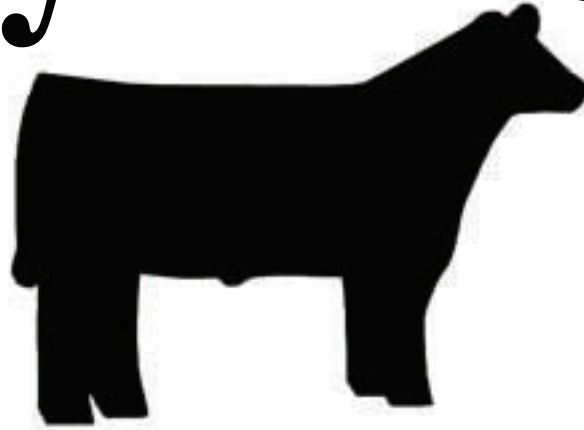


# Bay County



## Market Beef Project Record Book Ages 12-15

Name \_\_\_\_\_

4-H Club \_\_\_\_\_

Leader (s) \_\_\_\_\_

Age as of January 1 \_\_\_\_\_ Years Showing Beef \_\_\_\_\_

Record Started \_\_\_\_\_ Record Ended \_\_\_\_\_  
Month/Day/Year Month/Day/Year

Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, marital status, family or veteran status.

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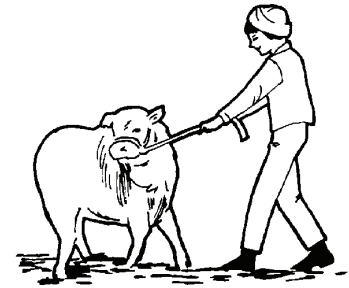
# W

## hy 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:

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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  
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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: \_\_\_\_\_

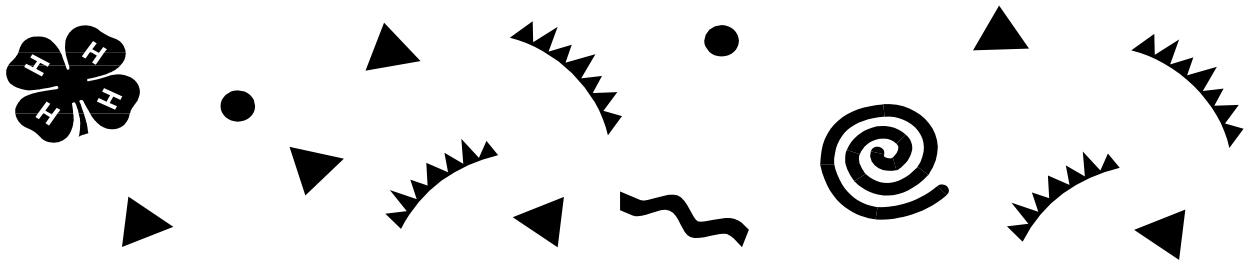
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

List some of the Beef Project activities you would like to participate in (outside of the fair) such as trips, shows, clinics/workshops, posters/projects, demonstrations, quiz bowl, skill-a-thon's, and judging team and WHY:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What do you want 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:

Please Check One:

Purchased

Raised

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:

Please Check One:

Purchased

Raised

Steer

Heifer

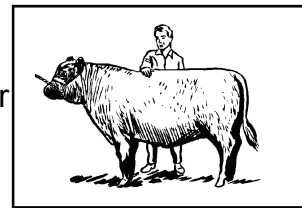
Beginning Weight: \_\_\_\_\_ Date Weighed: \_\_\_\_\_ Method: \_\_\_\_\_

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 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 animals.

FEED TYPE	Prior to December	December	January	February	March	April	May	June	July	TOTAL
Type of Grain: _____										
Ibs. Used _____										
Cost of Feed (per lb.) _____										
Monthly Cost _____										
Type of Concentrates: _____										
Ibs. used _____										
Cost of Feed (per lb.) _____										
Monthly Cost _____										
Type of Minerals: _____										
Ibs. Used _____										
Cost of Feed (per lb.) _____										
Monthly Cost _____										
Type of Hay (Quality): _____										
Number of Bales fed _____										
Cost Per Bale _____										
Monthly Cost _____										
<b>MONTHLY FEED TOTAL</b> Find the sum of your monthly costs										
										TOTAL FEED COST

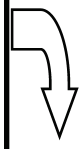


Monthly cost (feed) = Cost of the feed (per lb.) x lbs. used.      Monthly cost (hay) = Number of bales fed x cost per bale.

## 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.

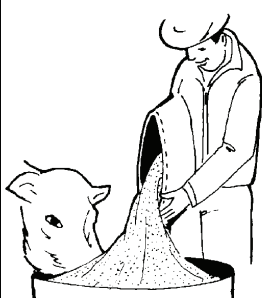
Expense Items	November/ December	January	February	March	April	May	June	July	Project Totals (\$)
Monthly Feed Total (from pg. 6)									
Veterinary Charge									
Bedding									
Insecticides									
Fitting & Showing Supplies									
Trucking									
Marketing of Animal									
Miscellaneous									
Monthly Totals									



TOTAL EXPENSES FOR THIS ANIMAL

## 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 (Scale, Weight Tape)	
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

$$\frac{\boxed{\phantom{000}} \text{ lbs. of Gain}}{\boxed{\phantom{000}} \text{ Days on Feed}} = \text{Average Daily Gain} = \text{_____ lbs./Day}$$

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.

$$\frac{\boxed{\phantom{000}} \text{ lbs. Of Dry Matter}}{\boxed{\phantom{000}} \text{ lbs. Of Gain}} = \text{Feed Efficiency} = \text{_____}$$

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



## 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 8)			
PURCHASE PRICE OF ANIMAL: (From Page 4)	+		
TOTAL PROJECT EXPENSES:		\$	= TE
FINISHED WEIGHT OF ANIMAL: (From Page 4)		lbs.	= FW

$$\text{BREAK EVEN PRICE (BE)} = \frac{\text{TE}}{\text{FW}} = \boxed{\phantom{0000}}$$

\$

What is the current selling price of beef (per lb.)? \_\_\_\_\_  
*This price should be current as of July 1 of current year.*

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

Why? \_\_\_\_\_

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How could you decrease your Break Even Price of your animal to make a larger profit while still raising a quality Market Beef Project?

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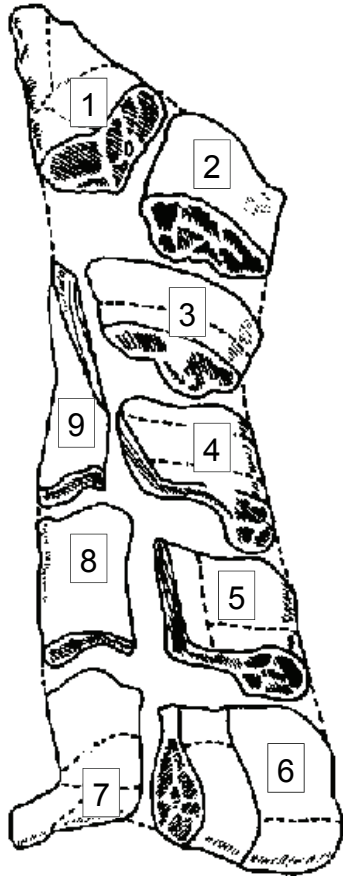


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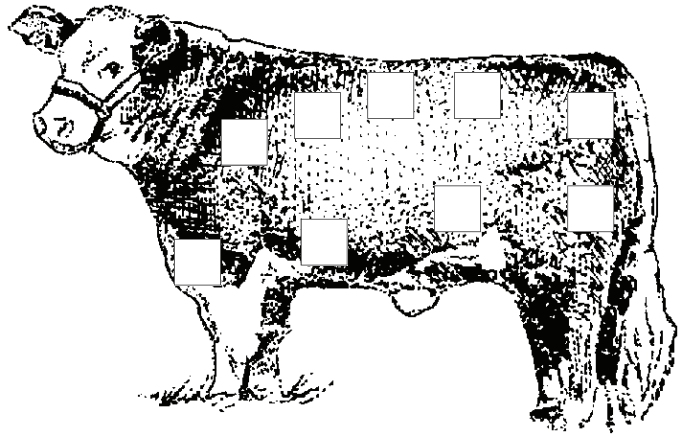


# Know Your Cuts of Meat

List the cuts of a beef carcass from the diagram and match the numbers to the photo below:



- \_\_\_\_\_ Brisket
- \_\_\_\_\_ Chuck
- \_\_\_\_\_ Flank
- \_\_\_\_\_ Loin: Short Loin
- \_\_\_\_\_ Loin: Sirloin
- \_\_\_\_\_ Plate
- \_\_\_\_\_ Ribs
- \_\_\_\_\_ Round
- \_\_\_\_\_ Rump



Of the nine wholesale cuts of meat listed above, which cut is the most valuable?

\_\_\_\_\_

What is your favorite food from beef (e.g. Hamburger, Prime Rib, New York Strip Steak, Pot Roast)?

\_\_\_\_\_

Which wholesale cut (one of the nine listed above) would your favorite come from?

\_\_\_\_\_

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

\_\_\_\_\_  
\_\_\_\_\_

Bone meal is a beef by-product that is now controversial. Why is beef bone meal controversial?

\_\_\_\_\_

## Extra Credit for My 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:**

- **FOLK PATTERNS:** 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, 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 MSU 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.

## 12 - 15 4-H Beef Record Book Score Sheet

<i>Page</i>	<i>NAME:</i>	<i>Points Possible</i>	<i>Your Points</i>
1 - 2	<b><i>COVER SHEET &amp; WHY KEEP RECORDS</i></b>	<b>5</b>	
	All information is completed and has Leader's Signature.		
3	<b><i>MEMBER ACHIEVEMENT SUMMARY</i></b>	<b>10</b>	
	All Information is neat and complete. All questions are answered.		
4	<b><i>4-H BEEF PROJECT ANIMALS</i></b>	<b>10</b>	
	Information complete on <i>PRIMARY</i> animal. All weights/ prices recorded.		
5	<b><i>4-H PROJECT PHOTOGRAPHS</i></b>	<b>10</b>	
	A beginning and finished photograph is included.		
6	<b><i>MONTHLY FEED COSTS</i></b>	<b>10</b>	
	Table completed & totals tabulated.		
7	<b><i>PROJECT EXPENSES</i></b>	<b>10</b>	
	Table completed and total expenses calculated.		
8	<b><i>WEIGHT RECORD</i></b>	<b>20</b>	
	Calculations are completed and questions answered.		
9	<b><i>MARKET BEEF BREAK EVEN PRICE</i></b>	<b>20</b>	
	Calculations completed and questions completed.		
11	<b><i>KNOW YOUR CUTS OF MEAT</i></b>	<b>10</b>	
	Worksheet completed.		
12	<b><i>EXTRA CREDIT:</i></b> A Project from page 12 ( <b><i>or another worthy project.</i></b> ) 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.		
	<b><i>TOTAL POINTS</i></b> A: 80 – 100, B: 60 – 79, C: 10 – 59	<b>100</b>	