	29588	1154	921	549	647	305
25	4/17/2017	1 P		2.75	101.5	2.9	3	1	377	2/13/2017	2		34	131	10920	383	332	26997	906	829	184		
47	5/29/2017	2		3.25	87.3	3.3	3	1.9	379	2/23/2017	2		33	121	9160	357	283	24076	896	747	82	44	28
200				3.50	113.8	4.4	2.7	4	380	4/1/2017	2		37	84	7387	320	215	25872	1146	765	274		
460				2.75	80.6	3.8	3	5.2	381	5/18/2017	2		37	37	1043	43	36				-246		
31	5/20/2017	1		3.00	93	4.7	3.1	1.3	383	3/10/2017	2		38	106	8747	407	280	23293	1098	763	132		
13				3.25	96.7	3.4	2.6	0.1	384	4/7/2017	2		37	78	5067	240	157	23639	973	740	118		
13	5/16/2017	2		2.75	110	4.1	2.8	0.1	385	2/15/2017	2		36	129	11122	476	329	26298	1118	786	436		
62				3.00	95.8	4.1	3.3	2.3	386	5/18/2017	2		36	37	1240	56	47				-14	-476	192
87	5/13/2017	1		3.75	111.9	3.7	2.9	2.8	387	3/8/2017	2		36	108	7978	324	246	24244	996	777	285	322	86
19	5/28/2017	2		2.75	89.2	4.1	3.1	0.6	388	2/16/2017	2		33	128	9258	405	283	24394	1036	748	282	424	184
33	4/19/2017	1 P		3.25	93	4.3	3.1	1.4	389	2/10/2017	2		34	134	11630	467	362	25999	1100	819	220	290	142
13				2.75	73	4.1	3.3	0.1	390	4/30/2017	2		36	55	2206	100	81				601		
76	4/22/2017	5		3.25	61.6	3.9	3.5	2.6	391	3/28/2016	6		27	453	32502	1235	1024	27674	1034	826	267	199	101
23	10/27/2016	4 P		3.00	51.2	4.3	3.8	0.9	393	4/11/2016	6		22	439	29783	1246	956	29021	1180	898	510		
13		C		3.25	55.9	4.2	3.9	0.1	395	4/13/2016	6		25	437	26667	1064	871	24822	930	756	-11		
325	11/26/2016	4 P		3.25	15.1	4.1	3.6	4.7	397	4/14/2016	6		25	436	22572	707	719	23131	685	713	-302		
	9/23/2016	5 P		3.25					398	4/18/2016	1	71	22	361	20254	823	668	24345	981	788	59	-48	39
	9/4/2016	3 P		3.25					400	4/22/2016	1	71	22	357	20561	901	655	23906	1054	755	51	274	160
100				2.75	59.7	5.3	2.8	3	401	5/16/2017	2		32	39	881	51	28				-748		
	9/14/2016	3 P		3.25					402	5/2/2016	1	56	22	362	24649	845	724	28365	950	825	302		
50	10/26/2016	3 P		3.00	64.5	3.4	3.2	2	403	5/3/2016	6		24	417	29043	953	899	28673	906	857	325	592	-22
13				3.50	93.9	3.3	3.1	0.1	404	5/2/2017	2		35	53	2647	96	92				257	218	89
	9/23/2016	2 P		3.00					405	5/11/2016	1	42	22	367	22238	898	739	25473	1031	836	119	-195	76
13				3.25	116.7	3.8	2.9	0.1	406	4/26/2017	2		33	59	4005	167	127				331	32	125
152				3.25	57.8	4.5	3.9	3.6	409	5/27/2017	2		34	28	303	14	12				962	314	227
76		C		2.75	55.9	3.7	3.6	2.6	410	5/16/2016	6		23	404	23435	946	755	24133	981	748	81		
22	10/23/2016	3 P		3.00	50.2	2.4	3.1	0.8	411	5/23/2016	6		21	397	29569	956	847	33561	1107	934	735	890	105
	9/24/2016	2 P		3.00					412	6/4/2016	1	35	22	350	27899	1133	891	32967	1315	1026	899	630	232
17				3.25	81.6	3.9	3.6	0.4	413	5/23/2017	2		35	32	699	29	28				523	-123	162
27		C		3.00	45.5	5.3	4.1	1.1	414	6/4/2016	6		28	385	18131	1005	664	18434	1015	656	-309	239	316
54	11/20/2016	4 P		3.25	37	4.4	3.6	2.1	415	6/7/2016	6		22	382	23564	901	770	27886	1050	892	311		
66	11/11/2016	3 P		3.00	34.1	4.8	3.8	2.4	416	6/11/2016	6		24	378	20897	915	673	23963	1039	738	4	82	193
348	10/21/2016	2 P		2.50	45.5	3.3	3.3	4.8	417	6/12/2016	6		24	377	21325	758	655	24098	859	715	-158	260	11
38				3.00	60.7	4.4	3.4	1.6	418	5/24/2017	2		35	31	469	22	18				-313	139	44
	10/8/2016	2 P		4.25					419	6/18/2016	1	28	22	343	19262	765	630	23016	907	739	-124	83	57
	9/23/2016	1 P		3.50					420	6/26/2016	1	42	29	321	18050	776	611	20745	889	692	-274		

# 2017 National FFA Dairy Cattle Event - Dairy Herd Record Evaluation - Management Quiz

Date of Test: 6-2-2017

Report Information current through 6-2-17

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scc	date bred	X-b r e d	Repro Code	BCS	Test Day Production				Cow No.	.....status... date	code	days	age @ dry calving	Current Lactation						ERPA \$ Dev	Net		
					milk #	fat %	protein %	s c s						milk #	fat #	prot #	Mature milk #	Equivalent fat #	prot #		PTA milk	Merit \$\$\$	
1000's																							
71	2/18/2017	1	P	3.00	61.6	4	3.2	2.5	467	12/9/2016	6		24	197	11668	509	366	21905	932	696	-91	-110	91
	9/20/2016	3	P	3.25					469	4/9/2016	1	49	84	392	30886	1242	983	23206	949	743	61	198	54
800				3.00	127.1	3.5	2.7	6	470	3/21/2017	2		91	95	9492	358	261				731		
115	5/6/2017	2		3.00	85.4	2.8	3	3.2	471	12/11/2016	6		26	195	14766	570	430	28203	976	840	332	695	269
19	3/14/2017	1	P	3.50	73	3.8	2.9	0.6	472	12/12/2016	6		23	194	11819	503	352	24153	985	732	66	798	141
20	3/6/2017	2	P	3.25	81.6	3.9	3.2	0.7	473	12/16/2016	6		22	190	11919	480	376	26135	1044	863	347	336	146
13	4/14/2017	1	P	3.25	121.4	3.6	3	0.1	474	2/22/2017	2		90	122	11550	374	355	24391	879	784	868	-171	-50
400	5/8/2017	2		3.00	101.5	2.6	2.7	5	475	12/19/2016	6		23	187	15647	510	420	33325	993	911	596	1520	190
20	3/22/2017	2	P	3.25	92	2.8	3	0.7	476	12/11/2016	6		23	195	14964	532	438	30485	994	908	507	1012	228
57	3/4/2017	1	P	2.75	71.1	4.3	3.4	2.2	477	12/25/2016	6		23	181	12612	558	379	25729	1123	785	279		

Somatic  
Cell  
Count  
(1000's)

P Pregnant  
W Preg W Twins  
N Open  
C Do not breed

Body  
Condition  
Score

Somatic  
Cell  
Score  
(linear)

Status Codes

1 Dry  
2 Milking 2nd lactation or greater  
6 First Lactation

Prepared by K.L. Heckaman, Purdue Extension - Kosciusko County, Warsaw, IN & L. Glista, NorthStar Cooperative, E. Lansing, MI

# 2018 National FFA Dairy Cattle Event - Dairy Herd Record Evaluation - Management Quiz

Date of Test: 8-1-2018

Report Information current through 8-1-2018

pag

scc	date bred	X-b r e Code d	Repro Code	Test Day Production				Cow No.	.....status... last calv date	code	days	age @ dry calving (months)	Current Lactation					MatureEquivalent			ERPA \$\$ Dev	PTA milk
				BCS	milk #	fat %	protein %						s c s	days in milk	milk #	fat #	prot #	milk #	fat #	prot #		
1000's																						
27				2.50	99.5	6.3	3.1	1.1	565	6/26/2018	2		52	57	1111	76	39				268	957
76	2/28/2018		3 P	4.25	17.1	4.3	3.1	2.6	579	7/18/2017	2		40	400	30692	1281	922	29110	1268	880	185	620
15				3.00	121.5	3.5	2.8	0.3	596	5/25/2018	2		50	89	4435	190	139	23957	938	768	251	1280
200	12/6/2017		3 P	4.00	17.1	5	4.1	4	599	4/4/2017	2		36	505	35348	1711	1221	28749	1423	958	585	769
13				3.25	116.2	3.3	2.6	0.1	612	4/7/2018	2		48	137	11689	475	347	26075	1027	811	480	1375
13				3.50	107.6	3.1	2.6	0.1	677	2/10/2018	2		44	193	16777	618	458	25972	947	731	-150	653
13	5/23/2018		1 P	2.75	96.8	4.5	3	0.1	681	12/14/2017	2		42	251	25496	1223	727	30946	1498	911	609	603
13	6/13/2018		1	3.00	110.9	3.4	2.9	0.1	687	12/4/2017	2		41	261	27759	923	784	33888	1153	988	419	1629
13				3.25	136.5	2.8	2.5	0.1	688	5/4/2018	2		46	110	7123	259	198	26297	920	763	342	1453
429				2.75	94.2		4	5.1	708	1/2/2018	2		41	232	22535	851	634	28882	1315	830	467	1712
325			C	3.00	82.9	3.5	3.4	4.7	711	9/14/2017	2		37	342	29907	1048	978	31474	1123	1021	-73	868
13			C	3.75	104.9	3.1	3	0.1	719	9/29/2017	2		38	327	32944	1162	942	35990	1280	1024	608	1604
13	12/6/2017		2 P	3.00	64.5	3.3	2.9	0.1	724	6/26/2017	2		35	422	38871	1530	1121	34969	1429	993	523	925
1970			C	3.25	95.1	3.5	2.8	7.3	726	9/19/2017	2		37	337	34949	1242	970	37251	1347	1026	493	678
13				2.75	97.6	4.2	2.8	0.1	744	1/6/2018	2		41	228	22024	992	614	28880	1314	822	646	935
47	7/7/2018		2	3.25	69	4.3	3.2	1.9	754	9/8/2017	2		36	348	29632	1211	863	30932	1288	893	123	1354
13	6/13/2018		1	3.00	77.5	3.4	2.7	0.1	758	10/23/2017	2		38	303	27518	1037	790	30493	1152	868	-58	470
93	1/17/2018		3 P	3.25	44.2	2.8	3.2	2.9	762	4/28/2017	2		32	481	41127	1388	1132	33772	1161	899	31	1488
31	3/21/2018		1 P	3.25	98.7	2.8	2.8	1.3	767	10/30/2017	2		38	296	32085	940	895	36458	1072	1015	206	1769
13	6/13/2018		1	3.25	64.1	4.1	2.8	0.1	793	1/28/2018	2		40	206	16743	612	441	21962	852	582	-351	-295
13				3.25	102.9	3.1	2.6	0.1	801	10/30/2017	2		37	296	32632	1245	906	37537	1415	1030	685	1702
15				2.75	76.6	3.9	3.1	0.3	802	12/9/2017	2		38	256	22433	1020	649	27285	1237	809	190	382
14	5/30/2018		2 N	3.25	91.9	3.7	2.7	0.2	809	11/19/2017	2		38	276	24847	991	732	29942	1191	888	369	1143
81	5/23/2018		2 P	3.00	78.3	3	2.7	2.7	810	10/6/2017	2		36	320	26979	933	772	29501	1025	837	-82	1432
13				3.50	90.4	4	3.1	0.1	842	12/8/2017	2		37	257	21745	901	672	27858	1172	883	205	208
325				3.00	87.5	3.3	2.9	4.7	843	1/20/2018	2		39	214	12932	456	381	20180	716	607	-473	1232
17				3.25	85.2	3.6	2.6	0.4	886	12/13/2017	2		36	252	24642	780	671	30834	1026	859	190	900
13			C	3.25	79.6	3.1	3	0.1	890	12/19/2016	6		25	611	57286	1947	1698	36118	1247	1059	316	2132
17				2.75	89.2	3.8	2.8	0.4	895	1/20/2018	2		38	214	21121	804	590	28424	1115	806	359	1259
13				3.00	100.5	3.8	3	0.1	896	1/26/2018	2		38	208	20026	784	579	28674	1143	842	118	779
325				3.00	49.3	3.6	2.3	4.7	898	4/28/2018	2		41	116	6937	291	214	17272	770	547	-393	1656
13				3.25	110.4	3.5	2.8	0.1	900	5/25/2018	2		64	89	4752	174	144	22268	858	696	236	595
	10/25/2017		4 P	3.75					904	12/26/2016	1	74	23	530	53915	1734	1511	36496	1181	993	194	1957
76				3.25	60.8	4.8	3.1	2.6	915	12/9/2017	2		34	256	18544	880	602	23762	1153	784	27	4
35				3.00	99.9	2.4	2.8	1.5	916	3/20/2018	2		38	155	13454	507	371	26121	931	748	78	1689
	10/25/2017		3 P	4.50					917	3/10/2017	1	74	25	456	36579	1330	1121	29827	1099	879	43	1800
13				3.00	93.4	4	3.1	0.1	954	2/15/2018	2		36	188	16030	633	486	26000	1075	802	-21	630
13				3.25	95.1	4.9	2.8	0.1	961	6/8/2018	2		40	75	2681	145	84				-237	8
13				3.50	91.7	3.3	2.9	0.1	964	3/5/2018	2		36	170	14659	583	436	25945	1043	807	0	197



**2018 National FFA Dairy Cattle Event Dairy Herd Record Evaluation - Management Quiz**

scc	date bred	X-b r e d Code	Repro Code	BCS	Test Day Production				Cow No.	.....status... date	days code	age @ dry calving	Current Lactation							ERPA \$\$ Dev	PTA milk	
					milk #	fat %	protein %	s c s					days in milk	milk #	fat #	prot #	MatureEquivalent					
																	milk #	fat #	prot #			
1000's																						
13	2/28/2018	2	P	3.00	66.3	2.8	3	0.1	966	7/29/2017	6	22	389	36366	1071	1072	39998	1189	1175	612	1837	
	10/25/2017	2	P	4.00					967	6/9/2018	1	74	22	336	22937	875	686	25759	1007	779	-178	642
13	2/28/2018	1	P	3.00	71.1	3.9	3	0.1	972	11/6/2017	6	25	289	18810	839	611	24776	1089	794	-112	749	
19	5/2/2018	2	P	3.00	73.1	4	3	0.6	974	10/25/2017	6	25	301	18044	804	596	23466	1037	759	-248	920	
13	1/17/2018	1	P	3.50	71.9	3.6	3	0.1	975	9/15/2017	6	23	341	22205	913	657	26745	1109	780	-120	1034	
13	2/7/2018	1	P	3.25	99.1	3.5	2.9	0.1	978	10/12/2017	6	24	314	27051	1043	766	34199	1314	959	388	1006	
13	2/28/2018	1	P	3.25	77.5	4.4	3.2	0.1	979	11/6/2017	6	25	289	20834	963	681	27404	1264	891	197	653	
13	5/23/2018	3	P	3.00	101.6	2.8	2.9	0.1	982	9/21/2017	6	23	335	30395	1012	866	37340	1247	1049	444	2125	
13	12/27/2017	1	P	3.25	75.3	3.8	3.1	0.1	985	9/2/2017	6	22	354	25152	934	761	29569	1120	906	53	2192	
27	1/17/2018	1	P	2.75	59.5	4.3	3.4	1.1	988	9/18/2017	6	23	338	21447	994	693	25941	1213	827	18	15	

Somatic  
Cell  
Count  
(1000's)

P Pregnant  
W Preg W Twins  
N Open  
C Do not breed

Body  
Condition  
Score

Somatic  
Cell  
Score  
(linear)

Status Codes

1 Dry  
2 Milking 2nd lactation or greater  
6 First Lactation

**2018 National FFA Dairy Cattle Event - Dairy Herd Record Evaluation - Management Quiz**

je 1

**Net**  
**Merit**  
**\$\$\$**

523  
464  
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607  
618  
264

**2018 National FFA Dairy Cattle Event - Dairy Herd Record Evaluation - Management Quiz**

Net  
Merit  
\$\$\$

620  
463  
645  
540  
566  
558  
743  
677  
740  
502

Batch	Breed	Permanent ID	SCC and Milk Weights by Test Day						Sample Day Data			Barn Name	Lactation To Date								Projected 305 Actual			Times Bred	Bred Date	Due Date	
			Test Date	Test Date	Test Date	Test Date	Test Date	Test Date	Milk	Fat%	Income Over Feed \$		Lact No.	Fresh Date	Days in Milk	Milk	Fat	Pro	CAR	Income Over Feed \$	Diff. from Herdmates						
			01-06	02-05	03-05	04-02	05-07	07-08													Milk	Fat	Pro				
			Sire ID	Milk SCC	Milk SCC	Milk SCC	Milk SCC	Milk SCC	Milk SCC	SCC	Pro%		Summit Milk	Index	Days Dry	Age Yr/Mo	Days 3X	ERPA \$	Fat%	Pro%	Rat	Perst. %	Milk	Fat	Pro	Service Sire ID	Action Needed
HO		74442488 7HO11314	98 62	107 54	101 33	102 38	93 44	76 54	DRY			AJAX 795	1 20	5-20 2-05		+395			B	100	25528 +3620	773 +49	684 -12			B	
HO		73114014 29HO13366	113 13	118 19	116 17	109 38	105 15	83 20	96.1 20	3.6 3.3		108	ANGEL 725	2 63	9-03 4-00	352	36422 +1524	1293 3.6	1151 3.2	A	100	32226 +6873	1131 +243	1014 +231			B
HO		840003137154136 200HO03501	89 20	93 20	84 19	98 17	122 27	87 23	70.7 23	3.3 3.4		91	APLETIN 1537	1	12-10 2-02	254	23585 +1046	883 3.7	721 3.1	A	99	26887 +5963	989 +242	829 +172			B
HO		840003013874269 7HO12198	74 54	55 187	66 566	50 174	56 1300	62 81	45.3 76	4.8 3.7		92	ARMANI 6795	2 43	12-28 3-01	601	44618 +841	1976 4.4	1594 3.6	A	100	26512 +2763	1137 +314	890 +124			B
HO		840003141691949 200HO06480	53 13	59 13	63 13	61 18	54 13	64 13	52.6 13	3.5 3.3		56	ASHTON 9716	1	10-17 2-01	308	16910 -1058	680 4.0	569 3.4	C D	101	16751 -7434	675 -131	564 -183			B
HO		840003127567899 7HO11477	103 41	100 57	97 54	105 54	102 50	80 31	78.0 87	3.7 3.5		102	AVA 11392	2 72	12-01 3-09	263	24716 +1203	944 3.8	799 3.2	A	104	27682 +2822	1048 +158	903 +124			B
HO		74442449 94HO14105	89 71	51 264	41 264	DRY	DRY	78 15	88.9 107	3.5 2.8		83	BANANA 756	3 54	5-25 4-04	88	6852 -389	164 2.4	193 2.8	E		20076 -1038	659 -79	591 -23			B
HO		69931494 29HO11614	76 283	34 200	64 246	74 650	62 696	40 1300	43.5 1393	3.3 3.2		89	BEAN 599	5 43	6-14 6-07	433	29389 +167	806 2.7	864 2.9	E	100	22936 -4461	611 -271	658 -171			B
HO		840003134738348 7HO11314	74 31	58 47	64 35	55 41	67 18	DRY	DRY				BESS 818	1 51	3-01 1-11		-317			C	100	21106 -841	619 -136	632 -64			B
HO		840003128017488 7HO12189	76 20	86 23	98 13	96 29	82 17	78 81	65.3 71	2.8 3.0		92	BILLIE 851	1	12-11 1-11	253	20602 +90	546 2.7	579 2.8	C	100	23692 +3060	628 -161	672 +2			B
HO		840003128017489 7HO12189	73 31	84 62	82 141	85 81	98 87	78 87	83.4 141	2.9 2.9		78	BOBBIE 852	1	12-03 1-11	261	21360 +442	641 3.0	611 2.9	B	105	24778 +4498	737 -28	709 +50			B
HO		840003128017502 94HO17301					49 87	85 17	74.4 17	3.0 2.6		80	BONNIE 865	1	4-29 2-03	114	8298 -12	264 3.2	208 2.5	D	99	19251 +771	634 -18	505 -62			B
HO		73114015 29HO13306	114 27	113 47	125 66	109 107	116 115	87 100	70.7 246	4.7 3.2		127	BOX 726	3 64	10-25 4-01	300	32402 +2155	1206 3.7	964 3.0	A	100	32726 +6637	1218 +327	974 +160			B
HO		840003125563992 *107281771			TF 57	55 23	60 23	73 38	61.7 57	3.9 3.2		58	BRAZIL 1	1	3-01 1-11	173	10434 -181	406 3.9	317 3.0	D	97	17112 -1812	678 +20	539 -35			B
HO		69931492 29HO13387	DRY	DRY	74 33	65 22	71 19	83 20	76.2 41	3.5 2.9		72	CABBY 597	5 68	2-26 7-04	176	13080 -770	420 3.2	368 2.8	E	102	20012 -4094	668 -195	574 -145			B
HO		74442482 94HO16937	67 81	73 23	73 23	72 31	73 29	64 38	52.6 41	4.8 3.5		84	CALLY 789	1	9-24 1-11	696	51379 +657	2011 3.9	1665 3.2	A	100	24289 +3466	934 +230	734 +36			B
HO		840003128017500 94HO18013						53 35	58.0 93	4.0 3.1		55	CAMREN 863	1	6-01 2-04	81	4141 -285	149 3.6	125 3.0	E		15405 -2358	623 -11	485 -47			B
HO		73113997 94HO13666	94 13	93 76	100 87	98 123	85 132	62 152	54.4 152	4.6 3.5		97	CANDY 708	3 55	12-10 4-11	254	20875 -52	843 4.0	682 3.3	C	102	23171 -3324	953 +7	764 -52			B
HO		840003128017513 7HO12198						53 214	68.9 50	3.7 2.9		61	CARE 876	1	6-06 1-11	76	4113 +330	180 4.4	133 3.2	C		17275 +940	688 +114	583 +95			B
HO		72137995 94HO00863	53 76	51 187	28 325	30 87	33 162	25 187	32.6 100	3.9 3.4		97	CARROT 655	4 36	12-14 5-00	615	35750 -398	1258 3.5	1179 3.3	D	100	23393 -3726	814 -142	744 -106			B

Bull ID's starting with \* not found at USDA

Condition Affecting Record (CAR):					
1. Solid Feet/Legs	7. Solid Mastitis	A. Abnormal			
2. Solid Dairy	8. Solid Disease	E. Estimated Production			
3. Solid Low Prod.	9. Solid Udder	F. Fat% Est. by Supv.			
4. Solid Repro.	X. Solid Reason Not Rprtd.	H. In Heat on Test Day			
5. Solid Injury/Other	B. Started or Ended by Abortion	I. Injtd. Prior or During Milk			
6. Died	C. 305 Day Rec. computed	L. Fat% Est. by Lab			

Rating Codes:	Due Date Codes:	Action Codes:
A. Top Cows	* Confirmed Preg.	B. To Breed
B. Above Average	- Not Confirmed Preg.	F. Lead Feed
C. Below Average	W Preg. With Twins	D. To Dry
		P. Preg. Check

Lead Feed Days = 21, not 14.

## 2022 National FFA Dairy Cattle Event - Dairy Herd Record Evaluation - Management Quiz

Fecha prueba: 9-1-2022			Información del informe hasta 1-9-2022																		página 1					
r	c	s	x mil	fecha concep.	X-c o n repro c.	Cód. repro	ECF	Producción en el día del examen				Nún. vaca	.....estado... Últ. parto	días sin produc.	edad al parir (meses)	Lactancia actual			Equivalente maduro			ERPA \$	Merito			
								leche #	grasa %	proteína %	r c s					días en leche	leche #	grasa #	prot. #	leche #	grasa #		prot. #	PTA leche	neto \$\$\$	
				11/19/2021	1	P	2.50					766	9/4/2021	69	1	22	291	22911	956	722	28192	1201	902	-363	567	335
				12/3/2021	3	P	4.25					767	7/12/2021	55	1	20	359	28518	1050	872	33255	1281	967	-153	831	344
325							3.00	129	4.9	2.8	5	768	6/24/2022		2	32	67	4118	190	130	31578	1486	1012	368	831	344
41				2/26/2022	5	P	4.00	58.9	4.6	4	2	770	7/31/2021		6	21	395	30903	1310	1061	33426	1460	1108	395	871	497
31							3.25	84.1	3.6	3.1	1	772	7/16/2022		2	33	45	1318	52	47				603	1228	467
174				1/14/2022	1	P	3.50	84.1	3.7	3.4	4	773	10/26/2021		6	24	308	25438	926	786	30921	1138	951	-234	425	347
38				1/22/2022	4	P	2.75	78.5	3.9	3	2	776	8/5/2021		6	21	390	34143	1336	987	36991	1471	1048	377	684	174
13							4.50	106.6	3.4	2.7	0	781	6/24/2022		2	32	67	4349	124	106	28244	1058	699	-894	-261	171
57							3.25	131.8	4.6	2.6	2	782	7/11/2022		2	32	50	2683	136	80				1078	-261	171
				11/12/2021	1	P	4.75					787	8/27/2021	76	1	22	292	23055	881	749	29866	1160	976	-348	265	134
22				2/18/2022	3	P	3.00	64.5	4.7	3.7	1	788	8/24/2021		6	22	371	27125	1219	902	30597	1401	1018	135	361	315
						C	3.75	42	5.2	3.2		791	7/21/2021		6	20	405	26269	1209	842	28719	1340	885	-242	1283	527
13						C	3.00	72.9	4.2	3.3	0	792	7/6/2021		6	20	420	32323	1157	1017	32404	1174	973	-329	265	134
2599				1/1/2022	2	P	3.25	89.7	4.4	3.4	8	795	9/10/2021		6	22	354	27759	1015	871	30898	1140	981	-302	50	243
				11/19/2021	2	P	2.75					796	7/31/2021	69	1	21	326	26219	1150	874	31230	1382	1018	86	663	300
132				4/30/2022	6	P	3.25	67.3	4.8	3.3	3	799	8/29/2021		6	22	366	28507	1273	893	31589	1435	999	169	469	233
				11/26/2021	1	P	3.00					800	9/7/2021	61	1	22	296	20961	982	707	25685	1229	878	-386	528	432
				2/27/2022	3	P	3.25	62	4	3.4		802	10/13/2021		6	23	321	24483	1032	819	28911	1230	958	-94	-166	124
				11/19/2021	1	P	3.00					807	9/4/2021	69	1	22	291	21039	914	677	25909	1148	846	-575	235	157
				12/31/2021	3	P	4.00					809	8/3/2021	41	1	21	351	40021	1203	1159	44209	1346	1258	610	1293	332
				11/13/2021	2	P	3.00					811	7/11/2021	76	1	20	339	23129	1098	819	27212	1320	923	-231	381	454
13				2/8/2022	4	P	3.00	100.9	4.1	3.3	0	812	9/18/2021		6	22	346	33658	1462	1047	38353	1701	1206	1114	1219	402
				12/5/2021	3	P	3.50					815	7/26/2021	55	1	20	345	28350	1320	961	33447	1589	1092	581	479	343
152							3.25	89.7	3.7	2.8	4	818	7/16/2022		2	32	45	1405	57	45				233	1079	339
				11/19/2021	2	P	3.25					820	8/1/2021	61	1	20	333	19179	727	568	23251	899	663	-1398	872	356
				11/26/2021	2	P	3.00					821	8/5/2021	61	1	21	329	31318	1097	925	37478	1326	1086	204	889	355
				1/28/2022	2	P	3.25	79	3.7	3.3		822	10/7/2021		6	23	327	25252	967	802	29460	1141	928	-289	182	125
				11/12/2021	1	P	2.75					823	8/4/2021	76	1	21	315	23475	1035	812	28764	1296	980	-128	-31	129
				12/24/2021	1	P	2.75					824	10/8/2021	34	1	23	292	26067	892	776	31082	1072	917	-400	1217	314
				12/24/2021	1	P	3.00					826	10/11/2021	34	1	23	289	24273	966	764	28905	1156	904	-310	1217	314
13				1/22/2022	3	P	3.00	53.3	4	3.3	0	827	9/18/2021		6	22	346	27382	1165	846	31721	1379	990	128	872	356
47							3.25	70.1	3.6	3.6	2	829	7/24/2022		2	32	37	601	23	24				-215	889	355
38							3.75	109.4	5.4	3	2	832	7/19/2022		2	32	42	1416	84	48				-264	-31	129
18				1/7/2022	2	P	3.25	67.3	4.1	3.2	1	833	9/17/2021		6	22	347	29476	1142	931	33977	1341	1087	255	624	294
				11/26/2021	1	P	3.00					834	9/13/2021	61	1	22	290	19943	841	625	24856	1066	790	-820	-431	92
33							4.50	134.6	4.7	3	1	835	7/13/2022		2	32	48	2485	129	85				723	119	314
				11/5/2021	1	P	3.00					839	8/23/2021	83	1	21	289	29284	1234	957	38729	1680	1250	1092	584	509
132							3.25	78.5	4.1	3.2	3	840	7/22/2022		2	32	39	808	36	29				-1613	-814	-50
				12/14/2021	2	P	3.50					841	9/4/2021	41	1	21	319	25110	1179	883	29872	1445	1044	312	-102	325

## 2022 National FFA Dairy Cattle Event - Dairy Herd Record Evaluation - Management Quiz

Fecha prueba: 1-9-2022

Información del informe hasta 1-9-2022

página 2

X-c		Producción en el día del examen										Lactancia actual						Equivalente maduro			ERPA	PTA	Merito
rce	fecha	o	Cód.	ECF	leche	grasa	proteína	r	Nún.	.....estado...	días	edad al	días	leche	grasa	prot.		leche	grasa	prot.	\$\$	leche	\$\$\$
x mil	concep.	n	repro		#	%	%	c	vaca	Últ. parto	cód. sin produc.	parir	en	#	#	#		#	#	#	Dev		
	1/14/2022	1	P	3.00	87	4.1	3.3		973	10/29/2021		6	22	305	24386	1101	779	31110	1419	1016	350	246	343
62	2/11/2022	3	P	3.25	61.7	4	3.4	2	974	9/14/2021		6	20	350	38545	1380	1144	46451	1692	1326	1396	964	253
	1/22/2022	3	P	2.75	65	4.9	3.8		975	9/20/2021		6	20	344	32747	1242	1009	39801	1526	1175	783	812	231
	12/17/2021	1	P	3.00					977	10/4/2021	41	1	21	289	24740	713	794	30291	902	958	-624		
	1/15/2022	2	P	3.75	60	4.5	3		979	10/5/2021		6	21	329	21545	904	665	25922	1101	790	-632	1092	366
25	12/31/2021	2	P	3.00	84.1	3.8	3	1	982	9/21/2021		6	20	343	29761	1169	861	35923	1438	1000	294	1093	171
100	3/11/2022	2	P	3.25	58.9	5.5	3.8	3	984	11/20/2021		6	22	283	17945	889	610	23637	1211	837	-337	-327	344
	12/3/2021	1	P	2.75					986	9/17/2021	55	1	20	292	26268	907	783	33726	1190	974	-196	603	303
985	1/21/2022	1	P	3.25	75.7	3	3.4	6	990	11/3/2021		6	22	300	27841	948	870	34820	1195	1124	257		
31	1/7/2022	1	P	2.75	56.1	5	3.7	1	991	10/23/2021		6	21	311	21380	1001	697	26820	1275	869	-192	281	403

Recuento de  
células  
somáticas  
(x mil)

P Preñada  
W Preñ. c/ gem.  
N Abierta  
C No reproducir

Evaluación de la  
Condición  
Física (BCS)

Recuento de  
células  
somáticas  
(lineal)

Códigos de estado

1 Fuera de producción  
2 En segunda lactancia o más  
6 Primera lactancia

Preparado por K.L. Heckaman, extensión de la Universidad Purdue, Syracuse, IN, y por L. Glista, CentralStar Cooperative, E. Lansing, MI