



PLANNING FOR PROFIT



Province of British Columbia
Ministry of Agriculture, Fisheries and Food

Barley/Italian Ryegrass Silage (Irrigated) North Cariboo Summer 1993

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 Statement**.

Key Factors Affecting Profit

Target	
Quantity	4.0* Tons Hay Equivalent/acre
Price	\$85/Ton
*Silage is 35% DM	

The quality and yield of Barley/Italian Ryegrass silage can be maintained through fertilizing with 75 pounds of nitrogen per acre and ensuring adequate irrigation. Subsequent regrowth of Italian Ryegrass will be affected by fertility and irrigation. The first cut is mostly barley with a minimum of one additional forage cut as hay or silage. Fall grazing is normally obtained in the Cariboo.

Marketing Alternatives

Barley/Italian Ryegrass silage is basically limited to the producer's operation for feeding cattle or sheep. Subsequent harvests may be taken as high quality grass hay or silage.

Cash Flow Timing

	J	F	M	A	M	J	J	A	S	O	N	D
%Inc										10	20	20
%Exp			15	35	10	5	30	5				

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

Direct Expense % of Income	35-40%
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The above indicators are provided for comparison purposes. They are set out as potential targets for Barley/Italian Ryegrass production.

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BARLEY/ITALIAN RYE SILAGE

Target Yield -4.0 Tons/Acre

Contribution Margin

1 Acre of Irrigated Barley/Italian Ryegrass Silage

Income

	Yield	Price	Unit	Income
Silage	4.0	\$85.00	Ton	\$340.00
Pasture	0.5	85.00	Ton	42.50
Total Income				\$382.50

Direct Expenses

	Quantity	Price	Unit	Expense
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Seed

Barley	100	\$0.10	lb.	\$10.00
Ital. Ryegrass	20	0.93	lb.	18.60

Fertilizer

34-0-0-11	200	0.12	lb.	24.05
11-51-0	100	0.17	lb.	16.56
0-0-60	50	0.09	lb.	4.42

Herbicide

MCPA	0.71	5.50	litre	3.91
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Crop Supplies & Services

Irrigation				18.51
Silage Cover	50	0.04	sq. ft.	2.01
Fuel Costs				19.90
Machine Repair & Maintenance				27.00

Total Direct Expenses \$144.96

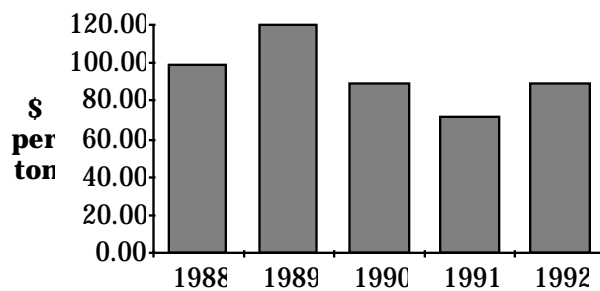
Contribution Margin \$237.54

Buildings and Machinery Replacement Cost

Total Farm Size - 500 Acres (100 Acres Silage)

Buildings	\$ 37,500
Power Machinery	82,800
Field Machinery	36,000
Harvesting Equipment	71,000
Irrigation	34,000
Small Tools & Other	8,000
Vehicle	15,000
Total	\$284,300

Grass Hay Price Cariboo



Contribution Margin - Sensitivity Analysis

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

Price \$/Ton	Yield Tons per Acre			
	3.0	3.5	4.0	5.0
70.00	100.04	135.04	170.04	240.04
80.00	135.04	175.04	215.04	295.04
85.00	152.54	195.04	237.54	322.54
100.00	205.04	255.04	305.04	405.04

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.