

Valacta

the Quebec dairy production centre of expertise

*Dairy knowledge
at your fingertips*

valacta

The secret to good forages?

Start early and make it quick!

How much will corn be worth this fall? Who knows? The best way for dairy producers to cushion the impact of the high price of grain and other concentrates is to produce superior quality forages. May the 2012 harvest be a good one!

**Jean Brisson, agronomist
Dairy Production Expert**

**René Roy, agronomist
Agroecologist
Research and Development
Valacta**

It's now common knowledge that good quality forages are the core of profitable dairy production. Good forages lead to good production, using reasonable quantities of concentrates, expressed as the "milk:concentrate" ratio. This ratio is the quantity of milk produced for each kilogram of concentrates fed. Obviously, there are some distinctions to be made at the farm level. If the ration is composed mainly of corn silage, a higher ratio is expected. If component levels are very high, a somewhat lower ratio is expected. If high-moisture grain is fed, it will need to be converted to an equivalent dry matter basis. Cows fed less than the required amount of concentrates will lose weight; sooner or later, they will require more feed to regain body condition.

Figure 1 presents the milk:concentrate ratio for the whole of Quebec for the last four years. Notice how the ratio increased appreciably between the end of spring 2010 (2.85) and the end of summer 2011 (3.17). That jump was due to the excellent quality of the forages harvested in the summer of 2010. You may recall that Mother Nature was particularly benevolent throughout the province that summer. We saw a great deal of forage containing about 30 per cent ADF, a sign of high energy levels.

Producing good quality forages is hence the best strategy

to lessen the impact of rising grain prices on the herd's feed costs. So now how do we maximize forage quality? While there are several factors to consider, producers are advised to adhere to two basic principles: start at the right time and harvest quickly.

1- Start at the right time

It's hard to make milk with timothy or alfalfa harvested at the flowering stage. You need to keep a close watch on the maturity of the stand because the optimal time to start mowing is highly dependent on growing conditions. The date varies widely from one year to the next, so you need to be vigilant. The best way to determine the right moment for the first cut is to start visiting the field regularly early in the season. Since the plants mature extremely rapidly in the spring, you'll need to increase the frequency of your field visits as the forage stand approaches the desired maturity stage.

2- Harvest quickly: work efficiently

You've decided on the ideal day to start harvesting your forage crop. How many days will it take to harvest the first cut? Obviously, you need to take into account the weather, but you'll be more likely to produce good quality forage if you harvest 150 round bales per day rather than 60. It's all very well to start in early June, but you'll gain nothing by it if the harvest drags on until July 15! Hence your harvest operation should be organized in such a way as to enable you to harvest your first cut within a few days under typical weather conditions...

One size fits all?

At the regional dairy seminar held in Rivière-du-Loup and Mont-Joli, on February 1 and 2, 2012, dairy producers in attendance were invited to take part in a little memory exercise. They were asked to write down three dates for the first cut in 2010 and 2011: the date of the first mowing, the date of the last mowing for silage, and the date of the last mowing for hay. It is standard practice to harvest silage first and finish with hay. Readers are invited to try the exercise as well. We know there are producers who will have no trouble doing this because they have been keeping records for a number of years now: field number, mowing and harvest-

ing dates, and number of boxes or bales harvested. This is obviously valuable information for managing inventories and assessing yields.

Figure 2 shows the respondents' position in terms of their first mowing date and the number of days required to make first-cut silage. The graph is divided into four sections. To

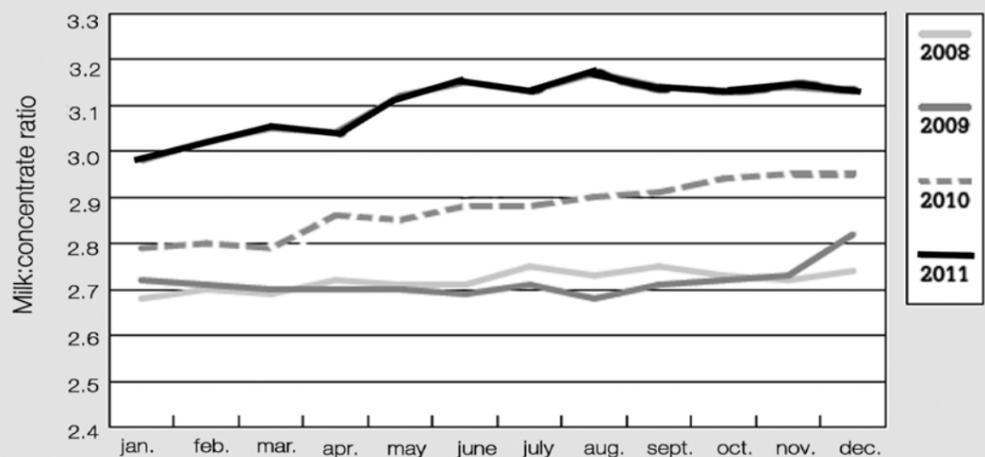
and harvest over several weeks. The graph shows that the stand reached maturity earlier in 2010, since the vast majority of producers had completed their first mowing before June 16.

When we look at the length of the first-cut period, however, we see that there is no significant difference between the two years. While some harvest sys-

includes both large and small herds.

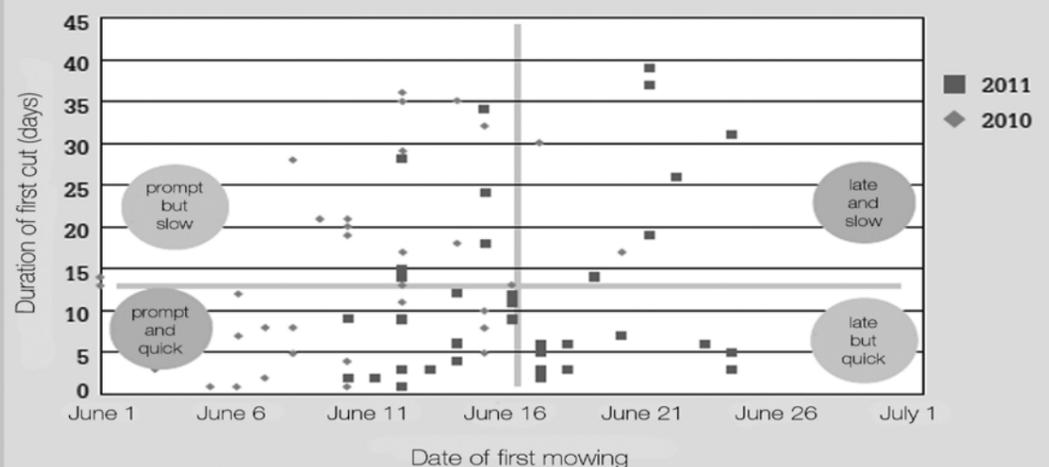
Efficiency is therefore a question of organization rather than size. It's a simple matter to change the start date of the harvest since that decision is up to the producer. But shortening the length of the first-cut harvest is another story entirely, because it means completely

FIGURE 1. MILK:CONCENTRATE RATIO (12-MONTH ROLLING AVERAGE)



The best way to determine the right moment for the first cut is to start visiting the field regularly early in the season.

FIGURE 2. RESPONDENTS' POSITION BASED ON DATE OF FIRST MOWING AND LENGTH OF FIRST-CUT HARVEST PERIOD (EASTERN QUEBEC REGIONAL DAIRY SEMINAR, 1 AND 2 FEBRUARY 2012)



the bottom left are the producers who start promptly and harvest quickly. To the bottom right are the producers who delay harvesting but work quickly once started. In the top left area are the producers who start at the right time but whose daily harvesting capacity is low, which means the first-cut harvest stretches out over several weeks. Finally, the top right section groups together the "laid-back" producers, who start late

tems are able to complete the first cut within a week, many require more than three weeks to complete the operation. We asked the producers who took part in the exercise to indicate the size of their herd to see if that might account for the length of the harvest period. We weren't surprised to find that there was almost no link between herd size and the duration of the harvest period: each of the sections in Figure 2

reworking your harvest operation and may involve some investment as well. There are two conditions for success: draw up a realistic plan and be prepared to change the way you do things. The month of May isn't too late to revise your harvest system. Your advisors are well equipped to support you in your efforts to improve forage quality.