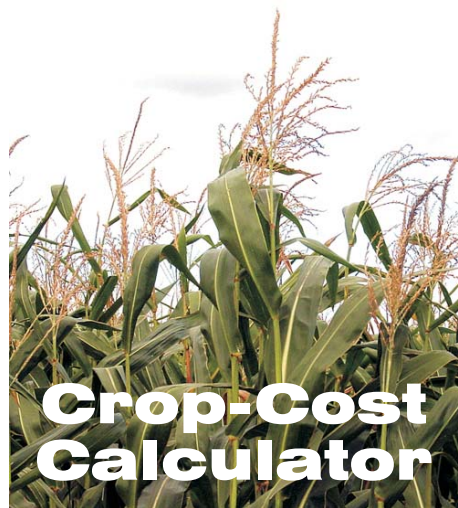




INFORMATION TO IMPROVE THE BOTTOM LINE!



The ROF uses standard feed prices for home grown feeds. Many times the statement is made "I can grow feeds cheaper than that." If it is indeed possible to calculate it, there is a tool available to help you determine exactly what it costs to grow a crop.

Some issues need to be addressed when you try to calculate this cost. The two major ones are accuracy in yield data, and a method to allocate costs such as fuel and machinery repairs. For example, if you have a \$10,000 fuel cost for the year and 400 acres of crop land, how would you allocate the fuel? Is it as simple as  $\$10,000/400 = \$25/\text{acre}$ ? Probably not. Some crops take more fuel than others because of the number of hours spent in the field. A fair method needs to be determined to allocate the crop.

**CROP YIELD**

I think the simplest measure of yield is to measure the volume in storage or fed and divide it by the number of acres harvested. In many cases (particularly high quality haylage), this means lower yields than originally estimated and higher costs/T because higher quality crops tend to have lower yield and therefore a higher cost/T. However, from the cow's standpoint, because of the increase in quality, it is worth it.

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## Using ROF to look at ALL dairy costs

*W.J. Grexton, Manager, Herd Management Services*

**What is a profitable dairy?** How does the owner or manager know it is profitable? Is there an easy way to get a look at what each enterprise contributes or costs the overall business? The ROF program can help you answer some of these questions.

In any dairy enterprise, there are five main enterprises: the milking cow, the dry cow, the growing heifers, cattle sales, and the crops used for feed. Looking at each one of these can give you an idea of the cost/contribution to overall profit and more importantly can show where profit can be improved - especially when compared to others.

Here's how ROF gives you some insight: The **Milking Cow** analysis shows revenue over feed costs. The **Dry Cow** analysis shows the cost of the dry cow program on your farm. The **Other Dairy Expenses** section calculates the costs on a /cow or /cow /day basis. The **Heifer** analysis looks at the cost of raising your heifers. The **Crop-Cost Module** can give you an idea of the cost of growing homegrown feeds.

Your profit can easily be calculated as follows:  
 $\text{ROF} - \text{Dry Cow Costs} - \text{Heifer costs} - \text{Other Dairy Expenses} = \text{Net Enterprise Income/Cow/Day}$ .  
 Comparing your cost of growing feeds to the *standard prices* that the program uses can allow you to adjust that profit for your own cost of crop production.

Here is a brief summary of what to expect from each module.

**Milking Cow** - Revenue from milk sold minus feed cost = ROF (return over feed).

Comparisons can show you how much you have changed from previous tests and by comparing that change in *profit* with the causes, you can see

the economic impact of that feed or management change in dollars per day. The average ROF last year was \$13.71.

**Dry Cows** - This module estimates the cost to feed a dry cow for the far-off and close-up dry period and then prorates it back to each day she was milking. For example, a cow milking for 320 days and dry for 80 days with a dry cost of \$100 would actually have to pay \$.31/day in milk to cover her dry period cost.



**Heifers** - The entire heifer raising-cost is paid for by the milking cows. Carrying additional heifers, feeding them longer than necessary, or paying too much to raise them all have to be covered. The Heifer analysis takes a *snapshot* of your feeding program and estimates the cost to feed your heifers for one year, to calving and the amount each cow has to pay every day to pay for their replacement.

There are a lot of areas in heifer raising to reduce costs by up to \$15,000 or more per year.

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## Crop-Cost calculator (Continued)

The Crop-Cost Calculator looks at seven major annual costs to growing feed: Seed Fertilizer, Chemicals, Custom work, Machinery Repairs, Fuel and Other Crop expenses, like twine etc. You start by allocating these costs to the crops specified after which you enter the total yield.

Direct Crop Cost Allocation							
Crop Costs							
Annual Enterprise Costs/Returns (from last income statement)	Seed	Fertilizer	Chemicals	Custom Work	Machinery Repairs	Fuel	Other Crop
	5624	6994	2914	6537	13530	8670	2206

Allocation of Crop Expenses							
Enter the allocations of the expenses in the squares provided and page down to enter acres and yields.							
	Seed	Fertilizer	Chemicals	Custom Work	Machinery Repairs	Fuel	Other Crop
Hay Crop	35	20	15	20	55	55	50
Corn Silage	15	15	20	0	7	7	0
Other Forages	0	0	0	0	0	0	0
Grain Corn	20	20	35	20	8	8	0
Cereal Grains	25	35	15	20	20	20	0
Other Grains	5	10	10	20	5	5	50
% of Total Expenses Allocated	100	100	95	95	95	95	100

Allocation of Crop Costs to individual crops

The program will use this information to calculate a cost per acre and per tonne of feed **FROM THESE DIRECT CROP COSTS**. This provides a platform for you to compare with other producers to see how you stand. To get a final cost per tonne of crop, you need to add in overhead, labor

and land costs. These costs are specific to your farm, and while they are part of your cost of production, do not allow for good comparison across farms.

You may be surprised as you compare your DIRECT costs to the *Standard Prices* (or fair market price), when you see which feeds you can profitably grow and which cost you money compared to buying them.

**This is a great advantage!**

ROF users can send the Crop-Cost Input Form into CanWest DHI and get an analysis in return. This is available as part of the annual fee or can be purchased as a 'single use'. Try it today! It's worth knowing - **and knowing is half the battle!**

## ROF Benchmark Results

The ROF program changes its standard prices on October 1st of each year. These prices are then fixed for the next 12 months. Prices of grains are based on estimated farm gate price for the last three months of 2005 and the first three months of 2006. Milk component price is the AVERAGE price paid during the previous 12 months. Forages did not change in value. In October 2005, two major changes happened. Grains dropped in price dramatically from the previous year and milk revenue rose approximately \$1.50/cow/day. The result was that for the same situation, the ROF increased about \$1.75. When comparing numbers from September or earlier with November or later, remember the impact of these two things.

### Looking at Month to Month Changes

The **AVERAGE** milk, fat and protein produced changed very little over the past year. However, when we look at consistency and how much individuals changed from one test to another, there are some very interesting observations.

Only 1/3 of the tests changed LESS than \$0.50/cow/day (either up or down). Everyone else had a change from test to test of more than \$1,500/month (based on 100 cows). Almost 40% changed more than \$1.00 /cow /day and specifically they averaged \$1.93 or \$3,475 for that 60 cow herd. The overall feed cost did not change much with a range of only \$153 - \$163/tonne for the ration. Feed cost/cow ranged by only \$0.13.

### ROF Results By Change from Previous Test (2005)

Category	% of Tests	Av ROF Change	Cost	Cost /T	Change in Cost*	
					Increase	Decrease
More than \$2.00/cow/day.....	13.9%	\$2.82.....	\$3.65.....	\$160.....	(\$0.11).....	+\$0.15
\$1.00 - \$2.00/cow/day.....	25.9%	\$1.45.....	\$3.55.....	\$156.....	(\$0.12).....	+\$0.03
\$0.50 - \$1.00/cow/day.....	25.9%	\$0.73.....	\$3.58.....	\$158.....	(\$0.01).....	(\$0.03)
Less than \$0.50/cow/day.....	34.2%	\$0.23.....	\$3.58.....	\$156.....	(\$0.02).....	(\$0.02)

\* Herds who had an ROF increase are shown under 'increase'. Herds with a ROF decrease are shown under 'decrease'. In both cases, change in cost is small compared to change in ROF.

What does this mean? Almost 2/3 of herds have changes between tests that amount to thousands of dollars a month. Are the managers tracking it to see why the change occurred or is it just ignored? If it is the latter, then either profit is not their motive or is it possible that they feel profit can be ignored without much hardship?

For more information, please contact your ROF Facilitator.

## Looking at all dairy costs (Continued)

As an example, Farm A carries one heifer per milking cow and calves them out at 24 months of age with a feed cost of \$1,000 each to calving. Farm B carries 25% more heifers, calves at 26 months for the same total cost to calving. Which is the better method? Farm A pays \$1.64/milking cow/day to raise heifers. Farm B pays \$1.89/milking cow/day for a cost difference of more than \$4,500 per year. And that's using the same overall cost. Usually feeding a heifer longer costs more.



**Other Dairy Expenses** - The annual cost for health, breeding and other direct dairy expenses are used to calculate a daily cost for each day in milk. How much is your Vet or breeding or DHI costing you each day? For example, an annual health cost of \$9,000 for 60 milking cows would cost \$0.41/cow/day, but in a 75 cow herd would only be \$0.33/cow/day. The total of these 'other dairy expenses' may be \$1.25/cow/day or more when a credit is given for revenue from cattle sales.

**Using the Net Enter Price Income Formula (NEI), I and some of the examples mentioned earlier, we would have a NEI of \$13.71 - \$.31 - \$1.64 - \$1.25 = \$10.51.** Or to put another way, from each cow you have \$10.51 per day to pay for other expenses such as labor, overhead, debt, reinvestment, living and profit. There is also the potential to increase that by \$0.50/day to a \$1.00/day. What is your NEI?

Users of the ROF program can have this analysis done by simply filling out the input forms and sending them to DHI with their Milking Cow ROF inputs.