

GRATIOT COUNTY



DAIRY PROJECT RECORD BOOK 2024

Name: _____

4-H Club/FFA Chapter/Open: _____

Leader: _____

Age (as of January 1): _____

Years in Project Area: _____

Record Started: _____ Record Closed: _____
Month Day Year Month Day Year



Intermediate
12-14 years old

Record Book Instructions:

DON'T CHANGE THE PAPER:

Completed record books must be on standard letter sized (8.5"x11") white paper and HANDWRITTEN. There are classes in still exhibits for scrapbooks so please leave these types of books there. Minor embellishments are allowed and neatness is encouraged. Books must be fastened with a staple in the upper right hand corner or secured inside a 3 ring binder or folder.

DON'T BE LATE... KNOW THE DUE DATE:

The date and time to turn-in a completed record book will be listed on the Schedule of Events for Exhibitors printed in the front of the annual Fair Book.

USE THE RIGHT RESOURCES:

Good resources to help complete this record book is the publication "Your 4-H Market Beef Project" (4-H1188) which is available by loan at the Gratiot County MSU Extension (4-H) Office and the "Beef Resource Handbook" (OSU Extension 4H117R) is available for checkout at the MSU Extension Office. Online resource of "United States Standards for Grades of Feeder Cattle". Some answers will be found at gcffy.org and inside the fair book general and species rules.

Record Book Score Sheet

Participants Name _____ Jr. ____ Int. ____ Sr. ____

Page		Possible Points	Points Given
	Cover Page		
	My Project		
	Expenses		
	Business Plan		
	Health		
	General Knowledge		
	Neatness, presentation (binder or notebook, decorated)	10	
	Sr. Total	100	
	Int. Total	100	
	Jr. Total	100	

All about my feeder project...

For this section use the animal the exhibitor will most likely exhibit at the fair. If you are exhibiting both market and breeding stock, focus on one registered market steer.

Name (or identification) of my animal: _____

Tag Number: _____ Breed: _____

Color(s): _____ Date of Birth: _____ Actual Birthdate
 Estimated Birthdate

Special Markings: _____

Please Check One: Purchased Raised Date of purchase: _____

Please Check One: Steer Heifer

Purchase Price: _____ If you raised your animal, list the estimated market value.

A completed record book should have photos of your animal. At minimum this book should have a beginning and ending picture. Photo captions are encouraged. Up to two extra pages can be included behind this page within this record book.

All about my feeder project...

You may choose to do the weight record **OR** the essay. You may not do both the weight record and the essay for this record book. The points scored for whichever choice you make will be the same. The fair recommends all market exhibitors weigh their animals frequently but understands that access to a scale is not always available.

Choice 1 - Weight Record:

Do not complete the essay "Choice 2" below if you complete this section.

It is recommended to weigh your market beef animal(s) at least once each month. Use one chart for up to four animals. These should be the same (up to) four market beef animals registered on the market beef registration form. If you are doing a breeding program this can be cattle being raised.

ANIMAL ID					
DATE	METHOD Scale, tape, etc.	WEIGHT	WEIGHT	WEIGHT	WEIGHT
beginning					
Final					

Describe changes made based on information you gathered collecting these weight data.

Choice 2 - Project Essay:

Do not complete the weight record "Choice 1" above if you complete this section.

Write and attach to your completed book an essay from one of these two essay topic choices. Junior exhibitors complete an up to half page essay. Intermediate Exhibitors complete an up to one page essay. Senior Exhibitors complete an up to 2 page essay. **Topic 1:** What are the differences between a full bred feeder calf and a crossbred calf? Provide reasons why we separate the two classes here at the fair. What are the benefits to one or the other? **Topic 2:** What are five characteristics a Grand Champion Feeder will encompass? Why are these characteristics important?

My project expenses:

List all expenses for this market project and record the cost spent under the proper account. If your family/farm is providing feed, please estimate an approximate value. Add additional sheet if necessary.

How many animals are in this project. This can be your likely project animal along with backup animals.					
Date of purchase	Purchase Description	Feed Cost	Vet/Health Cost	Bedding Cost	Other Cost
TOTAL Column Expenses					
TOTAL Project Expenses: (find by adding Total Column Expenses together)					
AVERAGE Cost per animals (total project expenses divided by number of animals in project)					

My business plan:

The following calculations will help you learn about your ability to earn a profit for your participation in this agricultural project. Often in animal projects the profit margin for industrial feeder facilities have a slim profit margin. Let's see how you compare.

Average cost per animal (from prior page): _____

Purchase cost (of primary project animal): _____

TOTAL EXPENSES (WHOLE PROJECT) _____

Number of Project Animals in this report: _____

AVERAGE COST PER ANIMAL: _____

Finished Weight of Project Animal: _____

Finished weight can be taken at home anytime during the week prior to fair or it can be the fair's official market weight.

BREAK EVEN PRICE: _____

To calculate break-even price divide the average cost per animal by finished weight.

What is the current market price of market animal? _____

Would have you been able to make a profit if you would have sold your feeder calf at a stock yards at this current market price rather than the fair's livestock sale? Why or why not?

If you could change one thing about the fair, what would it be? _____

My General Feeder Knowledge:

All Ages:

What are measures we can take to prevent our visitors from becoming ill after visiting the fair? _____

How is your feeder steer a part of the dairy industry? _____

Can your animal be drug tested at the Gratiot County Fair for Youth? _____

The minimum weight for dairy feeder calves will be _____ lbs.

Market feeder beef steers at the Gratiot County Fair for Youth can have a maximum weight of _____ lbs.

If the animal is less than the minimum weight it can be shown in _____ but _____
_____.

All cattle shown at GCFY should not have any horn longer than _____ inch(es).

_____ pr crossbreeding with dairy breeds other than those listed above will _____
be eligible for Grand or Reserve Champion.

What time must all fair animals be fed and watered and have their pens cleaned by? _____.

If proper care is not given to your animal the superintendent will place a _____ tag on your pen and the exhibitor must

If there is a second offense, a _____ tag will be placed on your pen and the exhibitor must

What dairy cattle breeds can be shown (without penalty) at GCFY in the Feeder Classes?

_____, _____, _____, _____,
_____, & _____.

Ages 12-19:

The grade of feeder cattle is determined by evaluating three general value-determining characteristics:

_____, _____, and _____.

Define Thriftiness: _____

Ages 15-19:

Define a parasite: _____

List problems parasites can cause: _____

List examples of internal parasites: _____

List what can be used to control/treat internal parasites? _____

List examples of external parasites: _____

List what can be used to control/treat internal parasites? _____

List steps to keep feeder steers healthy. _____

Ages 8-19:

Keeping my feeder project healthy:

Listed below are initials of diseases. Give the correct name, list if it is a virus or a bacteria and provide symptoms of the disease.

IBR: _____

BVD: _____

BRSV: _____

PI3: _____

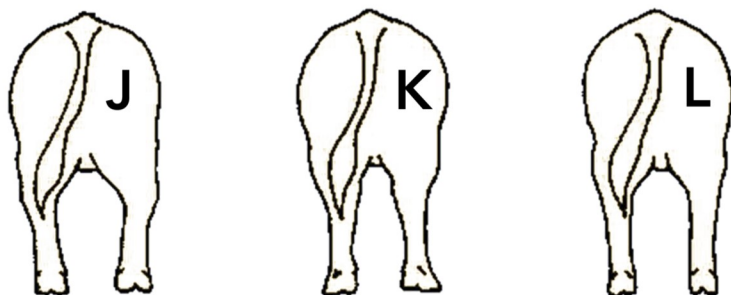
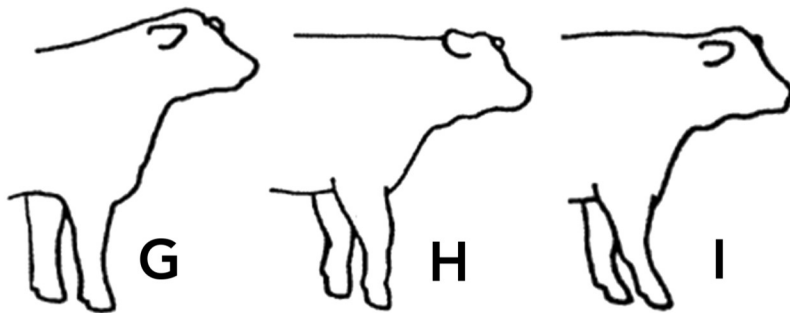
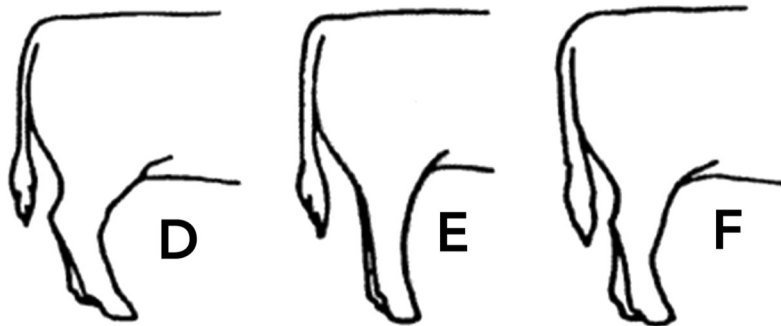
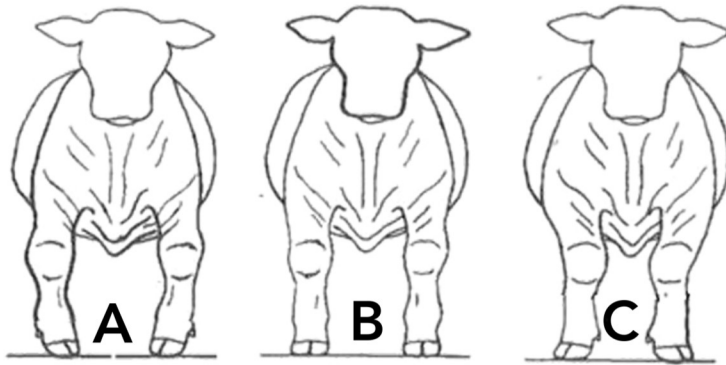
List steps you can take to keep cattle healthy. _____

My General Feeder Knowledge:

Ages 8-19:

Structural Differences:

Identify the structural differences from this chart using the following listed differences. Note... some differences will be listed in two places and some pictures will have two different structural differences as answers (list both). Differences to place on the chart: **bowlegged, buck kneed, calf kneed, cow hocked, knock kneed, pigeon toed, postlegged, sickle hocked and splayfooted**



Label From Graphic	Structural Flaw or label as correct
A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	

All ages:

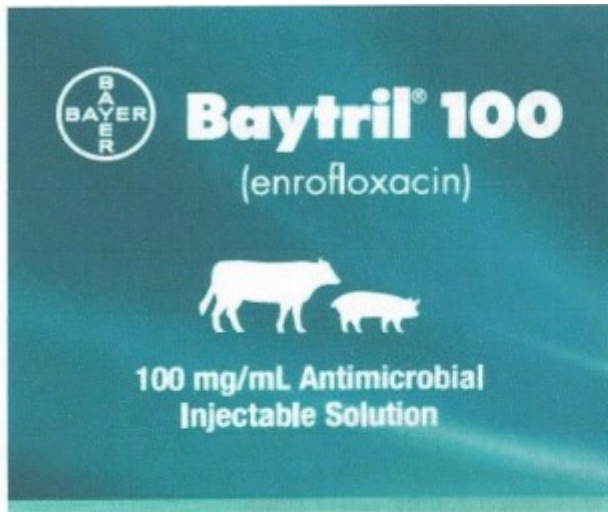
1. What is the name of this medication? _____
2. How should this medication be administered?

3. What is the withdrawal time on this medication, for cattle? _____

Ages 12-19

1. Looking at the temperature this medication should be stored at, where should it be stored?

2. List two cautions you should remember when administering this medication.



DOSAGE AND ADMINISTRATION:

Cattle:

Single-Dose Therapy (BRD Treatment): Administer, by subcutaneous injection, a single dose of 7.5-12.5 mg/kg of body weight (3.4-5.7 mL/100 lb).

Multiple-Day Therapy (BRD Treatment): Administer daily, a subcutaneous dose of 2.5-5 mg/kg of body weight (1.1-2.3 mL/100 lb). Treatment should be repeated at 24-hour intervals for three days. Additional treatments may be given on Days 4 and 5 to animals that have shown clinical improvement but not total recovery.

Single-Dose Therapy (BRD Control): Administer, by subcutaneous injection, a single dose of 7.5 mg/kg of body weight (3.4 mL/100 lb). See insert for examples of conditions that contribute to high risk.

Administered dose volume should not exceed 20 mL per injection site.

Swine:

Administer, either by intramuscular or subcutaneous (behind the ear) injection, a single dose of 7.5 mg/kg of body weight (3.4 mL/100 lb). Administered dose volume should not exceed 5 mL per injection site. For the control of colibacillosis, administration should be initiated within the first 60 days post-weaning when clinical signs are present in at least 2% of the animals in the group. See package insert for full dosage and administration information.

INDICATIONS:

Cattle: Baytril® 100 is indicated in beef and non-lactating dairy cattle for:

Single-Dose Therapy: the treatment of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica*, *Pasteurella multocida*, *Histophilus somni* and *Mycoplasma bovis* in beef and non-lactating dairy cattle; and for the control of BRD in beef and non-lactating dairy cattle at high risk of developing BRD associated with *M. haemolytica*, *P. multocida*, *H. somni* and *M. bovis*.

Multiple-Day Therapy: the treatment of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica*, *Pasteurella multocida* and *Histophilus somni* in beef and non-lactating dairy cattle.

Swine: Baytril® 100 is indicated for:

The treatment and control of swine respiratory disease (SRD) associated with *Actinobacillus pleuropneumoniae*, *Pasteurella multocida*, *Haemophilus parasuis*, *Streptococcus suis*, *Bordetella bronchiseptica* and *Mycoplasma hyopneumoniae*. The control of colibacillosis in groups or pens of weaned pigs where colibacillosis associated with *Escherichia coli* has been diagnosed.

CONTAINS PER mL: Enrofloxacin 100 mg. Excipients: L-arginine base 200 mg, n-butyl alcohol 30 mg, benzyl alcohol (as a preservative) 20 mg and water for injection q.s.

RESIDUE WARNINGS:

Cattle: Animals intended for human consumption must not be slaughtered within 28 days from the last treatment. This product is not approved for female dairy cattle 20 months of age or older, including dry dairy cows. Use in these cattle may cause drug residues in milk and/or in calves born to these cows. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.

Swine: Animals intended for human consumption must not be slaughtered within 5 days of receiving a single injection dose.

HUMAN WARNINGS: Not for use in humans. Keep out of reach of children. See package insert.

For customer service or to obtain product information, including a Safety Data Sheet, call 1-800-633-3796.

For medical emergencies or to report adverse reactions, call 1-800-422-9874.

STORAGE CONDITIONS: Protect from direct sunlight. Do not refrigerate or freeze. Store at 20-30°C (68-86°F), excursions permitted up to 40°C (104°F). Precipitation may occur due to cold temperature. To redissolve, warm and then shake the vial.

Read package insert carefully for complete details.

All Ages:

1. Who is the superintendent for dairy feeders at the Gratiot County Fair for Youth?

1. What is your favorite part of showing a dairy feeder?

2. What was the hardest challenge this year while raising your dairy feeder?

Ages 12-19

1. The industry is changing. It now can be challenging to find a pure Holstein dairy feeder. As the industry changes the fair needs to change also. What are your thoughts on a dairy feeder crossbred class? What are the pros and the cons for this change. Please understand There would be a pure dairy feeder class & a crossbred dairy feeder class with two types of Grand and Reserve—do you agree or disagree?

2. What is something you would love to see improve or change for the better! We love suggestions to grow !

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USE THE RIGHT RESOURCES:

Good resources to help complete this record book is the publication "Working With Dairy Cattle," http://www.holsteinfoundation.org/pdf_doc/workbooks/WorkingDairyCattle_WKBK.pdf available for download from the Holstein Foundation and the "Dairy Resource Handbook" (OSU Extension 4H127R) is available for checkout at the MSU Extension Office. Some answers will be found at gffy.org and inside the fair book general and species rules.

Record Book Score Sheet

Participants Name _____ Jr. ____ Int. ____ Sr. ____

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Health		
General Knowledge		
Neatness, presentation (binder or notebook, decorated)	10	
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Int. Total	100	
Jr. Total	100	

My Project Animal & I:

A completed record book should have photos of your animal. At minimum this book should have a beginning and ending picture. Photo captions are encouraged. Up to two extra pages can be included behind this page within this record book.

All about my dairy project...

Project Animal(s):

Name or ID	Breed	Date of Birth	Sire	Dam

Why did you enroll in this project? _____

Where are your project cows located? _____

How did you obtain your project animals? _____

This is what I feed my project animals: _____

My project expenses:

List all expenses for this dairy project and record the cost spent under the proper account. If your family/farm is providing feed, please estimate an approximate value. Add additional sheet (s) if necessary. Start your expenses log on January 1 of this year.

How many animals are in this project. This can be your likely project animal along with backup animals.					
Date of purchase	Purchase Description	Feed Cost	Vet/Health Cost	Bedding Cost	Other Cost
TOTAL Column Expenses					
TOTAL PROJECT EXPENSES:					

My General Dairy Knowledge

In order to move cattle in the state of Michigan what kind of tag is required? _____ (note these tags are also required for all cattle who are on site at GCFFY.)

All cattle shown at GCFFY should not have any horn longer than _____ inch(es).

What time must all fair animals be fed and watered and have their pens cleaned by? _____.

If proper care is not given to your animal the superintendent will place a _____ tag on your pen and the exhibitor must

If there is a second offense, a _____ tag will be placed on your pen and the exhibitor must _____

What is the current price of milk dairy farmers are receiving for selling their milk by \$/cwt? What does CWT stand for?

What changes, or additions would you like to see happen in the dairy program? What awards would you like?

Disease and Illness Identification

By learning about different diseases and illnesses and their symptoms, you will know how to identify if your animal is acting sick, what to do if your animal is sick and how to prevent your animal from getting sick. Select a disease or illness from the list with a circle around your selection; then, find answers to the questions on this page. You can add additional pages if needed.

Acidosis, Coccidiosis, Hardware Disease, Milk Fever, Botulism, Ketosis, Bovine Leukosis Disease (BLD), Bovine Respiratory Disease (BRD), Johne's

What do cattle act like when they have that disease or illness? _____

How do cattle get that disease or illness? Is it contagious?

What do you do if your animal gets that disease or illness? _____

Will your animal get better if she gets that disease or illness? _____

How can you prevent your animal from getting that disease or illness? _____

Breed Identification

Please name the breed and the state where the registration office is located.

1. This very popular breed originated in the Netherlands and is known for producing the highest volume of milk. They are usually black and white, but some are red and white.

2. Developed in 1750 in the county of Ayr, Scotland, this breed is medium size with strongly attached, well-shaped udders. Although they have average milk production, they are known for their extreme hardiness and good foraging ability. These animals are red/mahogany and white.

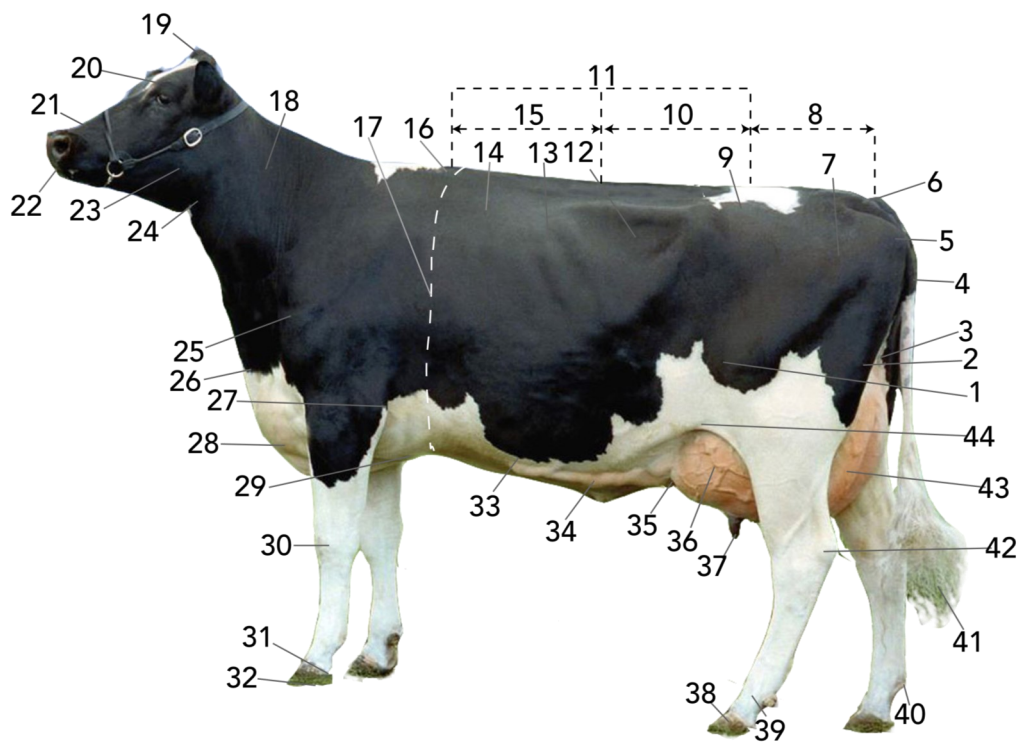
3. This large-sized breed originated in Switzerland and is known for strength, ruggedness, and good feet and structure. Developed to graze the mountains, these cows have high milk production and provide high-protein milk for cheese. They are solid brown with a black nose, switch and hooves.

4. This breed was developed on an island in the English channel. They are the smallest cows, but produce milk highest in fat and protein. These animals are a shade of fawn with or without white markings.

5. This intermediate-sized breed was developed from an English breed of cattle; the breed association was formed in 1972. Although average milk producers, this breed is an efficient converter of feed into meat or milk. These animals have a high heat tolerance and can be red, white or roan.

6. This breed was developed on an island in the English Channel to produce high-fat milk for making butter. This breed is known for its gentle nature and yellow-tinted milk. Fawn and white markings characterize this breed.

My General Dairy Knowledge:



Identify the Parts of a Cow:

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 15. _____ | 30. _____ |
| 2. _____ | 16. _____ | 31. _____ |
| 3. _____ | 17. _____ | 32. _____ |
| 4. _____ | 18. _____ | 33. _____ |
| 5. _____ | 19. _____ | 34. _____ |
| 6. _____ | 20. _____ | 35. _____ |
| 7. _____ | 21. _____ | 36. _____ |
| 8. _____ | 22. _____ | 37. _____ |
| 9. _____ | 23. _____ | 38. _____ |
| 10. _____ | 24. _____ | 39. _____ |
| 11. _____ | 25. _____ | 40. _____ |
| 12. _____ | 26. _____ | 41. _____ |
| 13. _____ | 27. _____ | 42. _____ |
| 14. _____ | 28. _____ | 43. _____ |
| | 29. _____ | 44. _____ |

My General Dairy Knowledge:

Using the Dairy Cow Unified Score Card, list the percent given to each major dairy trait and **list ONE positive characteristic for each of the four major traits.**

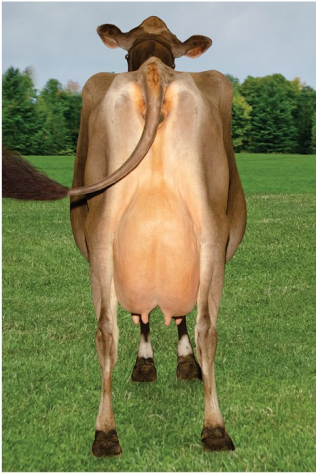
1) Frame %

2) Dairy Strength %

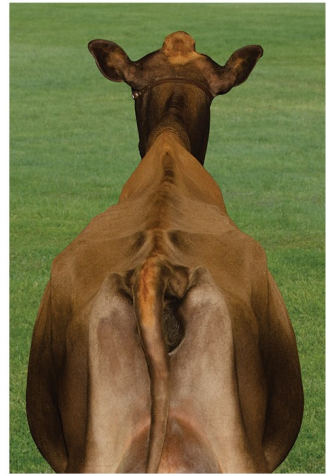
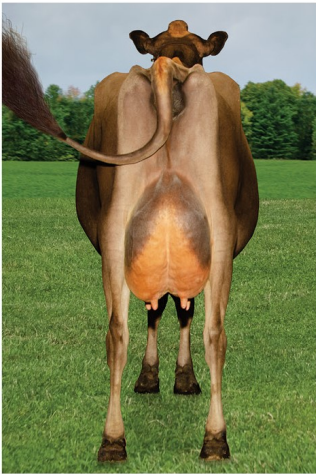
3) Rear Feet and Legs %

4) Udder %

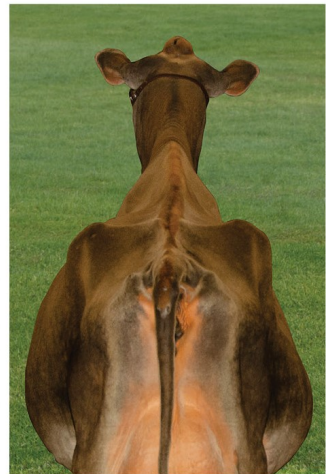
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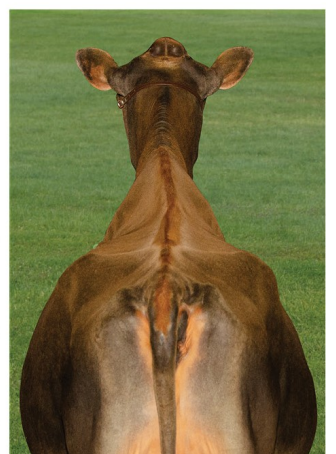
B



C



D



Dairy Industry Interview

One of the best ways to learn about the dairy industry and how to take care of your heifer or cow is to talk to a professional, someone who makes a living doing this. Examples of dairy industry professionals are: a local dairyman, a veterinarian, a nutritionist, an industry professional who works with a company that distributes products used by dairymen, or a dairy judge. Interview one of those professionals listed and have them answer the following questions.

What is their job title? _____

What made them decide to go into this occupation? _____

What type of training or schooling do they need to perform their job? _____

What would they do differently if they could start over? _____

Would they recommend this type of occupation to someone else? Why or why not? _____

Come up with your own questions, either about their job or about dairy cattle or dairy farming.

Question: _____

Response: _____