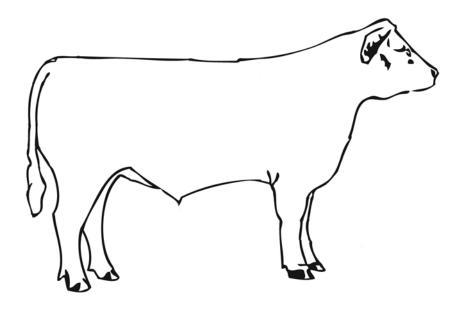
British Columbia



Fed or Market Beef Record Book



Units applicable to this record book are: Unit II (Fed Calf) and Unit V (Market Animal)

The 4-H Motto

"Learn to Do by Doing"

CANADA®

The 4-H Pledge

I pledge
My Head to clearer thinking
My Heart to greater loyalty,
My Hands to larger service,
My Health to better living,
For my club, my community, and my country.

The 4-H Grace

(Tune of Auld Lang Syne)
We thank thee, Lord, for blessings great
on this, our own fair land.
Teach us to serve thee joyfully,
with head, heart, health and hand.

Acknowledgements:

This 4-H Record Book is an extension of the BC 4-H Livestock Record Book, Publication #398 and has been combined with the individual project record books of the 4-H Branch of Alberta Agriculture, Food and Rural Development. Thank you to the Alberta 4-H Program for the use of their materials.

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Instructions for the Electronic Record Book

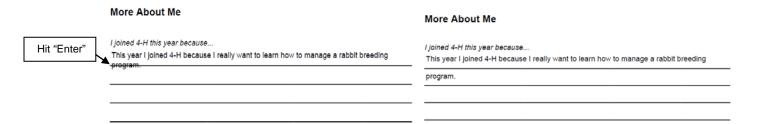
Each B.C. 4-H record book publication has been converted to allow for electronic data entry. This will allow for changes to be made and saved on your computer. It is also a way to create extra pages when needed.

To use:

- All files are pdf form. The book is to be filled in electronically and then printed.
- Where there is a light-blue section, you will be allowed to fill in the required information.
 Some sections will also have check boxes.
- All typing is in 12 point Helvetica font
- To move wording in the box, use the space bar to adjust location.
- You cannot exceed the writing space of the box otherwise it will not print correctly.



- For multi-line answers, type until the second line and then hit enter. This will line up the writing with the pre-determined spaces.



Additional Notes

- After the file is printed, complete your record book by doing the following:
 - ☐ Circle lbs or kg on feeding record pages
 - ☐ Attach photographs to the document
 - ☐ Get handwritten signatures on pages that require it.
 - ☐ If a growth chart for your animal is included, you will need to complete it by hand.
- Save as a regular file, but remember to create a new copy for each of the same project type or each new project year.

The Creed 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.
- Be kind to animals. 8.
- 9. Always be a good sport in competition.
- 10. Keep an accurate record of my projects.
- 11. Complete my project and take part in all the activities of my 4-H club each year.

I have read and agree to abide by this creed.

Your Signature _____ Date



4-H AWARE Program

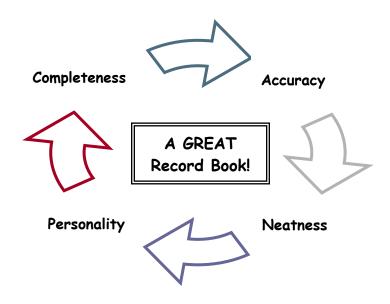
Your leader should review the 4-H AWARE program. AWARE is Animal Welfare, Animal Rights Education and being a beef 4-H member, this is an important topic. When you are at the fair, make sure that people know your animal has feed and water and explain the care of your animal. Before the fair, review all the aspects of your project and any questions that could be asked and try to have the answers at your stall.

About Your Record Book

Why do we keep records in 4-H?

- To record information about your animal.
- To record the work you have done.
- To record your club activities.
- To learn the importance of keeping accurate records in any business.
- So you can see the actual costs involved in completing your project. Without records, you cannot accurately tell how much of a gain or loss you have made on your investment.

What is involved in a Great Record Book?



- **Completeness** A good record book has all the required information completed, including achievement day and an evaluation of your project year.
- **Accuracy** Your figures and information should be accurate and up-to-date. Be accurate when weighing your feed and your animal.
- **Neatness** Neatness is important in your record book. We realize that you are working on your record book throughout the year and will do your best to keep your book neat.
- **Personality** This is the story of your project and experiences. Be original and personal in the information you keep in your book. Add photographs (with captions), newspaper and magazine articles on you, your club, your project type and 4-H. Your record book will be important to you for many years.

Flexibility is the Key!

The key to this beef record book is flexibility. Start by putting these pages in a three ring binder. Add extra pages if you need more room. Make this your personal record book. Remember that this a record book of YOUR WORK WITH YOUR PROJECT!

Hints for Keeping Good Records

Helpful Hint: Keep a calendar and a pen somewhere handy to your animal. Whenever you change the feed, or your animal is treated or vaccinated, you can quickly grab your calendar and mark it down. When it is time to write the information in your record book, the information is easy to find and accurate.

- Read the instructions for each section carefully. Make sure that you know in advance which records you must keep in that section. If you have any questions, ask your leader, he or she is there to help you!
- If you do not know feed prices, there are many people you can contact. Your club may decide to set prices at the start of the project year. Consult your parents, Internet websites, local radio reports, feed companies, your local agriculture specialist, your leader, your neighbour and so on. Prices will vary during the year.
- Be consistent in your units for weight. No matter which type of units you use (metric or imperial), use the same units through your entire book.
- Keeping records is a good business procedure. A good record book will be important
 in future projects for your decision-making. For fed or market beef projects you must
 keep records for at least 150 days. Your achievement day must be included in the 150
 day record period.
- Keep your records up-to-date! Problems are caused by forgetting to record last month's feeds, or not recording changes in the feeds.
- Be accurate in your feed weight so you can accurately reflect the costs of maintaining your project. Round the number to one decimal place, for example: 1.4 kg instead of 1.375 kg.
- Include all costs, no matter how small. This will give you a true picture of your actual costs.
- Identify any purchases or losses of equipment during the project year.

About Me and My Club

About Me	
My name	
Address	_
My age at January 1 st this year	
This is my year in 4-H	
About My Club	
Club Name	
Number of members	
This club has been operating for years.	
<u>Name</u>	Phone Number
Club Leader(s):	
Club Executive:	
President	
Vice President	
Secretary	
Treasurer	
Press Reporter	
Sofoty Officer	

More About Me

I joined 4-H this year because
This year in 4-H, I hope to accomplish
This year I will contribute to my club by

About My Beef Project

Name of Animal			
Date of Birth			
Purebred or Crossl	ored	Breed	·
CCIA Eartag		<u></u>	
Name/Breed of Da	m		
Name/Breed of Sire	e		
Date purchased	Purchas	e price or initial value	
Purchased from	Name:		
	Farm/Breeder:		

Include a photograph here, taken within the first two months of the project year. Be sure to put a title and date.

(Add more pages to show all of your photographs from throughout the year.)

4-H Year Planning

Complete this section at the beginning of the project year.
How many and what kinds of animals will you care for (fed calf, market steer)?
What will you do to take care of them (example: feed, exercise, grooming)?
What goals do you want to accomplish with your project (example: a steady weight gain, best grade of carcass)?
What activities do you want to try (example: a regional 4-H event, judging rally)?

Caring for My Animal

Check the things that you are already doing well to care for your animal. Check which ones you can improve on.

I'm already doing	I want to improve	Care
		Prepare facilities before I get my animal.
		Provide adequate housing and bedding.
		Feed my animal daily and on a regular schedule.
		Feed a balanced ration.
		Provide access to good quality water at all times.
		Control internal and external parasites.
		Any invasive procedures (e.g. castration, dehorning, docking) are performed when animals are as young as possible.
		Train animals to lead or be handled at a young age.
		Have a planned health program to prevent disease.
		Observe animals daily and get treatment for those needing it.
		Aware of the signs that my animal is in pain or is suffering.
		Keep feed and treatment records.
		Be aware of an animal's comfort (physical and mental) at all stages of production.
		Minimize or eliminate all procedures or circumstances that may cause stress to my animal.
		Take the time to understand the behavioural needs (e.g. companionship) of my animals.
		Sort and load animals safely and with concern for them.

Beef Management

Your animal requires regular care and management. Here is the place to explain what you regularly do for or with your animal on a daily, weekly and monthly basis. Be as specific as possible. Use the "Caring for My Animal" checklist on the previous page as a guideline for this page.

Remember to list the following:

- Feeding and watering practices
- Bedding
- Grooming
- Health check
- Clean pens, feed and water containers
- Manure removal
- Checking and repairing facilities as needed: fencing, pens, barns

What I do for / with my project animal					
Daily:					
Veekly:					
Monthly:					

My Beef Project Frame	e Score Weight measured in kgs / lbs (circle one)
Purchase Weight (1) X Purchas	e Price = Initial Value of Project Animal (2) = (2)
Weigh-In Date	Weight at Weigh-In (3)
Achievement Date	Number of Days on Feed (4)
Frame Score	
(do not complete this section if y instead proceed to the Rate of Ga	ou a record of weights for your animal on a scale, ain Record section)
Frame score is a score based on a	n actual measurement of hip height.
	stimated mature weight of the animal. This score will equired for the animal to be at the estimated finished days on feed.
How to determine the Frame Score 1. Measure the animal from the	
2. What is the age of your anim	al (in months)?
3. Find the age of your animal i	n the first column of the chart.
4. Go across the frame column	s until you find your calf's approximate hip height.
5. Go down to the last column to	under the hip height. It will show you an approximate
correct finishing weight for yo	our animal.
6. Weigh your animal and then	fill in the information to find out how much your calf will
have to gain each day, to be	finished by Achievement. How much did it weigh?

Frame Score Chart

Age (months)	Frame Score	Frame Score	Frame Score	Frame Score
	4	5	6	7
10	45.0"	47.0"	49.0"	51.0"
11	46.0"	48.0"	50.0"	52.0"
12	47.0"	49.0"	51.0"	53.0"
13	47.5"	49.5"	51.5"	53.5"
14	48.0"	50.0"	52.0"	54.0"
15	48.5"	50.5"	52.5"	54.5"
16	49.0"	51.0"	53.0"	55.0"
Estimate of Correct	1,050 to 1,150 lb	1,151 to 1,250 lb	1,251 to 1,350 lb	1,351 to 1,450 lb
Finished Weight	(476 to 522 kg)	(522 to 567 kg)	(567 to 612 kg)	(613 to 658 kg)

Project Frame Score		Estimated	d Finished	Weight	(5)
Estimated Finished Weig	[Veight at Weigh-In	(3) = Esti	mated Total V	Veight Gain (6) (6)
Estimated Total Weight on Feed		Targeted Ave	rage Daily	Gain (ADG)	
	(6) =				
	(4)				

Knowing how much your animal is gaining each day is important for a beef project. Weights can be measured by using scales, weight tapes, or estimated. It is recommended to weight your animal on a scale at least at the beginning and end of your project.

Instructions: Fill in the chart below and then graph your animal's growth curve at the end of the project year. For calculations for the first table, follow the example column. The **weight gain** will be the overall weight gained for the month; therefore the **ending weight [2]** minus the **starting weight [3]**. The **average daily gain [5]** is the weight your animal gained each day, which can be calculated using the **weight gain [4]** over the **number of days in the month [1]**. If your weigh-in started in the middle of the month, only account for that number of days.

This is an example calculation, these values are not to be used in your table:

For the month of March, there are 31 days. The ending weight of a fed calf is 879 lbs (398.7 kg). The start weight was 825 lbs (374.2 kg).

Weight Gain = Ending Weight - Starting Weight = 879 lbs (398.7 kg) - 825 lbs (374.2 kg) = 54 lbs (24.5 kg)

Average Daily Gain = Weight Gain = 54 lbs (24.5 kg) = 1.74 lbs (0.79 kg) per dayNumber of Days 31 days

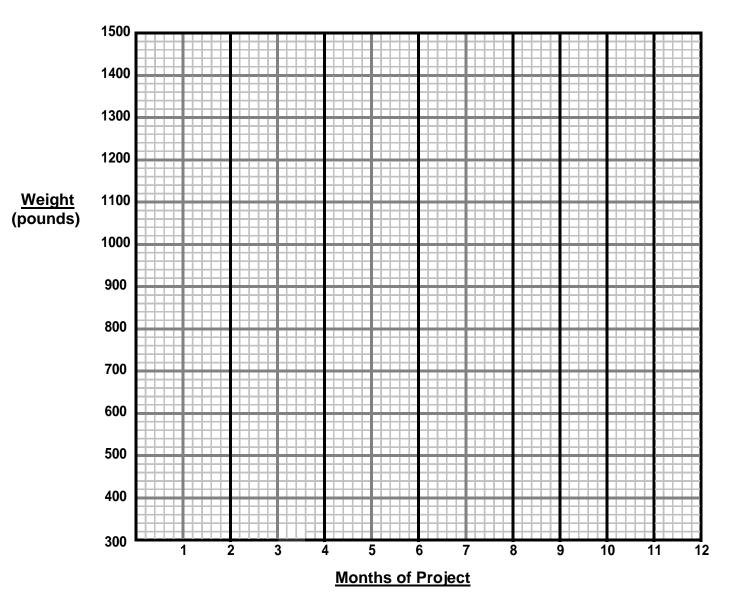
Month					
Number of Days [1]					
Ending Weight (kg/lbs) [2]					
Starting Weight (kg/lbs) [3]					
Weight Gain (kg/lbs) [4]	[4] = [2] – [3]				
A.D.G. = Average Daily Gain	[5] = [4] / [1]				
(kg/lbs per day) [5]					

Final Weight	-	Initial Weight	=	Total Weight Gain
			=	
Total Number of Sum of I		of Project =		

Growth Chart

Using the weights in the table, draw a chart to help you track your animal's progress. In the chart below, plot the predicted growth curve (based on the average daily gain) and then plot the actual weight of your animal at various times during the feeding period to determine if you are "on target". Compare the actual growth curve with the targeted growth line. From this information, you may need to make adjustments to how much you are feeding.

- 1. Mark the initial weight at the appropriate location on the left-hand side of the table.
- 2. Mark the estimated final weight at the appropriate location for the number of weeks in the feeding period.
- 3. Connect these 2 points with either a straight or curved line, based on your predicted average daily gain.
- 4. Each time you weight your animal, record that weight on the Growth Chart. Connect this point with the previous actual weight.



Equipment Inventory

This page will be used to keep track of all equipment that the member owns and all the items will be assigned a value. The Equipment Inventory will be continuous from year to year and should be transferred to the current Record Book each year. Do not include items that you put in Other Costs.

Example:

Date	Equipment Item	Value of Purchased Equipment of Carried Forward	10% Depreciation (\$)	Remaining Value to be Carried Forward (\$)
April 1, 20XX	Feed Bucket	\$18.50	\$1.85	\$16.65
April 15, 20XX	Measuring Scoop	\$7.00	\$0.70	\$ 6.30

Date	Equipment Item	Value of Purchased Equipment of Carried Forward	10% Depreciation (\$)	Remaining Value to be Carried Forward (\$)
	_			>>>>>>
	Tota	al Depreciation Costs		

Weight measured in kgs / lbs (circle one)

Include the values of pasture, hay, grain and supplements that your project animal eats. If you share feed with someone else, calculate and record only the value of the feed your own animal eats.

Monthly Record For: March (Example for your reference)

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed [1]	Weight per Day kgs/lbs [2]	Monthly Weight kgs/lbs [3]	Price per Weight Unit [4]	Monthly Feed Cost (\$) [5]
	[1]	[2]	[3] = [1] x [2]	[4]	[5] = [3] x [4]
16% Dairy Texture	31	6.75 kg	209.25 kg	\$0.46/kg	\$96.26
Hay	31	0.91 kg	28.21 kg	\$1.22/kg	\$34.42
Subtotals			Total 237.46 kg		Total \$130.68

Monthly Record For:	
----------------------------	--

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed [1]	Weight per Day kgs/lbs [2]	Monthly Weight kgs/lbs [1] x [2] = [3]	Price per Weight Unit [4]	Monthly Feed Cost (\$) [3] x [4] = [5]
		[2]			
	0000000	>>>>>>		0000000	
Subtotals			Total		Total
		<u> </u>	(A1)		(B1)

Monthly	/ Record	For:	

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed	Weight per Day kgs/lbs	Monthly Weight kgs/lbs	Price per Weight Unit	Monthly Feed Cost (\$)
				0	
Subtotals			Total		Total
	88888888	*******	(A2)	88888888	(B2)

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed	Weight per Day kgs/lbs	Monthly Weight kgs/lbs	Price per Weight Unit	Monthly Feed Cost (\$)
Subtotals		l V	Total		Total
	8888888	*****	(A3)	88888888	(B3)

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed	Weight per Day kgs/lbs	Monthly Weight kgs/lbs	Price per Weight Unit	Monthly Feed Cost (\$)
Subtotals			Total		Total

Monthly Rec	ord For:	

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed	Weight per Day kgs/lbs	Monthly Weight kgs/lbs	Price per Weight Unit	Monthly Feed Cost (\$)
Subtotals			Total		Total
			(A5)		(B5)

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed	Weight per Day kgs/lbs	Monthly Weight kgs/lbs	Price per Weight Unit	Monthly Feed Cost (\$)
Subtotals			Total		Total

Monthly Recor	d For:
	<u> </u>

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed	Weight per Day kgs/lbs	Monthly Weight kgs/lbs	Price per Weight Unit	Monthly Feed Cost (\$)
Subtotals			Total		Total
Subiolais			(A7)		(B7)

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed	Weight per Day kgs/lbs	Monthly Weight kgs/lbs	Price per Weight Unit	Monthly Feed Cost (\$)
Subtotals			Total		Total
			(A8)		(B8)

Feed (Grains, Hay, Supplements, Pasture)	Days on Feed	Weight per Day kgs/lbs	Monthly Weight kgs/lbs	Price per Weight Unit	Monthly Feed Cost (\$)
		ge/iiic			
Subtotals			Total		Total
	*******		(A9)		(B9)

Total Feed Amounts and Expenses

Month	Monthly Weight of Feed (from pg 13-17)		Monthly Feed Cost (\$) (from pg 13-17)
	(A1)		(B1)
	(A2)		(B2)
	(A3)		(B3)
	(A4)		(B4)
	(A5)		(B5)
	(A6)		(B6)
	(A7)		(B7)
	(A8)		(B8)
	(A9)		(B9)
Total Feed		Total Feed	
(kgs/lbs) = A1+A2+A3+A4+ A5+A6+A7+A8+A9		Expenses (\$) = B1+B2+B3+B4+ B5+B6+B7+B8+B9	

My Beef Project Feed Information

Attach a Feed Ingredient Slip/Nutritional Analysis from each of your feed sources. If the feed is mixed in a mill, ask the mill operator for a list of ingredients. If a slip is not available, please describe your feed sources as best as possible.
Did the feed or mixture change during the course of the project? If yes, why and how did it change?
Did your animal have any feeding problems? Describe the problem and how you dealt with it.

Health and Veterinary Record Animal's Veterinarian: Veterinarian's Phone Number: _____ This should include a record of any health related activities (immunizations, hoof trimmings, drugs, surgery, or use of veterinarian's services for any reason such as health certificate). This should include what you used, how much you used, and what you used it for. Fill in all applicable information. If your animal was healthy through the project, please note. Date **Procedure or Problem** Treatment Cost (\$) (product used, dosage)

Total Health and Veterinary Expenses

Medications

Because your project is a market animal, it is important to record medications and when they are through the animal's system (withdrawal). Remember to document ALL medications or medicated feeds and withdrawal times.

Date Administered or Fed	Medication Name (Medication added/included in feed and approximate amount of medication)	Withdrawal Time (Instructed)	Withdrawal Complete (Date)

Prohibited Feed Affidavit	
I, (print), of the attest that to the best of my knowledge, the ration fed to cattle under rownership and which are supplied to any packer in Canada have not material" as defined in the Mammalian to Ruminant Feeding Ban SOF to the Regulations Respecting the Health of Animals, SOR/91-52S), needs to the Animals Act S.C. 1990, c21	my authority, direction or been fed "prohibited R/97-362 (Amendments
4-H Member's Signature	Date
Parent or Guardian Signature	Date

My Beef Project Other Expenses

In this section you will record your other costs to prepare your beef project for achievement day. Please feel free to include attachments of actual expenses with your record book. The types of expenses to include on this sheet are Bedding, Show Supplies, Show Entry Fees, Trucking, and Miscellaneous Expenses.

Date	Type of Expense	Cost
	Та	otal Other Expenses

My Beef Project Show Record

In this section, you will list the shows you attended with your project animal. If you earned prize money, put the value in the income portion of the table.

Date	Show and Judge	Class	Prize Earned	Income
			Total Show Incon	ne

My Beef Project Financial Summary Income: Sale price or estimated value of animal at end of project Total show income (page 23) TOTAL INCOME **Expenses:** Purchase Price or initial value of animal (page 6) Depreciation Cost (page 12) Total Feed Expenses (page 18) Health and Veterinary Expenses (page 20) Other Expenses (page 22) **TOTAL PROJECT EXPENSES Profit or Loss Calculation:** Total Income Total Project Expense **Profit or Loss** 1. Did you have a profit or loss? 2. If you had sold this animal at today's market price, would you have made a profit or loss? Indicate the current market price per weight unit. **Market Price** - Expenses = Real Life Profit or Loss

Note: The person who bought your project supports you, as a 4-H member, by paying a premium price (more than market value). You are expected to send a thank you note to your buyer.

My Animal's Performance

Using the information from page 10, you can calculate costs for the entire length of time of your project.		
Total Weight Gain (from bottom of pg 10) =		
Total Number of Days of Project (from bottom of pg 10) =		
Overall Average Daily Gain for Project Period = Total Weight Gain Total Number of days kgs/lbs kgs/lbs per day continuous cont		
Feed Cost per kilogram or pound of Weight Gain		
This tells you how much it costs to feed your animal(s) for one kilogram or pound of gain in weight. This does not include your other expenses.		
<u>Total Feed Expenses (pg 10)</u> = Feed cost per kilogram or pound of Weight Gain Total Weight Gain (see above)		
Breakeven Sale Price Needed to Cover All Costs		
<u>Total Project Expense</u> = Breakeven sale price needed to cover all costs Actual Sale Weight		

Carcass Evaluation

One end product in the livestock industry is meat for the retail market. Because of this, the quality and lean meat yield of the carcass produced is important. The quality and yield information is obtained from the grader's report.

Carcass / Ear tag Number	
Live Weight (sale weight)	
Warm Carcass Weight	Carcass Weight Points
Estimated Lean Yield %	Yield % Points
Yield Grade	
Marbling	
Quality Grade	Quality Points
	Total Points

Definitions of Terms

Estimated Lean Yield: estimated by the grader of the percentage of red meat that makes up the carcass

Yield Grade: measuring of exterior fat and length & width of rib-eye.

Marbling: intramuscular fat amount in the rib-eye

Quality Grade: the Canadian grade the carcass receives reflects the tenderness, juiciness, consumer acceptability, shelf life and yield of the carcass

Look for the Canadian Beef Grading Agency for more information on Canadian beef grading.

Record of My Project's Progress

Include photographs with captions of your project and your 4-H year on photo pages.

Month	Comment – How did your project do this month, questions, comments?	
	Member:	
		Leader Initial:
	Member:	
		Leader Initial:
	Member:	
		Leader Initial:
	Member:	
		Leader Initial:
	Member:	
		Leader Initial:
	Member:	
		Leader Initial:
	Member:	
		Leader Initial:
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	Member:	
		Leader Initial:
	Member:	
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		Leader Initial:
	Member:	
		Leader Initial:
	[- ·	Leader Initial:
	Member:	
		Leader Initial:
		Leader Initial:
	Member:	
		Leader Initial:
	Member:	Leader Initial.
	Wember.	
		Leader Initial:
Leader's	Comments (for entire 4-H year)	
	,	

My Beef Project Photo Album

Be Creative. The more photographs, the better! A completed record book should at least have a beginning photograph and a finished picture. You are encouraged to be in the photo with your project animal and include more photographs. You should also include captions on your pictures that at least include the date of the photograph. You may use additional pages.

Club Activity Log

It is important to always keep track of the meetings, field trips and events you participate in and learn from your experiences. Describe with detail what you did, what you learned and what you completed during the year with your club or on your own.

Date	Meeting, Field Trip, At Home or Event	What you learned or accomplished
Feb. 20, 20XX	Club Public Speaking	Gave my speech and gained confidence as a speaker

Date	Meeting, Field Trip, At Home or Event	What you learned or accomplished

My Beef Project Year Summary

What I learned this year

This section is to be completed at the end of the 4-H year. It is meant to help you look back on all that you have learned during the past year. Look back on the goals you set for yourself at the beginning of the year. How well did you meet those goals?

How did you improve or learn the skills you wanted to learn?
How did you accomplish the goals you set for yourself?
What new activities did you try?
In what way did you help or teach others?

B.C. 4-H Provincial Council

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