



4-H Dairy Project Record Book



Total Meetings Held: _____

Total Meetings Attended: _____

Who's Who (Photocopy this page if you run out of room!)

Club President: _____ Phone: _____

Vice President: _____ Phone: _____

Secretary: _____ Phone: _____

Treasurer: _____ Phone: _____

Press Reporter: _____ Phone: _____

Other: _____ Phone: _____

	DATE & TIME	PLACE	NOTES (things to bring, remember, etc.)
<i>Meeting 1</i>			
<i>Meeting 2</i>			
<i>Meeting 3</i>			
<i>Meeting 4</i>			
<i>Meeting 5</i>			
<i>Meeting 6</i>			
<i>Acheivement Program</i>			

Leading the Way:

Leader Name & Phone Number	Leader Name & Phone Number

RECORD OF MEMBER TRAINING AND GOALS:

Are you a Beginner ____ Junior ____ Senior ____

If you have already shown a project calf before what are your goals for this year?

Why did you join the dairy project this year?

If you have not shown a project calf before what are your goals for this year?

Do you have any fun activities that you would like to see the club do for this year?

Any other goals?

Remember, the more you put into your 4-H club year, the more you will get out of it!



Caring for My Project Animal

Check the things that you are already doing well to care for your project animal. You can also check the things you would like to improve about how you care for your animal.

<input checked="" type="checkbox"/> <i>Things I do well...</i>	<input type="checkbox"/> <i>Things I would like to improve...</i>	<i>Care</i>
		Prepare facilities before I get my animal.
		Provide adequate housing and bedding.
		Feed my animal regularly.
		Feed a balanced ration.
		Provide good quality water at all times.
		Control internal and external parasites.
		Train my animal at a young age.
		Have a planned health program to prevent disease.
		Observe animals daily and get treatment for those who need it.
		Have animals identified.
		Keep feed and treatment records.
		Be aware of animal comfort at all times
		Use proper technique for vaccination or treatments of any kind.
		Use only proper handling equipment.
		Sort and load animals safely and with concern for their health and safety.
		Be respectful of your project animal and have fun.



The Creed of the of the 4-H Stock Keeper

I will:

1. Provide comfortable and sufficient quarters for my livestock.
2. Feed my livestock on time each day.
3. Provide animals with clean water at all times.
4. Keep my animals free from parasites.
5. Strive to keep my livestock in good health.
6. Learn as much as possible about the best methods of feeding and caring for livestock.
7. Strive to improve the breeding and quality of my Livestock, and of the livestock in my community, from year to year.
8. Be kind to animals.
9. Always be a good sport in competition.
10. Keep an accurate record of my projects.
11. Strive to fulfill the basic requirements of being a 4-H Club Member.

I have read and agree to abide by this creed.

Signature: _____

Date: _____

Source: Alberta 4-H Dairy Record Book

INTRODUCING YOUR 4-H PROJECT ANIMAL!

Calf Name: _____

Calf Birthdate: _____ Breed: _____

Ear Tag Number: _____ Tattoo: (left) _____ (right) _____

Herd Management Number: _____

Registration Number*: _____ Percentage Purebred: _____

Dam Name: _____ Registration Number: _____

Sire Name: _____ Registration Number: _____

*Note: It is not required that 4-H project animals be registered with a breed association; however, registration may be required to participate in some shows.

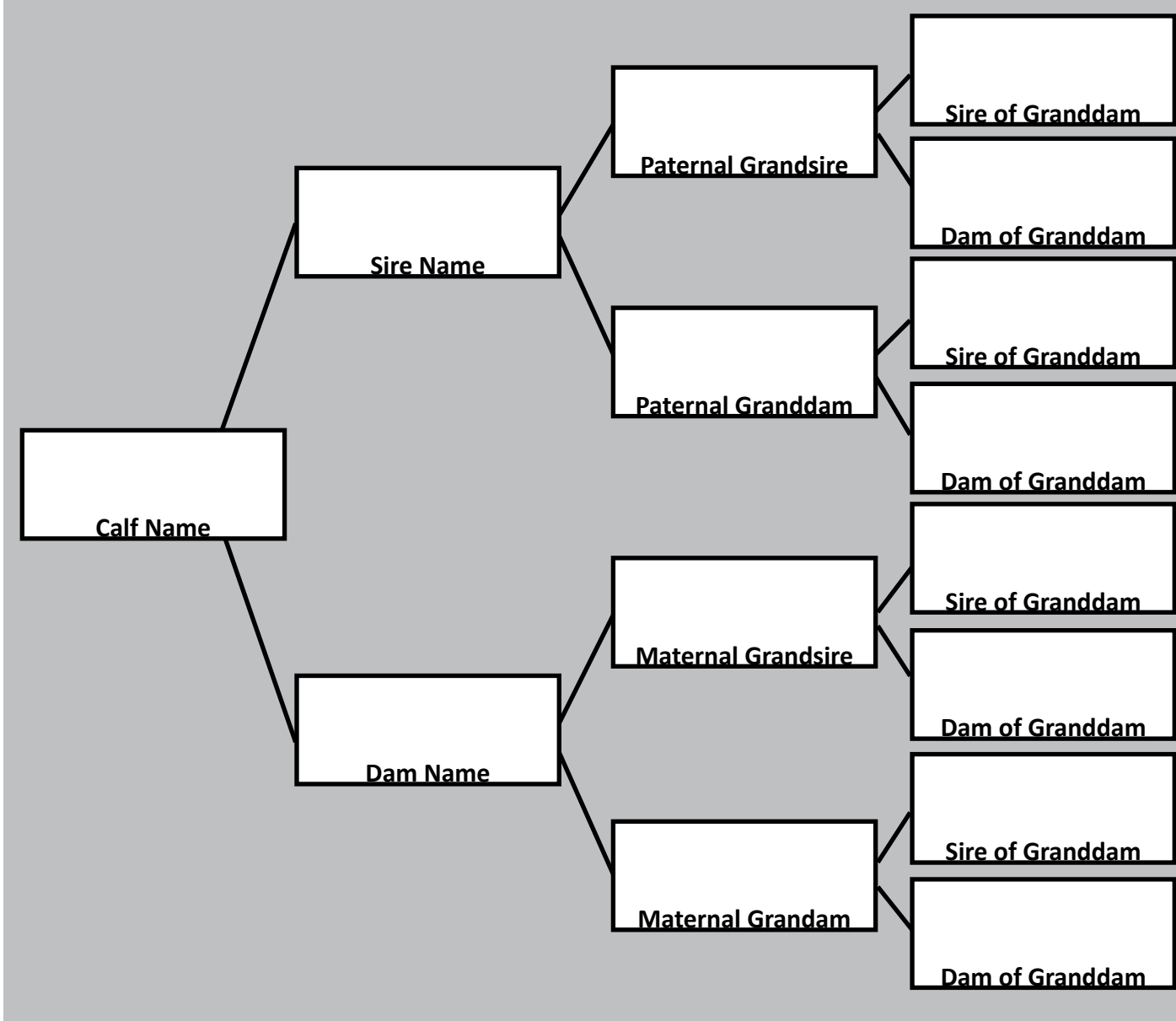
Was my Project Animal Identification Form completed and given to my leader before June 1? ____

Check off which age class my animal is shown in this year:

- Junior Yearling (March 1 of last year to May 31 of last year)
- Summer Yearling (June 1 of last year to August 31 of last year)
- Senior Calf (September 1 of last year to November 30 of last year)
- Intermediate Calf (December 1 of last year to February 28 of this year)
- Junior Calf (March 1 to May 31 of this year)

Insert photograph or sketch of project animal below:

Pedigrees or registration papers are like family trees for cows. Fill in the family tree information for my animal below:



How many generations does this chart show? _____

Is there any indication of linebreeding in these generations? _____

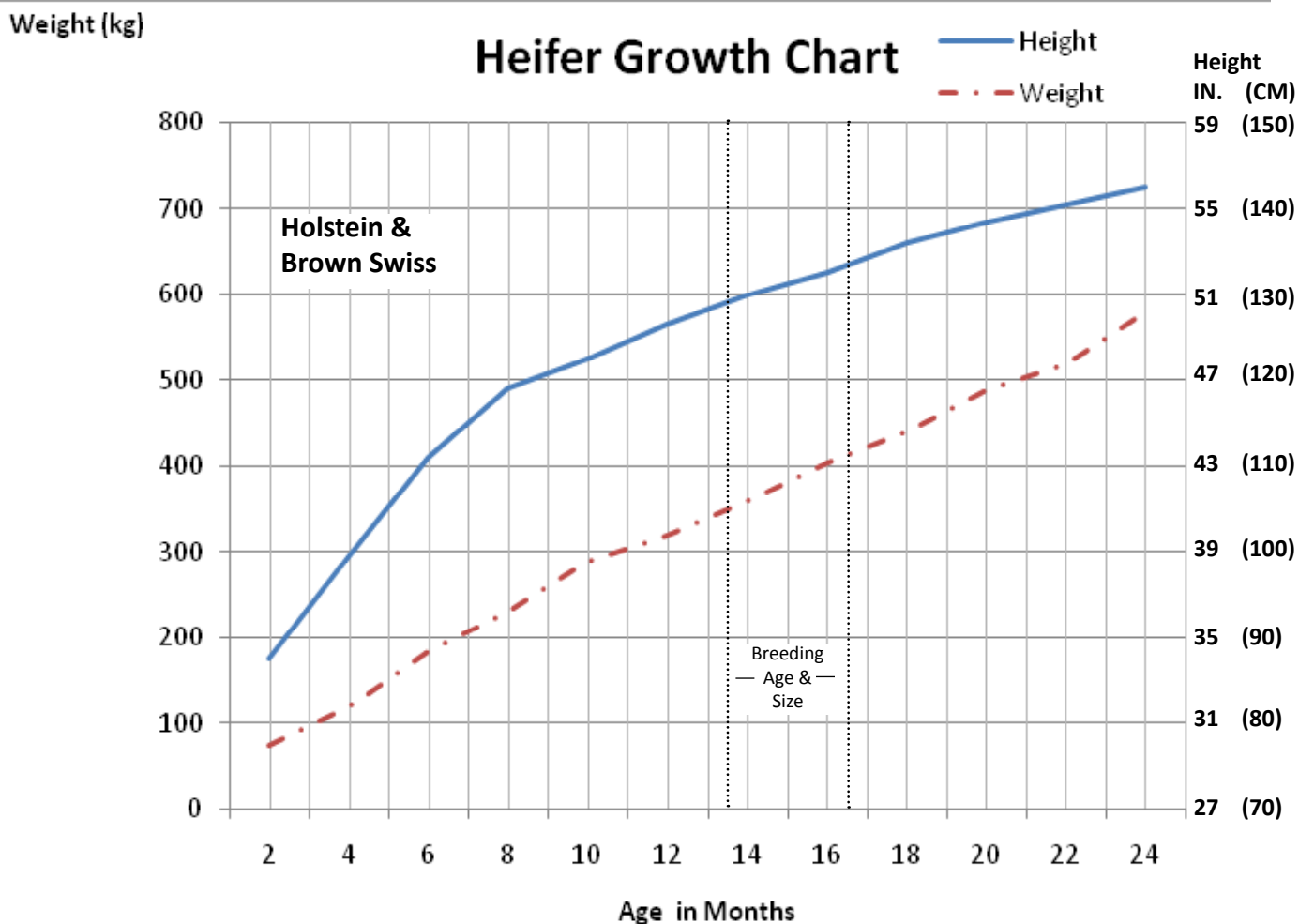
Do you know if there is linebreeding in any earlier generations? _____

What is the classification of your calf's dam? _____

What are the classifications of the next dams? _____



Fill in the chart below to see how your calf grew this year compared to the average for her breed:



At the beginning of the year my animal is _____ compared to the average height curve (circle one):

- a. Tall
 - b. Average
 - c. Short
- Does this change during the year? _____

At the beginning of the year my animal is _____ Compared to the average weight curve (circle one):

- a. Heavy
 - b. Average
 - c. Light
- Does this change during the year? _____

Caring for Your Project Animal – A Big To-Do List

Having an animal under your care is a big responsibility. List the duties and chores that you are responsible for to ensure that your project animal is healthy and happy while in your care.

DAILY:

WEEKLY:

MONTHLY:

ANNUALLY:

ANY SPECIAL DUTIES NOT LISTED:

Calf Examination Chart

Complete the following medical examination chart for your 4-H project animal.

Calf Identification:			
Weather Temperature:			
General state of health: (circle one) EXCELLENT GOOD POOR			
Describe how the calf looks and acts:			
Have these management practices been done?	Yes	No	Comments (i.e. method, date, etc.)
Horns removed			
Extra teats removed			
Dewormed recently			
Free from flies and lice			
Vaccinated (indicate for which diseases in comments section)			
Tagged			
Ear tattooed (if applicable)			
	Observations of a Healthy Calf		Symptoms of a Sick Calf
Udder and teats			
Ears and eyes			
Respiration rate			
Heart rate (pulse rate)			
Temperature			
Fecal material			
Eating habits			
Drinking habits			

Source: Chart adapted from Manitoba 4-H Intermediate Dairy Manual

Breeding your 4-H Dairy Project Animal

Recording your heifer’s heats will help you keep track of her reproductive cycle. Then you will know when to expect her to be in heat when you hope to breed her. Record your heifer’s heats on the chart below:

Date	Observations <i>(i.e. loud bawling, restless, mounting other animals, standing to be mounted by other animals, mucous discharge, bloody discharge following heat, etc.)</i>

When do you want to breed your heifer? _____

If her breeding date is during the time of this project, was she bred successfully? _____

Based on your heifer’s parentage and her own conformation traits, examine current bull proofs and select your top three choices of bulls to breed her to:

	Bull Name	Reasons for Selection
1 st choice		
2 nd choice		
3 rd choice		

My results at 4-H and open shows:

Name of Show	Date	Judge's Comments Showmanship	Judge's Comments Conformation

What improved over the course of the year? _____

Show Record of My Dairy Project Animal

Show date	Show attended and transport cost if applicable.	Classes entered & cost	Placings	Judge(s)	Awards received

What is the value of showing your 4-H project animal?

What does your participation in these shows teach you?

Feed Resource Sheet

(Adapted from the Manitoba 4-H Dairy Record Book)

Metric Conversion Table	Weighing Feed
<p>Weight:</p> <p>1 ounce = 18.3 grams 1 pound = 0.45 kilogram 0.035 ounces = 1 gram 1,000 grams = 1 kilogram 2.205 pounds = 1 kilogram 2,200 pounds = 1 tonne 1,000 kilograms = 1 tonne</p> <p>Liquid Measure:</p> <p>1 quart = 1.1 litres 1 gallon = 4.5 litres 0.91 quarts = 1 litre 0.22 gallon = 1 litre</p> <p>Length:</p> <p>1 inch = 2.54 centimeters 1 yard = 0.9 meters 0.39 inch = 1 centimeter 1.1 yard = 1 meter 100 centimeters = 1 meter</p>	<p>Whenever a feed is weighed, you should record the kind and weight on a separate piece of paper so that the transfer can be made at the end of the month.</p> <p><i>The following information may help in your calculations:</i></p> <p>To convert POUNDS to KILOGRAMS: Divide the total pounds by 2.205 to determine the kilograms fed. Example: 300 lbs / 2.205 = 136 kgs.</p> <p>To convert POUNDS to TONNES: Divide the total pounds by 2,200 to determine the tonnes fed. Example: 700 lbs / 2,200 = .32 tonnes</p> <p>To convert KILOGRAMS to TONNES: Divide the total kgs by 1,000 to determine the tonned fed. Example: 1,100 kgs / 1,000 = 1.1 tonne</p> <p>To convert BUSHEL to KILOGRAMS to TONNES: If you are self-feeding and use a bushel measure, multiply the number of kgs / bushel * by the number of bushels to determine the kilograms fed.</p> <p>To determine tonnes fed, divide this amount by 1,000. Example: * Barley - there are 21.8 kgs / bushel 21.8 x 2,000 bushel. = 4360 kgs 4360 kgs / 1,000 = 4.36 tonnes * Oats - there are 15.4 kgs / bushel * Wheat - there are 27.2 kgs / bushel</p>

Feed Summary (review your 4-H Dairy Manual for full descriptions)

Roughages - hay, haylage, corn silage, grasses. Important for ruminant animals such as sheep and cows.

Concentrates - made from a mix of grains & other products for added energy & protein

Eg.- grains such as corn, oats & barley

- distillers & brewing by-products
- oilseed meals, such as soybean, linseed & canola meal
- whole seeds, such as soybean & cotton seed
- non-protein nitrogen (NPN) such as feed grade urea and anhydrous ammonia

Total Mixed Ration (TMR) - a balanced ration including minerals, vitamins & concentrates



ANALYZING your Feed:

Do you feed a brand name feed? _____.

Why did you choose this brand of feed? _____

Read the feed tag on your calf starter or grain supplement that you feed your 4-H dairy project animal.

What % does your label read?	
Protein (min)	
Fat (min)	
Fiber (max)	
Moist or dry matter	
Others on the list:	

Have you had any feeding problems? _____

Does your calf eat well? _____

If you are having problems describe them. _____

What may be the possible reason for feeding problems? _____

What steps will you take to solve this problem? _____

Calf Feeding Records

(Adapted from the Manitoba 4-H Dairy Record Book)

Age of Calf	Suggested Guidelines	What you did with your calf (average over suggested time period)
0 - 3 days	Colostrum twice daily	Colostrum
3 - 60 days	Milk Replacer * .45 - .7 kg / day Calf Starter .75 - 1.0 kg / day	Milk Replacer _____ kg / day x _____ days = _____ kgs Calf Starter _____ kg / day x _____ days = _____ kgs
8 weeks to 3.5 months (45 days)	Good Hay 1.25 - 2 kg / day Grain Mix (or Grower Ration) 1.0 - 1.5 kg / day	Good Hay _____ kg / day x _____ days = _____ kgs Grain Mix (or Grower Ration) _____ kg / day x _____ days = _____ kgs
3.5 - 9 months (165 days)	Good Hay (free choice) 2.25 - 4.0 kg / day Grain Mix (or Grower Ration) 2.0 - 2.5 kg / day	Good Hay _____ kg / day x _____ days = _____ kgs Grain Mix (or Grower Ration) _____ kg / day x _____ days = _____ kgs

* This guideline for milk replacer will vary with birth weight of the calf. These feeding levels are typical for calves housed @ temperatures above 70 C (45' F). Higher milk replacer feeding levels would be required if calves are raised in cold temperatures below P C (45" F).

Yearly Calf Feed Cost Records

(Adapted from the Manitoba 4-H Dairy Record Book)

A. 0 - 60 days

* cost per kg can be obtained from your Leader

Age of Calf	Feed Used	Your Cost
0 - 3 days	Colostrum	\$ _____
3 - 60 days	Milk or Milk Replacer	
	Total kgs: _____ x Cost per kg: \$ _____ =	\$ _____
	Calf Starter	
	Total kgs: _____ x Cost per kg: \$ _____ =	\$ _____

TOTAL COST OF FEEDING YOUR CALF FOR 0 - 60 DAYS =

\$ _____

B. 8 Weeks - 3.5 Months

* cost per kg can be obtained from your Leader

Age of Calf	Feed Used	Your Cost
8 weeks - 3.5 months (45 days)	Good Hay	
	Total kgs: _____ x Cost per kg: \$ _____ =	\$ _____
	Grain Mix (or Grower Ration)	
	Total kgs: _____ x Cost per kg: \$ _____ =	\$ _____

TOTAL COST OF FEEDING YOUR CALF FOR 8 WEEKS - 3.5 MONTHS=

\$ _____

Age of Calf	Feed Used	Your Cost
3.5 months to 9 months (165 days)	Good Hay	
	Total kgs: _____	
	x	
	Cost per kg: \$ _____ =	\$ _____
	Grain Mix (or Grower Ration)	
	Total kgs: _____	
	x	
	Cost per kg: \$ _____ =	\$ _____

C. TOTAL COST OF FEEDING YOUR CALF FOR 3.5 MONTHS - 9 MONTHS=

\$ _____

	YEARLY COST
A. 0-60 days	\$ _____
B. 8 weeks to 3.5 months	\$ _____
C. 3.5 months to 9 months	\$ _____
TOTAL COST OF FEEDING YOUR CALF TO 9 MONTHS OF AGE=	\$ _____

D. Other costs

Date	Service Performed	Cost
	Herd Health Costs:	
	Dehorning	\$ _____
	Remove extra teats	\$ _____
	Vaccinations	\$ _____
	Other	\$ _____
	Identification	\$ _____
	Other costs:	\$ _____
	TOTAL EXTRA COSTS:	\$ _____

E. YEARLY CALF COST SUMMARY

Cost of feeding your calf to 9 months \$ _____

Other costs \$ _____

TOTAL COST OF RAISING CALF TO ACHEIVEMENT: \$ _____

OPTIONAL: HEIFER FEEDING RECORDS

(Following pages adapted from the Manitoba 4-H Dairy Record Book)

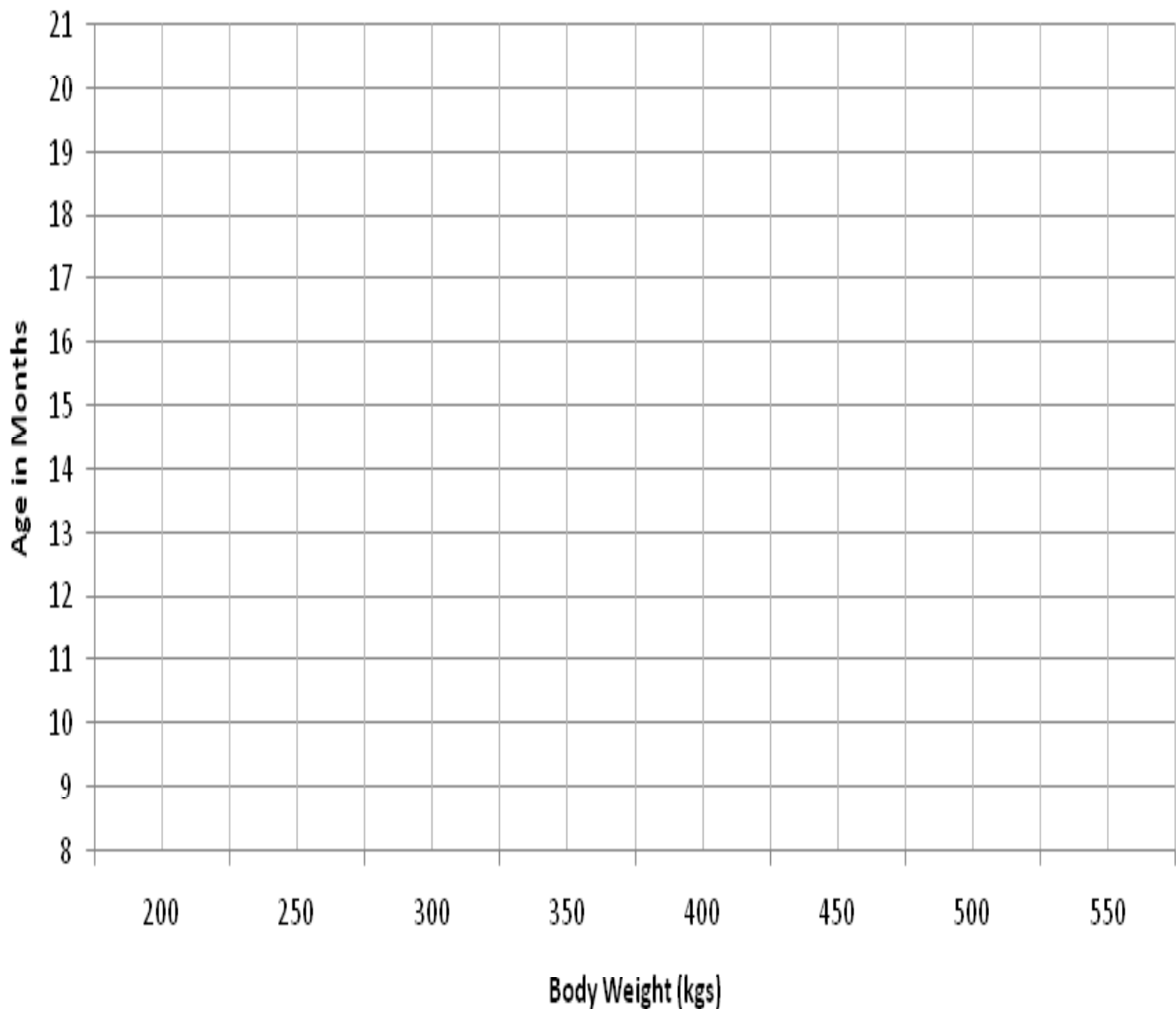
Many 4-H members will keep their 4-H calves, raising them to be heifers. This is a very critical time in your animal's life, as it will reach its full growth potential.

These records help you keep track of how much your heifer eats and grows. The end result will indicate how well you have looked after your heifer.

Remember those important points in keeping records - accurate, complete, neat, timely and lots of fun while doing it!

Graph the progress your heifer has made

(connect the dots to show the progress)



Heifer Feeding Records - 9 - 12 months

Age of Animal	Suggested Guideline (it is assumed all vitamin & mineral requirements will be added to the concentrates)	What You Did With Your Animal (average over suggested time period)
9 - 12 months (120 days)	Roughage (either i, ii, or iii)	Roughage
	i) 4 - 5.5 kg of hay / day <p style="text-align: center;">OR</p> ii) 1.0 - 2.5 kg of hay / day plus 3.0 - 6.0 kg of silage / day <p style="text-align: center;">OR</p> iii) 6.0 - 10.0 kg of silage / day Concentrates 1.5 - 2.0 kg of concentrates / day	i) _____ kg / day of hay x _____ days = _____ kgs of hay <p style="text-align: center;">OR</p> ii) _____ kg / day of hay x _____ days = _____ kgs of hay plus _____ kg / day of silage x _____ days = _____ kgs of silage <p style="text-align: center;">OR</p> iii) _____ kg / day of silage x _____ days = _____ kgs of silage Concentrates _____ kg / day of concentrate x _____ days = _____ kgs of concentrate

Heifer Feeding Records - 12 - 24

Age of Animal	Suggested Guideline (it is assumed all vitamin & mineral requirements will be added to the concentrates)	Worksheet (average over suggested time period)
12 - 24 months (till heifer calves, date dependnt on each heifer's calving date).	Roughage (on an as-fed basis) (either i, ii, or iii)	
	i) Hay 6 - 12 kg / day OR ii) Haylage 12 - 24 kg / day OR iii) Combination Your choice to balance Concentrates 1.5 - 2.5 kg of concentrates / day	i) Hay _____ kg / day x _____ days = _____ kgs of hay OR ii) Haylage _____ kg / day x _____ days = _____ kgs of hay OR iii) Combination _____ kg / day of _____ (feed) x _____ days <u>plus</u> _____ kg / day of _____ (feed) x _____ days = _____ kg of _____ (feed) <u>plus</u> _____ of _____ (feed) Concentrates _____ kg / day x _____ days = _____ kgs of concentrate

Heifer Feed Cost Records - 9 - 12 months

Age of Heifer	Suggested Guideline (it is assumed all vitamin & mineral requirements will be added to the concentrates)	Worksheet (average over suggested time period)
9 - 12 months (120 days)	Roughage (either i, ii, or iii)	
	i) Total kg of hay _____ x cost per kg _____ OR	i) \$ _____ OR
	ii) Total kg of hay _____ x cost per kg _____ PLUS	ii) \$ _____ PLUS
	Total cost of silage _____ x cost per kg _____ = OR	iii) \$ _____ OR
	iii) Total kg of silage _____ x cost per kg _____ = Concentrates Total kgs _____ x cost per kg _____ = Roughage (either i, ii, iii or iv): Concentrates:	\$ _____ \$ _____ \$ _____ \$ _____
A. Total Cost of feeding Your Heifer from 9 - 12 Months:		\$ _____

Heifer Feed Cost Records - 12 - 24 months

Age of Heifer	Suggested Guideline (it is assumed all vitamin & mineral requirements will be added to the concentrates)	Worksheet (average over suggested time period)
12 - 24 months (365 days) (till heifer calves)	Roughage (either i, ii, or iii)	
	<p>i) Total kg of hay _____ x cost per kg _____ =</p> <p style="text-align: center;">OR</p> <p>ii) Total kg of haylage _____ x cost per kg _____ =</p> <p style="text-align: center;">OR</p> <p>iii) Total cost of silage _____ x cost per kg _____ =</p> <p style="text-align: center;">OR</p> <p>iv) Combination Total kg of _____ (feed): _____ (kg x cost per kg): _____ =</p> <p style="text-align: center;">PLUS</p> <p>Total kg of _____ (feed): _____ (kg x cost per kg): _____ =</p> <p>Concentrates Total kgs _____ x cost per kg _____ =</p> <p style="text-align: right;">Roughage (either i, ii, iii or iv):</p> <p style="text-align: right;">Concentrates:</p>	<p>i) \$ _____</p> <p style="text-align: center;">OR</p> <p>ii) \$ _____</p> <p style="text-align: center;">OR</p> <p>iii) \$ _____</p> <p style="text-align: center;">OR</p> <p>iv) \$ _____</p> <p>\$ _____</p> <p>\$ _____</p> <p>\$ _____</p> <p>\$ _____</p>
B. Total Cost of feeding Your Heifer from 12-24 Months: (till heifer calves)		\$ _____

COST OF FEEDING YOUR HEIFER

	YEARLY COST
A. 9 - 12 months	\$ _____
B. 12 - 24 months	\$ _____
TOTAL COST OF FEEDING YOUR HEIFER TILL CALVING	= \$ _____

D. Other costs

Date	Service Performed	Cost
	Herd Health Costs:	
	Vaccination	\$ _____
	Pregnancy check	\$ _____
	Parasite control	\$ _____
	Fly tags	
	Hoof Trimming	
	Other	\$ _____
	Breeding:	\$ _____
	Other costs:	\$ _____
	TOTAL EXTRA COSTS:	\$ _____

YEARLY HEIFER COST SUMMARY

	YEARLY COST
A. Total Cost of Feeding Your Heifer till Calving	\$ _____
B. Other Costs	\$ _____
TOTAL COST OF RAISING YOUR HEIFER TILL CALVING	= \$ _____