



2021-2022 Commercial Dairy Heifer Record Book

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

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 11th and no later than January 25th.

	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
*Note:		Total Heifer #1		D.	E.
Total Cost = Pounds Purchased x Cost Per Pound		Total Heifer #2		D.	E.
(see below for <i>Total Feed Cost</i> formula)		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:

	Heifer #1	Heifer #2	Heifer #3
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.

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?

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

SECTION II cont'd

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

SECTION III -- 20 POINTS

1. What percent of milk is made up of lactose or milk sugar? _____
2. Beginning at _____ degrees Fahrenheit, calves will actually start using their own body energy to cool themselves?
3. What is one of the two most prevalent protozoal disease in youth calves? _____
4. Anthelmintic products are used to _____ animals on the dairy farm?
5. An important number for economic viability of the dairy operation, many farmers will evaluate IOFC, which stands for? _____
6. _____ is the largest milk cooperation in the United States.
7. Drinking milk after eating spicy food can help soothe the mouth thanks to the specific, milk component called _____ ?
8. Considered water loving, _____ should be included in a calf vaccination program as infection can cause anemia, abortion and reduced milk production.
9. On the Purebred Dairy Cattle Association Evaluation card, a failure to switch the rear legs of the animal when the judge moves around her would be considered a _____ discrimination.
10. Conventional milk replacers should contain a minimum of _____ percent protein?
11. Calves grown correctly should double their birthweight by _____ weeks of age.
12. Important in milk digestion, the _____ of the ruminant animal's stomach has a much lower pH than the rumen and is often referred to as the "true stomach."
13. A dairy cow can lose water through breathing, urine, milk, sweat and _____ ?
14. If a cow is frightened or upset in the milk parlor, she will release _____, which can interfere with proper milk let down.

15. In 2020, Georgia ranked _____ in total milk production in the United States?
16. In dairy herds, pneumonia is most often not the result of cold weather or drafty environments but instead caused by_____.
17. At first breeding, dairy heifers should be _____ percent of their mature bodyweight/
18. Prolific in hot weather, _____ flies typically are found along the back and sides of cattle/
19. Animals obtain vitamin_____ when exposed to sunlight.
20. The 2021 World Dairy Expo will include breed shows of Brown Swiss, Holstein, Jersey, Guernsey, Ayrshire, Red and White as well as _____.

SECTION IV -- 20 POINTS

Write a story about your 2021-2022 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.

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 2021-2022 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 18th. Additional awards may be awarded to selected placings once donor funds have been confirmed.

1. Juniors must be in 4th grade as of September 1, 2021 and must not have completed 8th 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 2022 State Commercial Dairy Heifer Show.
3. Record keeping is from the date of purchase until no later than February 9th.
4. All Commercial Dairy Heifer Record Book participants must be registered online by ag teacher/agent by close of business February 4th on the Qualtrics platform: <https://tinyurl.com/22GJNLSRecordBookProgram>
5. *All participants must mail in their completed record books. These books must be received by close of business February 9th to the following address:*
 - 4-H participants** to Heather K. Shultz, Georgia 4-H, Hoke Smith Annex #321, 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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