Clare County

MARKET BEEF PROJECT
RECORD BOOK
16 - 19 YEARS OLD

Name: ________________________________

Address: ______________________________

4-H Club: ______________________________

Leader: ________________________________

Age: ________ Number of Years Showing Beef: ________

Record Started: ___________ Record Closed: ___________

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, or family status.

Revised 5/2004
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-CLARE COUNTY
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Harrison, Michigan 48625
Phone: (989) 539-7805
FAX: (989) 539-2791
e-mail: clare@msue.msu.edu
clare County 4-H Beef Program

Member's Achievement Summary

20___

Your Name: __________________________________________

Date of Birth: ____________________  Age (as of 12/31 of this year): ______

School Attending: ________________  Grade: ________________________________

Number of Years Showing Beef in Clare 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, 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   □ Tattoo
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: _________________________________________
Identification Number: _______ Type of Identification:   □ Tag   □ Tattoo
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 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.
# 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.

<table>
<thead>
<tr>
<th></th>
<th>Weight of Animal (lbs.)</th>
<th>Date of Measurement</th>
<th>Method of Weight Measurement</th>
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</thead>
<tbody>
<tr>
<td>START OF PROJECT</td>
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<tr>
<td>END OF PROJECT</td>
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</tbody>
</table>

1) Calculate the weight that your animal gained. \[\text{lbs. of Gain}\]

2) From your data, find the number of days between the start of project and the end of project. \[\text{Days on Feed}\]

3) Calculate the Average Daily Gain

\[
\frac{\text{lbs. of Gain}}{\text{Days on Feed}} = \text{Average Daily Gain} = \text{lbs./Day}
\]

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:

\[
\text{Total lbs. Of Feed Fed: } \text{lbs. (sum this from pg. 7)}
\]

\[
\text{Dry Matter Feed} = \frac{\text{lbs. Of Dry Matter}}{\text{lbs. Of Gain}} = \text{Feed Efficiency} = \text{ }
\]

5) Describe how you can estimate the weight of a cow 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.

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<thead>
<tr>
<th>FEED TYPE</th>
<th>Prior to December</th>
<th>December</th>
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MONTHLY FEED TOTAL  
Find the sum of your monthly costs

\[ \text{Monthly cost (feed)} = \text{Cost of the feed (per lb.) } \times \text{lbs. used.} \]
\[ \text{Monthly cost (hay)} = \text{Number of bales fed } \times \text{cost per bale.} \]
**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.

<table>
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<tr>
<th>Expense Items</th>
<th>December</th>
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<th>February</th>
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<th>Project Totals ($)</th>
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<td>Monthly Feed Total (from pg. 7)</td>
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**TOTAL EXPENSES FOR THIS ANIMAL**
YOUR MARKET BEEF PROJECT BREAK EVEN PRICE

4-H animals are sold by the pound at our Livestock Auction. Find out what bid price (per lb.) you need to get at the Livestock Sale 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: _________________________ lbs. = FW
(From Page 4)

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

What is the current selling price of beef (per lb.)? $ _________________________
This price should be current as of June 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?
**Marketing My 4-H Market Beef Animal**

One of the most important parts of any market animal project is marketing. This includes writing letters and talking to prospective buyers.

How have you marketed your animals in the past?

Contacting potential buyers:

Sending out letters and making personal contacts are good marketing tools for your market project. In your letter, you should introduce yourself, state why you are participating in the Auction, let them know the dates and times of the sale and why you would like them to come, while keeping your letter to only one page with proper margins. Remember, you are representing the Clare County 4-H Program in your letter. With this in mind, you should never pressure the prospective buyer into buying your animal. A better tactic is to invite the buyer to come early to meet you and see your animals. A positive approach will work better.

A good letter should also be personalized. To give your letter a more personal feel, make sure you spell the individual and business’s name correctly and that you PERSONALLY sign each letter. Feel free to personalize your individual letters as well to have the buyer feel like you are only writing your letter to them.

Please attach a sample copy of a marketing letter. If you would like to personalize it, address the letter to: Chris Clover, c/o MSU Extension-Clare County, 225 W. Main Street, P.O. Box 439, Harrison, Michigan 48625.

How many letters have you sent? ____ Phone Contacts? ____ Personal Contacts? ____

AFTER SALE INFORMATION:

How many of your contacts came to see you? ____ How many were at the Sale? ____

Was one of your buyers someone you previously contacted? _____________

What did you do to make your stalls presentable for the prospective buyers?
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**

Choose from **ONE** of the projects below that relate to other 4-H project areas. If you choose an additional project(s), you may receive extra credit at the discretion of the judge. Please check the project that you are completing.

**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 MSU Clare 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.
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<tr>
<th>Page</th>
<th>NAME:</th>
<th>Points Possible</th>
<th>Your Points</th>
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<tbody>
<tr>
<td>1-2</td>
<td>COVER SHEET &amp; WHY KEEP RECORDS</td>
<td>5</td>
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<td>3</td>
<td>MEMBER ACHIEVEMENT SUMMARY</td>
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<td>4</td>
<td>4-H BEEF PROJECT ANIMALS</td>
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<td>5</td>
<td>4-H PROJECT PHOTOGRAPHS</td>
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<td>6</td>
<td>WEIGHT RECORD</td>
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<td>7</td>
<td>MONTHLY FEED COSTS</td>
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<td>8</td>
<td>PROJECT EXPENSES</td>
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<td>9</td>
<td>MARKET BEEF BREAK EVEN PRICE</td>
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<td>10</td>
<td>FINANCIAL SUMMARY</td>
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<td>11</td>
<td>MARKETING</td>
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<td>12</td>
<td>KNOW YOUR CUTS OF MEAT</td>
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<td>13</td>
<td>MARKET BEEF PROJECT</td>
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<td><strong>EXTRA CREDIT:</strong> Additional Project from page 13 (or another worthy project.)</td>
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<td>Points are at Judge’s discretion.</td>
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<td>If project cannot be attached to record book, please add a page to describe how judge can find project.</td>
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