

Montcalm County



Market Beef 4-H Project Record Book Ages 12 ~ 15

Name: _____

Address: _____

4-H Club: _____

4-H Leader: _____

4-H Age (as of 1/1): _____ Years Showing 4-H Beef: _____

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



MICHIGAN STATE
UNIVERSITY | Extension

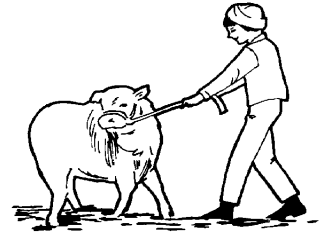


MSU is an affirmative-action, equal-opportunity employer. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status.

Rev. 11/2014



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, and to apply for 4-H awards or a 4-H scholarship.

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

I understand that this is a **completed** Market Beef Project Record Book as required.

4-H'ers Signature: _____

4-H 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, throughout sale of the product.
- Experience competition through showing the animal at local area organization sponsored shows, the fair and state wide shows.

MSU Montcalm Extension
 211 W. Main Street, P.O. Box 368
 Stanton, Michigan 48888
<http://msue.anr.msu.edu/county/info/montcalm>
 Phone: (989) 831-7500
 Fax: (989) 831-7515



Montcalm County 4-H Beef Program

Member's Achievement Summary



20____

Your Name: _____

Date of Birth: _____ 4-H Age (as of 1/1): _____

School Attending: _____ Grade: _____

Number of Years Showing 4-H Beef in Montcalm 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: _____

Type of Identification: Tag #: _____ RFID #: _____

Breed(s): _____

Color: _____ Date (Month) of Birth: _____

Markings: _____

Please Check One:

Purchased Raised

Please Check One:

Steer Heifer

Weigh-In 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: _____

Type of Identification: Tag #: _____ RFID #: _____

Breed(s): _____

Color: _____ Date (Month) of Birth: _____

Markings: _____

Please Check One:

Purchased Raised

Please Check One:

Steer Heifer

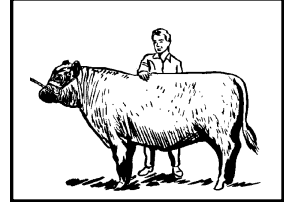
Weigh-In Weight: _____ Date Weighed: _____ Method: _____

Finished Weight: _____ Date Weighed: _____ Method: _____

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

My 4-H Beef Project Photographs

A completed record book should include a **beginning** photograph and a **finished** picture. You are encouraged to be in the photo with your project animal. You should also include captions on your pictures that at least include the date of the photograph. If you choose to include extra photos, please include them at the end of this book and be creative!!!



My 4-H Beef Project Feed Record and Expenses

In this section, you will calculate your cost to feed this market animal. Record by the amount 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	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

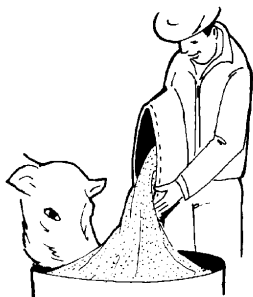
In this section, you will calculate your cost to prepare your market beef project for the fair and auction. Please feel free to include attachments of actual expenses with your record book.

Expense Items	December	January	February	March	April	May	June	July	Project Totals (\$)
Monthly Feed Total (from page 6)									
Veterinary Charge									
Bedding									
Insecticides									
Fitting & Showing Supplies									
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

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

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. 6)

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:

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 7)

PURCHASE PRICE OF ANIMAL:
(From Page 4)

+

TOTAL PROJECT EXPENSES:

\$

= TE

FINISHED WEIGHT OF ANIMAL:
(From Page 4)

Lbs.

= FW

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

What is the current selling price of beef (per lb.)? \$ _____
This price should be current as of June 1 of current year.

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

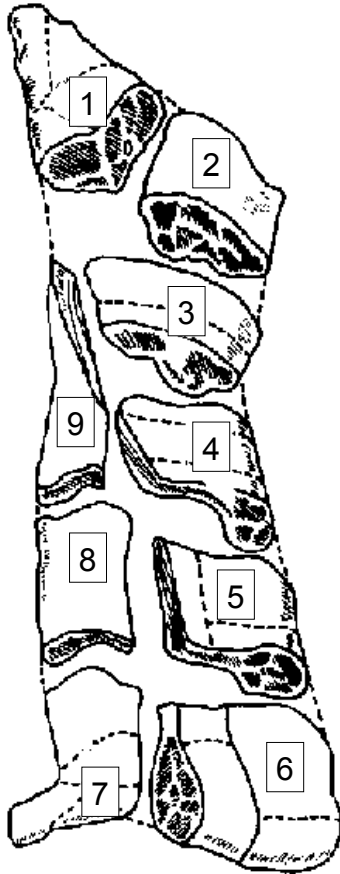
Why? _____

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

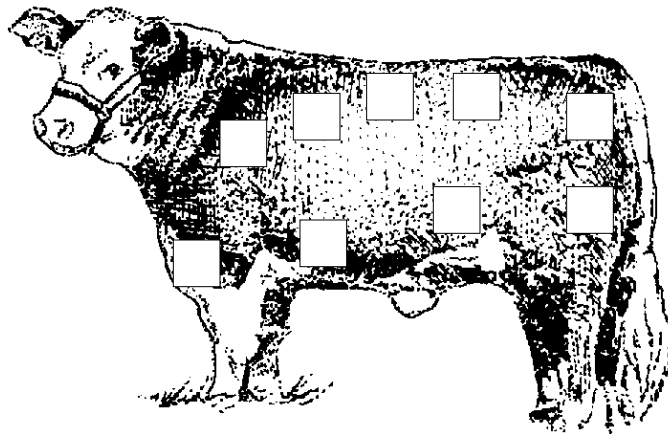


Know Your Cuts of Meat

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 cow. Describe other products (called animal by-products) of the slaughtered cow/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 for Ages 12-15:

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 enhance your knowledge in your project area. Be creative! Your own ideas are also encouraged. This project will be handed in at the same time as your record book but must be kept separate from the record book. No pages should be added to the actual record book!

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).

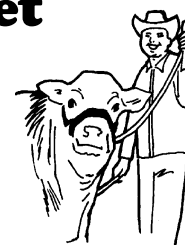
Choose *one* of the following topics:

- **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.
- **Job Shadow:** Complete a portfolio that highlights your job shadow experience. This might include a story of your experience, photos and so on. Be creative! Job shadows can follow any agricultural career. Call the office for suggestions of places that will welcome you!
- **Leather craft:** 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 MSU Montcalm Extension's groundwater resources for more information about "Farm*A*Syst."
- **Foods & Nutrition:** Outline the nutritional content of beef (it varies depending on the cut.) Include sample recipes of "healthy" beef foods.
- **Advertising:** Create an advertisement for the beef industry or for your specific steer market project. The ultimate goal is to market your project to buyers.

Record Book Judge's Comments

Judges should use this space to include any additional comments they may have in regards to this record book. Suggestions for future record books may be valuable!

4-H Beef Record Book Score Sheet (Ages 12 - 15):



4-H Member: _____

4-H Club: _____

<i>Page</i>		<i>Possible Points</i>	<i>Your Points</i>
1 & 2	COVER SHEET & WHY KEEP RECORDS	5	
	All information is completed and has a Leader's signature.		
3	MEMBER ACHIEVEMENT SUMMARY	10	
	All information is neat and complete. All questions are answered.		
4	4-H BEEF PROJECT ANIMALS	10	
	Information complete on PRIMARY animal. All weights/prices recorded.		
5	4-H BEEF PROJECT PHOTOGRAPHS	10	
	A beginning and final photograph is included.		
6	MONTHLY FEED COSTS	10	
	Table completed and totals tabulated.		
7	PROJECT EXPENSES	10	
	Table completed and total expenses calculated.		
8	4-H BEEF WEIGHT RECORD	15	
	Calculations are completed and questions answered.		
9	MARKET BEEF BREAK EVEN PRICE	15	
	Calculations completed and questions completed.		
10	KNOW YOUR CUTS OF MEAT	15	
	Worksheet completed.		
11	EXTRA CREDIT (<i>Projects not required.</i>)	Up to 20	
	Points are at Judge's Discretion.		
	TOTAL POINTS A: 100 - 85, B: 84 - 75, C: 74 - 60, No Rating: 59 - 0	100	