Allegany County Cooperative Extension

4-H Novice Market Beef Project Book



INSERT A PHOTO OF YOUR MARKET ANIMAL HERE

Livestock Interview will be held on the Friday at fair from 9:30-11:30 am in the livestock area.
Project Records will be due into the 4H office first Friday in September. If showing at State Fair they will be due the second Friday in September.

Name: _____

Age (as of January 1st)_____

Years Enrolled in 4-H _____

Date Project Started_____

Date Project Closed _____

Why Records are Important

The objective of a steer project is to give youth an opportunity to develop skills that will advance them in the future. This hands-on opportunity will help youth develop skills like leadership, organization critical thinking, goal setting, time management and communication. The task of keeping records can also help prevent a youth from falling short of their goals and maximize their opportunity to grow, learn and develop as an individual.

What You Need to Get Started

- an interest in raising a steer
- a place to keep and raise a steer
- money to purchase and raise a steer
- equipment to handle, feed and water a steer safely
- support from an adult

Knowledge About Steers

- different breeds and their characteristics
- cattle terminology
- body parts of a steer
- what steers eat to grow efficiently
- common steer behavior

Instructions

1. Use this project record for Market and Non-Market Steer Projects.

2. Keep a separate record for each individual animal.

3. Fill out a new project record book every year for Market and Non-Market Steers.

4. Write the things you do with and without your animal that relates to your steer project.

5. Keep all receipts as proof of money spent for your project. Photo copies of receipts are allowed.

6. Turn in your project records after the market sale by the date given by extension to receive your check. Non-market animals should be turned in by this date as well using true market estimations or actual sale price of animal.

Project Plans

Complete this section after you take ownership of your project.

Why did you choose this individual animal?

_____

_____

How do you plan to care for this animal?

_____

_____

What do you want to learn about your project this year?

_____

_____

How will you ensure your animal is on track for show and market?

_____

_____

Here is Some Terminology to Help You Get Started

Auction- Process where cattle are sold to the highest bidder

Average daily gain- Pounds gained from a starting point to an end point divided by the number of days (ADG)

Birth Weight- Weight of the calf measured within 24 hours of its birth (BW or B. Wt.)

Bloom- Desirable condition of skin and hair

Bull- a male bovine that has not been castrated

Colostrum- First milk given by a female following delivery of her calf; It is high in antibodies that protect the calf from invading microorganisms

Cow- A female bovine that has had at least one calf

Heifer- A young bovine female that has not produced a calf

Hooks- Hip bones

Legume- Any plant type within the family Leguminosae, such as pea, bean, alfalfa and clover

Pin bones- the visible portion of the pelvis; protrudes on each side of the rectum

Steer- A castrated male bovine

Stage- a male bovine that was castrated unsuccessfully

Project Animal's Information

Animal's Name _____

Identification Number and/or Tattoo _____

County Identification Number _____

Breed(s) _____

Gender_____ Date of Birth_____

Date of Purchase _____ Total Purchase Amount $_____

Purchase Weight _____ lbs Purchase Hip Height (inches) _____

Days from Purchase until fair weigh in _____

Estimated Finish Weight_____

Estimated Amount of pounds needed to gain to finish_____

Estimated pounds gained per day until fair weigh in _____

You Have a Project Steer

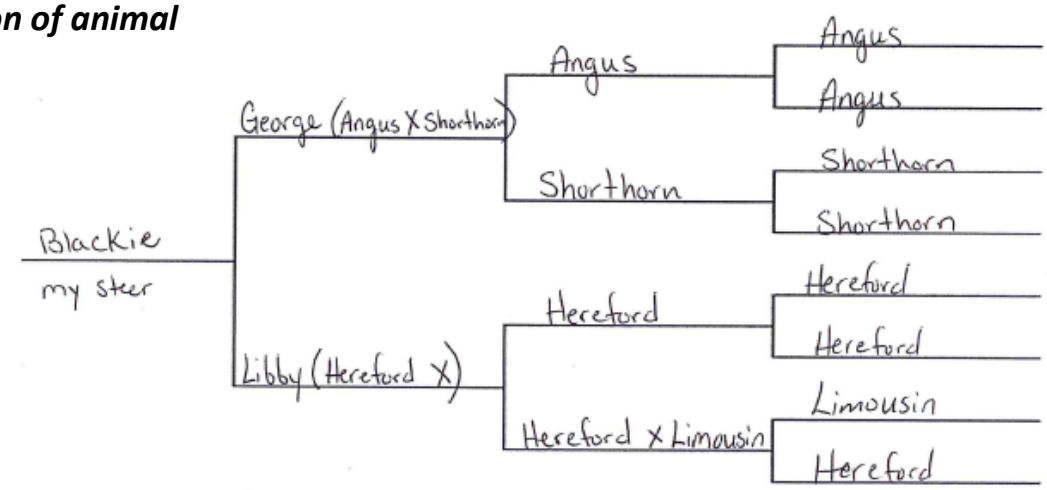
In the first part of your record book read the instructions to ensure you follow them correctly so not to be penalized later for missing something. Also review the fair rules (attached) to ensure your animal gets the proper vaccinations and meets all other requirements such as age and weight for fair.

In this section you will need to document all the information about your steer project at the time of purchase and/or the date you take possession of the steer. If your animal is registered with a specific breed association, copy the names directly into the given pedigree. If your steer is a crossbred fill in what you know even if it is just the breed. An example of each has been provided below.

Registered Animal

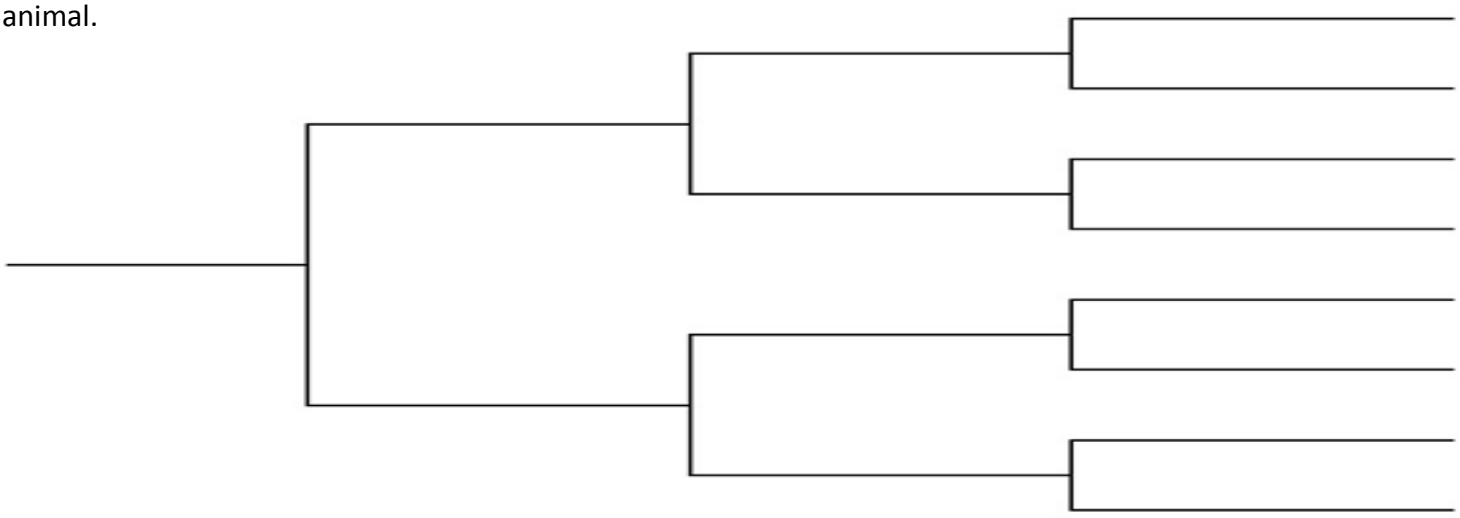


Estimation of animal



Your Project's Pedigree

Fill in as much of your project's pedigree as you know even if it is just different breeds that make up your animal.





Purchase Information

Because every breeder is different you may need to obtain some of the information yourself. Most breeders should be able to give you the animals tag or tattoo identification and location (left ear, right ear, both ears etc.), what breed(s) makes up your chosen animal, gender, birth date, and current weight. The county will be around to tag your animal with a county tag for identification.

Your steer's hip height should be measured in inches, then determine your steer's age in months. Use the charts below get an estimated finish weight. Count the number of days until fair weigh in. Next subtract the estimated finish weight of your steer and his current weight to get the total number of pounds he needs to gain by fair weigh in to be considered a finished steer. Finally, divide the total number of pounds the animal needs to gain by the number of days until fair weigh in to get your estimated average daily gain (ADG). As you move up in age you will work with these numbers more and more to help determine profitability of your steer before you purchase him.

Age (Months)	Frame Score								
	1	2	3	4	5	6	7	8	9
5	33.5	35.5	37.5	39.5	41.6	43.6	45.6	47.7	49.7
6	34.8	36.8	38.8	40.8	42.9	44.9	46.9	48.9	51
7	36	38	40	42.1	44.1	46.1	48.1	50.1	52.2
8	37.2	39.2	41.2	43.2	45.2	47.2	49.3	51.3	53.3
9	38.2	40.2	42.3	44.3	46.3	48.3	50.3	52.3	54.3
10	39.2	41.2	43.3	45.3	47.3	49.3	51.3	53.3	55.3
11	40.2	42.2	44.2	46.2	48.2	50.2	52.2	54.2	56.2
12	41	43	45	47	49	51	53	55	57
13	41.8	43.8	45.8	47.8	49.8	51.8	53.8	55.8	57.7
14	42.5	44.5	46.5	48.5	50.4	52.4	54.4	56.4	58.4
15	43.1	45.1	47.1	49.1	51.1	53	55	57	59
16	43.6	45.6	47.6	49.6	51.6	53.6	55.6	57.5	59.5
17	44.1	46.1	48.1	50.1	52	54	56	58	60
18	44.5	46.5	48.5	50.5	52.4	54.4	58.4	58.4	60.3
	Hip Height (inches)								

Frame Score	2	3	4	5	6	7	8	9
Est. Finish Weight (lbs)	850	950	1050	1150	1250	1350	1450	1550

What Did You Do With and Without Your Project Animal?

Use the following charts to document what you do relating to your project. This can consist of things like deworming, purchase of supplies or feed, participating in skill-a-thon, visiting another farm and many others. Sometimes you may need to estimate cost or values of something. An experience may not always have a value but can be documented here. Also if you earn money back say by selling manure or winning skill-a-thon document it here in the appropriate column (amount received).

Date	What Happened?	Who did it?	Cost or Value ($)	Amount Received ($)
January 20	Bought a steer	My dad and me	$200.00	
February 5	Bought 200 lbs of feed	Mom	$25.00	
April 1	Vet visited and vaccinated	Dr. Jones	$45.00	
July 15	County Fair! Steer Placed First!	Me		$600.00

Date	What Happened?	Who did it?	Cost or Value ($)	Amount Received ($)

What You Do and Financial Summary

Throughout the project year you will be doing various things to take care of your steer project. In this next chart is where you will be documenting this information. As you move up in the steer program this will become more and more detailed. For this year document everything you feel is relevant to your steer project. Even if you pay a fee to attend a clinic without your steer it should be documented. If you participate in skill-a-thon and win prize money or a supply item it should also be documented here.

At the end of the year you will be adding these various items up into four different categories of cost (feed/hay, healthcare, general supplies, and other cost). Other income will also be totaled up to help determine if you made a profit or loss on your steer project. As you advance in age more detailed management will go into your steer project to help you learn how to better manage your steer's profitability.

Marketing a Steer Project

While this aspect is not written directly into the project record it does directly affect your bottom line profit. From the time of purchase of an animal it is important to start thinking of where you are going to sell it. Many different approaches and techniques can be used to help market your steer project. In some cases the breeder in which you purchased your steer project from may be able to recommend some target buyers. It is important that you market your animal with your desired profit in mind. For example if your goal is to obtain four hundred dollars to set aside for college and you know it will cost you approximately two thousand dollars to raise your steer you need to sell your steer for a minimum of two thousand, four hundred dollars. Because steers are not only costly to raise they are costly for your buyer(s) to buy. This is why it is important to market your steer to potential buyers early so they can prepare themselves for the purchase of your steer on sale night. As you advance through the steer project you will be given more tools and ways to help calculate profitability however none of this will matter if you don't market your steer just as diligently as the effort put forth into raising him.

Project Summary

Use this section to determine how well you grew your project. Use the information you recorded in the previous charts to answer the questions and summarize your profitability.

Purchase Cost $_____ Purchase Weight_____lbs

Total cost of feed/hay $_____ Total cost of general supplies $_____

Total cost of health care $_____ Other total cost $_____

Target-finish weight _____lbs Final weight_____lbs

Final sale price $_____ Total of other income $_____

Final Sale Price and other income $_____

Total of all cost including purchase price $_____

Loss or Profit earned (+/-) $_____

Final weight _____ - Purchase weight _____ = _____

Days grown (number of days from start of project until final weigh in date)_____

Pounds gained per day (pounds gained divided by days grown) _____

Final weight _____ - Target weight _____ = _____

How did you do and what can you do differently next year to increase profitability of your project?

_____

_____

_____

Summing up The Year's Experience

Answer this page of questions before turning in your project record. Answering these questions will help the program educators better understand where they can help improve the program for future years. It will also help you make realizations about your experience of raising a steer.

What You Experienced

Where did you keep your animal? _____

_____

Explain how you took care of your animal? _____

_____

_____

How much and what did you feed your animal? _____

_____

_____

What did you do to keep your animal healthy? _____

_____

_____

What did you do to keep your animal and equipment clean? _____

_____

_____

What did you do to groom and train your animal? _____

_____

How did you market your animal? _____

_____

_____

What was one skill you learned or improved this year? _____

_____

_____

What was one goal you met this year? _____

_____

_____

What would you like to learn or do next year? _____

_____

_____

Portions of this Project Book were adapted from publications from Penn State University's College of Agricultural Sciences and Penn State Extension