

Province of British Columbia Ministry of Agriculture and Fisheries Dehydration Plant Hon. John Savage, Minister

Alfalfa for the Creston Spring 1990

Agdex 121 - 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 Gross Margin, taking into consideration resource constraints, market opportunity, risk and uncertainty.

The Gross 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**

| Quality<br>Quantity<br>Price | Target 22% Crude Protein <sup>1</sup> 4.5 - 6.5 Tonne/ac \$30/Tonne |
|------------------------------|---|
| Price                        | • •   |
| Life of Stand                | 4 yrs - 1 yr est., 3-4 prod   |

In order to achieve the best price for the product, it is important that alfalfa hay be high in crude protein and relatively weed free (less than 5% weeds on dry matter basis).

Alfalfa stands should be replaced after five years to maintain high yields.

<sup>1</sup> at 60% moisture content

## **Marketing Alternatives**

Weather patterns in the Creston Valley make it difficult to put up high quality hay. Marketing alternatives include contracts with the dehydration plant, or if hay can be put up, it can be processed as a sun-cured product at the dehydration plant, or marketed to livestock producers.

## Cash Flow Timing

| J                 | F | M | A   | M | J | J  | A | S  | 0 | N  | D |  |
|-------------------|---|---|-----|---|---|----|---|----|---|----|---|--|
| J<br>%Inc<br>%Exp |   |   | 100 | ) |   | 40 |   | 35 |   | 25 |   |  |

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

#### Rules of Thumb

| Investment Direct Expense % of Income | \$225/acre |
|---------------------------------------|------------|
| Direct Expense % of Income            | 20% - 30%  |

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

Contact:

BOB DRINKWATER, P. Ag.

District Agriculturist

Creston

ROGER KEAY, P. Ag.

Farm Management Specialist

Kamloops

# ALFALFA Target Yield - 5 MT/acre

Gross Margin
1 Acre of Alfalfa
Production Years

#### Total Income

Yield Price Unit Income

Alfalfa Hay 5 \$30 tonne \$150

#### **Direct Expenses**

Quantity Price Unit Expense

Fertilizers 8-21-21 115 .33 kg 37

Custom Work
Fertilizer Application

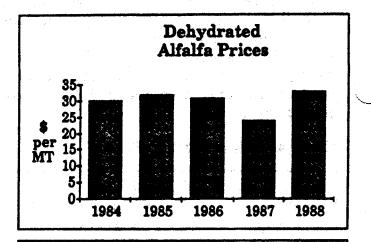
Total Direct Expenses \$41

Gross Margin \$109

Buildings and Machinery
Replacement Cost
Total Farm Size - 500 Acres
Alfalfa Establishment - 70 Acres

Buildings \$27,300
Power Machinery 46,100
Field Machinery 17,500
Miscellanous 21,600

Total \$112,500



# Gross Margin - Sensitivity Analysis

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

| Yield Tonnes Per Acre |                       |                                    |   |  |  |  |
|-----------------------|-----------------------|------------------------------------|---|--|--|--|
| 4.0                   | 4.5                   | 5.0                                | 6.0   |  |  |  |
| 59                    | 72                    | 84                                 | 109   |  |  |  |
| 71                    | 85                    | 99                                 | 127   |  |  |  |
| 79                    | 94                    | 109                                | 139   |  |  |  |
| 91                    | 108                   | 124                                | 157   |  |  |  |
|                       | 4.0<br>59<br>71<br>79 | 4.0 4.5<br>59 72<br>71 85<br>79 94 | 4.0     4.5     5.0       59     72     84       71     85     99       79     94     109 |  |  |  |

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.