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Newsletter

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PATLQ

Inauguration of the Canadian Dairy Herds Management Service (CDHMS)

750,000 cows under the same roof !

The *Canadian Dairy Herds Management Service (CDHMS)* was inaugurated at *PATLQ* on February 25. ***CDHMS* is the second largest dairy production data processing centre in North America**. Attending some 15,000 dairy herds –for a total of 750,000 cows throughout Canada–, *CDHMS* is the product of an alliance among milk recording agencies from Western Canada, Ontario, Quebec and the Maritimes. This innovative pooling of resources allows the standardization of information and an improved efficiency of operations, yielding significant savings that will benefit all dairy producers in Canada.

CDHMS is located right here at *PATLQ*. Among our guests at the opening, Mr. Jacques Baril, Deputy Minister of Transportation, was acting as representative for Mr. Rémy Trudel, Minister of Agriculture, Fisheries and Alimentation. Sorry to miss the opening, Mr. Trudel sent his support and congratulations to all *CDHMS* and *PATLQ* personnel in a video address. On a previous visit, last May, Mr. Trudel was much impressed by all our achievements, and was positively delighted by this new Canadian Centre, then under construction.

CDHMS is responsible for the operation and maintenance of *Vision*2000, the all-new Canadian software for dairy production data processing. *Vision*2000 is a world-class software, whose great flexibility allows the development of custom-made services for the clientele of each participating agency. *Vision*2000 was launched with success in January 2000.

Bertrand Farmer, *directeur général*

The Canadian Dairy Herds Management Service is born and very much alive, thank you! From left to right, Bertrand Farmer, General Manager, PATLQ, Jacques Baril, Deputy Minister for Transportation (representing Minister Rémy Trudel, of MAPAQ), and Gilles Brault, president of PATLQ and Member of the Board of the Fédération des producteurs de lait du Québec.

PATLQ Feed Analysis Lab

Formal accreditations from Standards Council of Canada

We are pleased to announce that after all its lab procedures have been audited by the *Standards Council of Canada*, *PATLQ* Feed Analysis Service has been granted formal accreditation. *PATLQ* Dairy Lab was also granted continued accreditation for all its dairy analysis services.

Being an accredited laboratory formally acknowledges our competence to carry out specific analysis services following internationally accepted standards (*ISO Guide 25*), providing a basis for national and international acceptance of our services and results.

Brian Corrigan, *General Manager*

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Ultra-Cal and Ultra-Pro

New technology for superior calibration samples

Since *PATLQ* lab started providing analysis services in 1966, there has been a tremendous growth in the number of samples tested and the types of analysis services made available, such as dosing fat, protein, lactose and urea, somatic cell count analysis, and more recently forage analysis. In the past, these services were available primarily to the dairy farmers of Quebec but, since the analyses for the purpose of milk payment were transferred to Sainte-Anne-de-Bellevue in 1994, our services have been available to all partners in the dairy industry.

More recently, in partnership with *Université Laval* and *Advitech Solutions*, *PATLQ* has offered to all dairy plants in Quebec new milk samples series for the calibration of infrared analysers. These samples are prepared by the fractional process, which allows for the development of a wide variety of milk samples according to the specific needs of the dairy industry. Since they are pasteurised and partly homogenised, the new samples offer better physical and microbiological stability. Currently, we provide two types of calibration series, named *Ultra-Cal* and *Ultra-Pro*. *Ultra-Pro* helps with the analysis of dairy products with high levels of protein, and *Ultra-Cal* was designed to help determine the composition of raw milk and finished products. Calibration samples are essential to the dairy industry, since they help manage the production of milk and dairy products in the plants.

Over the next couple of months, *PATLQ* is planning to take charge of the complete preparation process for these samples, thus completing the transfer of all technologies initially developed by *Advitech / Université Laval*. Also, in the near future, the reference laboratory will offer milk samples designed for the analysis of true protein and caseine.

With these new calibration sample series, obtained through an exclusive process, new markets outside of Quebec become available to *PATLQ*. *UltraCal* is presently being sold in Canada, Brazil and the United States. And this is only the beginning because this ground breaking technology has the potential to meet the needs of the dairy industry of today... and tomorrow.

Brian Corrigan, *Laboratory Director*
and **Rachid Kouaouci**, *Chemist*

Good managers, good advisors

Happy winners

Ten expert dairy herd managers each won a $200 prize in the contest "A good manager relies on good advisors". The contest was conducted jointly by the *CIAQ*, the *CIQ*, *Holstein Quebec* and *PATLQ*. The draw took place at the *Salon de l'Agriculteur* on January 13, 2000 and the prize consisted in credits for products or services from each sponsoring organization. Here are the ten winning managers:

1. Marcel Bouchard, from Saint-Adrien d'Irlande;
2. Guylaine Bouffard, from Norbertville;
3. Michel Bournival, from Saint-Barnabé Nord;
4. Malcolm Burns, from Cookshire;
5. Yvan Cantin, from Saint-Léonard;
6. Luc Chaumont, from La Plaine;
7. Pierre Choquette, from Roxton Falls;
8. Ferme Guylin, Ayer's Cliff;
9. Christian L'Allier, from Mirabel;
10. Julie Riendeau, from Coaticook.

Another draw also took place at the *Salon provincial de la machinerie agricole de Québec*, on February 12, 2000. Our winner is Gervais Pelletier of Saint-Roch-des-Aulnaies. Mr. Pelletier took home a brand new *Tru-Test Wide Bore* milk metre that is worth $490.

We wish to thank one and all for participating in such great numbers in these special promotions, and we thank our loyal partners for making this interesting project possible. See you next year!

J.B.

PATLQ Feed Analysis
A reliable, ultra-fast service

PATLQ has been offering a Feed Analysis Service since June 1998. At the cutting edge of technology, our near-infrared spectroscopy (NIRS) analyser is capable of scanning most feed in the fresh state, which means samples do not need to be dried and ground beforehand. This brand new technology allows an ultra-fast service by eliminating these tedious steps. It also reduces the risks due to handling errors or the alteration of samples through the drying process. Results are sent back by fax or E-mail, within 24 hours of the sample's entry at the lab.

A partnership with an independent, certified laboratory, gives access to a wide range of chemical analysis. This laboratory has also been selected to perform the quality control on infrared analysis. Several hundred samples that have gone through infrared analysis are thus double-checked with conventional chemical analysis to validate the process. Furthermore, any prediction by the infrared analyser is coupled with an indication on the reliability of the analysis. Reliability is determined by the similarity between the analysed sample and the samples used to establish the calibration equations of the analyser. Any prediction whose reliability does not conform to established standards is then verified by chemical testing, and the results are sent to the client at no additional cost, a further guarantee of reliable results.

During the current operation year, beginning in June 1999, close to 2,400 clients have sent more than 8,000 samples to the *PATLQ* lab. Most of these clients had already tried this service in the year of its implementation, a clear indication of satisfaction.

Daniel Lefebvre
Development Agent - Nutrition

Cattle production in Quebec
Financial support for project "Interface"

PATLQ was recently granted $250,000 for the development of a database interface for Quebec's cattle herds. The grant comes from *MAPAQ*'s *Agri-Food Concertation Program*. The project will also benefit from a $100,000 support from the *Council for the Development of Agriculture*, subsidized by the *Canadian Fund for Adaptation and Rural Development at Agriculture and Agri-Food Canada*.

Why Interface ?

Québec's cattle market is relatively small. Yet, the data on our animals is scattered. Information on dairy or beef production, veterinarians'data, etc., are often stored in different databases, outside the farm. The idea of Interface is simple: create a software that can integrate and access all the data, either from the farm, or from anywhere else.

PATLQ, in alliance with *Agri-Gestion Laval*, has been promoting for some time the idea of a partnership with all participants in herd management for the benefit of producers. Scheduled along the next 18 months, the project promises to be invigorating for the whole industry, since the interface will allow easy access to all pertinent data: subjects' identification, growth, production, reproduction events, management and health. It should eliminate problems such as costly duplication and risks of errors inherent in data entry involving several different agents.

Producers want their business to become more computerised, and want to gather all relevant data on the same computer registry, in order to save time and increase their profitability. They should rejoice at the prospect of this new tool coming their way.

Bertrand Farmer
General Manager

Exceptional measure for a year of transition

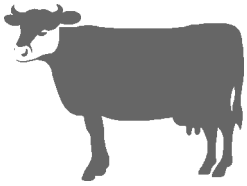
1999 Annual Summary of Lactations

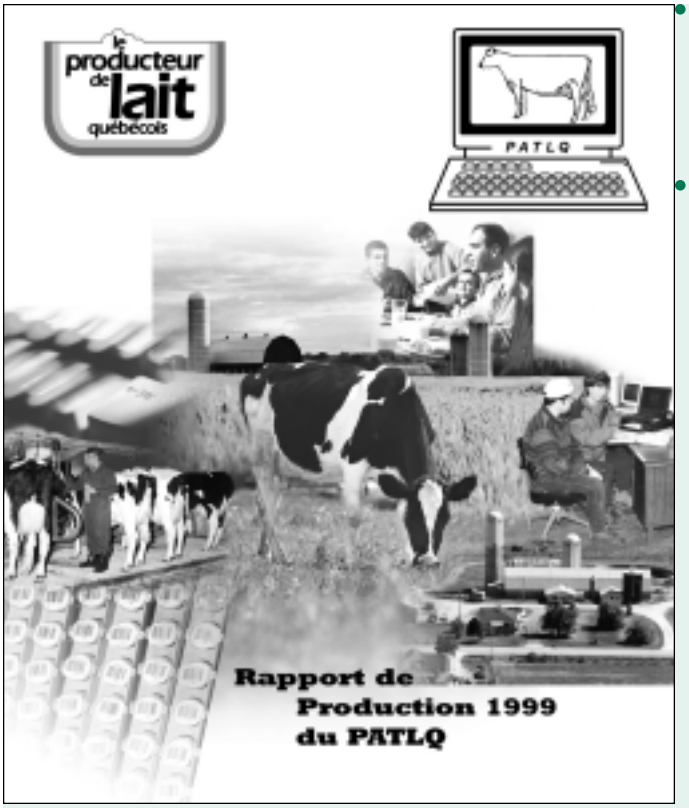
In past years, *PATLQ* issued a summary of a herd's lactations to all producers registered on official milk recording. *PATLQ* views this summary as an excellent management tool, and wishes to make it well known to all of its clients. For this one year only, the summary will be issued without cost to all producers registered with *PATLQ*. As the notion of official or unofficial has been replaced by that of supervised or unsupervised, the benefits of this management tool will be available to all producers. But what does this summary have to offer ? It is a list of all the cows having reached 305 days of lactation in the herd, the cows that have been dried off after 120 days, and the cows sold after 240 days that do not transfer to another herd registered with milk recording. Please note that the 1999 Annuals Summaries do not make any distinction between publishable and non- publishable lactations.

Publishable data for awards and production contests

With the implementation of *Vision*2000, the year 1999 marks a transition for *PATLQ* as well as the *Canadian Dairy Network (CDN)*. From now on, the *CDN* is in charge of data publication. As we are in a transition period, the *CDN* does not yet have the capacity to produce reports for herds and cows qualifying as publishable and thus eligible for awards. In order to assist the various breed associations in Quebec, the 1999 awards data will be extracted by *PATLQ*. This data will include herds having a minimum of 10 tests, of which at least 50% were supervised. This data will then be transmitted to each breed association in early July. The following data will be produced by club, for each breed: Herd BCA, Herd BCA increase, the 10 best cows for categories: 1-year, 2-year, 3-year, 4-year, 5-year, 6-year to 9-year and 10-year and more. Any other request from breed clubs will be billed to the requesting club.

Guy Boyer
Regional Manager, Montérégie





1999 Production Report

An Entirely New Look

Early next June, check your mailbox! *PATLQ*'s 1999 Production Report will come to your door in a completely new format. Published in alliance with the *Fédération des producteurs de lait du Québec*, the Report will come as a special edition of the magazine *Le Producteur de lait québécois*. Designed with a brand new layout, with more comments and analysis, the 1999 Report also makes room for our partners and suppliers. As in any regular issue of the magazine, there will be advertisements in our Production Report this year. Thanks to these ads, all costs related to the graphical improvement of the Report are entirely covered, and our distribution is considerably enlarged. We hope that the result will appeal to you, and that this Report will help you improve your production and profitability.

M.P.

MTP Method from *Vision*2000
Improved projections

Since the implementation of *Vision*2000, many clients have noticed that the projections for some cows were **overestimated**. It is our pleasure to announce that with the recent upgrade of the Multiple Trait Prediction Method (MTP), **projections are much more on target**.

MTP estimates the shape of the lactation curve based on the individual animal's data and the reference curve. In some instances, the measured production was so **unusual** that it deflected the expected curve and overestimated global production.

For instance, when cows had **very similar milk weights** for the first few tests or had their **highest daily production on the 3rd or 4th test**, the data from the animal became more important than the reference curve and MTP projected the lactation curve as a **flat line** or with an **upward slope**! (*Fig. 1*)

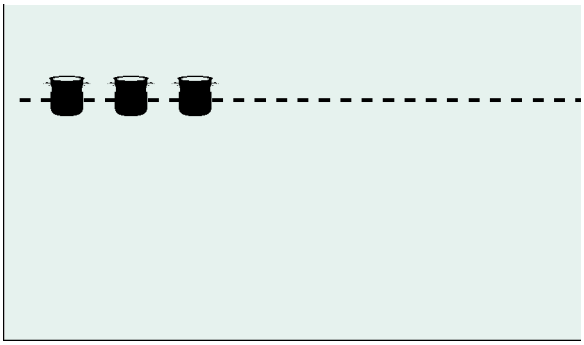


Fig. 1

Another situation that had arisen was those cows having **very high production on their first test, followed by a rapid decline**. Some cows had no observations in the ascending phase of the curve. In these situations, MTP determined that the peak of the lactation occurred at day 5, with a very high peak milk production (up to 100 kg and more, in some cases). We would then see an **inverted lactation curve lacking an ascending phase**. (*Fig. 2*)

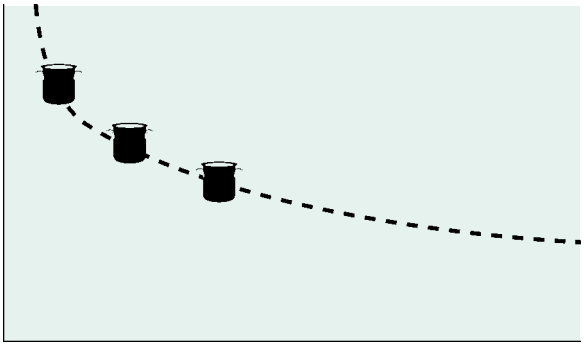


Fig. 2

The solution

MTP now estimates the animal's production at 5 days in milk using **production at her first test** and the appropriate reference curve. This value is used throughout the lactation. The overall effect is to **generate an ascending phase** in the lactation curve. This greatly diminishes the tendency towards an inverted curve with high peak milk production at day 5 of lactation.

Also, based on each new test for the animal (the latest available test), MTP uses the production and the reference curve to establish the production level that the cow will have at day 305. This modification **generates a descending phase**, thus avoiding flat line lactation curves with high projections. (*Fig. 3*)

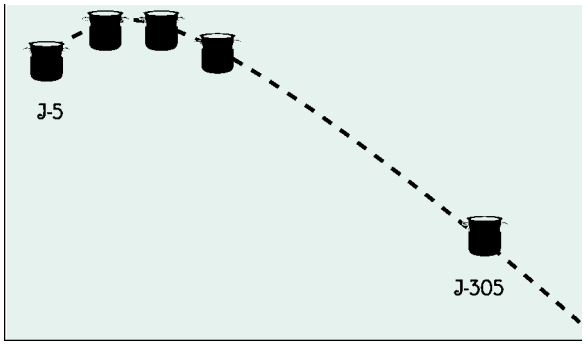


Fig. 3

Already in operation

The **improved version of MTP** is in place since **April 3, 2000**. The month of April is therefore a transition period between the two methods. It is to be expected that cows whose production followed a pattern similar to that previously described, will have **large differences in their projections** for milk, fat and protein. However, these cases are exceptional. **For most cows, results will not be much different, even with the improved version of MTP**. As for cumulative productions, they will get back to normal after the adjustment period.

The new version of MTP has several advantages: **more accurate and stable projections**; **better estimation of the cow's lactation peak**; **easier to understand cow profiles**, and also **better consistency between projections and cumulative production**.

Thank you for your support and understanding.

Sylvain Biron, *Regional Manager, Les Rives,*
and **Robert Moore**, *Development Director*

URÉELAB Service
More popular than ever

A growing number of clients now request the analysis of milk urea nitrogen (MUN). In 1999, close to 4,000 clients asked for our *URÉELAB* service. In full season, from November to February, more than 25% of monthly test samples were analysed for urea, with a peak over 30% in December, which represents a 50% increase over the previous year.

We now know that MUN is one way through which our cows can state their verdict on the ration equilibrium. In fact, the efficiency with which protein in the ration is utilized by the cow is one of the main factors influencing the amount of urea in the milk. A recent study confirmed that the optimal concentration of MUN in milk is between 10 and 16 mg/dL (milligrams per decilitre). Outside of this range, it would be advisable to review the ration composition and its delivery to optimize dietary protein utilization, milk production and feed costs.

A reliable method

MUN analysis by infrared on test-day samples is increasingly recognized as the best method to evaluate feed protein utilization by the dairy cow. A recent study showed that there is a close agreement between the infrared MUN and measurements obtained through the accepted reference method. And it was confirmed that this measurement provides a most interesting diagnostic tool.

The reliability of our analysis equipment is under constant scrutiny. *PATLQ* participates in a monthly quality control program involving more than twenty other laboratories in North America, accounting for a total of 34 analysers, whether with infrared or reference method. The results for both *PATLQ*'s analysers stand among the best in infrared analysis, for accuracy as well as stability of measurement. *PATLQ* also collaborates with Ontario's DHI's laboratory, which operates a reference analyser, in order to perform a monthly validation of our measurements.

URÉELAB results can be trusted with the utmost confidence. And now, these results are still easier to interpret with new *Vision*2000 reports. Just ask your *PATLQ* agent.

Daniel Lefebvre
Development Agent - Nutrition

Newsletter

PATLQ

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Tim Mann, Senior Technician, at the controls of the FOSS 2000 analyser.

In the next few months, take a look at the development of our Web site : www.patlq.com