

Are your cows working for you?

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Is your herd profitable? Do your cows allow you to live well? The *Vision 2000 Profitability Report* is a tool that can be used to detect the animal factors influencing herd profitability.

The profit per day of life for the herd is the primary indicator used on this report. It uses an average to show how much each cow has earned per day since birth. To give you an idea, in September 2007, the average for Quebec herds was **\$0.77** profit per day of life. Not terribly high...

Three points that influence the profitability of a cow:

- 1- How much the cow costs (cost of producing a heifer)
- 2- Number of years (or lactations) the cow will "work" for the herd
- 3- How much milk the cow produces annually

1- Cost of producing a heifer

Length of time needed to raise a heifer: the life of a profitable cow begins with adequate growth. Twenty-four months is considered an optimal growth period allowing the cow to attain maturity without compromising her milk production. Prolonging this period means investing more money to obtain a cow that will not be more productive. On the other hand, the shorter this period is, the more quickly we can hope to profit from our investment. Proper management of feed, growth and reproduction are the keys to minimizing start up costs. Heifer raising costs should normally be reimbursed by the milk production from the first lactation.

2- Number of years in the herd

Herd demographics: first lactation cows are still in the process of reimbursing their heifer raising cost - *they have not yet achieved a positive balance* - so, the more first lactation cows in the herd, the more the average profitability is lowered. On the other hand, the higher the proportion of cows having completed at least two lactations - *cows whose heifer raising costs have been paid back* - the more favourable it is to the average profitability for the herd.

One of the factors that greatly influences the number of first lactation cows in a herd is the **replacement rate**. This rate is directly related to the number of cows that are culled. We know that the replacement rate should never be over 30%. It is especially important to note the culling reasons, because it will provide clues for improvement. Sometimes the replacement rate can be influenced by the quantity of heifers raised (**heifer raising rate**). In other words, in order to make room for a young cow that still needs to pay her raising cost before she will earn anything, an already profitable and productive cow must be culled. The longer we keep our productive cows, the more profit there is to be made.

Calving Interval: when the calving interval gets over 400 days, the number of lactation peaks that a cow can provide in her life span is reduced. A longer lactation means a larger number of days of low production, or a longer dry period. The dry period is always a necessity but when an animal is healthy and well cared for, there is no reason to lengthen the dry period beyond 60 days. Consider the dry period as an investment: a cow needs this time to build up her strength in order to deliver a healthy calf and resume production at an optimal level.

3- Milk Production

The quantity of milk components delivered is the source of revenue that allows us to pay for the costs incurred by the herd. Therefore, the larger the amount of components produced by a cow, the faster her costs are paid back so she can finally work for you!

Example: Carmen calved for the 1st time at 24 months, she completed

five lactations and produced between 8500 and 11 000 kg of milk (depending on the lactation). She will have generated more net profit during her life than Daisy, who calved at 29 months and was culled before the end of her second lactation: \$8850 vs. a meagre \$14! Quite a difference!

What about your herd? Complete the following table and discuss it

with your Valacta advisor. Make sure that your cows are truly working for you by giving them the time they need to really make a profit.

Complete Table

Profit per day of life according to production and longevity

Criteria	Average Fall 2006 (Holstein)	My Herd	
		Actual	Objective
Milk (kg/cow/year)	8387 ^a		
Fat (% - kg/cow/year)	3.79 - 318 ^a		
Protein (% - kg/cow/year)	3.22 - 270 ^a		
Calving Interval (days)	426 ^a		
Age of heifers at 1 st calving (months)	27.6 ^a		
% cows in first lactation	34.4 ^b		
Longevity (% 3 rd lact. and +)	40.8 ^b		
Cull rate	37.4 ^b		
Profit per cow at calving (\$) ^c	-2076 ^d		
Profit/day of life End 1 st lact. (\$/d)	-0.28 ^d		
Profit/day of life End 2 nd lact. (\$/d)	1.07 ^d		
Profit/day of life End 3 rd lact. (\$/d)	1.96 ^d		
Profit/day of life for the herd (\$/j)	0.77 ^a		

^a From Table 3-7, *Évolution de la production laitière 2006*

^b From Table 3-6, *Évolution de la production laitière 2006*

^c Therefore, the heifer production cost at the birth of her calf.

^d Averages on December 31, 2005, used on the 2006 *Profitability Report*.

Valacta

The Quebec dairy production centre of expertise

This Fall's Cue Card

Dairy Planning means big money!

This year's extra production days "dry up" in November.

Read **René Roy**, in the September issue of *Le producteur de lait québécois* or *Quebec Farmer's Advocate*.