



# PLANNING FOR PROFIT

Province of British Columbia  
Ministry of Agriculture, Fisheries and Food

**Dryland Barley Silage  
North Okanagan  
Spring 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

	<b>Target</b>
Protein Content	10%
Energy Content	63% TDN
Yield	3.0 tons dry matter/acre

Variety selection is important to ensure livestock palatability. A smooth horse smooth barley variety should be used. Dryland barley production is restricted to areas with a minimum of 17 inches precipitation.

Although the total digestible nutrients will remain constant as the plant matures, the energy level will move from the stalk to the head. For best silage production, harvesting should be keyed on the barley when the barley is in the soft dough stage.

## Marketing Alternatives

Silage is grown to be used as a feed for a livestock enterprise. The prices used are an indicator of the value of the cost of replacement forages. The high cost of moving silage reduces the value of silage as a commercial crop.

## Cash Flow Timing

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

The above information indicates the timing of monthly flow of funds included in the contribution margin only. Typically, silage will be held over the year end for winter feed and the returns will not be realized until the livestock are sold. A complete **Projected Cash Flow** should include indirect expenses, capital sales and purchases, loans and personal expenses.

## Rules of Thumb

Direct Expenses % Income	36%
--------------------------	-----

The above indicators are provided for comparison purposes. They are set out as potential targets for silage production.

Contact: GREG TEGART, P.Ag.  
District Agriculturist  
Vernon  
HOWARD JOYNT, P.Ag.  
Farm Management Analyst  
Vernon

# Barley Silage

## Target Yield - 3.0 Ton/Acre

### Contribution Margin 1 Acre of Barley Silage

#### Total Income

	Yield	*Price	Unit	Income
Barley	3.0	\$95.00	ton	\$285.00

#### Direct Expenses

	Quantity	Price	Unit	Expense
<u>Seed</u>				
Barley	90	\$0.14	lb.	\$12.44

#### Fertilizer

46-0-0	250	0.13	lb.	32.89
(actual rate and nutrients should be based on soil test)				

#### Herbicide

broadleaf	0.5	5.47	litre	2.73
-----------	-----	------	-------	------

#### Crop Supplies & Services

Silage Cover	50	0.04	sq.ft.	2.01
Fuel Costs				25.55
Machine Repair & Maintenance				27.27

**Total Expenses** **\$102.90**

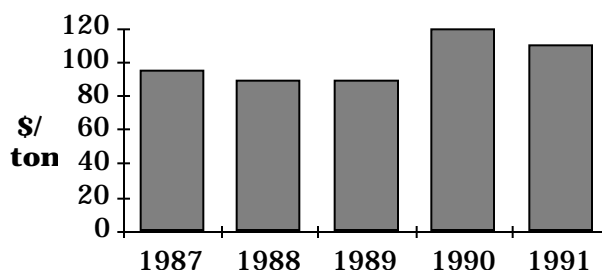
**Contribution Margin** **\$182.10**

\*Hay equivalent price.

### Buildings and Machinery Replacement Cost Total Farm Size - 200 Acres Silage - 70 acres

Buildings	\$ 25,000
Bunker Silo	11,000
Power Machinery	82,800
Field Machinery	23,400
Harvesting Equipment	69,000
Small Tools & Miscellaneous	8,000
Vehicle	15,000
<b>Total</b>	<b>\$234,200</b>

### Alfalfa Hay Prices Okanagan



### 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 d.m. per Acre			
	2.4	2.7	3.0	3.3
<b>75.00</b>	77	100	122	145
<b>85.00</b>	101	127	152	178
<b>95.00</b>	125	154	182	211
<b>105.00</b>	149	181	212	244

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 and Fisheries.