



PLANNING FOR PROFIT



Province of British Columbia
Ministry of Agriculture, Fisheries and Food

Grass Forage Seeding Cowichan Valley Summer 1994

Agdex 120 - 810

Introduction

The planning process provides producers with 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 Budget**.

Key Factors Affecting Profit

	Target
Quality - Hay	Min 65% T.D.N. 86% Dry Matter Crude Protein 16 - 18%
- Silage	Min 65% T.D.N. 35% Dry Matter Crude Protein 16 - 18%

Controlling troublesome perennial weeds such as Curled Dock and Quack Grass must be considered when deciding when to re-establish a forage stand. This budget is for early spring seeding.

Soil fertility, adequate moisture, availability of nutrients and good weed control are required for successful establishment and long term stand production. Forage quality is affected by stage of maturity at harvest. Proper handling and storage facilities will maintain good feed quality.

Marketing Alternatives

A limited opportunity exists to market grass silage. The majority of the crop is produced for consumption on the farm. Farm operations would realize income when forage is transferred to a livestock enterprise. Hay can be marketed locally to individuals with small livestock holdings on limited acreages.

Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
%Inc	12	12	12	12	8				8	12	12	12
%Exp		25	20	5	10	10	10	10	10	8		

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.

Labour Time

Land Preparation	60 - 70 min./acre
Fertilizing	15 - 20 min./acre
Seeding	10 - 12 min./acre
Harvesting	4 1/2 - 5 hours/acre

The above indicators are based on the actual field time with the equipment complement used in this budget, which is assumed to be in top operating condition. Individual operators may vary from this depending on equipment size, land and operator expertise.

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GRASS FORAGE SEEDING

Target Yield - 4.0 Tons D.M./acre

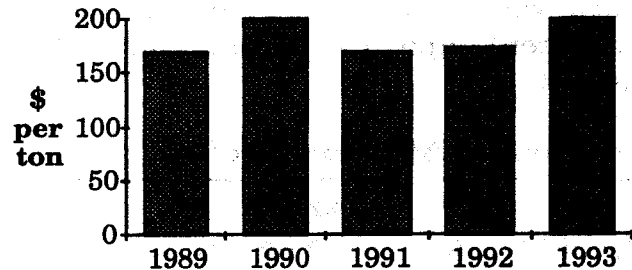
Contribution Margin 1 Acre of Grass Forage Cowichan Valley

Income				
	Yield	Price	Unit	Income
Grass Silage	8.0	\$40.00	ton	\$320.00
Grass Hay	2.25	140.00	ton	315.00
Total Income				\$635.00
Direct Expenses				
	Quantity	Price	Unit	Expense
Grass Legume	30	\$2.27	lb.	\$68.10
Fertilizer				
46 - 0 - 0	350	.15	lb.	52.80
18 - 18 - 18	110	.15	lb.	17.00
Lime	2	60.00	MT	120.00
Manure	30	0	ton	0.00
Pest Control				
Roundup	2	12.20	litre	24.40
MCPA	1.2	6.40	litre	7.70
Machinery Costs				
Land Preparation				13.90
Seeding				2.40
Fertilizing				3.25
Irrigating				13.30
Harvesting				58.30
Trucking				7.40
Crop Supplies and Service				
Silage Additive	8	3.50	ton	28.00
Silo Cover	8	.15	ton	1.20
Twine	2.25	2.50	ton	5.65
Total Direct Expenses				\$423.40
Contribution Margin				\$211.60

Buildings & Machinery Replacement Cost Total Farm Size - 90 Acres

Buildings	\$65,000
Power Machinery	33,000
Irrigation	58,500
Field Equipment	58,200
Harvest Equipment	92,300
Vehicles (incl. used dump truck)	<u>58,000</u>
Total	\$365,000

Cowichan Alfalfa Hay



Contribution Margin - Sensitivity Analysis

The table below lists the changes to contribution margin as yield of hay changes and price received varies.

Price \$/ton	Hay Yield Tons per Acre			
	1.25	1.75	2.25	2.75
100.00	24	73	122	170
120.00	49	108	167	225
140.00	74	143	212	280
160.00	527	605	724	763

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