As a member of the 4-H Market Livestock Steer Project, you are required to submit your records as part of an educational project notebook in order to sell your animal at the 4-H Market Livestock Sale. This notebook must be shown to the Oceana County 4-H Market Livestock Committee's Weighmaster at the time of weigh-in and then entered by you in the Educational Notebook Division of the Oceana County Fair on Entry day.

**AGE:** _______

The age you enter depends on how old you are or will be on January 1, 2018

**Number of years in project:** _______

Use this sheet as the first page of your project record book. Fill it out completely. **Please print neatly.**

NAME__________________________________________________________

4-H CLUB________________________________________________________

BREED___________________________STEER’S NAME______________________

LOCATION OF WHERE ANIMAL IS RAISED______________________________
JUDGE’S SCORE/COMMENT SHEET

(PLEASE DO NOT REMOVE, PLACE THIS SHEET IN SHEET PROTECTOR OR GLUE TO COVER). This sheet must be kept free for the judge to write their comments.

This sheet should help each 4-H’er understand their ribbon placing.

A. Specific educational value or worth
   ___ All questions were answered completely
   ___ All calculations were correct
   ___ Calculations were incorrect
   ___ Questions were not completely answered
   ___ Questions were not answered (missed questions)

B. Notebook contains all project records
   ___ Notebook contained all project records and were fully completed
   ___ Notebook contained additional project related information (research materials etc.)
   ___ Project records were incomplete
   ___ There was no additional project related information

C. Accuracy, neatness and general appearance
   ___ Notebook was neat in appearance (typed/hand printed)
   ___ Notebook pages were clean and stain free
   ___ Notebook pages were in order and complete
   ___ Notebook pages were out of order and missing pages
   ___ Notebook was difficult to read and messy
   ___ Notebook had wrinkled and stained pages

Other Comments: _______________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
# TABLE OF CONTENTS

Please keep your notebook in Table of Contents order.

1) GENERAL GUIDELINE INFORMATION

2) JOURNAL OF CARE

3) PROJECT INFORMATION
   a) Information & Feed Expenses
   b) Other Project Expenses
   c) Project Efficiency Information
   d) Marketing

4) SPECIFIC PROJECT KNOWLEDGE
   a) Steer Digestive System
   b) Steer Parts
   c) Steer Retail & Wholesale Cuts Identification
   d) Steer Breeds
   e) Steer Diseases
   f) Miscellaneous Project Knowledge

5) YOUR PROJECT INFORMATION
   a) Project Progress & Management Records
   b) 4-H Knowledge & Activities

6) BUYERS NAMES

7) NON-CLUB/CLUB POINTS SHEETS

8) PICTURES OF YOUR PROJECT (1 page)

APPENDIXES (OPTIONAL):

A. PICTURES OF YOUR PROJECT (additional pictures)

B. FEED INFORMATION (example: feed labels etc.)

C. ADDITIONAL INFORMATION ABOUT YOUR PROJECT
   a. Information you found in reference materials
   b. Information located off the internet
   c. Information gathered from your feed representative
   d. Any other information
This record book is part of your 4-H Market Steer Project. By keeping records up-to-date you will be able to see how much progress you make as you set goals and work to accomplish them. Write neatly and clearly. Feel free to add extra pages.

**PROJECT PICTURES**

Pictures are a required part of this notebook. Taking pictures of your project animal throughout the project will indicate how your animal has grown and developed. Add pictures to your notebook on a separate piece of paper.

**SCORING CRITERIA**

The following breakdown will be used during the judging process of all market livestock notebooks.

A. Specific educational value or worth 30%
B. Creative way of showing what has been learned 10%
C. Notebook contains all project records 50%
D. Accuracy, neatness and general appearance 10%

Note: Reference materials used for the specific project knowledge include:

a. Extension publication 4-H 1188 – Your 4-H Market Steer Project
b. State 4-H Market Project Notebook
c. 4-H Skills for Life Animal Series – Beef 1, 2 & 3
   (All beef leaders have a set of these resources and they are available on a check-out system at the MSU Extension)
d. Other MSU Extension Office notebooks
**JOURNAL OF ANIMAL CARE**

The 4-H Market Livestock Committee is requiring all 4-H Market Livestock members to complete the “Journal of Care”, so the judge may see the time, effort and care you have put into learning about your animal.

** It will be assumed that you walked & fed your animal, but what additional things have you done such as; washed, clipped, trimmed, foot care, health practices, medicines, general maintenance (cleaning living area & feed pans) halter breaking, training, had vaccinated, etc. **

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<th>SEPTEMBER:</th>
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<td>FEBRUARY:</td>
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I, __________________________, do attest and certify that this 4-H’er has cared 4-H’er has
(property owner name (please print))
for this animal in a responsible manner while housed on my property. I also understand
that integrity and responsibility are important to this 4-H experience.

___________________________
Signature of Property Owner (if housed at home have parent sign)  ________________

Date
PROJECT INFORMATION

The start of the project will be the date the exhibitor placed the animal on feed. The end of the project will be weigh-in at fair.

Project Start Date ___________  Project End Date ___________

What month was your steer born? ________________

Please fill in the following information about your steer.

<table>
<thead>
<tr>
<th>Steer’s RFID Number</th>
<th>Breed</th>
<th>Date of Purchase</th>
<th>Price or Value</th>
<th>Starting Weight</th>
<th>Ending Weight</th>
<th>Total Pounds Gained</th>
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Note: Ending Weight - Starting Weight = Total Pounds Gained

MONTHLY FEED RECORD & EXPENSES

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<th>Month</th>
<th>Type of feed used- (grain, silage, hay, pasture, etc.)</th>
<th>Supplements (if any used)</th>
<th>Amount (indicate lbs, bales, etc.)</th>
<th>Cost or Value of feed used for the month</th>
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## MONTHLY FEED RECORD & EXPENSES (cont.)

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<th>Month</th>
<th>Type of feed used- (grain, silage, hay, pasture, etc.)</th>
<th>Supplements (if any used)</th>
<th>Amount (indicate lbs, bales, etc.)</th>
<th>Cost or Value of feed used for the month</th>
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Total Feed Costs for Project  $ ________________
EXPENSES OTHER THAN FEED

The 4-H Market Livestock Committee would like you to keep a running list of all of your expenses -- veterinary charges, bedding, insecticides, trucking, insurance, interest paid on money borrowed, housing etc.

<table>
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<tr>
<th></th>
<th>Vet Charges</th>
<th>Bedding</th>
<th>Insecticides</th>
<th>Equipment/Fitting &amp; Showing Supplies</th>
<th>Trucking</th>
<th>Shearing or Clipping</th>
<th>Advertising/Marketing</th>
<th>Miscellaneous (specify) Yardage would be included here</th>
<th>MONTHLY TOTAL</th>
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PROJECT EFFICIENCY INFORMATION

Value of Animal at Time of Purchase  = __________

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

\[
\frac{\text{Total Feed Cost}}{\text{Total lbs. of gain}} = \text{Feed Cost per Lbs. of Gain}
\]

\[
\frac{\text{Total lbs. of feed fed}}{\text{Total lbs. of gain}} = \text{Lbs. of Feed fed per lb. of Gain}
\]

\[
\text{Total Feed Expense} + \text{Cost of Animal} + \text{Other Expenses} = \text{Total Project Expense (TE)}
\]

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

\[
\frac{\text{Total Expenses (TE)}}{\text{Final Weight (FW)}} = \text{Break Even Price (BE)}
\]

(or total cost per pound to raise your animal)

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

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 or why not? ____________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
MARKETING

One of the most important parts of any market animal project is marketing. This may include writing letters, talking to buyers and making sure that you thank previous buyers in a timely fashion.

- What did you do to market your animal this year?
- If you have participated in the market livestock before what did you do differently in marketing your animal this year?

PROJECT KNOWLEDGE

DIGESTIVE SYSTEM

Word Bank
(Write the correct digestive system part on the correct line in the diagram)

Anus
Abomasum
Small Intestine
Cecum
Reticulum
Esophagus
Rumen
Large Intestine
Mouth
Omasum
PARTS OF A STEER

Write the number next to the correct part listed below

____  Back or Top
____  Hock
____  Poll
____  Brisket
____  Hoof
____  Quarter
____  Cannon
____  Hook or Hip
____  Rear Flank
____  Cod (steer)
  Scrotum (bull)
____  Knee
____  Rib
____  Dew claw
____  Loin
____  Rump
____  Dewlap
____  Lower forerib, fore flank
____  Shoulder
____  Elbow
____  Muzzle
____  Stifle
____  Face
____  Neck
____  Switch
____  Forearm
____  Pastern
____  Tailhead
____  Forehead
____  Pin Bone
____  Throat
____  Forerib
____  Point of Shoulder
____  Top of Shoulder
RETAIL CUTS

A. ___________________________  G. ___________________________
B. ___________________________  H. ___________________________
C. ___________________________  I. ___________________________
D. ___________________________  J. ___________________________
E. ___________________________  K. ___________________________
F. ___________________________

WORD BANK

BRISKET
RIB STEAK
SHORT RIBS
CHUCK ROAST
ROUND STEAK
STEW BEEF
FLANK STEAK
RUMP ROAST
T-BONE STEAK
GROUND BEEF
SIRLOIN STEAK

WHOLESALE CUTS OF BEEF

Fill in the name of number that coincides with the correct part.

___ Shank
___ Round
___ Ribs
___ Plate
___ Loin
___ Flank
___ Chuck
___ Brisket
BREEDS:
(fill in the blank with the correct breed)

1. ________________ Developed as a pure meat animal to produce the largest possible cuts of meat.

2. ________________ Solid black, polled breed that originated in Scotland. They are the most numerous cattle in the US.

3. ________________ Developed as a draft animal, the most important traits are extreme size & strength, they’re the largest cattle in the world.

4. ________________ Large framed, red and white in color, from France.

5. ________________ White faced, red cattle have horned blood lines and polled bloodlines. They are known for their mothering and foraging abilities.

6. ________________ Large muscled, red & gold breed from the French regions of Limosin and Marche.

7. ________________ Large framed, solid white breed from France that are known for their fast growth rates.

8. ________________ Developed in a hot environment this breed’s important traits are disease resistance, heat tolerance & hardiness.

9. ________________ White faced, red or yellow breed from the Simme Valley in Switzerland. Noted for good milk production. American versions are black or red with a blazed face.

10. ________________ Originally called Durhams, this British breed can be red, white or roan in color. They were used for milk production.

11. ________________ Originated in Germany. Selected for meat, milk and work.

12. ________________ Developed in a cold, rocky, harsh environment this breed’s most important traits are small frame size, calving ease and cold weather tolerance.
**DISEASES**

(fill in the crossword puzzle with the disease by using the definitions)

**ACROSS**

1. Common to calves & usually occurs shortly after shipment. Basically a respiratory disease caused by a virus. Signs may be fever, depression, going off feed, light cough & nasal discharge.

3. Viral infection of the skin that causes growths that look like cauliflower. They commonly appear on the neck, shoulder and head.

4. This “overeating disease” progresses so quickly that often no symptoms are noticed before the animal is found dead. Can happen when calf is overfed on grains or other high energy feedstuff.

7. Severe ulcers & sores develop inside calf’s mouth, tongue & inside its esophagus, abomasum & intestinal tract. Often shows signs of severe diarrhea, dehydration & elevated temp. with complete loss of appetite. The diarrhea persists & the general condition deteriorates rapidly.

9. This is when a cow has swallowed metal while eating and it is caught inside the stomach. A nail, wire, any object will settle to the bottom of the stomach & may pierce the wall.

**DOWN**

1. Caused by a bacteria & can permanently blind the animal in one or both eyes. Can be spread to humans. An eye infection.

2. The soft tissue between or around the toes will become tender if the calf stands in soiled, wet pasture. Lameness, soreness & swelling will develop between toes & hairline above affected hoof.

5. This common disease is a fungus infection of the skin surface. Spreads slowly thru groups by direct contact or indirect contact with shared items. May be spread to humans.

6. First signs are bulging of the area between the last rib & hip bone. As gas pressure increases inside the rumen, the entire abdomen enlarges on both sides.

8. Also known as pneumonia this disease is caused by bacteria that may be contracted thru contaminated water or feed. It affects the respiratory system.
PROJECT KNOWLEDGE (continued)

1. Name 3 **types** of stress that your animal may face:
   __________________________,     __________________________,     __________________________

2. Name 3 **signs or signals** of stress you could observe in your animal:
   ______________________________________________________________________________________
   ______________________________________________________________________________________
   ______________________________________________________________________________________

3. What are 3 basic components of meat cuts?
   __________________________,     __________________________,     __________________________

4. Name the 5 nutrient groups:   __________________________,     __________________________
   __________________________,     __________________________,     __________________________

5. Name 3 Animal Agricultural Careers:
   __________________________,     __________________________,     __________________________

6. Why is it important that your animal have a permanent ID?
   ______________________________________________________________________________________
   ______________________________________________________________________________________

7. What measures do you take to protect your feed from pests and contaminants?
   ______________________________________________________________________________________
   ______________________________________________________________________________________
   ______________________________________________________________________________________
PROJECT PROGRESS AND MANAGEMENT RECORD

1. When you selected your market steer what factors did you consider?

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________

2. What was the best feature of your market steer this year? What can use improvement?

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________

3. What steps did you take to ensure your animal stayed healthy? Why were they important?

_________________________________________________________________________________________________________

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_________________________________________________________________________________________________________

4. Explain how you trained and prepared your animal(s) for show.

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________

5. What were your 4-H and project goals for the year?

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________

_________________________________________________________________________________________________________
**4-H ACTIVITIES**

Number of club meetings held: _______  Number you attended: _______

**List any club activities in which you have:**
- participated in
- responsibilities which you have assumed

(for example: Community service events, workshops, judging contest, clinics, offices held)

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<tr>
<th>Activity</th>
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<th>Placing, Position or Comments</th>
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1. What does 4-H mean to you?

_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________

2. List at least 3 ways you helped or taught other 4-H youth in your club, or another club, this year:

_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
MY 4-H STORY

(Interesting things that happened to me and my animal this year, challenges, highlights of my year or anything else I would like to share about my overall 4-H experience)

POTENTIAL BUYER’S NAMES

As part of your 4-H Market Livestock Project, you must personally contact at least five potential buyers before the Oceana County Fair. You are encouraged to seek two new buyers that have not been asked or submitted before. **You also must have at least three different buyers than those of your siblings in the market livestock project.** Please confirm with your buyers their accurate mailing address (example: post office box vs. a street address). The information on page 17 must be completed and taken to the Oceana County MSU Extension Office on or before the due date where it will be **copied** and used to send out letters to your potential buyers. This page will remain in your notebooks. This is a Market Livestock Committee rule. Failure to comply will result in not being able to sell your animal in the 4-H Market Livestock Sale.
4-H MARKET LIVESTOCK POTENTIAL BUYER'S LIST
STEER PROJECT (AGES 15-19)

Name______________________________Club_________________________

Please print business names and complete addresses clearly.

1. Contact Name_________________________________________________
   Business Name_________________________________________________
   Mailing Address_________________________________________________
   Phone________________________________________________________________
   Signature________________________________________________________________

2. Contact Name_________________________________________________
   Business Name_________________________________________________
   Mailing Address_________________________________________________
   Phone________________________________________________________________
   Signature________________________________________________________________

3. Contact Name_________________________________________________
   Business Name_________________________________________________
   Mailing Address_________________________________________________
   Phone________________________________________________________________
   Signature________________________________________________________________

4. Contact Name_________________________________________________
   Business Name_________________________________________________
   Mailing Address_________________________________________________
   Phone________________________________________________________________
   Signature________________________________________________________________

5. Contact Name_________________________________________________
   Business Name_________________________________________________
   Mailing Address_________________________________________________
   Phone________________________________________________________________
   Signature________________________________________________________________

(Must be stamped by the MSU Extension Office)
YOUR PROJECT PICTURES

Please use this page for your project pictures. If you have more than 1 page of pictures please use the appendix section to include those pictures. The judges appreciate captions so they know what the pictures are portraying.