



2019-2020

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. Final weight and ending height date for this record book should be no earlier than February 1st and no later than February 19th.

| | 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 |
|---|--------------------------------|---|---------------------|-------------------|---------------|
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| *Note: Total Cost = Pounds Purchased x Cost Per Pound (see below for <i>Total Feed Cost</i> formula) | | | 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:

| | 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 rank did Georgia hold in 2018 for total milk production relative to the U.S ? _____
2. In the past decade, please indicate whether the following numbers have increased or decreased in the state of Georgia:
 - a. Total Milk Production _____
 - b. Number of Milk Cows _____
 - c. Milk Produced per Cow per Year _____
3. California, Wisconsin and what other state rounded out the top three milk producing states in the U.S. for 2018? _____
4. The Innovation Center for U.S. Dairy launched what campaign two years ago meant to reintroduce consumers to dairy and connect consumers with dairy farmers? _____
5. Breeding a heterozygous polled bull to a homozygous polled cow would result in what percent polled calves? _____
6. When evaluating calf health, what would be a goal for heart rate in beats per minute?

7. What organization publishes "Gold Standards" with regards to welfare and best management practices of dairy heifers? _____
8. The largest two expenses on a dairy farm are feed and what? _____
9. When raising calves, you should monitor their growth. In order to properly assess growth, you should keep track of their weight and what other measurement? _____
10. What is the most common reason you would use a brix refractometer on a dairy farm? _____
11. To support their energy requirements for milk production in early lactation, cows will mobilize what body tissue? _____
12. The loss of what mineral in feces is the main cause of dehydration in scouring calves?

13. Having a halter with an improper fit, moving excessively while in a lineup and not cleaning the feet of your dairy heifer would all fall into what level of discrimination on the PDCA scorecard?

14. According to the PDCA Show Ring code of ethics, topline hair should not exceed what length?

15. When evaluating rear feet and legs on a dairy animal, what is given the highest consideration?

16. What milk processing technique reduces your risk of exposure to health issues associated with tuberculosis, listeria, and salmonella? _____
17. The hand-crank freezer, patented in 1846, led to the establishment of what kind of first commercial plant in Baltimore in 1851? _____
18. How many of the 50 U.S. States have dairy farms? _____
19. How many compartments are there in the ruminant animals' stomach? _____
20. According to the USDA, boys and girls ages 9-18 need how many cups of dairy per day? _____

SECTION IV -- 20 POINTS

Write a story about your 2019-2020 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 2019-2020 Commercial Dairy Heifers Record Books

The record books will be evaluated by a committee of 4-H and FFA Jr. Livestock supporters. The list of 4-H and FFA members that are selected to receive record book awards will be posted at the respective specie show office as soon as they are available. The top five Junior and Senior Record Books will be recognized during the champion drive Friday, February 21st. Additional awards may be awarded to selected placings once donor funds have been confirmed.

1. This record book is for Junior and Senior participants. Juniors must be in 4th grade as of September 1, 2019 and must not have completed 8th grade. Senior participants 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 record books complete for must be entered in the 2020 State Commercial Dairy Heifer Show.
3. Record keeping is from the date of purchase until no earlier than February 1st and no later than February 19th.
4. **For participants not attending the 2020 Georgia Junior Livestock Show, the Commercial Dairy Heifer Record Book must be received by Monday, February 3rd:**
4-H participants to Heather K. Shultz, Hoke Smith Annex #321-UGA, Athens, GA 30602.
FFA participants to Ben Lastly, 316 Poultry Science, University of Georgia, Athens, GA 30602.
OR may be delivered to the **Roquemore Building, no later than 4:00 p.m. Wednesday, February 19th.**
5. 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.
6. 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.
7. Records must be hand written by the member.
8. Plagiarism is not allowed. If an entry is suspected of plagiarism it will be disqualified and ineligible for awards.
9. A County 4H club or FFA Chapter can enter no more than seven (7) record books in each division of each species.

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Ben Lastly, Georgia FFA Executive Secretary

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