

What can I afford to pay for quota?

Are my feed costs too high?

What's wet brew mash worth?

Will I make more money if I raise my milk protein test?

Is OEP profitable?

How much milk can I ship within my quota?

Do my cows eat enough?

Can I make money selling excess milk at world prices?

What effect does fat test have on my bottom line?

How much silage is in that bunker?

How much more quota do I need to cover my increased production?



Alberta Dairy Management Tools

will help you answer these questions and many others

Alberta Dairy Management Tools are a set of stand-alone Windows®-based computer programs designed to assist the dairy manager in making routine management decisions. Here is a short description of each:

Feed Cost Tool

The Feed Cost Tool calculates daily feed cost, feed cost per hectolitre, feed cost per cow and margin over feed cost as well as daily dry matter intake per cow. You simply enter the feeds and ingredients consumed by your milking herd each day along with the amounts fed and their cost. Entry is simplified with pull-down lists of ingredients and units. The main window and per Cow Costs & Income are shown below. The Dry Matter Intake window is shown on the next page.

Calculation of Feed Cost

Identification: A. Dairy Farmer 3 March 1998

Ration Ingredient	Amount Fed per Day #	units	Ingredient Cost \$	per	Cost per day (\$)
Barley Silage North	1920	pounds	32	ton	30.72
Barley Silage South	1920	pounds	32	ton	30.72
Alfalfa Hay	420	pounds	120	ton	25.20
Barley Grain	1730	pounds	145	tonne	113.78
Protein Supplement	640	pounds	536	tonne	155.60
Grain Mix					
Grass Hay					
Grass Haylage					
Grass-Legume Hay					
Grass-Legume Haylage					
Mineral/Vitamin Mix					
Protein Supplement					
Topdress	3007	kilograms	118.38	ton	

Milk Production, hL/day: 21.35 Feed Cost: 155.60

Milk Value, \$/hL: 49.00 Milk Income: 1046.15

Milk Income, \$/day: 1046.15

per Cow Costs & Income

Number of Cows Fed	71
Feed Cost, \$/cow/day	5.01
Milk Production, L/cow/day	30.07
Milk Income, \$/cow/day	14.73
Milk Income Over Feed Cost, \$/cow/day	9.72

Dry Matter Intake

Number of Cows Fed Feed Waste Estimate %

Ration Ingredient	Forage?	Wet Feed Offered per Cow (kg)	Ingredient Dry Matter %	Dry Matter Offered per Cow (kg)
Barley Silage North	<input checked="" type="checkbox"/>	12.3	<input type="text" value="30"/>	3.7
Barley Silage South	<input checked="" type="checkbox"/>	12.3	<input type="text" value="32"/>	3.9
Alfalfa Hay	<input checked="" type="checkbox"/>	2.7	<input type="text" value="87"/>	2.3
Barley Grain	<input type="checkbox"/>	11.1	<input type="text" value="91"/>	10.1
Protein Supplement	<input type="checkbox"/>	4.1	<input type="text" value="93"/>	3.8
Complete Ration		42.5	56.0	23.8
Estimated Dry Matter Intake per Cow		21.4 kg	47.2 lb	
Ration Forage Content		41.6 % of Dry Matter	<input type="button" value="Print"/>	<input type="button" value="Close"/>

Feed Value Tool

What can you afford to pay for cull peas, potatoes or brewmash? The Feed Value Tool computes the value of an alternative feedstuff relative to the current prices of common feeds based on nutrient composition. This tool will help you decide whether an alternative feed is a good buy.

Calculation of Feed Value

Identification 31 May 1998

Reference Ingredients		NEI	CP	UIP	EiNDF	Cost
Primary Source Of:	Ingredient	Mcal/kg	Wet (as-fed) Basis %			\$/tonne
Carbohydrate Energy	Barley Grain	1.75	11.6	2.9	0.0	<input type="text" value="156"/>
Crude Protein	Canola Meal	1.57	36.0	12.6	0.0	<input type="text" value="250"/>
Undegradable Protein	Corn Distillers	1.83	26.4	13.2	19.1	<input type="text" value="245"/>
Effective Fibre (NDF)	Alfalfa Hay	1.30	17.2	4.8	34.4	<input type="text" value="110"/>
Alternative Ingredient	<input type="text" value="Wet Brew Mash"/>	<input type="text" value="1.36"/>	<input type="text" value="6.2"/>	<input type="text" value="3"/>	<input type="text" value="4.6"/>	<input type="text" value="39"/>
Value of Wet Brew Mash based on nutrient values of reference ingredients:						51.72

Maximum Milk Tool

The Maximum Milk Tool determines your daily maximum allowable milk production based on your fluid quota and remaining MSQ. If used each month when your milk statement arrives, this tool will help you keep your production on target, avoiding the reduced profits associated with either undershipping your quota or overshipping at low world prices.

Calculation of Quota-Allowable Production

Identification: A. Dairy Farmer

From Last Milk Statement

Date on Statement: January 31 1998

Fluid Quota: 1295 litres per day

Remaining MSQ: 10644 kg of butterfat

Projections to Year End

Class 1 Utilization of Fluid: 86.2531 %

Class 1 Fat Test: 2.535 kg per hl

Average Farm Fat Test: 3.29 kg per hl

Allowable Production

Shipments per Day: 2904 litres

Shipments per Pickup: 5809 litres per pickup

Number of Cows: 95 cows

Production per Cow: 31.4 kg per day

Buttons: Open, Print, Clear, Save

Quota-Allowable Production

Daily Shipments: 2904 litres

Fluid Quota: 1295 litres

Utilization: 86.25 %

Class 1 Volume: 1117 litres

Excess Volume: 1787 litres

Avg Farm BF: 3.29 kg/hl

Total BF in Class 1: 37 kg

Excess BF: 59 kg

Class 1 BF: 28 kg

Class 1 Skimoff: 9 kg

MSQ: 59 kg

Industrial BF: 59 kg

Buttons: Close

Milk Payment Tool

The Milk Payment Tool projects gross and net milk income to dairy year end based on a specific quota mix, OEP contract, milk production level and milk composition. This tool is particularly useful in evaluating alternatives to your current situation. For example:

- how will an OEP contract affect your bottom line?
- what would happen to your net milk income if you sold some fluid quota and used that money to buy MSQ?
- how much would your income increase if you could lower your fat test and raise your protein test?

Milk Payment Calculator

Identification: B. Dairy Farmer 7 March 1998

Farm Inputs

Fluid Quota: 410 litres/day
 MSQ Remaining: 4884 kilograms
 on date: January 31 1998
 OEP Contract: 0 litres/day
 Number of Cows: 60 cows
 Avg Milk per Cow: 30.5 litres/day
 Avg Composition:

Butterfat: 3.50 kg/hl
 Protein: 3.33 kg/hl
 Other Solids: 5.51 kg/hl

Outputs

Total Shipments: 331,230 litres
 Net Payment: 121,123 \$
 per hl shipped: 36.57 \$
 Year-end MSQ: 0 kg

Industry Inputs Open
 Production Details Print
 Payment Details Clear
 Save
 Close

The main window of the Milk Payment Tool (above) allows input of the on-farm variables that affect milk payment and presents a few key output values. Production and payment details are presented in separate windows - the Production Details window is shown below.

Production Details

Days Remaining This Year: 181 days
 Year End MSQ Balance: 0 kg

Milk Volume

Total Shipments: 331,230 litres
 OEP Shipments: 0 litres
 Total excluding OEP: 331,230 litres
 Class 1: 67,079 litres
 Excess: 268,152 litres

Butterfat

OEP: 0 kg
 Total excluding OEP: 11,593 kg
 Class 1: 1,595 kg
 Class 1 Skim-off: 613 kg
 Excess: 9,385 kg
 Domestic Industrial: 4,884 kg
 World: 4,501 kg

Protein

OEP: 0 kg
 Total excluding OEP: 11,030 kg
 Class 1: 2,089 kg
 Domestic Industrial: 4,659 kg
 World: 4,283 kg

Other Solids

OEP: 0 kg
 Total excluding OEP: 18,251 kg
 Class 1: 3,573 kg
 Domestic Industrial: 7,591 kg
 World: 7,086 kg

Close

The Industry Inputs window (below) summarizes the values determined by the Alberta Dairy Control Board on which milk payment is based. All of these values appear on your monthly milk statement. But, because milk prices vary widely from month to month, values for a single month should not be used to project future revenue. For this purpose, 3, 6 and 12-month average Industry Inputs are sent to users of Alberta Dairy Management Tools on diskette or by e-mail every 3 months.

Industry Inputs		
Identification: Feb - Apr 98 Averages		
Prices		
Class 1 Volume	44.05	\$/hl
Class 1 Butterfat	5.29	\$/kg
Industrial Butterfat	5.3649	\$/kg
Industrial Protein	5.5311	\$/kg
Industrial Other Solids	2.0071	\$/kg
World Butterfat	1.5595	\$/kg
World Protein	1.6947	\$/kg
World Other Solids	1.7008	\$/kg
OEP Butterfat	2.2370	\$/kg
OEP Protein	2.2370	\$/kg
OEP Other Solids	2.2370	\$/kg
Pooling Adjustments		
WMP Class 1	0.0004	\$/kg
WMP Excess	0.0000	\$/kg
Producer Pool	-0.0990	\$/kg
Class 1 Statistics		
Class 1 Utilization	84.7732	%
Class 1 Butterfat	2.4843	kg/hl
Class 1 Protein	3.3081	kg/hl
Class 1 Other Solids	5.6513	kg/hl
Producer Deductions		
Yard Charge	5.00	\$/pickup
Regular Hauling	1.65	\$/hl
OEP Hauling	1.65	\$/hl
Promotion Board	0.89	\$/hl
AMP Membership	0.1	\$/hl
DNC Assessment	0.06	\$/hl
ADCB Assessment	0.034	\$/kg
Lab Test Fee	11.00	\$/month
<input type="button" value="Open"/> <input type="button" value="Clear"/> <input type="button" value="Save"/> <input type="button" value="Close"/>		

Quota Purchase Tool

What is quota worth? The Quota Purchase Tool determines the breakeven price which can be paid for a unit of either fluid quota or MSQ. Calculations are based on the value of additional milk production, the cost to produce that additional milk and the terms of a loan (payback period, interest rate) taken to purchase the quota required. The value of additional production is calculated from Farm Inputs similar to those entered in the Milk Payment Tool and the Industry Inputs shown above.

Quota Purchase Calculator

Identification: 7 March 1998 Help

Inputs

Farm Inputs Industry Inputs

Added Milk Production under Quota Purchase: litres per day

Cost to Produce Additional Milk: \$ per hectolitre

Terms of Quota Loan

Interest Rate: % per year

Repayment Period: months

Payment Interval: ☒ Monthly ☐ Annually

Purchase of MSQ Only

MSQ Purchase: 3,258 kilograms

Loan Payment Amount: 1,506 \$ per month

Breakeven MSQ Value: 23.07 \$ per kg

Purchase of Fluid Quota Plus Required MSQ

Fluid Quota Purchase: 255 litres Change

MSQ Purchase: 489 kilograms

Loan Payment Amount: 2,367 \$ per month

Breakeven Fluid Value: 419 \$ per litre

Open Print ... Clear Save Close

Silage Inventory Tool

The Silage Inventory Tool computes the amount of silage stored in a bunker or tower silo based on the volume and type of silage. Calculations for bunker silos are based on research done by Alberta Agriculture. Those for tower silos use equations derived at the University of Guelph. Estimates of silo inventories and capacity are important in determining amounts to include in rations and amounts of inoculant required.

Calculation of Silage Inventory

Identification: 18 June 1998 Clear Close

Silo Type: ☒ Horizontal ☐ Tower

Horizontal Silo

Units of Measure: Body Length: Silage Type: ☒ Barley ☐ Hay Crop

Wedge Length: Body Height:

Wedge Height: Silo Width:

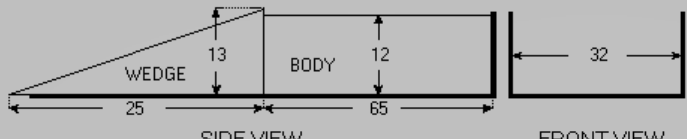


Diagram Labels: WEDGE, BODY, SIDE VIEW, FRONT VIEW

Total Barley Silage Dry Matter in Horizontal Silo = 198 tonnes

Alberta Dairy Management Tools

Description of Software

Alberta Dairy Management Tools software is a Windows®-based, stand-alone program, requiring no additional software to run. Compressed program, Windows® system support and example files are distributed on CD. Installation is simplified through the use of the industry-standard InstallShield® utility.

In addition to the software, the Alberta Dairy Management Tools package includes an extensive, full-colour user manual including sample printouts from each of the tools. Registered users also receive quarterly Industry Input summaries, containing 3, 6 and 12-month averages.

Computer System Requirements

To use Alberta Dairy Management Tools software, you will require an 'IBM-compatible' computer with a processor equivalent to an Intel 486 or Pentium running Windows® 3.1, 3.11, 95, 98, NT or XP.

To order Alberta Dairy Management Tools

Total cost of Alberta Dairy Management Tools is \$130 which includes \$8.50 GST. To order the software or to obtain a free, no-obligation trial version, call AgroMedia International Inc toll-free at:

(888)535-5054

or fax us at:

(403)220-9653

or send us a note at:

2508 Charlebois Drive NW
Calgary AB T2L 0T6

AgroMedia
International Inc