



2021-2022 Market Animal Show Record Book

Species: (circle all that apply) Steer Hog Lamb Goat

Division: (circle your age division)

Junior (9-11 as of Sept.30, 2022)

Intermediate (12-13 as of Sept.30, 2022)

Senior (14-19 as of Sept.30, 2022)

Exhibitor Information

Name: _____ Birthdate: _____

Parents/Guardians: _____

4-H Club/FFA Chapter: _____ Club Leader/FFA Advisor _____

School: _____ Grade in School _____

Member Statement:

I hereby certify that I have personally kept records on this project and have personally completed this record book.

4-H / FFA Member's Signature: _____ Date: _____

Record Approval: The 4-H/FFA member has completed this record book to a satisfactory level.

Parent/Guardian Signature: _____ Date: _____

4-H Leader/FFA Advisors Signature: _____ Date: _____

Steer, Lamb, and Hog record books are due by 5 p.m.
Monday May 23rd, 2022 at the Extension Office.

Goat record books are due by 5 p.m. Monday August
15th, 2022 at the Extension Office.

Why Keep Records?

By keeping records, you will be able to see how much progress you make this year and over the course of your 4-H/FFA career as you set goals and work to accomplish them.

Good records will:

- Help you learn about animals, their rate of growth, the feed they require, the cost of the feed they require and their habits.
- Increase understanding of your project's financial outcome.
- Assist you in gathering information to market your animal.
- Improve your management practices.
- Keep track of your project activities and learning experiences.
- Allow you to better plan for future livestock projects.

If you have questions or need help on this record book, please contact your leader, parent/guardian, agricultural educator, or extension office.

PLEASE PRINT OR WRITE CLEARLY.

Project Information

Submit **ONE** completed record book for each exhibitor.

Project Planning

This page should be completed at the start of your project and shared with your 4-H Leader/FFA Advisor.

What do you want to learn this year?

What do you hope to accomplish?

What new activities do you want to try this year? (Examples: Contests, Shows, workshops and ext.)

What factors will you consider when selecting your project (breed, age, price, etc....)

Where did you get your project animal(s) from? Reasons for selecting that breeder, farm, or sale?

How much do you expect to spend on your project?

- Purchase price or value of the animal(s) \$ _____
- Cost of Feed \$ _____
- Cost of Supplies \$ _____
- Other Cost \$ _____
- Expected Total Expenses** \$ _____

How will you pay for your project animal and expenses?_

Health Treatment Record

This should include a record of any health-related activities

Deworming	Vaccinations	Vitamin Injections
Antibiotic Treatments	Mange/Lice Treatments	Other Health Treatments

**** Make sure you list the products that were given at nominations. ****

Animal ID	Date	Condition Being Treated	Treatment Administered	Withdrawal Time (On Label)
			Product Used: Dose:	
			Product Used: Dose:	
			Product Used: Dose:	
			Product Used: Dose:	
			Product Used: Dose:	
			Product Used: Dose:	
			Product Used: Dose:	
			Product Used: Dose:	
			Product Used: Dose:	
			Product Used: Dose:	

I certify that I produced this animal, it was not fed any prohibited feedstuffs and I have listed **ALL** products and treatments they received while in my care.

Youth Signature: _____ Parent/Guardian Signature: _____

How to Calculate Monthly Cost of Feeds

(complete this page for one animal)

Grain

Cost of a bag of grain: \$ _____ / _____ lbs in the bag = \$ _____ per lb

Amount fed: _____ lbs per day X _____ days (in month) = _____ lbs

Monthly cost of grain: \$ _____ X _____ lbs = _____ (monthly cost of grain)
(cost per lb grain) X (total amount fed)

Hay

Cost of a bale of hay: \$ _____ / _____ lbs per bale = \$ _____ per lb

Amount fed: _____ lbs per day X _____ days (in month) = _____ lbs

Monthly cost of hay: \$ _____ X _____ lbs = _____ (monthly cost of hay)
(cost per lb of hay) X (total amount fed)

Supplements

Cost of package: \$ _____ / _____ oz or lbs per container = \$ _____ per oz or lb

Amount fed: _____ oz or lbs per day X _____ days (in month) = _____ oz or lbs

Monthly cost of Supplements: \$ _____ X _____ oz or lbs = _____ (monthly cost of supplement)
(cost per lb of hay) X (total amount fed)

Monthly Feed Record

** Type of feed should be expressed in pounds, if you are including hay you can write the number of bales per month**

<u>Feed Types →</u>										
<u>Month</u> <small>(write in the months)</small>	<u>Pounds</u>	<u>Cost</u>	<u>Pounds</u>	<u>Cost</u>	<u>Pounds</u>	<u>Cost</u>	<u>Pounds</u>	<u>Cost</u>	<u>Monthly lbs.</u>	<u>Total Cost</u>
<u>TOTALS</u>										

Number of animals reflected on the chart: _____

Income

Species	Tag ID	Final Weight	Price per Pound	Premiums (located on page 21)	Other Income	Total Income
TOTAL INCOME						

Expenses

Species	Tag ID	Cost of Animal	Check Off, Commission, & Entry Fee (Located on Page 21)	Carcass Contest	Feed Cost	Other Cost	Total Expenses
TOTAL EXPENSES							

Project Financial Summary

<u>Income</u>	
A. Value of animal(s) sold	
B. Miscellaneous Income (if any)	
C. Show Premiums Won	\$
Total Income = Add (A+ B + C)	\$
<u>Expenses</u>	
1. Purchase price or value of animal at beginning of project	\$
2. Equipment Expenses	\$
3. Feed Expenses	\$
4. Health Expenses	\$
5. Miscellaneous Expenses	\$
Total Expenses = Add (1 + 2 + 3 + 4 +5)	\$
Financial Summary (Total Income – Total Expenses)	Profit/Loss (circle one)

Questions

1. If you earned a profit, what will you do with the money?

2. What will you do differently next year?

Live Animal Data

Pick two of your market animals and fully complete the table for those animals.

Live Animal Data							
Animal ID	A Ending Weight	B Beginning Weight	C Total Pounds Gained ($A - B = C$)	D Total Days on Feed	Average Daily Gain ($C \div D$)	E Total Pounds of Feed the animal ate	Feed Efficiency (Conversion) ($E \div C$)

Livestock Marketing

List five potential buyers you visited or sent letters to.

Please attach one copy of a thank you note and one copy of your buyer letter.

1	Name of Business or Buyer: _____ Letter sent? Yes or No Date: _____ Visited? Yes or No Date: _____
2	Name of Business or Buyer: _____ Letter sent? Yes or No Date: _____ Visited? Yes or No Date: _____
3	Name of Business or Buyer: _____ Letter sent? Yes or No Date: _____ Visited? Yes or No Date: _____
4	Name of Business or Buyer: _____ Letter sent? Yes or No Date: _____ Visited? Yes or No Date: _____
5	Name of Business or Buyer: _____ Letter sent? Yes or No Date: _____ Visited? Yes or No Date: _____

Buyer Information

Please list the buyers who purchased your animals at the sale.

Buyer	Tag Number & Species	Date Thank You Letter was Sent

Section 8: Production Records, Calculations or Project Knowledge

There are a number of templates and worksheets available at the end of this guide, plus additional resources online and from your local Extension office.

Junior Record Book- (pick one)

1. Draw your species of animal and label parts.
2. Write a short report (5 - 10 sentences) about a breed of animal.
3. Draw, label, and explain 10 pieces of equipment you use for your market animal project.

Intermediate Record Book- (pick one)

1. Write a short report (10 to 15 sentences) on a disease that may affect your animal. Include information of cause, symptoms and treatments.
2. Drug Label identification: Provide a copy of a label from a medication you gave your animal and label the parts (include drug name, approved uses, animal species and class, withdrawal time, storage requirements, route of administration, dosage, active ingredients, cautions and warnings)
3. List five nutrients your animal needs, how you provided those nutrients and why those nutrients are important for your animals.
4. Draw & Label your animal's digestive system

Senior Record Book- (pick one)

1. Draw and label 10 retail cuts from your species, which wholesale cut they come from, and the cookery.
2. EPD's – describe what they are and how you use them when making breeding decisions with your project animals
3. Complete the attached Feed Tag Information's and Summary Sheet
4. Identify one problem or issue in agriculture today, explain why it's a problem, and present ideas on how to fix it. This report should be 20-30 sentences long.

Section 8: Production Records, Calculations or Project Knowledge

If you need more space use additional sheet and attach to this page

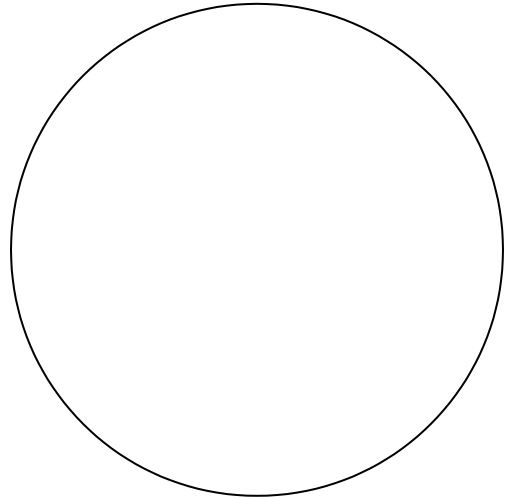
Pick one of the topics above from your age division and complete it

Feed Summary

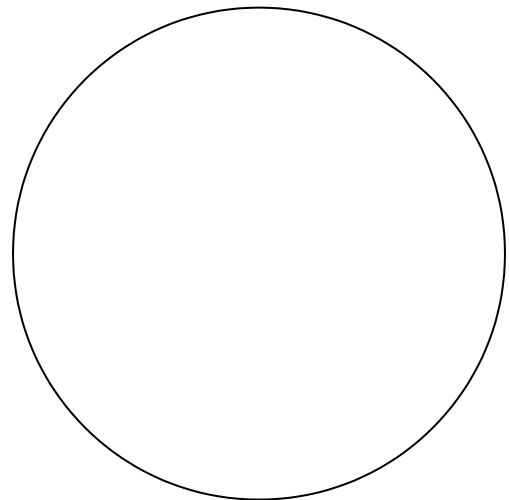
(Section 8 Worksheet for question #3 Seniors Only)

Calculate the total amount of feed used and the amount spent of feed. Leave any blank that do not apply. Complete the pie charts below.

<input type="text"/>	Total Pounds of Grain	_____	lbs
<input type="text"/>	Total Pounds of Hay	_____	lbs
<input type="text"/>	Total Pounds of Supplements	_____	lbs
	Total Pounds Fed	_____	lbs



<input type="text"/>	Total Cost of Grain	_____	\$
<input type="text"/>	Total Cost of Hay	_____	\$
<input type="text"/>	Total Cost of Supplements	_____	\$
	Total Feed Cost	_____	\$



Question

How do these pie charts compare?

Feed Tag Information

(Section 8 question # 3 Seniors Only)

Please use a separate page to attach a tag or label from the feed being used by the project animal. If an home-made mix is used please describe the mix.

1. What production level or type of animal is this feed designed for?
(*Ex. market animal, lactating animal, growing animal, maintenance, etc....*)
2. What is the Crude Protein level of this feed?
3. What is the main ingredient in this feed?
(Hint: if the answer is not clear, it's probably the first ingredient listed.)
4. Is this a medicated feed?
5. What is the active drug ingredient?
6. Is there a withdrawal time of this drug ingredient ?
7. The TDN (Total Digestible Nutrients) level of a feed indicates energy value
Please calculate the TDN level of this feed. Crude fiber level can be found on your feed tag.

Formula = {84—(1.5 x % Crude Fiber)} - _____% TDN

(Example {84—(1.5 X 15)} = 61.5 % TDN

Project Photos

Record Book Rubric

Total Amount you can receive	Description	Total points awarded
15 points	This year's project goals	
10 points	Activities Page	
10 points	Animal Information	
10 points	Health Records	
10 points	How to Calculate Monthly Cost of Feed	
10 points	Monthly Feed Records	
25 points	Income/ Expenses Project Financial Summary	
15 points	Live Animal Data	
10 points	Livestock Marketing <u>(to get full points please attach ONE copy of your buyers letter and thank you note)</u> Buyer Information	
25 points	Production Records, calculations or project knowledge	
10 points	Project photos	
TOTAL POINTS		

<u>Awards</u>		
Blue	150-140 points	
Red	139-130 points	
White	129-120 points	
Participation	119-below	

Judges Comments:

Production Calculations

Average Daily Gain (ADG): The average amount of weight an animal has gained each day for a given period of time that the animal has been on feed.

$$\text{ADG} = \text{End Weight} - \text{Beginning Weight} / \text{Days on Feed}$$

Example: Market Lamb

- 120 lb. end weight
- 75 lb. beginning weight
- 60 days on feed

$$\text{ADG} = (120 - 75) = 45$$

$$\text{ADG} = 45 \text{ lbs. gained} / 60 \text{ days on feed}$$

$$\text{ADG} = 0.75 \text{ lbs per day}$$

Feed Conversion (FC): The amount of feed required for each pound of an animal gains.

$$\text{FC} = \text{Total pounds of feed} / \text{Total weight gained}$$

Example: Market Goat Project

- Goat ate 150 lbs. of feed (hay, grain, etc.)
- The goat gained 50 lbs. while on feed

$$\text{FC} = 150 \text{ lbs of feed eaten} / 50 \text{ lbs gained}$$

$$\text{FC} = 3 \text{ lbs of feed for each pound gained}$$

Feed Cost Per Pound of Gain: The amount it costs for each pound gained by an animal

$$\text{Feed Cost per lb of gain} = \text{Total cost of Feed the animal ate} / \text{pounds the animal gained}$$

Example: Market Hog Project

- Your pig ate 15 bags of feed at \$20.00/bag (\$300.00)
- The pig gained 200lbs

$$\text{Feed Cost per lb of gain} = \$300 / 200 \text{ lbs.} = \$1.50 \text{ per pound of gain}$$

Break Even Cost: the total amount of money an animal must be sold for to cover all the costs associated with raising the animal.

$$\text{Break Even Cost} = \text{Total Cost of all Inputs} / \text{Sale Weight}$$

Example: Market Lamb Project

- 125 lb Market Lamb
- Total cost for project \$693.00

$$\text{Break Even Costs} = \$693.00 / 125 \text{ lbs}$$

$$\text{Break Even Costs} = \$5.54 \text{ per lb}$$

Estimated Carcass Weight (ECW): How much your animal's carcass is expected to weigh once the animal has been processed.

ECW = live weight X dressing % (use average for the species)

Dressing Percentage Averages

- Hogs – 70%
- Steers – 60%
- Lambs – 50%
- Goats – 45%

Example: Market Hog Project

- Live weight – 265lbs
- Average Dressing Percent for hogs =70%

ECW = 265 X 70%
 ECW = 265 X .70
 ECW = 185.50lbs

Performance Ratio: a measure of how your animal's performance for a given trait compares to the average performance of the group for that trait. You could do this for ADG (average daily gain) or carcass traits if your fair collects carcass data. Briefly explain what the number means.

Ratio = (individual animal value for trait ÷ group average for trait being measured) x 100

Example: Beef Project – Average Daily Gain

- Your animal's ADG value = 2.85 lbs/day
- Group average for ADG = 3.05 lbs/day
- This means your animal performed 6% below the other animals in the group

Ratio = 2.85 ADG ÷ 3.05 ADG
 Ratio = .9344 x 100
 Ratio = 93.44

Sale Commission Fee – All Species \$5.00

Promotion & Research (Check Off's)

- \$1.00 Steers – Beef Check Off
- \$0.50 Lamb
- \$0.004 X gross weight of Hog

Entry Fees

- \$15.00 per steer
- \$10.00 per Hog, Lamb, & Goat

Carcass Contest - \$5.00 per head

Class Premiums					
1 st Place	2 nd Place	3 rd Place	4 th Place	5 th Place	All Others
\$15.00	\$13.00	\$11.00	\$9.00	\$7.00	\$5.00