



# PLANNING FOR PROFIT



BRITISH COLUMBIA Ministry of Agriculture and Food

160 Head Cow-Calf Ranch  
Cranbrook  
Fall 1998

Agdex 422 - 810

## Introduction

The planning process provides producers the opportunity to look at their operation as a group of distinct enterprises. Alternative enterprises should be evaluated on the basis of **Contribution Margin**, taking into consideration resource constraints, market opportunity, risk and uncertainty.

The **Contribution Margin** must provide funds for interest, overhead and other indirect expenses as well as a return for living expenses, loan repayment and investment. These items should be included in the overall farm plan which will include a **Projected Income Statement** and **Projected Cash Flow Statement**.

## Key Factors Affecting Profit

	Target
Weaning Weight	620 lbs/steer 585 lbs/heifer
Calves Weaned as % of Cows Overwintered	More than 90%

For heavy fall calf weights high quality forage should be available to the calf, especially in the three month period prior to weaning.

To wean a 90% calf crop requires open cows to be culled in the fall, a good calf health program and good husbandry practices. Meeting the nutritional requirements of the cow particularly prior to and right after calving will increase the conception rate and thus reduce the number of open cows.

Shrink reduces profit through weight loss, therefore it is important to minimize animal stress levels through proper handling procedures during marketing.

Forage used by the cow-calf enterprise has been transferred from the crops enterprise at market value.

## Marketing Alternatives

Calves are usually marketed in the fall. They may be sold privately to a livestock buyer or a feeder. Often they are sold through a central market either through an auction sales yard or by computer. All methods involve shrink and weighing conditions which are key factors affecting the net market returns. When budgeting, it is imperative to use average prices, not just the price for an exceptional lot or the best market price received.

## Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
%Inc				5							95	
%Ex	4	2	16	3	5	5	5	4	5	6	2	15

The above information indicates the timing of monthly flow of funds included in the **Contribution Margin** only. A complete **Projected Cash Flow** should include indirect expenses, capital sales and purchases, loans and personal expenses.

## Rules of Thumb

Total Assets per Cow (less than)	\$5,000
Direct Expense % of Income	30% - 40%
Debt per Cow (less than)	\$700

The above indicators are provided for comparison purposes. They are set out as **potential targets** for the cow-calf production. These indicators have been realized by the top third of the ranchers who participated in the Cow-Calf Farm Business Analysis program 1989 - 1993.

Contact: MIKE MALMBERG, P.Ag.  
District Agrologist  
Cranbrook  
ROGER KEAY, P.Ag.  
Business Management Specialist  
Kamloops

# COW - CALF RANCH

## Target - 540 lbs/cow wintered

### Contribution Margin Per 100 Cows Cranbrook

Income	Head	Avg Weight	Price /lb	Income
Steers	45	615	\$1.129	\$31,245
Heifers	31	564	1.053	18,405
Cull Yearling Heifers	2	800	0.924	1,478
Cull Cows	10	1,140	0.508	5,792
Cull Bulls	1	1,900	0.621	1,180
Less Bull Purchase	1	1	2,000	(2,000)
<b>Total Income</b>				<b>\$56,100</b>

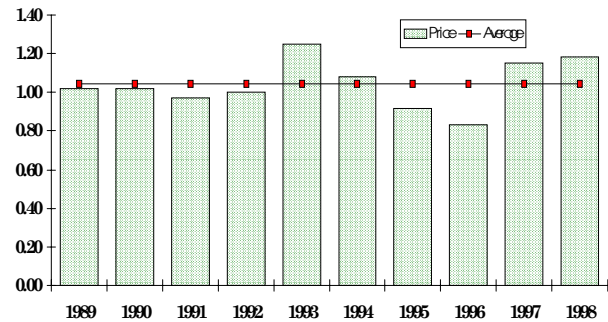
### Direct Expense

	Head	Input	Price / Unit	Total Expense
Hay:		Tons		
Cows	100	2.45	\$85.00	\$20,825
Bulls	3	2.85	85.00	727
Repl Hfr Calvs	14	1.22	85.00	1,452
Pasture:	AU	Mons	AUM	
Spring	116	0.75	15.00	1,305
Fall	116	1.25	15.00	2,175
Barley:		Lbs		
Cows	88	0	0.082	0
Bred Heifers	12	250	0.082	246
Bulls	3	360	0.082	89
Repl Hfr Calvs	14	540	0.082	620
Grazing Permit	114	4.75	2.03	1,099
Feed Supplements	Head	Days		
Min. & Salt	117	365	0.020	846
Supplies & Services	Cow	Cow		
Bedding	100	0.00		0
Livestock Spls	100	3.60		360
Vet & Medicine	100	14.50		1,450
Machinery Operation				
Fuel and Oil	100	10.50		1,050
R & M	100	8.50		850
Marketing	Head	Head		
Trucking	89	7.00		623
Mktg Charges	89	18.00		1,602
BIDB, Brand Insp.	89	2.75		245
<b>Total Direct Expense</b>				<b>\$35,563</b>
<b>Contribution Margin</b>				<b>\$20,453</b>

### Buildings, Machinery and Livestock Investment Farm Size - 200 Cultivated Acres (Does not include haying equipment)

Buildings	\$35,000
Machinery	32,000
Cow Herd	180,000
Vehicles	8,000
<b>Total</b>	<b>\$255,000</b>

### 500 - 599 Steer Calves



### Contribution Margin - Sensitivity Analysis

The table below lists the changes to Contribution Margin as the weaning weights, weaning percentage and steer price varies.

Steer Price	Weaning Weight Steers (Heifers 35 lbs less)				
	575	595	615	635	
<b>\$0.90</b>	6,056	7,377	8,697	10,018	
<b>1.00</b>	10,885	12,358	13,831	15,303	
<b>1.13</b>	17,115	18,784	<b>20,453</b>	22,122	
<b>1.20</b>	20,544	22,321	24,098	25,874	
Weaning Percent	Weaning Weight Steers (Heifer 35 lbs less)				
	575	595	615	635	
	<b>86%</b>	16,084	17,041	17,957	18,828
	<b>88%</b>	17,292	18,277	19,220	20,117
<b>90%</b>	18,468	19,482	<b>20,453</b>	21,376	
<b>92%</b>	19,678	20,721	21,719	22,669	

This information is provided as a guideline only. **Target yield indicates above average production.** An individual plan should be developed by each producer. Planning forms may be obtained from your local office of the BC Ministry of Agriculture and Food.