



Virginia 4-H Market Beef Project



Senior Record Book (for youth ages 14 - 19)

Name _____ Date of Birth _____ Age _____

Physical Address _____

Mailing Address (if different) _____

What county/city 4-H program are you enrolled in with this project _____

4-H Club _____ Years in 4-H (including this year) _____

Is the place where you keep your project animal registered with the National Animal Identification System (NAIS) Yes No

Date Project Started _____ Date Project Completed: _____

Member Statement:

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

4-H Member's Signature _____ Date: _____

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

Parent/Guardian Signature: _____

4-H Leader's Signature: _____

Revised 2007

Instructions for Using this Record Book

This record is designed to be the place for you to keep records on your animal projects. Read through the book carefully and complete all sections requested (for example, project planning, feed and health care purchases, supplies and tools, results from shows, and a financial summary). Do not leave any sections blank unless they do not relate to your project animal. It is important that you do your own work, but ask your 4-H leader, Extension Agent, parents, or other 4-H volunteers for help when you do not understand something.

This project record book is for record-keeping only. Information about how to raise these animals can be found in various 4-H Project Guides. Copies of project guides may be obtained from your local Virginia Cooperative Extension office.

1. Read through this book and familiarize yourself with the kinds of records you will need and where information should be recorded. Discuss the book with your parent and/or 4-H leader.
2. Complete essential information when you first start your project, such as the cover page and the project planning page. Share your goals with your 4-H leader.
3. Keep your records up to date. Record information as it occurs. Consider setting aside specific times during the project when you will work on your record book.
4. Write neatly and legibly. Use only one color ink.
5. Include at least one photograph of you with your project animal, but do not include more than two pages of photos. Additional clippings should be displayed in a scrapbook, not this record book.
6. Maintain your book in a 3-ring notebook/binder or folder.
7. Write a project story that captures what happened during your project. Discuss your goals, your activities, your challenges, and your accomplishments. Project stories must be at least ten sentences.

Revised 2006 by: Kelly Mallory, Extension Agent, 4-H Youth; Kaci Coppedge, Extension Agent, 4-H Youth; Cyndi Estienne, Extension Agent, 4-H Youth; Mary Elizabeth Williams, Extension Agent, 4-H Youth; Jocelyn Dailey, Extension Agent, 4-H Youth; Leslie Prillaman, Extension Agent, 4-H Youth; Bertha Durbin, 4-H Volunteer; Sandra Turner, 4-H Volunteer; Mark Walberg, Extension Animal Science Specialist, Virginia Tech; Celeste Crisman, Extension Equine Specialist, Virginia Tech, David Winston, Extension Diary Specialist, Virginia Tech.

www.ext.vt.edu

Virginia Cooperative Extension programs and employment are open to all, regardless of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Mark A. McCann, Interim Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; Clinton V. Turner, Interim Administrator, 1890 Extension Program, Virginia State, Petersburg.

Project Planning

This page should be completed at the start of your project and share it with your 4-H leader.

1. Set at least three goals for yourself this year.

- What do you want to learn?

- What do you hope to accomplish?

- What new activities do you want to try?

Please tell us about your project animal (check all that apply)

- I purchased my project animal
- My project animal is bred & owned (from a cow on my family farm)
- I lease my project animal
- I board my project animal at another farm

Project Planning

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

2. Where will you get your project ? Reasons for selecting that breeder, farm, or business?

3. How much do you expect to spend on your project?

Purchase price or value of the animal \$ _____

Cost of Feed \$ _____

Cost of Supplies \$ _____

Other Costs \$ _____

Expected Total Expenses \$ _____

4. How will you pay for your project animal and expenses?

After completion, show this page to your 4-H leader for approval.

Leaders Signature: _____ Date: _____

Market Beef Inventory Record

one chart for all animals

Beginning Animal Inventory						Closing Animal Inventory			
Identification of the Animal			Date Obtained		Beginning Information		Kept	Sold	
Animal ID	Description (breed, color, etc...)	Sex	Raised (Born)	Purchased	Starting Weight	Animal Value or Purchase Price	Value at End of Project	Final Weight	Total Selling Price

** Call your local Livestock Market or visit the VDACS Market News Website
<http://www.vdacs.virginia.gov/livestock/index.shtml> to find market value of your project animal. **

Animal Care and Management

Your project requires regular care and management. List the things necessary to take care of your project animal(s).

Include the following:

- Feeding and watering practices
- Grooming (clipping, trimming, foot care, etc.....)
- Health practices and medicines
- General Management (cleaning living area and feed pans, halter breaking, training, etc...)

Daily—Things done every day
<i>Example: fed animal , gave fresh water, spent time with animal</i>
Weekly—Things done once a week
<i>Example: Cleaned feed and water containers, gave new bedding</i>
Monthly—Things done once a month
<i>Example: Groomed my animal</i>
Yearly—Things done one time or occasionally throughout the year
<i>Example: Trimmed feet</i>

Equipment and Supply Inventory

At the beginning of the 4-H year, take an inventory of what equipment and supplies are on hand. If the cost is not known, estimate the replacement value. Add new equipment or supplies you purchase to the list. If equipment is shared between 4-H members, divide the cost between members. (Example: 1 set of clippers shared between 3 members $\$250/3 = \83.00 each)

Beginning Inventory - Equipment on hand at beginning of the project year
Remember that these are not "new" items. Wear and tear occurs on equipment we use again from year to year. These items will depreciate (go down in value). Please take this into account when putting a dollar value on your inventory items.

Amount & Kind	Beginning Value	End Value
<i>Ex: 3 used rope halters</i>	<i>\$12.00</i>	<i>\$9.00</i>

New Inventory - Equipment and supplies purchased during the project year
Wear and tear occurs on equipment as we use it. New items will depreciate (go down in value). Please take this into account when putting a dollar value on your inventory items.

Amount & Kind	Beginning Value	End Value
<i>Ex: new show halter</i>	<i>\$80.00</i>	<i>\$75.00</i>
<i>fly Spray</i>	<i>\$15.00</i>	<i>\$0.00</i>
Total Inventory Value	\$	\$

\$	-	\$	=	\$	Equipment Expenses
----	---	----	---	----	---------------------------

Worksheet - How to Calculate Monthly Cost of Feeds

This worksheet provides you with the formula and practice on calculating how much you spend per month on feed. This information is needed to complete page 9. If you feel comfortable with this calculation you do not need to complete this page just move on to page 9.

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 =
(Cost per lb grain) (Total amount fed) (Monthly Cost of Grain)

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 =
(Cost per lb of hay) (Total amount fed) (Monthly Cost of Hay)

Supplements

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

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

Monthly cost of supplements: \$ _____ X _____ oz or lb. =
(Cost per oz or lb.) (Total amount fed) (Monthly cost of Supplement)

Feed Records and Expenses

Keeping good feed records is important. A good practice is to enter your feed expenses when you buy feed. Put a calendar in the barn and write down the amount and the kind of feed used each day. At the end of the month, total each kind of feed used and its cost and record the information below. Home-raised feeds should be valued at market price - what it can be sold for.

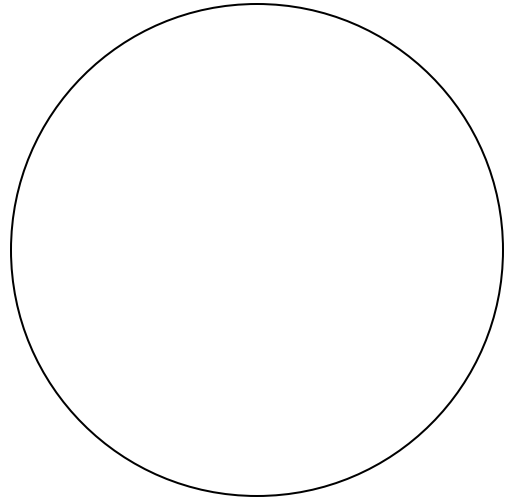
<u>Month</u>	<u>Type of Feed</u> <small>(grain, silage, hay, pasture, etc.)</small>	<u>Amount</u> <small>(indicate lbs, bales, etc.)</small>	<u>Cost or Value</u>
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs
____ days	_____	_____	\$ _____ \$ _____ \$ _____ Total Costs

TOTAL FEED COSTS FOR PROJECT \$ _____

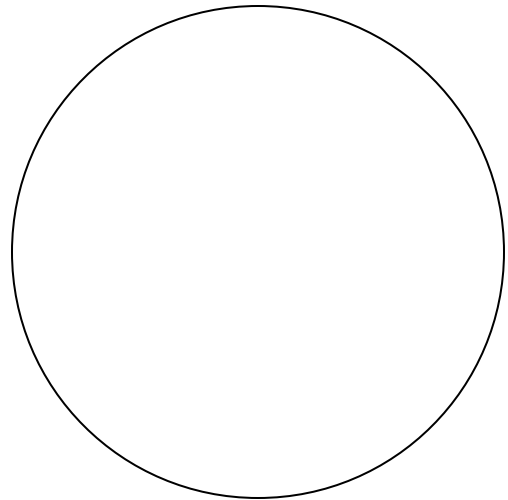
Feed Summary

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

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

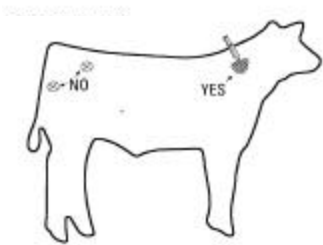
Market Beef Health Treatment Record

Deworming
Antibiotic Treatments

Vaccinations
Mange/Lice Treatments

Vitamin Injections
Other Health Treatments

Animal ID	Date	Condition Being Treated	Treatment Administered	Withdrawal Time (On Label)	Treatment Cost
			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:		
Total Cost of Treatments \$					



Suggestions for Proper Administration of Animal Drugs

- Properly restrain the animal before giving injections
- Give medications according to label instructions. Subcutaneous (Sub-Q) injection go under the skin in the neck. Intramuscular (IM) injections go in the neck muscle . If given an potion ALWAYS choose Sub-Q.
- Use sterilized syringes and needles. DO NOT transfer needles back and forth from animal to bottle because you may contaminate the bottle

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: _____

Other Health Care Expenses

Anything health related that does not fit into treatment category like health papers from the Veterinarian or hoof trimming

Date	Description	Cost \$
<i>Example: July 1st</i>	<i>Health Papers for the County Fair</i>	<i>\$25.00</i>
Total Other Health Care Expenses (if any)		\$

	+		=	
Total Cost of Treatments (Page 12)		Total Other Health Care Expenses (Page 13)		Total Health Care Expenses

Miscellaneous Expenses or Fees

List any expenses that do not fit into one of the previous categories. Examples: Entry fees, transportation, breed association dues, registration papers, etc.

Date	Description	Cost \$
<i>Example 7/1</i>	<i>County Fair Entry Fees</i>	<i>\$40.00</i>
Total Miscellaneous Expenses		\$

Miscellaneous Income

Any income from the sale of products from your project animal. (This is unlikely for a market project)

Date	Description	Income \$
Total Miscellaneous Income		\$

Show Ring Record

Record the date and name of any animal shows attended, placing out of the number of entries in the class, and any premium money earned.

Date	Show	Class	Placing	Premiums Won
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
			----- out of -----	
Total Premiums Won\$				

Project Financial Summary

One goal of the animal project is to teach budgeting, marketing and money management skills. The following chart will help you evaluate the financial status of your project.

<u>Income</u>	
A. Value of animal(s) sold pg 5	
B. Show Premiums Won pg 15	\$
C. Miscellaneous Income pg 14	
Total Income = Add A + B + C	
<u>Expenses</u>	
1. Purchase price or value of animal at beginning of project pg 5	\$
2. Equipment Expenses pg 7	\$
3. Feed Expenses pg 9	\$
4. Health Expenses pg 13	\$
5. Miscellaneous Expenses pg 14	\$
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?

3. How does this summary compare to what you planned or estimated? (see page 4)

Market Beef Production Record

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 ÷ D)	E Total Pounds of Feed	Feed Efficiency (Conversion) (E ÷ C)	Cost per Pound of Gain (Total expenses ÷ Lbs gained)	Break Even Price (Total Expenses ÷ Finished Weight of Animals)

Carcass Data								
** Please complete this section if your animal's carcass was evaluated. Fill in areas where you received data**								
Animal ID	Carcass Weight	Quality Grade	Dressing % (Carcass wt ÷ Live wt)	Backfat (inches)	Rib-eye Area (REA) (square inches)	Yield Grade	Percent Retail Product	Carcass Value

Average Daily Gain—This is the average amount of weight your project animal will put on each day. It is calculated by taking the current weight—beginning weight and divide by the number of days the animal has been on feed.

Feed Efficiency—The measure of how well an animal converts the nutrients in the feed they eat into muscle & fat.

Cost per pound of Gain - This is calculated by adding up all the cost associated with raising an animal (feed, equipment, health care etc...), then divide by the total pounds gained.

Dressing Percent—Dressing percentage is calculated by dividing the carcass weight by the live weight of the animal, and expressing it as a percentage. This figure represents the meat and skeletal portion of an animal relative to its live weight. The industry is interested in the dressing percentage because it establishes the weight upon which payment is calculated for animals sold on a live weight basis. Dressing percentages are highly variable because they are influenced by factors such as live weight, fat level, age, sex, diet, breed, distance trucked, and the type of market where cattle are sold.

Note: You may photocopy pages 18 - 20 and add to other project books if you have more than one project type.

4-H Activities

Number of club meetings held: _____ Number you attended _____

What 4-H committees did you serve on?

Did you hold an officer position in your 4-H Club? Yes No

If Yes, which one ?

- President Vice President Secretary Treasurer
 Reporter Chaplain Other _____

What other 4-H leadership roles did you hold this year? (camp counselor, teen leader, etc...)

What other 4-H clubs did you belong to and/or what other projects did you complete?

4-H Activities

(community service, workshops, camps, Share-the-Fun, county contests, judging teams, etc....)

Activity	Date	Location	Placing or Comments

4-H Story

The motto of 4-H is "learn by doing". Each year we learn something new by participating in a 4-H project. Please write a story that explains:

- ***What you have learned***
- ***New skills you have gained over this past year in 4-H***
- ***What goals you accomplished. If you accomplished your goals, how did you do so?***

Other Examples that you may consider writing about include: Something that happened that was funny, sad or exciting, Challenges you faced and how you overcame them, Who helped you with your project and how they contributed, Things you are most proud of. Feel free to relate your 4-H experience to other parts of your life (school, home, family, friends, etc.). Senior members' stories must be at least ten sentences.



Project Photos



** Please limit yourself to a maximum of two photo pages. **
Additional memorabilia should be displayed in a scrapbook or 4-H portfolio.

***Optional—Record Book Scorecard**

4-H Members: Leave this page blank.

The person judging your book will complete the score card.

<u>Points Possible</u>	<u>Scoring Criteria</u>	<u>Points Awarded by Judge</u>
10	Neatness (legible writing, one color ink, well-organized)	_____
15	Completeness (all pages and sections, complete thoughts and ideas)	_____
5	Signatures obtained on front cover (member, parent, leader)	_____
10	Accuracy (no math errors, factual statements made)	_____
20	Project Work (goals set, evidence of work throughout the year, goals accomplished, book completed by 4-H member, not an adult)	_____
10	4-H Participation (meetings, clinics, workshops, camps, contests, educational experiences)	_____
20	Project Story (well-written, original, creative, complete thoughts, grammar, mechanics)	_____
10	Photos, clippings, etc. (include at least one photo, not more than 2 pages)	_____
100	Total Points Earned by 4-H'er	_____

Scoring: 90-100 Blue, 75-89 Red, 74 or below White

Judges' Comments: