

## The 4-H Motto

*“Learn To Do By Doing”*

## 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

**Developed** by Provincial 4-H Beef Advisory Committee (BAC). Special thanks to Leisa Gallelli for leading the revision of this resource.

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Check out our web site at: <http://www.4h.ab.ca> for an on line version of this resource.  
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### Transportation Regulations

When you transport your livestock within Alberta, the regulations require the livestock to be accompanied by a completed Livestock Manifest. This means that when you transport your livestock from your farm to an event, or any club activity, the manifest must be completed before the vehicle leaves your property.

Livestock owners over the age of 18 are required to have a Premises Identification (PID) account. If you are boarding your animal at someone else's place you are still required to have your own PID account but you will use the landowners PID number on your manifests and other official forms.

All cattle must be ear tagged with a mandatory CCIA (Canadian cattle Identification Agency) approved tag before being transported.

### About Your Record Book

Why do we keep records in 4-H?

- To record information about your animal.
- 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 profit or loss you have made on your investment.

### What is involved in a good record book?

- **Completeness** – A good record book has all of the required information completed.
- **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 your record book. Be original and personal in the information you keep in your book. Add photographs, pictures, newspaper and magazine articles about you, your club, your project type and 4-H. Your record book will be important to you for many years.

This record book is flexible. Put these pages into your binder. You may want to add extra pages if you need more room. Check with your leader whether your club prefers to have additional information in your record book. Make this your personal record book.

### Looking for the record book on-line?

On the 4-H Alberta web site, [www.4h.ab.ca](http://www.4h.ab.ca), click on Resource Log-In, under the category Livestock, this resource is available to be downloaded and saved as a PDF. In order to access this information you will need to log in using `alberta4h` (user name) and `cleaver` (password), both are case sensitive.

## 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.
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 \_\_\_\_\_

**ABOUT ME**

My name \_\_\_\_\_

My address \_\_\_\_\_

Phone number \_\_\_\_\_ Premise I.D. \_\_\_\_\_

Email address \_\_\_\_\_

My age on January 1<sup>st</sup> this year \_\_\_\_\_ This is my \_\_\_\_\_ year in 4-H.

**MORE ABOUT ME**

Why did you join 4-H this year?

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What do you hope to accomplish in 4-H this year?

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What are your goals with your market beef project in 4-H this year?

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What are you going to contribute to your club this year?

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## ABOUT MY CLUB

Club name \_\_\_\_\_

My club has been operating for \_\_\_\_\_ years.

This year we have \_\_\_\_\_ members.

Our club goal is \_\_\_\_\_

4-H District \_\_\_\_\_ 4-H Region \_\_\_\_\_

Club/Project Leader(s) Name \_\_\_\_\_ Phone \_\_\_\_\_

Name \_\_\_\_\_ Phone \_\_\_\_\_

Name \_\_\_\_\_ Phone \_\_\_\_\_

Name \_\_\_\_\_ Phone \_\_\_\_\_

My club email contact address \_\_\_\_\_

## CLUB EXECUTIVE AND OTHER CLUB POSITIONS

President Name \_\_\_\_\_ Phone \_\_\_\_\_

Vice President Name \_\_\_\_\_ Phone \_\_\_\_\_

Secretary Name \_\_\_\_\_ Phone \_\_\_\_\_

Treasurer Name \_\_\_\_\_ Phone \_\_\_\_\_

Club Reporter Name \_\_\_\_\_ Phone \_\_\_\_\_

\_\_\_\_\_ Name \_\_\_\_\_ Phone \_\_\_\_\_

\_\_\_\_\_ Name \_\_\_\_\_ Phone \_\_\_\_\_

\_\_\_\_\_ Name \_\_\_\_\_ Phone \_\_\_\_\_

\_\_\_\_\_ Name \_\_\_\_\_ Phone \_\_\_\_\_

\_\_\_\_\_ Name \_\_\_\_\_ Phone \_\_\_\_\_

\_\_\_\_\_ Name \_\_\_\_\_ Phone \_\_\_\_\_

**HINT:** Make sure you include **Area Codes** with the phone numbers.

**ABOUT MY MARKET BEEF PROJECT**

Name of Animal \_\_\_\_\_ Date of Birth \_\_\_\_\_

RFID Eartag \_\_\_\_\_ 4-H Eartag \_\_\_\_\_

Date Project Purchased \_\_\_\_\_ Brand and Location \_\_\_\_\_

Purchased From \_\_\_\_\_

Purchase Weight (lbs) x Purchase Price (\$/lb) = **Initial Value of Project Animal (A)**

	x		=		(A)
--	---	--	---	--	-----

Initial Weigh Date: 



 Weight at Weigh In (lbs): 



 (B)Sale Weigh Date: 



 Sale Weight (lbs): 



 (C)Sale Weight (lbs) (C) - Weight at Weigh In (lbs) (B) = **Total Weight Gain (lbs) (D)**

	-		=		(D)
--	---	--	---	--	-----

Number of Days on Feed (include initial and final day): 



 (E)

	(lbs) (D)	=		lbs / day
<b>Total Weight Gain (D)</b>				
	(days) (E)			

Number of Days on Feed (E)

**HINT:** Round to two decimal places. For example, use 2.96 lbs instead of 2.956 in your calculation.



## PROJECT PHOTOS

Include two photos: One taken within the first month of Weigh-In Day and the second within two weeks of Achievement Day (label and include date).

## EQUIPMENT INVENTORY

Make a complete list of items you currently own and/or purchased this year, and will last more than one year. This includes items such as halters, combs and blowers. Replacement value is the amount you would have to pay to replace an item at the present time.

Equipment	Replacement Value
<b>Total</b>	<b>\$</b>

### BUDGETING (Senior Members only)

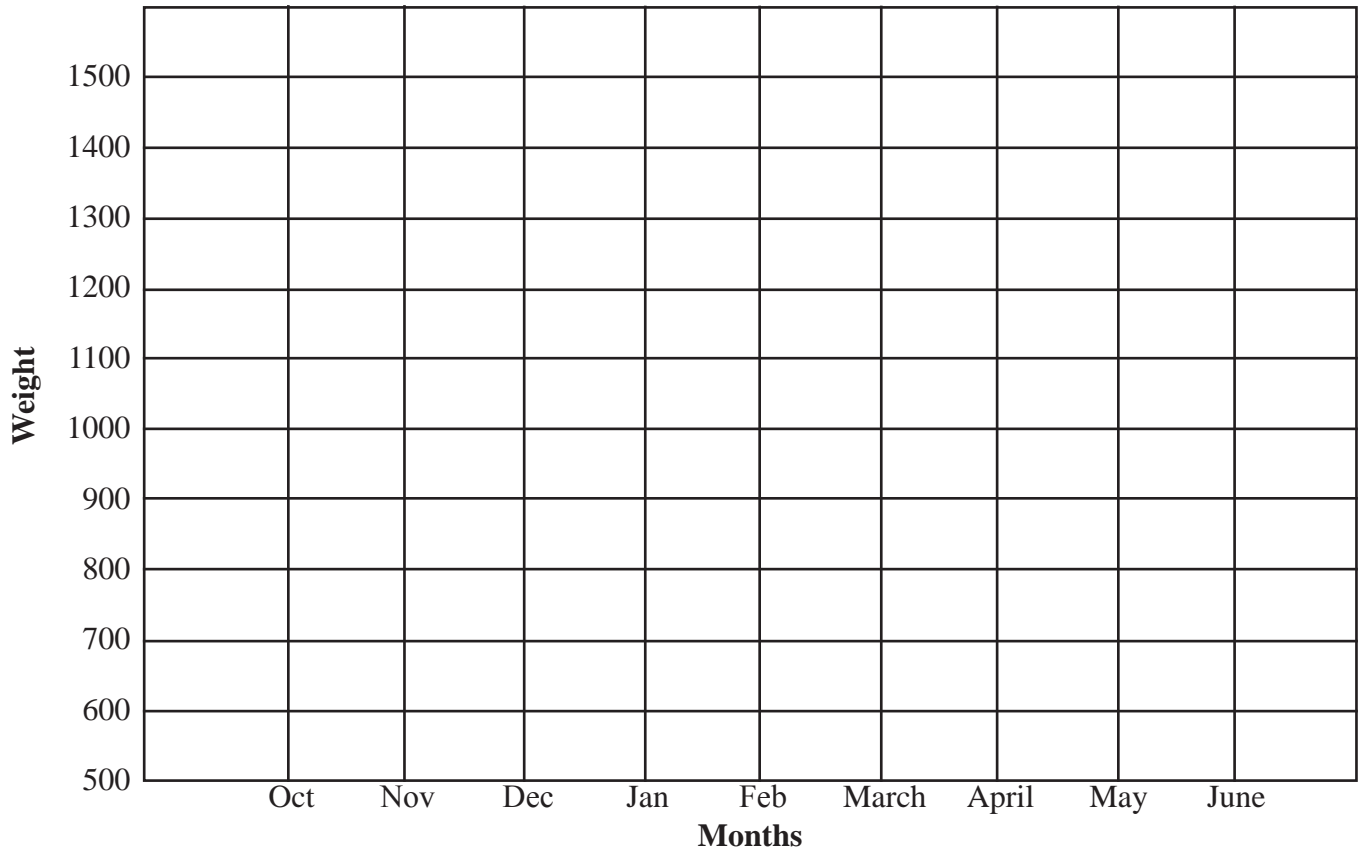
Budgeting is establishing a planned level of expenditures. Using your numbers from last year, establish a budget for this 4-H year.

Total Feed Expense		\$	<input type="text"/>
<i>Plus</i>	+		
Health Expense		\$	<input type="text"/>
<i>Plus</i>	+		
Other Expenses		\$	<input type="text"/>
<i>Plus</i>	+		
Other Project Expenses		\$	<input type="text"/>
<i>Equals</i>	=		
Total Projected Expenses (not including value of animal)		\$	<input type="text"/>

## RATE OF GAIN - Record in Pounds

Month	Example: October	October	November	December	January	February	March	April	May	June
# of Days	31									
Ending Weight	600									
Starting Weight	525									
Weight Gain	$(600-525) = 75$									
ADG (Average Daily Gain)	$(75/31) = 2.42$									

## GROWTH CHART IN POUNDS



1. Mark the initial weight with a dot at the appropriate location (month) on the left-hand side of the table.
2. Mark the estimated final weight (Appendix I) with a dot, corresponding to your final weigh date.
3. Connect these 2 points in **RED** with a straight line.
4. Every month record your steer's weight on the chart, and connect this point with the previous month's weight.

**HINT:** If you want to convert Rate of Gain into Kilograms, multiply weight in pounds by 0.454  
 Example:  $600 \text{ lbs} \times 0.454 \text{ kg/lb} = 272 \text{ kg}$ .

## RECORD OF FEED

### Total cost of feed

Add the total cost of feed from the following months to calculate your total cost of feed this year.

**TOTAL COST OF FEED:**

**Important feed terms**  (F)

**NUTRIENT** – needed for maintenance, growth, production and reproduction.  
Cattle require water, protein, energy, vitamins, and minerals.

**RATION** – the amount of feed required by the animal daily.

**ROUGHAGE** – high fibre feed. Example: hay, silage, straw, green feed.

**CONCENTRATE** – high energy feed. Example: barley, oats, corn.

**SUPPLEMENTS** – good source of one or more nutrients.

**FEED ADDITIVE** – improves feed efficiency and rate of weight gain. Example: Rumensin

### EXAMPLE

**MONTH:** \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
Barley	31	10	(31 days x 10 lbs) 310	\$0.08	(310 x \$0.08) \$24.80
Hay	31	12	372	\$0.05	\$18.60
Salt	31	0.2	6.2	\$0.09	\$0.56
<b>Total Feed This Month</b>			<b>688.20</b>	<b>Total Cost This Month</b>	<b>\$43.96</b>

**HINT:** If you need more space under feed type, put in items such as salt and supplements in “Other Project Related Costs”.

## EVALUATING ANIMAL PERFORMANCE

**Feed conversion ratio** is a gross measure of feed efficiency and most often used as a tool to evaluate groups or pens of growing and finishing cattle. **Feed efficiency** is defined as a ratio of feed intake to weight gain.

*Example:* If a steer had a ratio of 13:1, the steer needs to eat 13 lbs of feed in order to gain 1 lb.

**Seniors Only:**

688.20		<b>Total Feed This Month</b>		=	7.17		<b>: 1 Feed Conversion Ratio</b>
96		<b>Total Weight Gain this Month</b>					<b>(Rate of Gain - page 10)</b>

MONTH: \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
<b>Total Feed This Month</b>				<b>Total Cost This Month</b>	

*Seniors Only:***Total Feed This Month****: 1 Feed Conversion Ratio****Total Weight Gain this Month**

MONTH: \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
<b>Total Feed This Month</b>				<b>Total Cost This Month</b>	

*Seniors Only:***Total Feed This Month****: 1 Feed Conversion Ratio****Total Weight Gain this Month**

MONTH: \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
<b>Total Feed This Month</b>				<b>Total Cost This Month</b>	

*Seniors Only:***Total Feed This Month****: 1 Feed Conversion Ratio****Total Weight Gain this Month**

MONTH: \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
<b>Total Feed This Month</b>				<b>Total Cost This Month</b>	

*Seniors Only:***Total Feed This Month****: 1 Feed Conversion Ratio****Total Weight Gain this Month**

MONTH: \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
<b>Total Feed This Month</b>				<b>Total Cost This Month</b>	

*Seniors Only:*

Total Feed This Month

=

: 1 Feed Conversion Ratio

Total Weight Gain this Month

MONTH: \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
<b>Total Feed This Month</b>				<b>Total Cost This Month</b>	

*Seniors Only:*

Total Feed This Month

=

: 1 Feed Conversion Ratio

Total Weight Gain this Month

MONTH: \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
<b>Total Feed This Month</b>				<b>Total Cost This Month</b>	

*Seniors Only:*

Total Feed This Month

=

: 1 Feed Conversion Ratio

Total Weight Gain this Month

MONTH: \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
<b>Total Feed This Month</b>				<b>Total Cost This Month</b>	

*Seniors Only:*

Total Feed This Month

=

: 1 Feed Conversion Ratio

Total Weight Gain this Month



**MONTH:** \_\_\_\_\_

Feed Type	Days on Feed	Weight per Day (lbs)	Monthly Weight (lbs)	Cost per lb	Cost per Month
<b>Total Feed This Month</b>				<b>Total Cost This Month</b>	

*Seniors Only:*

	<b>Total Feed This Month</b>	=		: 1 Feed Conversion Ratio
	<b>Total Weight Gain this Month</b>			

**OTHER COSTS**

Include items that potentially are used in one year such as membership fees, buyer's gifts, grooming supplies, shirts, and travel expenses.

Date	Item	Amount
<b>Total Other Costs (G)</b>		<b>\$</b> _____

## OTHER PROJECT RELATED COSTS

Include costs such as bedding, trucking, insurance, brand inspection, and yardage.

Date	Item	Amount
<b>Total Other Project Related Costs (H)</b>		<b>\$</b>

**Bedding:** Any material used to provide insulation between an animal and the snow or ground when the animal is laying down. The material used must be comfortable and able to absorb moisture from snow, rain or land base to keep animals dry.

**Yardage:** Refers to the daily overhead costs\* associated with maintaining cattle in the lot (or yard). Next to feed costs, yardage is usually the second largest expense when calculating cost of production.

\*Overhead costs include: fuel, utilities, repairs, custom work, paid and unpaid labour, depreciation, lease payments, taxes, licenses, insurance, equipment rental, business costs (office supplies, accounting); and miscellaneous expenses.

## HEALTH AND MAINTENANCE

Date(s)	Condition Being Treated	Treatment (Medication, Amount and Route of Administration)	Drug's Lot # and Expiry Date	Withdrawal Time	Cost(s)
Ex. Nov. 28	Prevent Parasites	Invermectin at 1 ml/22 lbs Topical	091V09232 SE2010	49 days	\$0.41
Ex. Nov. 15 to June 1	Improve Feed Efficiency	Rumensin-mixed as a 12.5% oral ration	261235 N/A	N/A	Included in feed cost
<b>Total Health Care Cost (I)</b>					<b>\$</b>

Route Administration:

- Oral (in the feed, balling gun, drenching bottle, tube)
- Topical (poured along topline)
- Subcutaneous (injected beneath the skin)
- Intramuscular (injected directly into the muscle)
- Intravenous (injected into the vein).

Withdrawal time is defined as the time needed after the administration of a drug to ensure that drug residues in the marketable meat is below a determined Maximum Residue Limit (MRL). The animal may not be sold for slaughter during this time.

## FINANCIAL SUMMARY

### Income Record

Sale Weight (lbs) (C from page 7) x Actual Price per lb = Final Value of Your Steer (J)

$$\boxed{\phantom{00000}} \text{ (C)} \times \boxed{\phantom{00000}} = \boxed{\phantom{00000}} \text{ (J)}$$

### Expense Record

Initial Value of Project Animal (A from page 7)  $\boxed{\phantom{00000}}$

*Plus*

Total Feed Cost (F from page 11)  $+$   $\boxed{\phantom{00000}}$

*Plus*

Total Other Costs (G from page 16)  $+$   $\boxed{\phantom{00000}}$

*Plus*

Total Other Project Related Costs (H from page 17)  $+$   $\boxed{\phantom{00000}}$

*Plus*

Total Health Care Costs (I from page 18)  $+$   $\boxed{\phantom{00000}}$

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**TOTAL COST OF PRODUCTION**  $=$   $\boxed{\phantom{00000}}$  **(K)**

### Profit or Loss Calculation

Total Income (J) – Total Cost of Production (K) = Profit or Loss

$$\boxed{\phantom{00000}} \text{ (J)} - \boxed{\phantom{00000}} \text{ (K)} = \boxed{\phantom{00000}}$$

### Real Market Price

If you had sold this animal at today's market price, calculate to see if you would have made a profit or loss.

Current market price x Actual Sale Weight (C) = Real Market Value (L)

$$\boxed{\phantom{00000}} \times \boxed{\phantom{00000}} \text{ (C)} = \boxed{\phantom{00000}} \text{ (L)}$$

Real Market Value (L) – Total Cost of Production (K) = Real Life Profit or Loss

$$\boxed{\phantom{00000}} \text{ (L)} - \boxed{\phantom{00000}} \text{ (K)} = \boxed{\phantom{00000}}$$

Buyer(s) \_\_\_\_\_

Buyer's Investment in 4-H and me:

$$\boxed{\phantom{00000}} \text{ (J)} - \boxed{\phantom{00000}} \text{ (L)} = \boxed{\phantom{00000}}$$

## RECORD OF MY PROJECT'S PROGRESS

Month	What did you accomplish with your project this month? (halter breaking, clipping, shows attended, etc.)
	Member:
	Leader:
	Member:
	Leader:
	Member:
	Leader:
	Member:
	Leader:
	Member:
	Leader:

**RECORD OF MY PROJECT'S PROGRESS**

Month	What did you accomplish with your project this month? (halter breaking, clipping, shows attended, etc.)
	Member:
	Leader:
	Member:
	Leader:
	Member:
	Leader:
	Member:
	Leader:
	Member:
	Leader:













## **YOUR CLIPPING PAGE**

Add in your notes, pictures, and clippings here. Include information about your Achievement activity and special club events, for example: tours, shows, communication activities, provincial events, and so on. Add more pages as necessary!



**SUGGESTED MARKING GUIDE****4-H MEMBER'S NAME:** \_\_\_\_\_**JUNIOR / INTERMEDIATE / SENIOR****CLUB:** \_\_\_\_\_**PROJECT: Market Beef****COMPLETENESS (excluding accuracy pages):**

All information should be filled in or N/A indicated	
About Me page / My Club page (4 points each page)	/ 8
Record of Project's Progress / Record of Club's Activities (4 points each page)	/ 8
Story of Your 4-H Year (5 pts) / Creed (1 pt)	/ 6
4-H speech / presentation summary and judging sheets should be included	/ 4
4-H agendas and 4-H certificate (or copy of) should be included	/ 4
<b>TOTAL</b>	<b>/ 30</b>

**ACCURACY**

All records and calculations should be complete.	
Subtract 0.5 marks for each first time error (not cumulative).	
My Market Beef Page / Rate of Gain Page (4 points each page)	/ 8
Health Page / Financial Summary Page (4 points each page)	/ 8
Equipment Inventory Page (2 pts)/Other Costs(1 pt)/Other Project Related Cost(1 pt)	/ 4
Monthly Feed Charts and Total Cost of Feed (to a maximum of 10 pts)	/ 10
<b>TOTAL</b>	<b>/ 30</b>

**NEATNESS:**

Neatness is more than penmanship. It also includes spelling, punctuation, spacing (writing/numerical), and consistency (on-line/color of pen, writing/printing)  
Corrections should be minimal and neat.

**TOTAL / 15****PERSONALITY:**

Organization and presentation of material	/ 4
Originality and creativity	/ 4
Quality photos and pictures, titled and dated (includes project photos)	/ 6
Clipping Pages include newspaper / magazine articles about 4-H (source/date)	/ 6
<b>TOTAL</b>	<b>/ 20</b>

**ATTENTION TO DETAIL:**

Work is informative and highly detailed. This mark recognizes the members that have contributed extra to their project book.

**TOTAL / 5****TOTAL POINTS / 100****JUDGE'S COMMENTS:**







