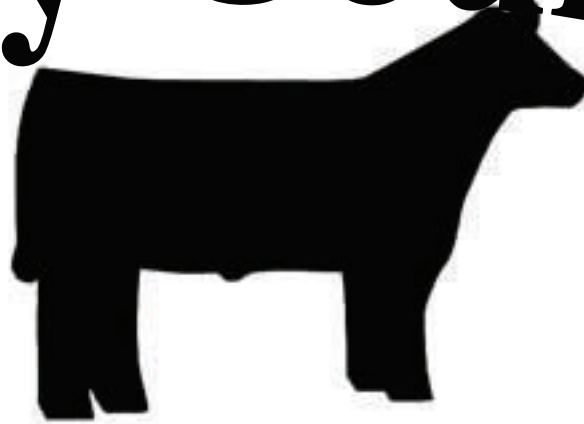


Bay County



Market Beef Project Record Book Ages 16-19

Name _____

4-H Club _____

Leader(s) _____

Age as of January 1 _____

Years Showing Beef _____

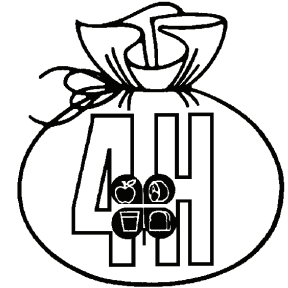
Record Started _____
Month/Day/Year

Record Ended _____
Month/Day/Year

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**MICHIGAN STATE
UNIVERSITY
EXTENSION**

WHY KEEP RECORDS?



Keeping records on your project can be interesting and fun - not dull or boring. Good records will:

- Help you learn about animals, their rate of growth, the feed they require, the cost of the feed and their habits
- Help you plan future projects
- Let you know if you made or lost money and how much
- Improve your management practices
- Give you a record of your project activities

Keep this record as part of your Personal 4-H Records. This information is helpful for you to plan future year's market projects, as well as if you ever apply for 4-H awards or a 4-H scholarship.

Remember - Records are no better than what YOU put into them!

LEADERS COMMENTS:

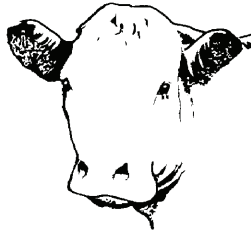
Leader's Signature: _____

OBJECTIVES

To let 4-H Members:

- Experience the obligation and responsibility required in a livestock enterprise.
- Experience and cope with the "values" and "attitudes" of responsibility, in a relatively unsupervised environment. Supervision will be on a periodic basis.
- Contribute to the family table with meat, or to experience the marketing process and system, through sale of the product.
- Experience competition through showing the animal at local area organization sponsored shows, the fair and state-wide shows.

*MSU Extension-Bay County
515 Center Avenue, Suite 301
Bay City, MI 48708
(989) 895-4026*



BAY COUNTY 4-H BEEF PROGRAM



Member's Achievement Summary

20_____

Your Name: _____

Date of Birth: _____ Age (as of Jan. 1
of this year): MM/DD/YYYY

School attending: _____ Grade: _____

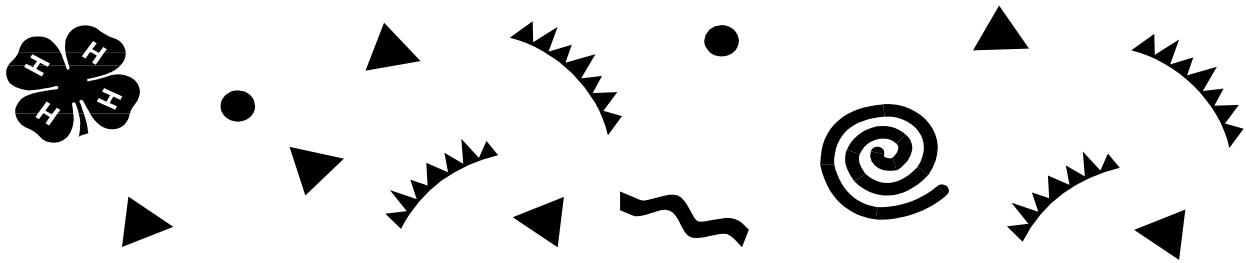
Number of Years Showing Beef in Bay County: _____

Have you participated in another county's beef program? Yes No

If Yes, list the counties and the number of years in each:

List some of the Beef Project activities you have participated in such as fairs, trips, clinics/workshops, posters/projects, demonstrations, quiz bowl, judging team, skill-a-thons, etc.

What do you hope to improve this year in your beef project?



MY 4-H BEEF PROJECT ANIMAL(S)

Name of Primary Animal: _____

Identification Number: _____ Type of Identification: Tag RFID

Breed(s): _____

Color: _____ Date (Month) of Birth: _____

Markings: _____

Please Check One:

Purchased Raised

Please Check One:

Steer Heifer

Beginning Weight: _____ Date Weighed: _____ Method: _____

Finished Weight: _____ Date Weighed: _____ Method: _____

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

Name of Secondary Animal or Extra: _____

Identification Number: _____ Type of Identification: Tag RFID

Breed(s): _____

Color: _____ Date (Month) of Birth: _____

Markings: _____

Please Check One:

Purchased Raised

Please Check One:

Steer Heifer

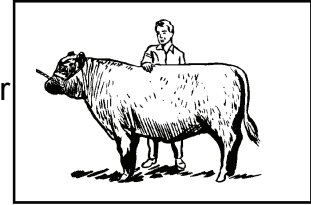
Beginning Weight: _____ Date Weighed: _____ Method: _____

Finished Weight: _____ Date Weighed: _____ Method: _____

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

MY 4-H BEEF PROJECT PHOTOGRAPHS

Be creative. The more photographs the better, but a completed record book should at least have a **beginning** photograph and a **finished** picture. You are encouraged to be in the photo with your project animal and include more photographs. You should also include captions on your pictures that at least include the date of the photograph. You may use additional pages.



MY 4-H BEEF PROJECT FEED INGREDIENTS


Attach a Feed Ingredients Slip/Nutritional Analysis from each of your feed sources. If the feed is mixed in a mill, ask the mill operator for a list of ingredients. If a slip is not available, please describe your feed sources as best as possible.

A small yellow pushpin icon is located at the top left corner of the large rectangular area.

ATTACH FEED SLIP HERE

MY 4-H BEEF PROJECT WEIGHT RECORD

In this section, you will calculate the rate of gain for your project animal. Calculate information only for the animal that you will be taking to the fair.

	Weight of Animal (lbs.)	Date of Measurement	Method of Weight Measurement	
START OF PROJECT				
END OF PROJECT				

1) Calculate the weight that your animal gained. _____ lbs. of Gain

2) From your data, find the number of days between the start of project and the end of project. _____ Days on Feed

3) Calculate the Average Daily Gain

$$\frac{\boxed{} \text{ lbs. of Gain}}{\boxed{} \text{ Days on Feed}} = \text{Average Daily Gain} = \underline{\hspace{2cm}} \text{ lbs./Day}$$

4) Feed Efficiency (FE) is the weight of dry matter feed fed to an animal to produce one pound of gain. Calculate your market beef project's FE. Note. A normal beef FE range is 6 – 8:

Total lbs. Of Feed Fed: _____ lbs. (sum this from pg. 7)

Dry Matter Feed = Total Feed Fed _____ lbs. X 0.85 = _____ lbs.

$$\frac{\boxed{} \text{ lbs. Of Dry Matter}}{\boxed{} \text{ lbs. Of Gain}} = \text{Feed Efficiency} = \underline{\hspace{2cm}}$$

5) Describe how you can estimate the weight of a steer if you do not have a scale available:

MY 4-H BEEF PROJECT FEED RECORD AND EXPENSES

In this section, you will calculate your cost to feed this market animal. Record by months amounts of feed purchased, weighed out or fed during each month. Grain and supplements: amount and cost of grain, amount and cost of supplements, including commercial mixture (protein, mineral, salt, etc.) Brand names do not matter, but content and cost do. Home grown feed should be listed by fair market value. To simplify this chart, you do not have to weigh your feed every feeding. **Averages are ok and encouraged.** If you are feeding more animals than one, you will want to figure the feed for JUST your animal by dividing the total lbs. fed by the number of animals.

FEED TYPE	November	December	January	February	March	April	May	June	July	TOTAL
Type of Grain: _____ lbs. used										
Cost of Feed (per lb.) _____										
Monthly Cost _____										
Type of Concentrates: _____ lbs. used										
Cost of Feed (per lb.) _____										
Monthly Cost _____										
Type of Minerals: _____ lbs. used										
Cost of Feed (per lb.) _____										
Monthly Cost _____										
Type of Hay (quality): _____										
Number of Bales fed _____										
Cost Per Bale _____										
Monthly Cost _____										
MONTHLY FEED TOTAL Find the sum of your monthly costs										TOTAL FEED COST

Monthly cost (feed) = Cost of the feed (per lb.) x lbs. used. Monthly cost (hay) = Number of bales fed x cost per bale.



MY 4-H BEEF PROJECT EXPENSES ON PROJECT ANIMAL

In this section, you will calculate your cost to prepare your market beef project for the fair and auction. Please feel free to include attachments of actual expenses with your record book.

Expense Items	January	February	March	April	May	June	July	Project Totals (\$)
Monthly Feed Total (from pg. 7)								
Veterinary Charge								
Bedding								
Insecticides								
Fitting & Showing Supplies								
Trucking								
Marketing of Animal								
Miscellaneous								
Monthly Totals								
TOTAL EXPENSES FOR THIS ANIMAL								

YOUR MARKET BEEF PROJECT BREAK EVEN PRICE

4-H animals are sold by the pound at Large Animal Meat Sale Auction. Find out what bid price (per lb.) you need to get at the Large Animal Meat Sale Auction to **break even** on your 4-H Market Beef Project.

EXPENSES ON MARKET ANIMAL:
(From Page 9)

PURCHASE PRICE OF ANIMAL:
(From Page 4)

+

TOTAL PROJECT EXPENSES:

\$

= TE

FINISHED WEIGHT OF ANIMAL:
(From Page 4)

lbs.

= FW

BREAK EVEN PRICE (BE) = $\frac{TE}{FW}$

\$

What is the current selling price of beef (per lb.)?

This price should be current as of July 1 of current year.

Where did you find the current selling price?

If your source was a person, ask them where they got this information.

Would you have been able to make a profit selling on the open market?

Why?

What would you do differently if you were selling your animal(s) on the open market?



KNOW YOUR CUTS OF MEAT

QUALITY GRADE is determined by the marbling of the meat. The higher the quality grade, the more flavor and tenderness the meat has. From the following list of USDA quality grades, list them from the most desirable (1) to the least desirable (5):

CHOICE, PRIME, SELECT, STANDARD, UTILITY

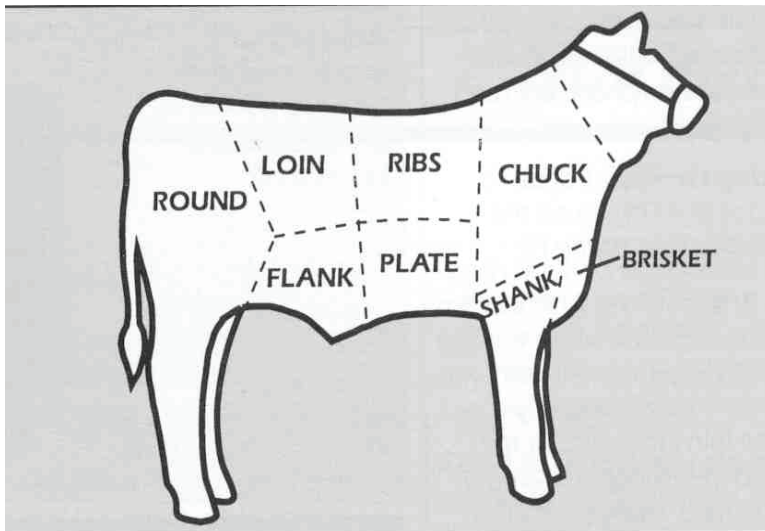
PERCENT DRESSED:

If you have an animal that has a beginning weight of 471 lbs., a finished weight of 1245 lbs., sells for \$0.92/lb. and has a chilled carcass weight of 827.4 lbs. and a ribeye area of 10.8 in², what is the dressing percentage? _____

How did you get your answer?

WHOLESALE CUTS VS. MARKET CUTS OF BEEF:

From the diagram, match the wholesale cuts of meat to the Retail Cuts of Meat:



- _____ BBQ Short Ribs
- _____ Roast Beef
- _____ Round Steak
- _____ Ribeye Steak
- _____ Porterhouse Steak
- _____ Filet Mignon
- _____ Ground Sirloin
- _____ Corned Beef

Meat is the main product from a beef animal. Describe other products (called animal by-products) of the slaughtered cow/carcass:

MY MANDATORY MARKET BEEF PROJECT

An outstanding 4-H project is one that goes above and beyond what is expected. This section will help you identify projects that you can do to improve your market record book and have a better chance at receiving an outstanding ribbon.

WRITE A REPORT ON *ONE* OF THE FOLLOWING TOPICS. REPORT MUST BE AT LEAST ONE PAGE:

- FOLKPATTERNS:** Visit with a former livestock or dairy farmer to compare and contrast today's Beef Projects with those in the past. What is better today? What was better in the past? **OR** describe the significance of the cow in Spain's "Running of the Bulls."
- LEADERSHIP:** How you have become a better leader through your years in the 4-H Beef Project? Describe what you have done and how you have grown.
- ANIMAL SCIENCE:** Describe the proper care and nutrition of your market animal **OR** how you selected your market animal.
- VETERINARY SCIENCE:** Describe a veterinary practice, procedure on livestock **OR** explain the digestive system of the cow **OR** describe cross breeding in cattle. Other bovine veterinary topics may be used for your report.

PHOTOGRAPHY REPORT. ALL PHOTOS ARE TO BE TAKEN BY THE EXHIBITOR (YOU). CHOOSE *ONE* OF THE FOLLOWING TOPICS:

- MY BEEF PROJECT:** Keep a photo journal of your market beef project. Photographs should represent the entire length of the project. A minimum of 12 photos from eight DIFFERENT TIMES must be included. All photos do not have to be of the animal. They could be of club meetings, field trips, shows, etc.
- FARM VISIT:** Create a photo journal of a large beef or dairy operation. A minimum of 12 photographs are required.

LEATHERCRAFT:

- Include a project that can easily accompany this Beef Record Book and outline the process of making this beef by-product (from cow to finished product.)

ENTOMOLOGY:

- Create an Insect Collection with a minimum of 8 insects that affect cows. Note: this could be pests, such as flies and mosquitoes or insects that eat crops that cows use as feed, such as corn, hay or oats.

ENVIRONMENTAL SCIENCE:

- Draw a diagram of your beef set up. From that diagram, show how you can protect resources such as Groundwater. Include manure management and storage of hazardous materials. Check with Ionia County Extension's groundwater resources for more information.

FOODS & NUTRITION:

- Outline the nutritional content of beef (it varies depending on the cut.) Include sample recipes of "healthy" beef foods.

SAFETY:

- Outline safe practices of your beef project. Consider halter breaking, shipping, stable/fence area, fair/shows, etc.

16 - 19 4-H BEEF RECORD BOOK SCORE SHEET

<i>Page</i>	<i>NAME:</i>	<i>Points Possible</i>	<i>Your Points</i>
1 - 2	<i>COVER SHEET & WHY KEEP RECORDS</i>	5	
	All information is completed and has Leader's Signature.		
3	<i>MEMBER ACHIEVEMENT SUMMARY</i>	10	
	All Information is neat and complete. All questions are answered.		
4	<i>4-H BEEF PROJECT ANIMALS</i>	5	
	Information complete on <i>PRIMARY</i> animal. All weights/ prices recorded.		
5	<i>4-H PROJECT PHOTOGRAPHS</i>	5	
	A beginning and finished photograph is included.		
6	<i>WEIGHT RECORD</i>	20	
	Calculations are completed and questions answered.		
7	<i>MONTHLY FEED COSTS</i>	10	
	Table completed & totals tabulated.		
8	<i>PROJECT EXPENSES</i>	10	
	Table completed and total expenses calculated.		
9	<i>MARKET BEEF BREAK EVEN PRICE</i>	10	
	Calculations completed and questions completed.		
10	<i>FINANCIAL SUMMARY</i>	5	
	Calculations completed and question answered.		
12	<i>KNOW YOUR CUTS OF MEAT</i>	10	
	Worksheet completed.		
13	<i>MARKET BEEF PROJECT</i>	10	
	ONE of the projects listed is completed.		
	<i>EXTRA CREDIT:</i> Additional Project from page 13 (<i>or another worthy project.</i>) Points are at Judge's discretion. If project cannot be attached to record book, please add a page to describe how judge can find project.		
	<i>TOTAL POINTS</i> A: 80 – 100, B: 60 – 79, C: 10 – 59	100	