

# Pennsylvania 4-H Dairy Project Record Book

(photo of project animal here)

Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip Code \_\_\_\_\_

Club \_\_\_\_\_ County \_\_\_\_\_

Leader(s) \_\_\_\_\_

Age \_\_\_\_\_ Birth date \_\_\_\_\_

Years in 4-H \_\_\_\_\_ Years with dairy project \_\_\_\_\_

Project start date \_\_\_\_\_ Project end date \_\_\_\_\_

Extension 4-H Representative \_\_\_\_\_

## **Objective of 4-H Dairy Project Record Book**

- You will learn key lessons on how to keep an effective record book.
- You will be able to set goals, establish methods of achieving them and determine if you met them at the end of the year.
- You will understand what is involved in caring for and raising a dairy animal.
- You will be able to compare your success from year to year, and be able to identify things you can change for the next year.

## **Instructions for Keeping Your Record Book**

- Keep entries neat and up to date.
- Understand what each section is asking for before you begin to record information.
- If you are having problems you may consult other members of the club, your club leader or your parents, but all work must be completed by you, not someone else. This is your book for you to learn from.
- You will be required to keep separate information for each animal you are showing. For heifers, you must keep a growth chart and breeding chart. For cows, you must keep the breeding chart and lactation chart.
- Have fun. Be creative. This is your record book; let it reflect your personality.

## My Goals for the Project Year

It is very important to set goals to achieve throughout the year with your project animals, within your 4-H club and on a personal development level. Fill in the boxes below with several goals to begin the year with. Then, in the second box, write how you plan to meet these goals. At the end of the year, you can look back at this page to see how well you have done at accomplishing these goals. You will be required to give a summary of how you met these goals at the end of this project book on the “My Dairy Project Story” page.

My Goals	Plan for Achieving My Goals

You must be committed to these goals in order to realize them. You will also need the help of your club leader. Please sign below to show your commitment to these goals. Also have your leader sign so that they can be made aware of what you would like to accomplish this project year.

Member signature \_\_\_\_\_ Date \_\_\_\_\_

4-H Leader signature \_\_\_\_\_ Date \_\_\_\_\_



## What I Do for My Animals

Your dairy project animal needs a lot of help from you. She relies on you to feed her and care for her on a daily basis. There are certain activities that you do for your animal with varying frequencies. For example, hopefully you do not need to have the vet check her everyday, but the vet does need to give your animal shots at times during the year. Here you can share what daily, weekly, monthly and yearly actions you take to care of your animal. From something as simple as brushing her, to something crucial as ensuring she has enough water.

<b>Daily Activities</b>
<b>Weekly Activities</b>
<b>Monthly Activities</b>
<b>Yearly Activities</b>



## Project Animal Information

This is a record of the animals that you will be using as your project animals. Please be sure to specify on the growth/breeding/lactation records which animal you are using. If you are showing more animals than there are spaces provided, please add sufficient copies of all necessary pages to accommodate the extra animals. If you have a heifer, the growth and breeding charts are necessary, with a cow, the breeding and lactation charts are to be filled out. These records can be easily transferred from year to year if you continue to show the same animal.

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Registration Name of Animal \_\_\_\_\_

Barn Name/Number \_\_\_\_\_ Breed \_\_\_\_\_ Date of Birth \_\_\_\_\_

Ear Tag Number \_\_\_\_\_ Tattoo Number \_\_\_\_\_

Registration Number (if registered) \_\_\_\_\_ Date Acquired \_\_\_\_\_

Owner's Name (as on registration paper) \_\_\_\_\_

Breeder's Name (as on registration paper) \_\_\_\_\_

Sire's Full Name \_\_\_\_\_

Dam's Full Name \_\_\_\_\_

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Registration Name of Animal \_\_\_\_\_

Barn Name/Number \_\_\_\_\_ Breed \_\_\_\_\_ Date of Birth \_\_\_\_\_

Ear Tag Number \_\_\_\_\_ Tattoo Number \_\_\_\_\_

Registration Number (if registered) \_\_\_\_\_ Date Acquired \_\_\_\_\_

Owner's Name (as on registration paper) \_\_\_\_\_

Breeder's Name (as on registration paper) \_\_\_\_\_

Sire's Full Name \_\_\_\_\_

Dam's Full Name \_\_\_\_\_

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Ear Tag Number \_\_\_\_\_ Tattoo Number \_\_\_\_\_

Registration Number (if registered) \_\_\_\_\_ Date Acquired \_\_\_\_\_

Owner's Name (as on registration paper) \_\_\_\_\_

Breeder's Name (as on registration paper) \_\_\_\_\_

Sire's Full Name \_\_\_\_\_

Dam's Full Name \_\_\_\_\_

## Growth Chart

Here you will record the growth of your project animal if it is a heifer. On the next page, you will plot your points onto a graph to show your animal's growth curve. This is helpful for seeing if your animal is growing properly.

Animal Name: \_\_\_\_\_

Birth Date: \_\_\_\_\_ Breed: \_\_\_\_\_

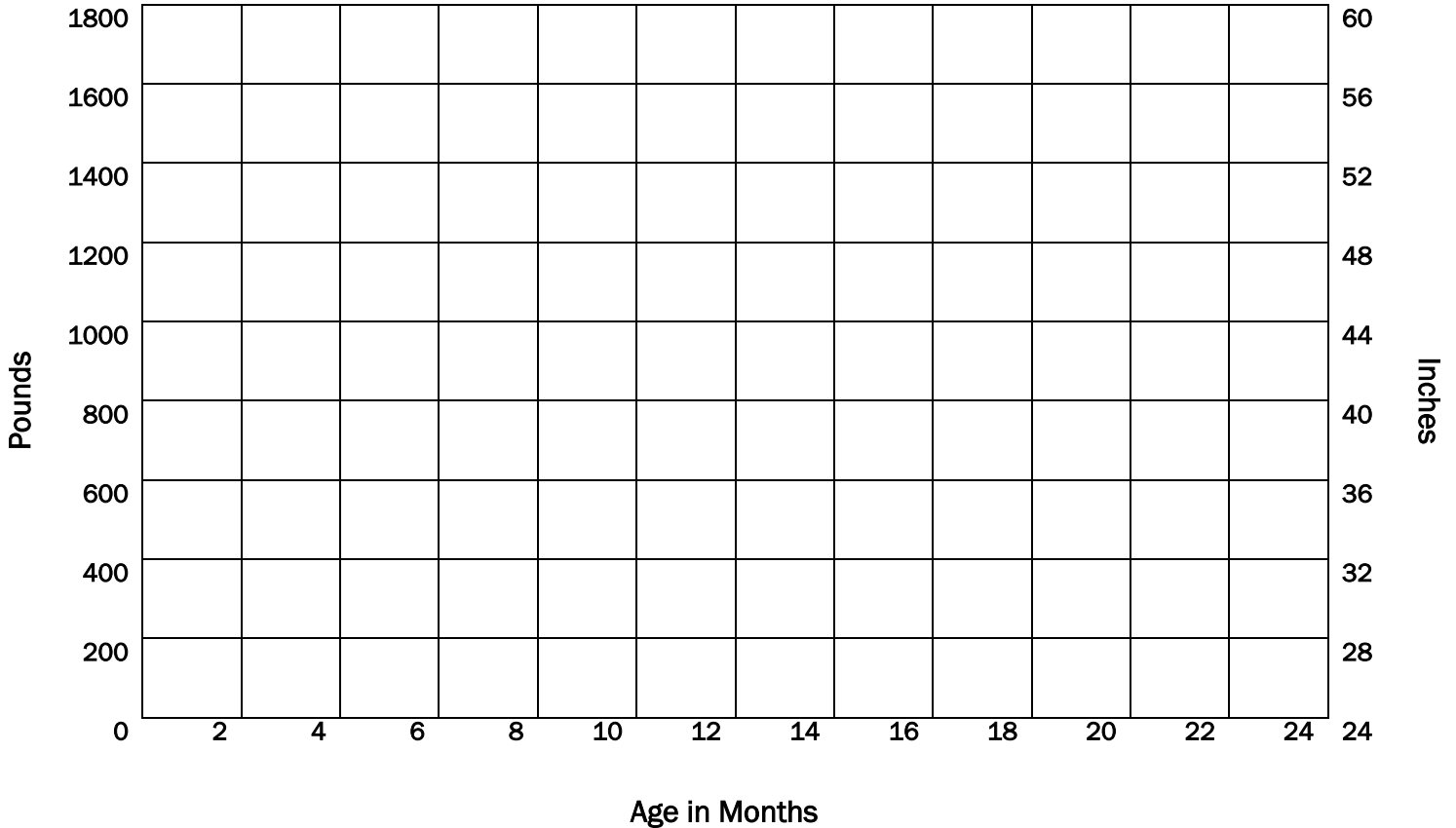
Age in Months	Holstein and Brown Swiss		Ayrshire, Milking Shorthorn, and Guernsey		Jersey		Project Animal	
	Inches	Pounds	Inches	Pounds	Inches	Pounds	Inches	Pounds
At Birth	29	96	27	70	26	55		
2	34	170	32	130	30	115		
4	39	270	37	230	34	195		
6	44	370	41	320	39	275		
8	46	500	44	400	41	385		
10	48	600	45	505	43	460		
12	50	700	46	600	44	520		
14	51	800	48	680	45	575		
16	52	900	50	770	46	630		
18	53	990	51	860	47	730		
20	54	1050	52	910	48	800		
22	55	1175	53	1050	50	875		
24	56	1300	54	1150	51	960		



# Growth Chart Graph

Animal Name: \_\_\_\_\_

Birth Date: \_\_\_\_\_ Breed: \_\_\_\_\_



Use a dotted line for height -----

Use a solid line for weight \_\_\_\_\_

Compare your animal's growth to its breed average; is it above or below the average?

\_\_\_\_\_

If your heifer's growth is below average, what are some things that you could do to improve its growth? \_\_\_\_\_

\_\_\_\_\_

## Breeding Record

Animal Name: \_\_\_\_\_

Birth Date: \_\_\_\_\_ Breed: \_\_\_\_\_

Whenever you breed your animal, record the date and the sire in the following graph. Once your animal is confirmed pregnant, record the due date in the graph. Then when your animal calves, record the date in the graph.

	Date Bred	Sire	Date Bred	Sire	Date Bred	Sire	Date Bred	Sire	Due Date	Date Calved
Pre-Lactation										
1st Lactation										
2nd Lactation										
3rd Lactation										
4th Lactation										
5th Lactation										

## Lactation Record

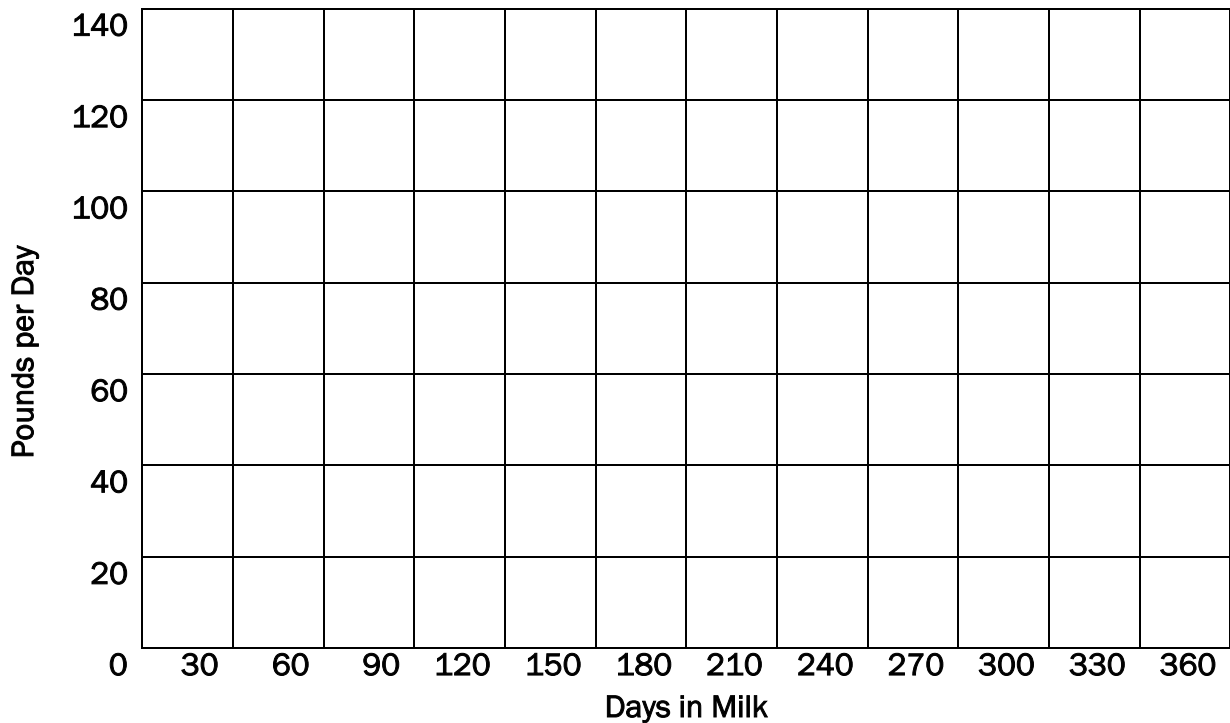
Animal Name: \_\_\_\_\_

Birth Date: \_\_\_\_\_ Breed: \_\_\_\_\_ Lactation Number: \_\_\_\_\_

Record the daily milk production for each month and then multiply that number by the number of days in the month. At the end of the year add up all the monthly totals for the yearly milk production total. Please specify what month you are starting with. Also, write if you are starting in the middle of a lactation, or if your animal was fresh for the beginning of this record or when she goes dry. Then, figure out how many days in milk your animal is and the corresponding pounds per day that goes along with it and plot them on the graph below.

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
Pounds per Day													
# of days in Month	31	28	31	30	31	30	31	31	30	31	30	31	Yearly Total
Monthly Total													

Dates: Begin: \_\_\_\_\_ Fresh: \_\_\_\_\_ Dry: \_\_\_\_\_ End: \_\_\_\_\_



## Supply Inventory

It is important to keep track of all the barn and show supplies you acquire. Here, you will keep a continuous record of all the supplies and equipment you have. This should be a list of all relevant supplies you currently own, along with those that you bought or acquired during the project year. This way you can determine what you have at the start of each year, and know what things you will need to buy for the year. Items include show/rope halters, feed tubes, water buckets, etc.

<b>Item Description</b>	<b>Intended Use</b>	<b>Date Acquired (full date or year)</b>	<b>Cost</b>

## Record of Shows and Fairs

This is a record of how you did at the various shows and fairs you attended with your animals throughout the year. It will be nice to have this recorded so you can look back and see how you have done over the years. Also, you will be able to keep track of basic show expenses (entry fees) and the money you were awarded for showing (premiums). Make sure to list the animals name, the dates they were showed, the show's name, the place awarded out of how many, along with premiums and entry fees.

<b>Name of Animal</b>	<b>Date</b>	<b>Name of Show/Fair</b>	<b>Number in Class</b>	<b>Placing &amp; Ribbon</b>	<b>Entry Fee</b>	<b>Premiums (if any)</b>

## Management Expense Sheet

Here you will figure out how much it costs to raise your calf, for this year, from birth to weaning, your heifer from weaning to first calving, and your cow from the time she begins milking. Use your project animal and estimate how much it cost to do all of these things for her. You will start at the beginning of the project year and count how many days your calf was fed liquid feed (milk or milk replacer), then how many days it received calf starter until it went on regular feed. Or, you will determine feed for a bred heifer, or you cow while she is milking. As animals grow, they require different amounts of feed so there are different prices per day for the animals. Multiply the days by the price per day. If you have more than one project animal, you can find the number for each and then add appropriate categories.

<b>Item</b>	<b>Average Cost*</b> (for 1 Calf for 1 Day) (in dollars)	<b>Average Cost*</b> (for 1 Heifer for 1 Day) (in dollars)	<b>Average Cost**</b> (for 1 Cow for 1 Day) (in dollars)	<b>Average Cost</b> of Raising Your Calf/Heifer/Cow (in dollars)
<b>Liquid Feed</b>	0.80	NA	NA	
<b>Calf Starter</b>	0.30	NA	NA	
<b>Feed</b>	NA	0.93	2.00	
<b>Bedding</b>	0.57	0.09	0.10	
<b>Veterinary/Health</b>	0.04	0.02	0.20	
<b>Breeding</b>	NA	0.05	0.14	
<b>Labor</b>	1.35	0.13	0.60	
<b>Manure Handling</b>	0.46	0.24	0.19	
<b>Housing</b>	0.08	0.08	0.64	
<b>Equipment</b>	0.05	0.09	0.84	
<b>Total Cost</b>				

\* Calf and heifer estimates derived from [www.das.psu.edu/dcn/CALFMGT/special/files/psucrrhManure2.xls](http://www.das.psu.edu/dcn/CALFMGT/special/files/psucrrhManure2.xls) .  
Gabler, Tozer, Heinrichs, and Beck. 2/20/04.

\*\* Cow estimates derived from *2000 Pennsylvania Dairy Farm Business Analysis*. Roth and Hyde. 2001. With assistance from Dr. C. Dechow, PSU Dairy and Animal Science Professor.

## Veterinary Record

It is smart to keep a list of all the shots and procedures preformed by the veterinarian on your project animals. This way, you are sure to know if your animal has all the required vaccinations for the show or fair. You can use the animal's first name for this record.

<b>Animal Name</b>	<b>Date</b>	<b>What the Vet Did</b>	<b>Animal Name</b>	<b>Date</b>	<b>What the Vet Did</b>

## My Financial Summary

Here you will record all expenses and income generated throughout the project year with your project animals. If you are unsure of specific dollar figures, ask for help to estimate the best amount. "Other" items could be the sale of embryos or the cost of having a cow classified.

### Revenue

Sale of project animal's offspring: \$ \_\_\_\_\_

Sale of project animal's milk\*: \$ \_\_\_\_\_

Show/Fair Premiums: \$ \_\_\_\_\_

(Other) \_\_\_\_\_: \$ \_\_\_\_\_

(Other) \_\_\_\_\_: \$ \_\_\_\_\_

**Total Revenue:** \$ \_\_\_\_\_

### Expenses

Total from "Management Expense Sheet": \$ \_\_\_\_\_

Purchase of Project Animal(s): \$ \_\_\_\_\_

Show Entry Fees: \$ \_\_\_\_\_

Equipment Purchases: \$ \_\_\_\_\_

(Other) \_\_\_\_\_: \$ \_\_\_\_\_

(Other) \_\_\_\_\_: \$ \_\_\_\_\_

**Total Expenses:** \$ \_\_\_\_\_

### Total Net Income

**Total Revenue – Total Expenses =** \$ \_\_\_\_\_

How important is it to have a positive number for total income? What are some things you can do to increase your total income? \_\_\_\_\_

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\* Total Animal Production divided by 100 multiplied by Price per 100 weight.

## **My Dairy Project Story**

This should be an account of your project year. Be sure to include the activities you were a part of, the awards and recognition you received, and your achievements from the year. You must also give a summary of how well you have met the goals you set at the beginning of the year, and how you reached them. Please feel free to add sheets of paper as needed.

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