



# 2022-2023 Commercial Dairy Heifer Record Book

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Name:		Jr. (4th-8th grade) Sr. (9-12 grade):
School Name:	Age:	Grade:
Address:		
City:	State:	Zip:
Phone:	County	
Name of 4-H Club or FFA Chapter:	Years in 4-H or FFA:	

4-H or FFA Member's Signature:
Parent or Guardian's Signature:
Agent's Signature (4-H): OR
Teacher's Signature (FFA):

## SECTION I -- 35 POINTS RECORDS FOR YOUR COMMERCIAL DAIRY HEIFER

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**Heifer Information:** You must have a beginning weight and a starting date. The ending weight and date for these records must be no earlier than January 11<sup>th</sup> and no later than January 25<sup>th</sup>.

	Heifer #1	Heifer #2	Heifer #3
Heifer's Name:			
Heifer's Ear Tag or Tattoo Number:			
Breeder's Name and Address:			
Heifer's Breed or Color			
Heifer's Birth Date			
Total Days on Feed			
Beginning Withers Height & Date			
Ending Withers Height & Date			
Beginning Weight & Date	A.	A.	A.
Ending Weight & Date	B.	B.	B.
Total Weight Gain (B-A)	C.	C.	C.

**SECTION I cont'd**

**2. Feed Purchased and Cost:**

Date	Verify Heifer # (1,2, or 3)	Name of Feed (if applicable). Place Feed was Purchased From. Feed Contents. (Grain, complete feed, corn, oats, protein, hay, etc.)	Pounds Purchased	Cost Per Pound	Total Cost
<p><b>*Note:</b>  <b>Total Cost</b> = Pounds Purchased x Cost Per Pound            (see below for <i>Total Feed Cost</i> formula)</p>	Total Heifer #1	D.		E.	
	Total Heifer #2	D.		E.	
	Total Heifer #3	D.		E.	

*Grand Total Pounds Purchased* = Total LBS Purchased Heifer #1 + Total LBS Purchased Heifer #2 + Total LBS Purchased Heifer #3

*Grand Total Feed Cost* = Total Cost Heifer #1 + Total Cost Heifer #2 + Total Cost Heifer #3

Grand Total Pounds Purchased: \_\_\_\_\_

Grand Total Feed Cost \$ \_\_\_\_\_

## SECTION I cont'd

NOTE: If multiple animal records are kept, determine calculations per animal number (#1 – #3). Pay special attention to questions that require calculations for individual animals versus total group of animals. (Example –records for one Heifer vs. records for three Heifers).

### 3. Other Costs:

	Heifer #1	Heifer #2	Heifer #3
Cost or Value of Animal	F.	F.	F.
Minerals, Vitamins, Salt and Other Feeds Not Listed in Question 2	G.	G.	G.
Veterinary Costs -- Vaccines, dewormers, Lice Controls, Blood Work	H.	H.	H.
Entry Fees, Trucking, Show supplies, and Other Costs	I.	I.	I.
Total Costs (F+G+H+I)	J. \$	J. \$	J. \$
Total Feed and Other Costs (E+J)	K. \$	K. \$	K. \$

### 4. Income:

	Heifer #1	Heifer #2	Heifer #3
Prize Money Won With This Heifer	L.	L.	L.
Prize Money Won in Showmanship with this Heifer	M.	M.	M.
Total Income (L+M)	N. \$	N. \$	N. \$
Total Spent (K)	O. \$	O. \$	O. \$

### 5. Performance Record:

	Heifer #1	Heifer #2	Heifer #3
Total Weight Gain (from question 1)	P.	P.	P.
Total Days on Feed (from question 1)	Q.	Q.	Q.
Average Daily Gain (P / Q)	R.	R.	R.
Feed per pound of gain (D / P)	S.	S.	S.
Cost per pound of gain (E / P)	T.	T.	T.
Frame Growth (Final Withers height – Starting Withers Height)	U.	U.	U.

## SECTION II -- 20 Points

### 6. Your Time with Your Project:

	<b>Heifer #1</b>	<b>Heifer #2</b>	<b>Heifer #3</b>
Hours Spent General Care (Daily Feeding, Watering, etc.)	V.	V.	V.
Hours Spent Working with Animal/Practicing (Walking, Setting Up, etc.):	W.	W.	W.
Hours Spent Preparing for Show (Washing, Clipping, Combing, etc.):	X.	X.	X.
Hours Spent Elsewhere (Artificial Insemination, etc.)	Y.	Y.	Y.
Total Number of Hours Spent With Project (V+W+X+Y):	Z.	Z.	Z.

(a) Explain why protein and TDN content of a feed are important.

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Select one of your heifers and complete this section.

(b) What is the breed(s) or composite characteristics of your heifer? What advantages does this breed(s) or composite characteristics possess? What characteristics does this animal possess that made you select it?

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(c) If you could change anything about your heifer, what would you change to make her a better show animal?

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**SECTION II cont'd**

(d) When you show this animal how would you compensate for the above described faults?

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**SECTION III -- 20 POINTS**

1. Also important in the formation of keratin in hooves, \_\_\_\_\_ is a traditionally used product for footbaths on dairy farms.
2. Mastitis is the most costly disease or disorder to the dairy industry. What is the largest cost associated with a case of mastitis? \_\_\_\_\_
3. Recent data advises that newborn calves should receive \_\_\_\_\_ percent of their body weight in colostrum at birth.
4. Showing an animal that has dirty hooves would result in what degree of discrimination on the PDCA Showmanship Scorecard?  
\_\_\_\_\_
5. If you breed an animal that is heterozygous polled to an animal that is homozygous polled, what percent of the calves will be polled? \_\_\_\_\_
6. Rumen drinking is a common consequence to feeding calves milk from buckets. In which compartment of the milk-fed calf is milk most effectively digested?  
\_\_\_\_\_
7. This commodity feed, which is also a basic ration ingredient, is the most commonly fed protein source to dairy cattle. \_\_\_\_\_
8. During which season is milk generally in the greatest supply?  
\_\_\_\_\_
9. Calves obtain what vitamin when exposed to sunlight? \_\_\_\_\_
10. Which county was number one in milk production in Georgia for 2021?  
\_\_\_\_\_
11. If you do not have scales, what tool can be used to help estimate body weight in heifers? \_\_\_\_\_
12. What is the minimum weight for a heifer to be shown at the 2023 Georgia State Livestock Commercial Dairy Heifer Show? \_\_\_\_\_

13. Do cows prefer diets that are bitter, salty, sour, or sweet?  
\_\_\_\_\_
14. New information has revealed that many people that previously considered themselves lactose intolerant really just have a sensitivity to which beta-casein variant? \_\_\_\_\_
15. Which part of the dairy animal might be described as open, flat, and sweeping?  
\_\_\_\_\_
16. What toxin is a common problem found when feeding high levels of cottonseed?  
\_\_\_\_\_
17. Feeding what substance helps treat dehydration in a scouring calf?  
\_\_\_\_\_
18. Which basic nutrient group is the dairy cow's major source of energy?  
\_\_\_\_\_
19. What is the name of the organization that manages the national database on dairy cattle genetics? \_\_\_\_\_
20. Milk contains how many essential nutrients? \_\_\_\_\_

## SECTION IV -- 20 POINTS

Write a story about your 2022-2023 Commercial Dairy Heifer Project, including this year's most significant experience. Juniors' (4-8 grade) stories should be a minimum of 1½ pages and Seniors' (9-12 grade) stories a minimum of 2½ pages. Any of the following outline may be used as a guide. (The outline is just a suggestion)

### SAMPLE STORY OUTLINE

I. Introduction

- a. Tell what type, breed, weight, etc., of heifer you got, and why you chose a heifer as your project.
- b. Tell why you chose the heifer you did – cost, breed, breeder, past successes, etc.
- c. In choosing your dairy heifer, did you conduct any research, if so, explain.

II. Body

- a. Were there things you wish you had known prior to this project, if so, what were they?
- b. Day-to-Day Care: briefly describe what your daily care consisted of – where your heifer lived, feeding routine, exercise, etc. including some of the Good Production Practices you used in raising your heifer.
- c. What was your most significant experience? What did you learn about yourself and/or your heifer? Was there anything that surprised you about this project?

III. Summary

- a. What would you change or do the same the next time you begin a dairy heifer project? For example: different feed, different breed, age of heifer you would start with, etc.

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**Supporting Material (two pages only) 5 POINTS**

(Pictures-with caption, newspaper articles, etc., that support your Dairy Heifer project)

**Supporting Material (continued)**

# Instructions for Completing 2022-2023 Commercial Dairy Heifers Record Books

The record books will be evaluated by a committee of 4-H and FFA Jr. Livestock supporters. The top five Junior and Senior Record Books will be recognized at the beginning of the State Commercial Dairy Heifer Show on Friday, February 24<sup>th</sup>. Additional awards may be awarded to selected placings once donor funds have been confirmed.

1. Juniors must be in 4<sup>th</sup> grade as of September 1, 2022, and must not have completed 8<sup>th</sup> grade. Seniors are grades 9-12.
2. All entries must be from bona-fide 4-H or FFA members for the current year. All commercial dairy heifers that have a record book completed for must be entered in the 2023 State Commercial Dairy Heifer Show.
3. Record keeping is from the date of purchase until no later than February 8<sup>th</sup>.
4. All Commercial Dairy Heifer Record Book participants must be registered online by ag teacher/agent by close of business February 3<sup>rd</sup> on the Qualtrics platform: <https://tinyurl.com/2023GJNLSRB>
5. ***All participants must mail in their completed record books. These books must be received by close of business February 8<sup>th</sup> to the following address:***
  - 4-H participants** to Jade Andrews Haston, Georgia 4-H, 331 Hoke Smith Annex, Athens, GA 30602.
  - FFA participants** to Ben Lastly, 316 Poultry Science, University of Georgia, Athens, GA 30602.
6. The record book is complete. No additional pages are allowed. Do not submit record books in notebooks or binders. You may use construction paper for the two Supporting Materials pages, but they must be 8 ½" X 11". Use only one side of the pages for your Support Materials.
7. All signatures must be obtained on the front of the record book. If the record book does not have all required signatures, the record book will automatically be disqualified and will not be evaluated for awards.
8. Records must be hand written by the member.
9. Plagiarism is not allowed. If an entry is suspected of plagiarism, it will be disqualified and ineligible for awards.
10. A County 4-H club or FFA Chapter can enter no more than seven (7) record books in each division of each species.

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