



## Purpose

The purpose of the 4-H Dairy Cattle Project is to:

- To become aware of the scope and economic significance of the dairy industry.
- To acquire skills in dairy production through ownership and the care of dairy animals.
- Learn and practice principles of cleanliness and sanitation as applied to the production and care of dairy products.
- To understand the business aspects and economics of purchasing animals, feeds, facilities, and equipment for a dairy project.
- Develop integrity, sportsmanship, and cooperation.
- Develop leadership abilities, build character, and assume citizenship responsibilities.

## 4-H Dairy Cattle Record Book Guidelines:

It is suggested that a copy of this book be made for use as a work copy. Records can then be transferred into your final copy of the book for submission.

- Your Record Book should start with the **purchase date of your animal or September 1st of the current 4-H year.**
- Section 1 and 2 must be completed at the beginning of your project. Complete the other sections throughout the 4-H year, do not wait until the end of the year to start your book.
- Your Care and Feed Record Book should contain information relating only to your current project animal.
- **Do not use ditto marks anywhere in this book.**
- Always double-check your work, especially your math calculations. Have someone check your Project Essay for spelling and grammar before writing it in your final copy.
- Your Record Book must be handwritten or typed **BY YOU, THE 4-H MEMBER.** Juniors may use pencil or pen (blue or black ink), Intermediates & Seniors must use pen (blue or black ink).
- Your project Essay may be hand written or typed. If it is typed, it must be printed on 8 ½ X 11, single-sided paper, **in a 12-point font, double-spaced, hole punched** and inserted. If you type your essay or write it on a separate sheet of paper **DO NOT TAPE THE STORY TO THE PAGES, USE A HOLE PUNCH AND INSERT THE PAGES.** Write a note on the first page of the essay section to **“SEE ATTACHED”.**
  - Junior members (age 8-10) Essay length is at least one (1) page.
  - Intermediate members (age 11-13) Essay length is at least two (2) pages.
  - Senior members (age 14-18) Essay length is at least three (3) pages.
- All sections must be completed, or an indication must be made that the section does not apply to your project.
- All Signature/Initial lines must be hand signed. Electronic signatures will not be accepted. Pages with an initial line must be initialed by the youth or the work will not be considered for grading by 4-H.







**Section IV: PROJECT ANIMAL INVENTORY**  
*(Section must be completed by County Fair Check In)*

List all animals you own at the beginning of the project and add animals you purchased, or animals born during the project year. Animals sold during the year should also be recorded under **INCOME-Animals Sold**. *Animals sold should have a \$0.00 Value at End of Project for this page.*

**\*Beginning Value** is the value of an animal at the beginning of the project. This could be the purchase cost for animals, or the value at birth for any animals gifted to you or born during your project.

**\*\* Value at End of Project:** Your animal's value should increase and is an estimated value.

*If you need help determining the value at the end of the project, consider contacting the breeder.*

Animal ID (Tag/Tattoo)	Breed	Sex	Date Born	Date Acquired	*Beginning Value	**Value at End of Project	Status (sold, kept, died, etc.)
<b>Total Value at Beginning</b>							
<b>Total Value at End/Value of Animal Assets</b>							

*By initialing this page, I certify that I personally wrote this report, and that the information is correct and true \_\_\_\_\_*

**Section V: ANIMAL PEDIGREE**

*(Section must be completed by County Fair Check In)*

Complete each line with as much information as possible. If information is not available, record "NA" for not applicable. If you have more than 4 animals, copy this page to add additional pedigrees.

**Animal #1 – Name and Tag #** \_\_\_\_\_

Sire			Paternal Grandsire	Reg. No.
Name	Reg. No.		Paternal Granddam	Reg. No.
Dam			Maternal Grandsire	Reg. No.
Name	Reg. No.		Maternal Granddam	Reg. No.

**Animal #2 – Name and Tag #** \_\_\_\_\_

Sire			Paternal Grandsire	Reg. No.
Name	Reg. No.		Paternal Granddam	Reg. No.
Dam			Maternal Grandsire	Reg. No.
Name	Reg. No.		Maternal Granddam	Reg. No.

**Animal #3 – Name and Tag #** \_\_\_\_\_

Sire			Paternal Grandsire	Reg. No.
Name	Reg. No.		Paternal Granddam	Reg. No.
Dam			Maternal Grandsire	Reg. No.
Name	Reg. No.		Maternal Granddam	Reg. No.

**Animal #4 – Name and Tag #** \_\_\_\_\_

Sire			Paternal Grandsire	Reg. No.
Name	Reg. No.		Paternal Granddam	Reg. No.
Dam			Maternal Grandsire	Reg. No.
Name	Reg. No.			







**Section VII: FEED EXPENSES, Continued**  
*(Section must be up to date at County Fair Check In)*

List all feed and supplement expenses on page 9 & 10. Each feed purchase should be listed separately or monthly. Be sure to always include the feed weight. All hay expenses are to be recorded on page 11.

Date	Description	Paid To	Weight in Pounds (lbs)	Total Cost
<b>Page 10 - Total Weight and Total Cost</b>				

*By initialing this page, I certify that I personally wrote this report, and that the information is correct and true \_\_\_\_\_*







**Section XI: MILK PRODUCTION RECORD**

*(Section must be up to date at County Fair Check In)*

List the average monthly amount of milk produced (in pounds) by each animal. Record the income received from milk sales if you receive a milk check. **If your animal is housed at a dairy, contact that dairy for monthly production records. If you exchange milk for housing/care with the dairy, you should still record the milk produced but indicate below that you do not receive income from milk produced by your cow(s).** If your animals are not lactating enter zero.

	Animal # 1	Animal #2	Animal #3	Animal #4	Total
September					
October					
November					
December					
January					
February					
March					
April					
May					
June					
July					
August					
Yearly Total					

Income from Sale of Milk \$ \_\_\_\_\_

I do not receive income for milk produced by my cow(s)

By initialing this page, I certify that I personally wrote this report, and that the information is correct and true \_\_\_\_\_

**Section XII: GROWTH AND DEVELOPMENT RECORD**

*(Section must be up to date at County Fair Check In)*

1. Measure heart girth and height at withers of your animal at one-month intervals.
2. Record this information in the tables on pages 15-16 for each animal.
3. Use the conversion table on page 17 to convert heart girth measurements into approximate weight measurements. Record these in the tables on pages 15-16.
4. Add a photo of each animal for identification purposes below each table.
5. Plot the height and weight for each animal on the charts on page 18 & 19. Use a different colored pencils for each animal when putting more than one animal on the chart. Be sure to label which color is which animal at the bottom of page 18 & 19.

<b>Animal # 1</b>					<b>Animal # 2</b>				
	Age in Months	Height at Withers	Heart Girth	Weight (pounds)		Age in Months	Height at Withers	Heart Girth	Weight (pounds)
Sept					Sept				
Oct					Oct				
Nov					Nov				
Dec					Dec				
Jan					Jan				
Feb					Feb				
Mar					Mar				
Apr					Apr				
May					May				
June					June				
July					July				
Aug					Aug				

**Place picture of animal one below:**

**Place picture of animal two below:**

*By initialing this page, I certify that I personally wrote this report, and that the information is correct and true \_\_\_\_\_*

**Section XII: GROWTH AND DEVELOPMENT RECORD - Continued**

*(Section must be up to date at County Fair Check In)*

1. Measure heart girth and height at withers of your animal at one-month intervals.
2. Record this information in the tables on pages 16-17 for each animal.
3. Use the conversion table on page 18 to convert heart girth measurements into approximate weight measurements. Record these in the tables on pages 16-17.
4. Add a photo of each animal for identification purposes below each table.
5. Plot the height and weight for each animal on the charts on page 18 & 19. Use a different colored pencils for each animal when putting more than one animal on the chart. Be sure to label which color is which animal at the bottom of page 18 & 19.

<b>Animal # 3</b>					<b>Animal # 4</b>				
	Age in Months	Height at Withers	Heart Girth	Weight (pounds)		Age in Months	Height at Withers	Heart Girth	Weight (pounds)
Sept					Sept				
Oct					Oct				
Nov					Nov				
Dec					Dec				
Jan					Jan				
Feb					Feb				
Mar					Mar				
Apr					Apr				
May					May				
June					June				
July					July				
Aug					Aug				

**Place picture of animal three below:**

**Place picture of animal four below:**

*By initialing this page, I certify that I personally wrote this report, and that the information is correct and true \_\_\_\_\_*



**TAPE WEIGHT TABLE FOR DAIRY CATTLE**

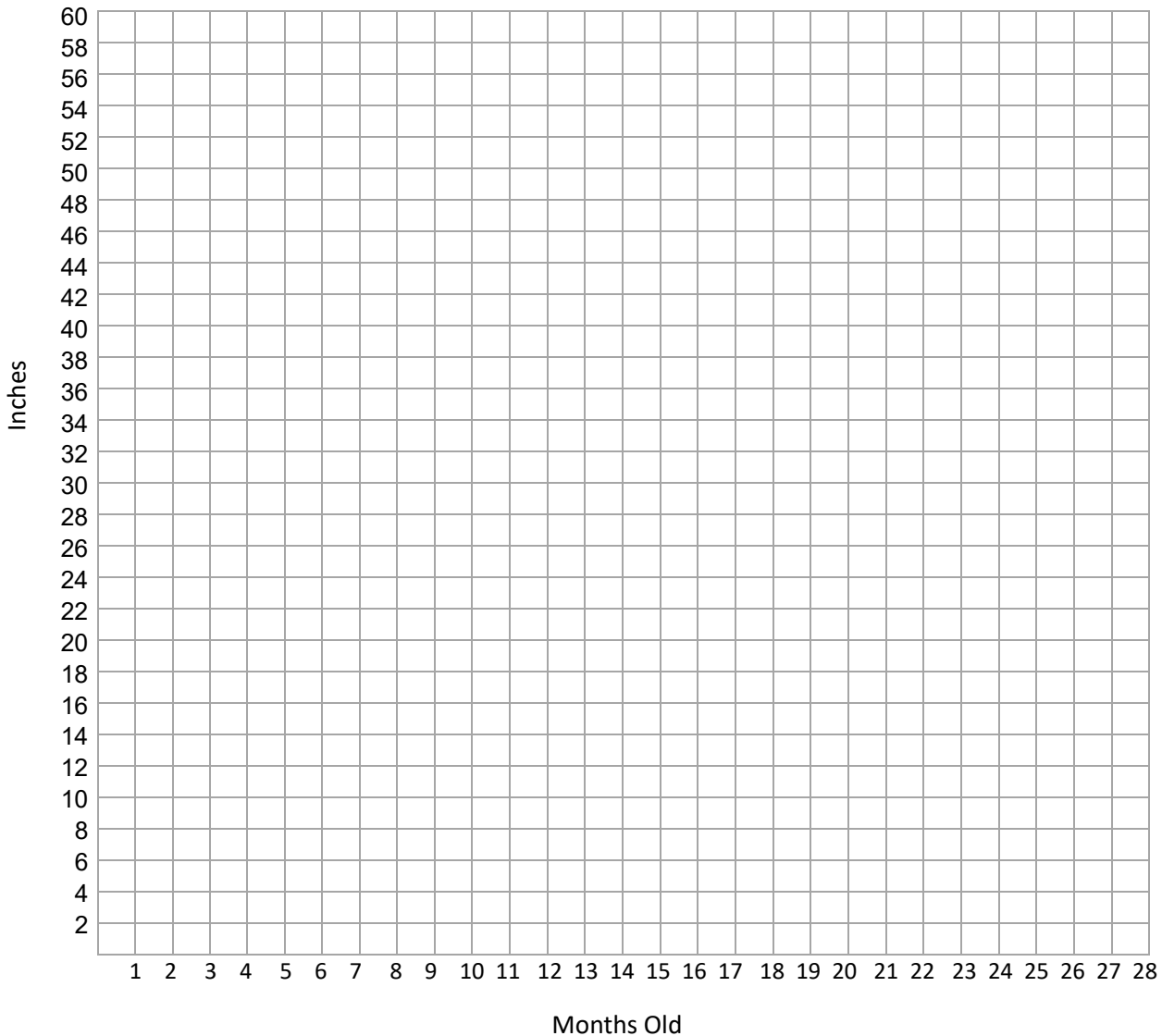
<b>Holstein &amp; Brown Swiss</b>		<b>Guernsey &amp; Ayrshire</b>		<b>Jersey</b>	
Heart Girth (Inches)	Weight (Pounds)	Heart Girth (Inches)	Weight (Pounds)	Heart Girth (Inches)	Weight (Pounds)
31	96	27	69	26	53
32	104	29	77	27	57
34	125	31	91	29	69
35	136	32	100	30	77
37	163	34	124	31	87
38	177	35	136	32	98
40	209	36	150	33	110
42	243	38	177	35	136
44	278	40	208	37	163
45	297	41	223	39	192
47	335	43	257	41	222
48	356	44	273	42	238
50	396	46	307	44	269
51	420	47	327	45	286
53	463	49	365	47	319
54	487	50	384	48	336
55	510	51	405	50	372
56	535	52	426	51	393
57	562	53	449	52	413
59	614	55	495	53	433
61	670	56	514	55	480
62	697	57	546	56	504
63	730	59	599	57	531
64	761	60	625	58	555
65	792	61	655	59	589
66	830	62	685	60	615
67	861	63	717	61	640
69	930	64	748	62	671
70	965	65	780	63	705
71	1003	66	815	64	736
72	1041	67	849	65	770
73	1080	68	882	66	804
74	1121	69	917		
75	1158	70	949		

**Section XII: GROWTH AND DEVELOPMENT RECORD - Continued**

*(Section must be up to date at County Fair Check In)*

1. Plot the height measurements from pages 15-16 for each animal below. For example, if at the start of your project Animal # 1 was 2 months old and 30 inches tall, put a dot where 2 months and 30 inches meet.
2. Repeat the procedure for every month you measured your animal's height during your project.
3. Use a different colored pencil to represent each animal in your project.
4. ***If any of your animals are older than 28 months***, indicate this below the chart on this page.

**HEIGHT AT WITHERS**



Animal # 1 Color: \_\_\_\_\_

Animal # 3 Color: \_\_\_\_\_

Animal # 2 Color: \_\_\_\_\_

Animal # 4 Color: \_\_\_\_\_

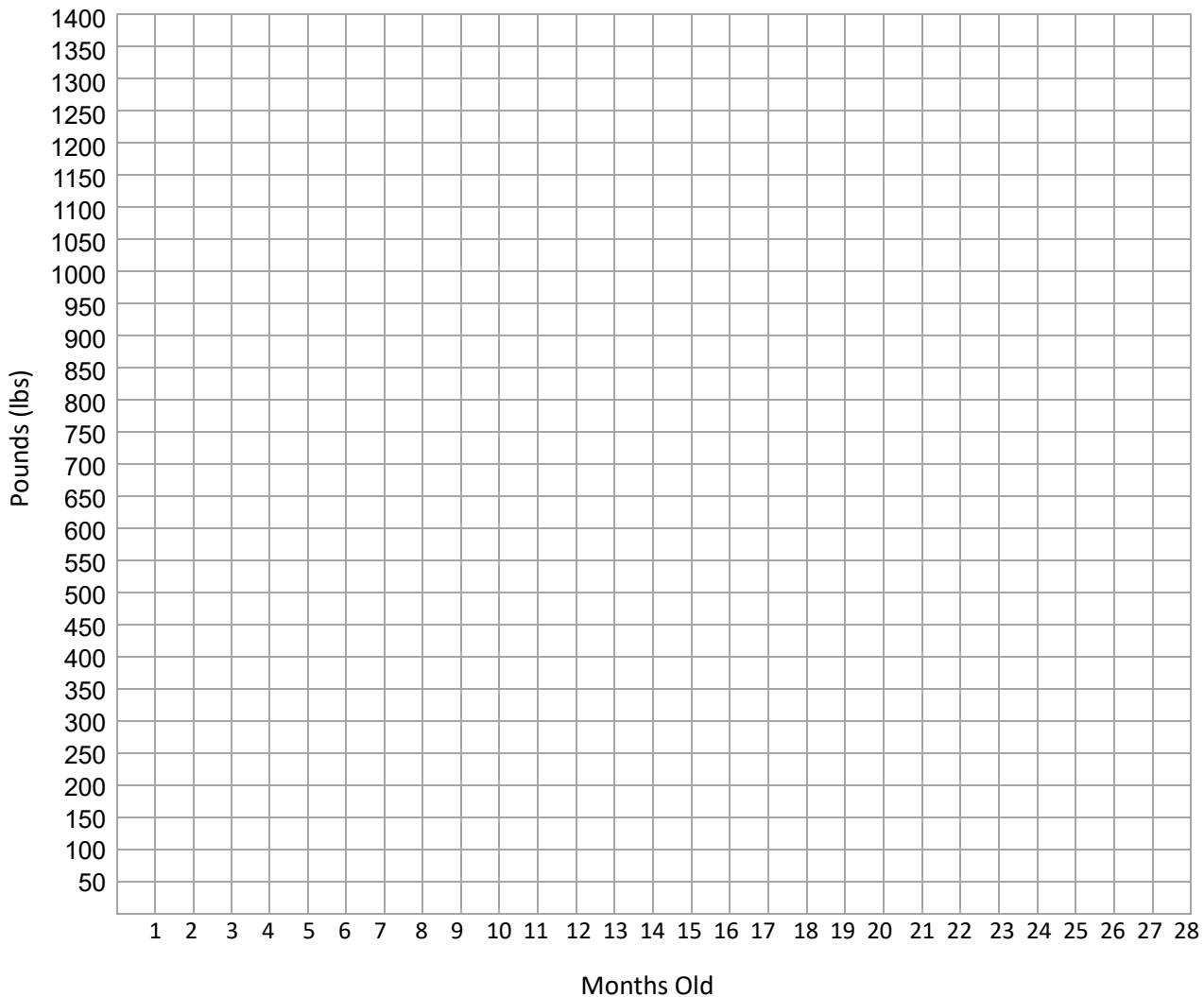
*By initialing this page, I certify that I personally wrote this report, and that the information is correct and true* \_\_\_\_\_

**Section XII: GROWTH AND DEVELOPMENT RECORD - Continued**

*(Section must be up to date at County Fair Check In)*

1. Plot the weight measurements from pages 16-17 for each animal below. For example, if at the start of your project Animal # 1 was 6 months old and 400 pounds, put a dot where 6 months and 400 pounds meet.
2. Repeat the procedure for every month you measured your animal's weight during your project.
3. Use a different colored pencil to represent each animal in your project.
4. ***If any of your animals are older than 28 months***, indicate this below the chart on this page.

**WEIGHT**



Animal # 1 Color: \_\_\_\_\_

Animal # 3 Color: \_\_\_\_\_

Animal # 2 Color: \_\_\_\_\_

Animal # 4 Color: \_\_\_\_\_

*By initialing this page, I certify that I personally wrote this report, and that the information is correct and true* \_\_\_\_\_

**Section XIII: CALVING RECORD**

*(Section must be up to date at County Fair Check In)*

List all calves born to your project animal(s). Record the income received from the sale of any calves born during this project year on page 20 Section XIV "Animals Sold."

IF NONE, ENTER ZERO.

Date Born	Calf Name	Sex	Dam Identification	Sire Reg. #/ Identification

**Section XIV: INCOME – ANIMALS SOLD**

*(Complete all that you can by County Fair Record Book Check In)*

Please include any calves born to your animals that you sold in this section as well.

**CHECK HERE IF YOU DID NOT SELL YOUR PROJECT ANIMAL, THEN ENTER ZERO.**

Date	Description (Breed, ID# if any)	Purchased By	Age	Total Price

**Total Income from Animals Sold: \$ \_\_\_\_\_**

*By initialing this page, I certify that I personally wrote this report, and that the information is correct and true \_\_\_\_\_*

**Section XV: SPONSOR INCOME**

*(Section must be up to date at County Fair Check In)*

You should record any money given to you, to support your project, by sponsors, farmers or an individual here. Example: Leased animals that the owner provides feed for at no expense to you. Also, if someone buys feed or hay for your animal, or if someone else (a farm or an individual) pays for expenses. You should be able to ask what it costs per day per animal. Multiply the number of days by the cost per day to get a total. **See page 34 for example.**

If you have no sponsor income from this project, THEN ENTER ZERO.

Date	Description (Sponsorship/show/contest/placing and/or ribbon)	Total

**Total Other Income: \$ \_\_\_\_\_**

**Section XVI: OTHER INCOME – SHOW PREMIUMS, ETC.**

*(Section must be up to date at County Fair Check In)*

Other project income should be recorded here, such as each show premium (ribbon money), or other money earned from **this project**. Keep in mind, every animal exhibited at the county fair receives monetary premiums that should be recorded in this section.

If you have no other income from this project, THEN ENTER ZERO.

Date	Description (Sponsorship/show/contest/placing and/or ribbon)	Total

**Total Other Income: \$ \_\_\_\_\_**

*By initialing this page, I certify that I personally wrote this report, and that the information is correct and true \_\_\_\_\_*



**Section XVIII: PROJECT FINANCIAL SUMMARY**

*(Section must be up to date at County Fair Check In)*

This section is to help you recognize the cost involved in caring for and maintaining your animal, and to determine if you made a profit in raising and selling your animal. The primary goal is to be honest about the figures regardless of the financial outcome. Financial outcomes do not reflect the enjoyment and skills you learned from the project experience---these can be priceless and will always profit you in life!

If your project will continue past the County Fair, fill in the areas with a \* in PENCIL for Fair check-in based on what you have done in your project so far. At the end of your project, rewrite your final totals in PEN before you turn your book in to 4-H for judging. Juniors may write their final totals in pencil.

Row	Income	Section Total	Grand Total
1	INCOME – ANIMALS SOLD (total from Section XIV, Page 20)		
2	MILK SALES (total from Section XI, Page 14)		
3	SPONSOR INCOME (total from Section XV, Page 21)		
4	OTHER INCOME (total from Section XVI, Page 21)		
5	TOTAL INCOME (Row 1 + Row 2 + Row 3 + Row 4)		
<b>Expenses</b>			
6 *	TOTAL DEPRECIATION ( <i>only seniors complete this line</i> ) (total from Section III, Page 5)		
7 *	TOTAL NON FEED EXPENSES (total from Section VI, Page 8)		
8 *	TOTAL FEED/HAY EXPENSES (total cost from Section VII, Page 11)		
9 *	TOTAL EXPENSES (Row 6 + Row 7 + Row 8)		
<b>Change in Animal Inventory</b>			
10	VALUE AT END (total from Section IV, Page 6)		
11 *	VALUE AT BEGINNING (total from Section IV, Page 6)		
12	NET CHANGE IN VALUE OF ANIMAL INVENTORY (Row 10 - Row 11) ** This may be a negative number		
<b>Financial Summary</b>			
13	FINAL PROFIT/LOSS (Row 5 – Row 9 + Row 12)		
14	VALUE OF ANIMAL ASSETS (total from Section IV, Page 6)		
15	VALUE OF PROJECT ASSETS ( <i>only seniors complete this line</i> ) (total from Section III, Page 5)		
16	TOTAL ASSETS ( <i>only seniors complete this line</i> ) (Row 14 + Row 15)		

By initialing this page, I certify that I personally wrote this report, and that the information is correct and true \_\_\_\_\_

**Section XIX: PROJECT PICTURES**

*(You should have at least 5 pictures by County Fair Check In)*

Use a minimum of 8 pictures to tell the story of your dairy cattle project. Under each picture, write a caption to explain what you are doing and why. Captions should be in complete sentences Your photos should demonstrate at least 4 (four) different skills that you have learned. The pictures and captions should complement your project essay. Make sure to check your spelling and grammar.

Limit the number of pictures of you just posing with your animal to two (2) pictures. Limit the number of pictures of your project animal(s) without you in the picture demonstrating something to two (2).

DO NOT COVER UP THE DIRECTIONS

DO NOT ADD ADDITIONAL PAGES



**Section XIX: PROJECT PICTURES CONTINUED**

DO NOT ADD ADDITIONAL PAGES

**Section XIX: PROJECT PICTURES CONTINUED**

DO NOT ADD ADDITIONAL PAGES

**Section XIX: PROJECT PICTURES CONTINUED**

DO NOT ADD ADDITIONAL PAGES

## Section XX: PROJECT ESSAY

Create a story of your project from beginning to end. Use your experiences, interesting facts or statistics, and examples to help you develop your story.

In your essay, try to answer the following questions:

- How did you start your project? (if your project animal is new, how/where did you get it, if you are showing an animal you already owned, how long have you had it?)
- How did you care for your animal?
- What new information and skills did you learn?
- What safety practices did you use in your project?
- What problems did you have? Were you able to overcome them? Why or why not?
- What were your accomplishments?
- Did you meet your goals? What plans or goals do you have for next year?
- What improvements could you make next year?
- Who helped you with your project and how did they help you?

Your essay may be handwritten or typed. For full points:

- Junior members (age 8-10) your essay must be at least one (1) page.
- Intermediate members (age 11-13) your essay must be at least two (2) pages.
- Senior members (age 14-18) your essay must be at least three (3) pages.

Your grammar, spelling, and neatness will be evaluated. If you type your essay or write it on a separate paper, ***do not tape the story to the pages, use a hole punch and insert the pages.*** Write a note on this page to “**SEE ATTACHED.**”

***Be sure to revisit and finish your essay after the fair*** and include what happened at the fair.







### Scoring System

Each section of this Record Book will be scored by the judge based on the completeness and accuracy of that section. You MUST initial the bottom of each page where there is an initial line in order for that page to be counted in your final score. For sections you did not complete because they do not apply to your project, you MUST check the box stating that section does not apply to you. If the section does not apply to you, it will not affect your overall score.

Section	Item	Points Possible
Cover	Signatures	2
I	Project Agreement Signatures	2
II	Project Plans and Goals	7
III	Project Inventory	5
IV	Project Animal Inventory	3
V	Animal Pedigree	2
VI	Non-Feed-Expenses	4
VII, VIII	Feed & Hay Expenses	5
IX	Ration Record	2
X	Health and Veterinary Record	5
XI	Milk Production Record	2
XII	Growth and Development Record	5
XIII	Calving Record	2
XIV, XV & XVI	Income - Animals Sold, Sponsor Income & Other Income	3
XVII	Educational Workshops/Clinics/Self-Guided Learning	5
XVIII	Project Financial Summary	8
XIX	Project Pictures	8
XX	Project Essay	30
	Overall Neatness, Accuracy, Grammar & Spelling	5
	<b>Total Possible Points for Project Record Book</b>	<b>105</b>
<b>Overall 4-H Member Record:</b>		
	All required sections of completed 4-H Member Record Book are tabbed and labeled	5
	Overall 4-H Report <i>(This report is not in this Record Book, it is a part of the Overall Member Record Book graded at the end of the 4-H year for 4-H Awards)</i>	40
	<b>Total Possible Points for Member Record Book</b> <i>(Project Book and Overall 4-H Report)</i>	<b>150</b>

### Ribbon Awards

**Blue:** 90% - 100%

**Red:** 80 - 89%

**White:** 79% - 0%



**PROJECT TERMS AND EXPLANATIONS**  
**NOTES AND EXAMPLES FOR PROJECT INVENTORY (page 5)**

- **Date Acquired** - List the date (mm/dd/yy) you obtained this item. On items older than one year, list only the year.
- **Purchase Cost or Value** - What did this item cost when you first got it? (If you did not purchase this item and it was given to you, what was its value?)
- **Value at Beginning of Project Year** – If you bought the item this 4-H project year, this number would be the same as the “Purchase Cost or Value”. If you had this item last project year, use the “Value at End of Project” from last year’s record book.
- **Depreciation of 10%** - Each year your items will “depreciate” (lose value) by 10% of the original purchase cost. For new items, estimate 10% depreciation even if you have had the item for less than a year (ex: purchased in November of the 4-H year and it is now January).
- **Value at the End of the Project** - This is the value at the beginning of the project year minus the depreciation.

**Examples:**

Items Description	Date Acquired	Purchase Cost or Value	Value at beginning of project year	Depreciation (10% of purchase cost)	Value at end of project
Rope	Purchased 4 years ago	\$10.00	(Value at end of last year’s project/had already depreciated 10% for 3 years) \$7.00	(\$10 x 0.10) \$1.00	(\$7 - \$1) \$6.00
Comb	Purchased 3 years ago	\$20.00	(Value at end of last year’s project/had already depreciated 10% for 2 years) \$16.00	(\$20 x 0.10) \$2.00	(\$16 - \$2) \$14.00
Brush	Purchased at the beginning of last year’s project	\$5.60	(Value at end of last year’s project/had already depreciated 10% for 1 year) \$5.04	(\$5.60 x 0.10) \$0.56	(\$5.04 - \$0.56) \$4.48
Bucket	Purchased this project year	\$9.10	(No Previous Depreciation) \$9.10	\$0.91	(\$9.10 - \$0.91) \$8.19
Total Depreciation*				\$4.47	
Value of Project Assets					\$32.67

\*Depreciation is an expense

**LEASED ANIMAL FEED AND RATION EXAMPLES**

Prices and amounts of feed are ONLY examples. **Be sure to get accurate info for where the animal is leased from.**

**FEED EXPENSES EXAMPLE**

Date	Description	Paid To	Pounds	Total Cost
9-2-17	Dakin Heifer feed	C Dakin Dairy	150	\$30.00
9-4-17	Dakin Cow feed TMR	C Dakin Dairy	1800	\$202.50
10-4-17	Dakin Cow feed TMR	C Dakin Dairy	1860	\$209.25

**RATION RECORD EXAMPLE**

Date	Animal ID	Feed Name, & Nutrient Content	Amount Fed Pounds/Day
9-2-17	4652	Dakin Heifer feed	5
9-2-17	7296	Dakin TMR	60

**SPONSOR INCOME EXAMPLE**

Sponsor's Name	Total
Cameron Dakin Dairy Heifer Feed (Sept.-Jan.)	\$282.00
Cameron Dakin Dairy Production Cow Feed (Sept. – Jan.)	\$411.75
Cameron Dakin Dairy Hay (Sept. – Jan.)	\$78.00
Cameron Dakin Health and Vaccinations (Sept. – Jan)	\$56.00
Lease Fee if any	



This document, **Manatee County 4-H Dairy Cattle Record Book**, was compiled by Alexandra Draper, 4-H Extension Agent, University of Florida/IFAS Extension - Manatee County, August 14, 2023.

Adapted from: **4-H Dairy Cattle Care and Feed Record Book**, Diana L. Smith, Ph.D., Extension 4-H Coordinator, University of Florida/IFAS Extension - Manatee County, July 2019.

**Florida 4-H Dairy Project Record Book**, <https://edis.ifas.ufl.edu/publication/4H054>. (Revised December, 2018).

**Florida State Fair Youth Livestock General Record Book** (Revised August 1, 2003).

**4-H Dairy Care and Feed Record Book** (Claudia Cahill, Author), Manatee County 4-H (Revised July 1998).

A special thank you to Christa Kirby, Extension Livestock Agent, University of Florida/IFAS Extension - Manatee County, Lori Jorgensen and a team of 4-H volunteers for their diligent efforts in the revision process (2012)(2015)(2017)(2021)(2022).