



2015 ASSESSMENT OF TRAINING NEEDS – DAIRY

Overcoming Challenges and Capturing Opportunities



Dalhousie Faculty of Agriculture:
Regional Leadership & Impact
Extended Learning

Introduction

Extended Learning staff from the Dalhousie Faculty of Agriculture conducted a training needs assessment for the Nova Scotia dairy industry in January, 2015. Dairy producers and key industry experts participated in surveys and focus groups to identify ***how training can help dairy farmers and farm employees do things better, or differently, in order to overcome challenges and capture opportunities.***

The results were also circulated to other dairy producers and key industry experts for comments.

Participation in the process was overwhelmingly positive, and participant input was insightful, detailed and forward thinking. We are now sharing the results with a wider group of dairy producers, key industry experts and industry groups in the Atlantic region.

We invite you to review the results in this document and forward comments to:

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Also, please circulate this summary to other dairy producers and key industry experts for their review.

The Process

Extended Learning staff from the Dalhousie Faculty of Agriculture conducted a training needs assessment in January, 2015. This consisted of two sessions:

(1) Dairy Farmers of Nova Scotia (DFNS) AGM, January 8, 2015:

- A ½ hour morning session in which a survey of the entire audience was conducted using Audience Response System (“clickers”). The survey focused mainly on participant background, delivery logistics, and interest in training.
- A 2-hour focus group with key industry experts and dairy farm owners in the afternoon. A total of 8 people participated:
 - 4 dairy producers
 - 2 representatives from the NS Federation of Agriculture
 - 1 representative from Holstein Canada
 - 1 representative from NSDA
 - 1 representative from Perennia

(2) Dalhousie Agricultural Campus (Dal-AC), January 29, 2015:

- A 2 ½ hour focus group with Dal-Ac faculty, staff and students, as well as key industry experts and dairy farm owners. A total of 19 people participated:
 - 3 producers, including the past chair of DFNS;
 - 8 students from the Diploma in Business Management (DBM) program. All of the students either come from farms or work on farms.
 - 7 faculty/staff members representing the degree/DBM programs and campus farm;
 - 1 private practice veterinarian, who also teaches in the DBM program.

The objective of the focus groups was to identify how training can help dairy farmers and farm employees do things better, or differently, in order to overcome challenges and capture opportunities. Participants were asked to first think about the results/impact the training should achieve, and then to align the behavior changes (i.e. transfer outcomes) necessary to achieve the results/impact.

Next Steps

- Share results with other dairy producers, key industry experts and industry groups in NS, NB, PEI, and NL.
- Use results to develop a "Dairy Training and Development Plan"
- Work with industry groups/training partners to identify possibilities and formats for training

Results will also be shared with degree/technical program representatives and committees at the Dalhousie Faculty of Agriculture, for program planning purposes.

Survey Results

A total of 75 people responded to the survey questions at the DFNS session. The results provide good data on which to base decisions regarding delivery, target audience etc.

Survey Question:	Answer/Percent of Respondents					
Where are you from?	Cape Breton 6%	Eastern 12%	Central 54%	Valley 20%	Western 0%	Out of Province 9%
What is your main role?	Owner/ Operator 81%	Farm Manager 4%	Farm Employee 3%	Supplier 0%	Consultant 0%	Other Industry Support 12%
Does your farm have employees?	Yes 84%	No 16%				
Are the majority of employees¹ ...	Full Time Year Round 52%	Full Time Seasonal 6%	Part Time Year Round 30%	PT Seasonal 2%	Part Time As needed 10%	
Who could benefit most from training?¹	Producers 47%	Employees 53%				
What months best suit your Schedule?	Jan 26%	Feb 31%	Mar 26%	Apr 13%	May 2%	June 2%
	July 1%	Aug 4%	Sept 5%	Oct 12%	Nov 47%	Dec 31%
What is the best time for you to participate in training?	Weekdays Only 79%	Weekends 4%	Evenings 17%			
What length of training best suits your needs and schedule?	Half day or less 14%	1 day 33%	2-3 days 16%	1 day/week for 1 mon. 28%	1 day/week for 2-3 mons. 9%	
Would you pre training that was offered ...	In-class 67%	Online/ Web- based 8%	Combination 25%			
If training was in-class, how long would you travel to attend?	1 hour or less 74%	1-2 hours 21%	2+ hours 5%			
Would you be willing to pay for training yourself?	Yes 80%	No 20%				
Would you be willing to pay for training for your employees?	Yes 90%	No 10%				

¹A show of hands indicated that the majority had employees in more than one category. Also, the majority felt both would benefit from training.

Combined Focus Group Results

The results of both focus groups were combined and are presented below, showing the desired results/impacts statements (bolded headings) and the main behavior changes (learning transfer outcomes – bulleted lists) that participants thought would contribute to the results/impacts.

1. Employees & Farmers Improve the Farm Business

- **Improve Cost of Production:**
 - Track and record expenses
 - Communicate purchase allowances etc. to staff
 - Collect information & populate software for a web-based COP program that allows benchmarking against themselves
 - Calculate profit/kg milk and expenses/kg milk
 - Benchmark against other farms to measure success (e.g. low feed costs, low machinery costs, low labor costs, etc.)
 - Identify the biggest cost & changes to make for improvements (Evaluate high input areas)
- **Improve Financial Management:**
 - Consult with financial advisors
 - Consult professionals (e.g. nutritionist) to increase efficiencies
 - Communicate finances in an easy way (e.g. graph) so that those making a decision (e.g. consultant) can make an educated/profitable decision
 - Make knowledge- and finance-based decisions, not “shots in the dark”
 - Get the most out of every dollar
 - Increase profits and assets for sustainability
- **Improve Analysis & Planning Methods:**
 - Prioritize business goals
 - Use cash flows to analyze business financial soundness and make decisions (e.g. equipment purchases)
 - Use financials & DFNS Reports (production, components, quota, sales, leasing, use of incentive days etc.) to analyze business financial soundness and make decisions
 - Use expenses (fixed & variable/operating) and operating expense ratios to analyze business financial soundness and make decisions
 - Use herd inventory information (e.g. cows/kg quota, production/cow, # heifers etc.) to analyze business financial soundness and make decisions
 - Create budgets to manage different sectors of the farm and make them more efficient
 - Develop capital gains projects and plan for future large purchases
 - Get quotes before purchasing new equipment
 - Improve energy efficiencies
 - Explore cost-sharing opportunities
 - Find assistance (government grants etc.) and alternative sources of finance

2. Long-term Planning for Sustainability

- Analyze Identify how to improve farm efficiency and sustainability
- **Ensure Environmental Sustainability:**
 - Utilize government programs (e.g. Efficiency NS) to save costs
 - Utilize technologies for efficiency
 - Increase/improve soil health to sustain increased yield of crops
 - Reduce off-farm inputs of fuel/electricity and use more green energy for farm productivity and profitability
- **Ensure Business Sustainability & Growth**
 - Make sure there is a strategy in place to enhance & develop the farm in a positive, long-term way
 - Ensure profit
 - Eliminate portions of your business that don't profit
 - Plan for infrastructure (equipment & facilities) expansion, replacement, and maintenance
 - Develop and implement an on-farm system to manage and make capital-based decisions and to determine long-term impact
 - Find ways to grow/expand when constrained by resources (e.g. quota, land)
 - Recognize new opportunities in the industry:
 - Research new opportunities for the industry
 - Assess the merit of potential opportunities
 - Increase potential for innovation and entrepreneurship:
 - Assess personal capacity for innovation/entrepreneurship
 - Assess partnerships that allow them to innovate or develop entrepreneurial ventures
 - Plan for farm succession & moving forward into the future
 - Manage large scale transition/succession in a planned, diligent, and ambitious way

3. Improved, Efficient & Sustainable Day-to-Day Operations

- **Improve & Sustain Operational Efficiency:**
 - Strive for efficiency & consistency
 - Set goals in a particular area & make decisions that will lead to that goal
 - Utilize professional development and assistance
 - Keep effective, accurate & detailed records
 - Set up & maintain a documentation system (CQM, ProAction, NMP etc.)
 - Read & understand management information (software, outputs, apps)
 - Interpret reports, equipment manuals, etc. (e.g. Valacta, DairyComp 305, ProAction requ'ts/reports, feed reports, SOPs)
 - Identify & implement procedures
 - Troubleshoot & go in a direction to fix it:
 - Look for the cause first, then find the solution
 - Make small decisions on every day stuff
 - Benchmark against yourself and the industry

- Manage efficaciously/effectively as well as efficiently
- Determine if a robotic system meets their needs/goals
- Select a robotic system that meets their needs/goals
- Manage the herd with robotics:
 - Understand robotic milking parameters and how to be manage the information generated
 - Manage herd health for robotic systems (preventive health management, feed management (esp. DMI), hoof health)
 - Maximize profit/unit, production/cow & throughput
- Use forage management principles and forage economics to improve forage quality, decrease feed costs and minimize environmental impact
- **Improve Animal/Herd Health, Care & Management:**
 - Tend the herd in a consistent manner & maintain consistency regardless of who is there
 - Observe animals and the herd every day
 - Understand the behavior & needs of the cows
 - Recognize animal/cow behavior, heat signals, injury, depressed cows (“cow signals”) (employees)
 - Communicate with employer on milk & animal signals/issues (employees)
 - Provide animal handling training for new hires
 - Identify cow problems in time
 - Develop and monitor a plan for managing herd health (lameness, vx, cr)
 - Set up a system to prevent cow problems
 - Maintain hoof health
 - Implement long term production/breeding plan for the herd
 - Maintain milk production
 - Ensure/maintain milk quality
 - Manage the milking parlor (proper milking techniques and cow movement)
 - Increase pregnancy rates
 - Decrease animal downtime
 - Detect heat in tie stall barns
 - Successfully inseminate cows
 - Increase conception rates
 - Understand what you need to comply with proAction
 - Read labels for livestock medicines
 - Understand withdrawal times
 - Understand calf needs
 - Raise healthier calves
- **Improve Farm Safety**
 - Create a safety culture
 - Identify, understand, & control or respond to situations
 - Understand how decisions should be taken (i.e. through Action/Decision trees)

4. Improved HR Management (Employers)

- **Improve HR Practices:**
 - Recognize that with larger farms you will spend more time managing people, with less time for farming
 - Develop a HR policy so employees are treated fairly (pay scales, vacations, benefits)
 - Implement a method of articulating roles & responsibilities
 - Troubleshoot “people” problems (e.g. short notice)
 - Maintain transparency
 - Avoid mixing the personal and professional
 - Manage people in a consistent manner
 - Practice employee/employer scenarios after training/seminar with peers in order to gain experience
 - Participate in peer-to-peer sessions to get advice from other farmers
 - Network
- **Fill the Labour Shortage:**
 - Identify labour requirements (i.e. what you need for the farm)
 - Attract non-traditional people with potential:
 - Use rational, strategic planning to match the type of person needed for different jobs (e.g. animal care, equipment operation, records etc.)
 - Develop an assessment tool to evaluate potential employees and to find people who are the right fit
 - Use HR research tools to identify groups/pools of quality employees for different jobs
 - Develop an add that attracts the right people
 - Identify & promote opportunities for employment in the dairy industry
- **Work With Different Generations:**
 - Recognize different working styles and responsibilities
 - Provide flexibility around different working styles & responsibilities
- **Create Self-starting Employees**
 - Encourage employees to realize they have a vested interest in the work/farm
 - Manage people to encourage self-starting
 - Understand employee motivators
 - Recognize that each team member has value & skills
 - Accept different ways of doing things
 - Share tasks by skills & interest
 - Foster and reward diligence, motivation, passion and respect in the team
- **Improve Employee Retention:**
 - Foster good staff relationships
 - Encourage employees to grow in their job, and provide opportunities for them to grow
 - Implement training for new & existing employees
 - Provide opportunities for individual staff members go to appropriate course/workshop (e.g. staff working with calves goes to calf workshop)

- **Improve Employer/Employee Communication on Farm, Improve Employee Understanding of Why Things Are Done & Increase Employee Confidence, Self-reliance & Common Sense**
 - Recognize that employees have less ag experience
 - Communicate clear expectations with the team
 - Organize and manage time and tasks for employees/team
 - Establish positive relationships (employer/employee in training)
 - Identify priorities for the day
 - Communicate on day-to-day matters (what needs to be done & when)
 - Develop SOPs
 - Chart process to illustrate work flow, actions, decision points (i.e. develop Action/Decision trees for SOPs, animal management, feeding systems etc.) – employer or designated employee
 - Conduct weekly staff meetings on 1-2 items (e.g. explain reports, assess staff prodn.)
 - Involve the whole team as appropriate to their roles and responsibilities
 - Involve the whole team in learning & keeping up-to-date
 - Train employees in old technologies as well as new

5. Employees Produce Consistent Results

- Follow SOPs
- Report back to employers
- Self-assess
- Work efficiently with the time available
- Prioritize & use available time
- Identify, understand, & control or respond to situations
- Understand how decisions should be taken (i.e. through Action/Decision trees)
- Identify & implement procedures
- Troubleshoot & go in a direction to fix it

6. Deal With External Influences & Trends

- **Understand Influences & Trends:**
 - Understand the industry's history & development
 - Analyze influences & trends so you understand them and have an informed opinion as to how to deal with them
 - Keep up-to-date with welfare issues, consumer demands etc.
 - Develop an awareness and knowledge of the dairy industry through reading, asking questions, digging deeper, identifying sources of information
 - Keep your eye on the “big picture” – WTO, supply management, quota, etc.
 - Recognize how uncertainty over demographic issues and supply management affect the industry and the individual farm
 - Think creatively!

- **Have a Positive Impact on Climate Change & Environment:**
 - Adapt to climate change & contribute to mitigation (e.g. through on-farm & green energy sources)
 - Reduce fossil energy use
 - Innovate for efficiency
- **Advocate for Agriculture & the Dairy Industry (local to national):**
 - Participate in policy development
 - Lobby politicians
 - Know how to do it
 - Know the rules and reporting requirements
 - Maintain transparency
 - Collaborate with other provinces for industry sustainability and to share gains/losses
 - Build bridges with consumers to educate them and improve their awareness
 - Communicate, educate and advocate on issues and concerns
 - Share stories
 - Be an “Ag-vocate”: speak as loudly for agriculture as those who are against it
 - Encourage a young, vibrant population that will buy the products

7. Engage in Personal & Professional Development

- **Take Advantage of Learning Opportunities:**
 - Capture and share traditional and inter-generational knowledge & wisdom
 - Learn constantly & lifelong:
 - Learn how to learn
 - Learn the why
 - Be open to new ideas to improve the operation
 - Take short courses provided by industry, Dal Ag campus etc.
 - Consult Perennia and other professionals
 - Keep up-to-date with research/technologies
 - Sort through information
 - Become software savvy
 - Take tours to see what others are doing
 - Recognize what not to do: Learn from the “research” of other farmers
 - Research new ideas
 - Start a dairy management club
- **Cultivate Professionalism & a Positive Image:**
 - Recognize & promote what it takes to be a successful farmer
 - Promote the professionalism of farming & foster a mindset of professionalism, within and outside the industry
 - Always be aware of your personal image as well as the image of the industry
- **Maintain Work/Life Balance:**
 - Take a holiday
 - Maintain a balance between personal and work life

8. Change Habits & Implement What You Learn

- **Foster a Culture of Change:**
 - Recognize the need to change
 - Recognize the value of change
 - Identify the roadblocks to change
 - Recognize your capacity for change
 - Take learning home to the farm and make the new way the habit
 - Develop an accountability system to ensure you implement what you decide to change
 - Develop a plan to inculcate good habits and castrate bad habits
 - Establish a coaching/mentor relationship
 - Allow the operation to be flexible
- **Implement Change:**
 - Develop objective, measurable outcomes
 - Take theoretical objectives and learning and identify how to acquire the skills, tools and infrastructure etc. to make it happen in the real world (e.g. monitoring fresh cow performance requires certain equipment)
 - Get staff interested in change
 - Be excited about change yourself
 - Communicate what you learned to your other staff/team members
 - Develop/provide policy & expectations for change
 - Communicate with and involve/engage other farm, team, or organization members in the implementation plan
 - Provide visuals/resources to implement change
 - Implement follow-up (e.g. recording system in place)
 - Measure results
 - Experiment and try the ideas and then compare: Don't try everything at once
 - Know what you can conclude from on-farm trials

9. Better Equipment Maintenance

- **Due to time constraints this area was not completed**

Thank you for reviewing this document and taking the time to comment. We would also like to thank the participants and reviewers in the September, 2014 focus group and review. Your time and insights have made this a rewarding and valuable process!

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