



MARCH 2024 DAIRY NEWSLETTER

We had yet another successful dairy producer meeting this year. Thank you to all that were able to come! As always, please pass on any feedback you have, good or bad, so we can continue to improve. Here is a summary of the take home messages from each talk:

Dr. Chris Church - Farm advisors:

Dairy farming is a team sport: Are you getting the most from your advisors?

- Choose farm advisors that are aligned with the goals of your operation
- Use your farm advisors to formulate short and long term goals; meet regularly to check in
- Meet with all farm advisors together – this can make sure everyone is speaking the same language and can help define context from one area of the farm to another

Dr. Chris Church - Dairy Production & Profitability:

What are the main bottlenecks to making more money?

For all businesses, it's not just how much money you make, but how much you can keep. On the cow level, we usually think that higher milk per cow will lower the feed cost per Kg, and at the barn level, as production goes up, you can milk fewer cows to fill a quota. EBITDA is a metric that accountants and lenders use to measure the dollars left between your revenue and the first set of expenses (Direct and Overhead).

In our study (60 farms, 5 years of year-end accounting data), lower feed costs per Kg of milk were associated with more EBITDA/Kg of quota. We usually assume that this is driven by higher milk per cow, but we all know that is not always the case. We wanted to investigate the 'brakes' that may cause cows and farms to be less efficient. We identified 5 factors:

1. Size: Larger farms are able to use economies of scale to capture more efficiencies
2. Labour use: We included all labour used by the farm (paid and unpaid). Not surprisingly, higher labour requirements per Kg of quota are associated with lower EBITDA.
3. Days in Milk (DIM): Cows closer to peak milk are biologically more efficient at producing milk. Maintaining a lower average herd DIM is associated with higher EBITDA/Kg. Ask your veterinarian about how DIM is affected by reproduction, transition, and herd turnover.
4. Pro\$: This is a genetic index related to the predicted profitability of future daughters. We found a significant association between this and EBITDA/Kg.
5. Average age at first calving (AFC): Surprisingly, we found that as AFC decreased, so did EBITDA. This suggests that calving heifers younger is associated with less efficiency. We suggest discussing this with your feed advisor and veterinarian to see if your heifers have reached the appropriate growth targets before being bred.

Dr. Phil Meadows – Mastitis Prevention

Mastitis Control – Easy as 1-2-3

1. Describe the problem:
 - a. Who, when, how many?
 - b. Heifers, cows or both?
 - c. Fresh cows or scattered across DIM?
 - d. 3 cows = 30% of tank or 30 cows = 30% of tank?
 - e. How many are new infections?
2. Housing Management:
 - a. Teat cleanliness
 - b. Bed cleanliness (dry cows too)
 - c. Ventilation, cooling
 - d. Water
3. Milking management:
 - a. Prep routine (is it posted?)
 - b. Equipment function – slugs, squawks?
 - c. Teat dip application?
 - d. Milking analysis?

Dr. Scott Westlake – Pain Management in Dairy Cattle:

- Meloxicam (injectable and oral) are the best NSAIDs for longer duration of action and reduced risk of negative side effects such as abomasal ulcers
- Benefits of Pain Relief:
 - Calving: increase in milk production; decrease in SCC; decreased culling; improved conception at first AI
 - Mastitis: More rapid decrease in SCC; improved conception and more cows pregnant; decreased culling.
 - Dehorning: Increase in A.D.G; less treatment for BRD
 - Castration: Greater weight gain; lower total morbidity
 - Neonatal diarrhea: Increased weight gain
 - Calves from dystocia: Improved health; improved weight gain
- Oral administration of Meloxicam is not affected by method of delivery in calves
 - Options: Direct Oral, in Milk replacer, in Electrolytes
- Oral Meloxicam provides longer duration of activity than injectable
 - Only one treatment is recommended - Lasts for at least 5 days in calves
 - Dosing guns are available
- Post Partum Study in Ontario and Quebec
 - 1009 cows Given oral meloxicam, 1600 in the control group; all 'normal' calvings
 - Results: Increase in Milk Production average 0.64 kg/day across all herds; up to 4kg/d in some
 - Reduced Risk of Mastitis, Culling and reduced treatment costs

Heather MacFarlane: Progressive Penalty Program and Bactoscan Trouble-Shooting

- DFO is going to implement a progressive penalty program, they are looking at the program currently running in Manitoba (see below)

PPP Penalty Level	Penalty Amount	Number of Infractions (rolling 12 months)
1	\$5/hL	1-10
2	\$15/hL	11-20
3	\$45/hL	21-30
4	\$45/hl plus suspension	31 and up

- Used for ALL quality test results (BSN, SCC , AFP)
- If a producer markets a shipment of milk that fails to meet more than one quality standard, they will be penalized on **EACH** of the quality standards not met. (i.e. SCC penalty + BSN penalty)
- Each penalty type progresses independently (i.e. Could be at 1st level BSN and 3rd level SCC simultaneously)
- Shut-offs are for a minimum number of days
- DFO will monitor test results and collect data
- Want all P5 on same page; Any proposed change in Ontario would involve a Regulation change

Common High BSN in Robots:

- Dirty bulk tank/buffer tank
- Dirty milk contact points – build-ups throughout system
- Low wash temps – hot water issues
- Lack of adequate washes
- Corroded detergent lines
- Water Softener (no salt)
- Sample dipper
- Dealer service issues
- Bulk tank not cooling properly

Common High BSN in Other Systems:

- Dirty milk contact points:
 - Pipeline
 - Receiver Group
 - Plate Cooler
- Washes not being run properly:
 - Dirty bulk tank (TCIP insufficient)
 - Inefficient bulk tank cooling (High Blend)
 - Lack of hot water (PCIP)
- Air injector issues
- Water Softener Issues

What you Need to Know - Texas Agalactiae Syndrome/Highly Pathogenic Avian Influenza in Cattle

What to Look for:

- Decrease in feed intake and rumen activity/rumination,
- Rapid drop in milk production (some with milk taking on the appearance of colostrum)
- Abnormal manure (either firm/tacky or diarrhea)
- Less common signs: fever (low grade to high) and secondary infections like mastitis or pneumonia
- Affected animals are predominantly older mid- and late-lactation cows

What to Expect:

- ~10% of the cow herd affected
- Highest case rate is 2-5 days after the first case
- Cases decrease over time and resolves in about 14 days
- Virtually most cows recover with supportive care (vitamins, NSAIDs, drenching) after 2-3 weeks
- Some did not return to their previous production level

Precautions if you think you may have it:

- Call your herd veterinarian as soon as possible
- Appears to be zoonotic – the virus can transmit from cows to humans (1 confirmed case)
- Wear gloves and glasses/goggles if handling affected cows and thoroughly wash hands
- Heat treat or pasteurize whole milk fed to calves or switch to milk replacer
- Refrain from shipping cattle including calves for at least 14 days from the initial case
- Divert milk from cows with clinical symptoms from the bulk tank

Control:

- Influenza viruses are easily destroyed by standard cleaning but hides well in biofilms
- Use hot water and soap to break up biofilms on equipment then:
 - Heat
 - Drying
 - UV Light
- Limit/Avoid visitors coming into the barn – If required: must use clean coveralls and boots
- Leave coveralls and boots in the barn and wash your hands when you leave

Prevention:

- Repair holes in bird screens and close the barn to birds as much as possible
- Limit wild birds around stored feed by keeping the area as clean and covered as possible
- Use different foot wear and gloves when out in remote areas of the property (bush, creeks, etc) and avoid contact with wild birds
- Isolate and quarantine new animals; Avoid purchasing animals that may have travelled from affected or nearby states/provinces
- Report dead or ill wild birds to Ontario Regional Centre of the Canadian Wildlife Health Cooperative 1-866-673-4781

Other:

- Milk and meat are safe to consume when proper pasteurization and cooking are followed
- Avian influenza is a reportable disease, CFIA is the lead organization that responds to cases
- Media inquiries should be directed to The Canadian Food Inspection Agency: cfia.media.acia@inspection.gc.ca; 613-773-6600