

County Farm Centre Ltd.

September 2014

Picton

38 Cold Storage Rd.
Store: (613) 476-2171
Crops: (613) 476-9183
Fuel: (613) 476-1613

Foxboro

552 Ashley St.
Store: (613) 962-0769
Fuel: (613) 961-0731

Madoc

278 Lawrence St. W
Store: (613) 473-9040
Fuel: (613)-473-2499

www.countyfarmcentre.com

AGRONOMY CORNER

Hay Fertilizer - Fall is the time to put fertilizer on your hay field to give it the required nutrients for the next growing season. See the table below for the amount of nutrients removed in a crop of alfalfa. Remember these numbers should be multiplied by the yield and number of cuts taken.



Nutrients Removed in Alfalfa (lb of nutrient/ton of alfalfa)		
Nitrogen	Phosphorus	Potassium
56	15	60



GPS Soil Samples – After your wheat comes off is an excellent time to get your fields GPS soil sampled. Soil sampling is the first step in Precision Ag and leads to pinpointing problem areas and site-specific recommendations. Once the samples are done, variable rate fertilizer can be applied.

*** Keep in mind fall is an excellent time to apply Potash and rebuild your levels.***

Quality Seeds Early Booking Discounts

5% Early Booking Discounts until September 31st

Be sure to talk to the sales staff about additional early pay and volume discounts



Wheat Seed



Be sure to talk to our sales staff about the lineup of excellent Hyland cereal varieties

Soft Red
Emmit
Branson
HY412-SRW
Hard Red
HY301-HRW
Soft White
Ava

ENERGY DIVISION

We now stock, diesel exhaust fluid (DEF) for your tractor or truck. Available in 9.6 litre jugs, 208L drums or 1200L totes. Call Tim for pricing at 613-922-1308.



Before long winter will be upon us. Don't get caught out in the cold. County Farm Centre supplies both propane and furnace oil.



Furnace oil is a reliable energy source that provides your home with comfortable, affordable heat.

County Farm Centre propane is a reliable, safe, efficient source of clean-burning fuel that's friendly to the environment. County Farm Centre provides bulk propane as well as home, farm and commercial deliveries. So for all your fuel needs; let our family keep your family warm this winter.

ANIMAL FEED & NUTRITION

Immune health helps boost milk production

The aim of a properly managed and nutritionally sound dry cow and early lactation program is to prepare the cow for a profitable lactation. Maximizing dry matter intakes, minimizing negative energy and protein balance, maintaining calcium homeostasis and minimizing immune dysfunction are critical points to a smooth transition into lactation. Successfully achieving these goals can result in improved start-up milks, higher peak milks and reduced somatic cell counts (SCC).

	Dairy Unit 1	Dairy Unit 2	Milk (lb) difference
Milk (lb) Pre-Trial			
1 st test day	81.4	84.5	3.1
Week 4	87.5	89.0	1.5
Peak	97.4	98.0	0.6
Milk (lb) Trial 1			
1 st test day	72.2 ^a	82.1 ^{b*}	9.9
Week 4	84.2 ^a	91.4 ^{b*}	7.2
Peak	98.4 ^c	103.6 ^{d*}	5.2
Milk (lb) Trial 2			
1 st test day	82.0	83.5	1.5
Week 4	86.5	89.4	2.9
Peak	94.4	95.7	1.3
Milk (lb) Trial 3			
1 st test day	79.9 ^{c*}	73.8 ^d	6.1
Week 4	87.3 ^{a*}	81.7 ^b	5.4
Peak	100.7 ^{a*}	94.4 ^b	6.3

Table 1

* Supplemented dry and fresh cows

^{a,b} means within rows are significantly different (P<0.001)

^{c,d} means within rows are significantly different (P<0.01)

Source: Prince Agri Products, Inc.

In 2011, a study of a dry and fresh cow feeding strategy was conducted on a large commercial Southwestern dairy. Presented at the 2013 American Dairy Science Association annual meeting in Indianapolis, Indiana, the goal of the study was to evaluate how adding an immune-supporting nutritional supplement to dry and early lactating mature cow diets could influence start-up milk, peak milk and milk quality.

An 8,000-cow herd was used in a 270-day feeding trial. The dairy was comprised of two separate 4,000-cow side-by-side mirror image units, each maintaining separate lactating and dry cow herds. Feeds and forages were shared. Good management practices were maintained throughout the operation, including nutrition management, facilities, cow handling and milking procedures.

Lactating cow groups at each unit were housed in barns specially designed for hot climate conditions and milked twice daily through separate parlors. Dry cows from each unit were housed in the same type of facilities, a two-group dry cow program was in place and a negative dietary cation-anion difference (DCAD) diet was fed to the pre-fresh dry cows. Dry and lactating cow rations were the same for both herds, and all diets were fed as a TMR. Any ration changes applied to both dairy units.

90-day cross-over trial design

To develop a fair performance assessment, two 90-day feeding trials were established in a cross-over design, with a 90-day non-feeding period used in between. Prior to the start of the first 90-day feeding trial, milk production and SCC were monitored and recorded for both herds to establish pre-trial production baselines or trends.

DairyCOMP 305 records were utilized to select and match the study cows. Only second-lactation-or-greater cows were enrolled. Cow groups between the dairy units were balanced based on parity, previous 305 ME-day milk, total milk and due date to calve. Cows had to spend 45 days or more in the dry period and have three consecutive weight-day test days following calving to be used in the final analysis. A total of 2,337 cows, equally divided between the two units, met these selection criteria.

Supplemented cows achieve higher production

First test-day milk, week four milk, peak milk and log score at freshening were the metrics used to evaluate the benefits of the nutritional supplement. As shown in **Table 1**, there was a significant difference in first test-day milk in both Trial 1 and Trial 3 between supplemented and non-supplemented cows. Trial 1 was conducted from December 2010 through March 2011, which is typically a time period to maximize production in this dairy's geographic area, considering weather conditions. Trial 3 was conducted from June through September of 2011. Typically, this time of year can be challenging in this region due to extreme heat – and the summer of 2011 was particularly hot.

Week four milk demonstrated similar results as first-day milk considering the seasonal differences. Peak milk followed the same trends. For Trial 2, when neither group was supplemented, milk production measures were not observed to be different between the two units, which was a similar trend observed in the pre-trial observation period.

Low SCC maintained

Milk quality was assessed using the first test log score. In this study, no differences were observed between the dairy units in the pre-trial or Trials 1 and 2. However, a difference was detected in Trial 3. Average SCC figures were low, and relative changes observed during each trial period were similar to those reported in our immunity challenge feeding trials.

Research indicates that for each 1 pound increase of milk at peak production, an additional 200 to 250 more pounds of milk are realized throughout the lactation. In this trial, adding a nutritional supplement to dry and early lactation cows to help support immune function resulted in milk production differences (Table 1) between cows from the two dairy units studied, and this trend was consistent regardless of which unit's cows were supplemented.

These results are similar to findings from other research and Immune health helps boost milk production, cont'd from page 93 field study projects dating back to 2002, which have demonstrated a link between a supplemented and healthy immune system and overall herd health. Studies continue to show that improved milk production is strongly correlated to proper immune function and healthier cows, and a healthy immune system can lead to lower SCC, fewer clinical mastitis cases, reduced incidences of metritis, fewer involuntary culls and fewer late-term abortions.

These studies further illustrate the important role that proper nutrition and sound management practices can play in supporting dairy cattle's innate immune system, providing the opportunity for better productivity and profitability.

