Canadian National Dairy Study 2015

Informed Consent Form

Introduction

You are invited to participate in the first National Dairy Cattle Study to be undertaken in Canada. This study will provide current national benchmarks for production, management, and disease across all 10 Canadian provinces. The study is funded by Dairy Farmers of Canada through the Dairy Research Cluster 2.

Procedure

The questionnaire consists of multiple choice or fill-in-the-blank questions and will take approximately 40 minutes to complete. You may need access to animal health and production records (ex. DHI /Valacta reports) in order to complete some questions so you may wish to have them with you before starting the survey. At any time you can pause, save your answers, and then return to complete it at a more convenient time. The questionnaire can be completed online using the Qualtrics platform, by personal phone interview whereby a trained technician will enter your verbal answers directly into the Qualtrics system or in a traditional paper format. Qualtrics, is an American software company. As such, your responses are subject to U.S. laws, including the USA Patriot Act. The risks associated with participation are minimal, however, and similar to those associated with many e-mail programs, such as Hotmail and social utilities spaces, such as Facebook and MySpace.

Benefits

Completion of the questionnaire will qualify you for the next phase of the study. In the summer of 2015, 300-400 producers will be randomly selected from all questionnaires submitted to participate in Phase 2 of the study, a farm visit. This visit will involve free disease testing of a yet to be determined number of animals and/or herd samples. The first 250 respondents to complete and submit their survey will receive a $20 Tim Horton's gift card. It is hoped that through your participation, the data collected will provide benchmarking data at a national level, direct future research projects and contribute to the sustainability of the Canadian dairy industry thereby benefiting all Canadian dairy producers.

Confidentiality

All data collected through this process from all participants will be kept confidential and will only be reported in an aggregate format (by reporting only combined results and never reporting individual ones). All questionnaires will be electronically concealed, and no one other than the research team listed below will have access to them. While we cannot guarantee the confidentiality of information transferred over the internet, the data collected will be stored in a secure, PIPEDA (Personal Information Protection and Electronic Documents Act) compliant
Qualtrics database located at the University of Guelph until data analysis is complete and published, at which time it will be deleted by the primary investigator.

Participation

This survey is strictly voluntary, you are under no obligation to complete it. At any time you may skip questions you are not comfortable in answering or withdraw by closing your browser or discontinuing the interview. However, once the survey has been completed it cannot be withdrawn.

Support/approvals

This project is supported and has received funding from the Dairy Farmers of Canada (DFC) and has received approval from the Research Ethics Boards of the University of Guelph (REB#14DC025), the University of Prince Edward Island (REB#6006095), Université de Montréal (15-007-CERES-D), and the University of Calgary (REB#14-2481).

Please address any questions about ethical concerns to one of the following people:

S. Auld, Director, Research Ethics, University of Guelph, reb@uoguelph.ca, 519.824.4120 ext. 56606
Joy Knight, Research Compliance and Awards Coordinator, University of Prince Edward Island, reb@upei.ca, 902.620.5104
Guillaume Paré, Conseiller en éthique de la recherche, Université de Montréal, ceres@umontreal.ca, 514.343.6111 ext. 2604
K. Beamer, Research Ethics Analyst, Conjoint Faculties Research Ethics Board, University of Calgary, cfreb@ucalgary.ca, 403.210.9863

Contact Information

If you have any questions regarding this study please feel free to contact: Primary Investigator Dr. David Kelton, Professor, Department of Population Medicine, University of Guelph Email: dkelton@uoguelph.ca Phone: 519.824.4120 ext. 54808 Co-investigators Dr. Greg Keefe, Professor and Director Maritime Quality Milk, University of Prince Edward Island Email: gkeefe@upei.ca Phone: 902.566.0968 Dr. Jocelyn Dubuc, Assistant Professor, Département de sciences cliniques, Faculté de médecine vétérinaire, Université de Montréal Email: jocelyn.dubuc@umontreal.ca Phone: 450.773.8521 ext. 8498 Dr. Herman Barkema, Professor, Faculty of Veterinary Medicine and Cumming School of Medicine, University of Calgary Email: barkema@ucalgary.ca Phone: 403.220.2659 Dr. Cathy Bauman, Project Coordinator, Department of Population Medicine, University of Guelph Email: cbauman@uoguelph.ca
Your consent indicates that:
1) You understand to your satisfaction the information provided to you about your participation in this research project and
2) You agree to participate in the research project

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. Please check the appropriate circle below:
○ Yes, I consent to participate in this study
○ No, I do not consent to participate in this study

Reason for refusal to participate in questionnaire:
○ No dairy cows January 2015
○ Did not want to participate
○ Don't have the time
○ Other _________________

Thank you.

Background Information

1 From the drop-down menu please select the province that you reside in:
○ Alberta
○ British Columbia
○ Manitoba
○ New Brunswick
○ Newfoundland
○ Nova Scotia
○ Ontario
○ Prince Edward Island
○ Québec
○ Saskatchewan

2 In order to proceed with the survey and to ensure that only one response per farm is recorded, you must enter either your confidential code that was mailed to you or your provincial license number. I choose to enter:
○ The confidential code
○ My provincial license number
Your confidential code can be found on the letter of invitation you received in the mail. It consists of 2 letters and 4 numbers. (ex. ON1111) If the code was never received or has been misplaced you can contact your marketing board to receive it.

Please enter your confidential code here:

Providing your provincial license number is strictly voluntary. It will be kept strictly confidential and only used for the purpose of this questionnaire.

Please enter your provincial license number here:

In order to judge whether the producers responding to the questionnaire are similar to the general population of Canadian dairy producers, producers can give their consent to the transfer of their production data of 2014 (volume of milk, milk composition, quality milk) from their provincial milk marketing agency. This production data (no financial data is involved) would be transferred anonymously through the unique code mentioned above.

Do you accept that your provincial marketing board transfers your production data (in an anonymous and confidential format) for 2014 as part of this study?
  o Yes
  o No

3 How would you identify your role on your farm?
  o Owner
  o Manager
  o Farm worker
  o Other ________________

4 Please indicate the age category you belong to:
  o < 20 years
  o 20-29 years
  o 30-39 years
  o 40-49 years
  o 50-59 years
  o 60-69 years
  o >70 years
Which of the following best describes the highest level of education you have completed:
- Grade 6
- Grade 8
- Grade 12
- College diploma (2-3 year)
- College degree (4 year)
- University degree
- Post-graduate degree

If you reside in the province of Québec, which of the following best describes the highest level of education you have completed:
- Primary school (grade 6)
- Secondary school (grade 11)
- CEGEP
- University
- Post-graduate degree

5 Is your dairy farm certified as as an organic dairy farm?
- Yes
- No

6 Are you currently enrolled in milk recording?
- Yes, with CanWest DHI
- Yes, with Valacta
- No

In the following section, we are asking questions regarding cow inventory, disease prevalence, and individual cow production. To reduce the time needed to complete this questionnaire and to minimize the errors that may occur when entering the data, you can choose to skip this section by voluntarily providing your CanWest DHI or Valacta herd number. This is a 4 or 5 digit number, depending on the province, and is located at the top of your herd summary report. We will collect only the information described above. My herd number is:

For the next 5 questions, we are asking about total number of animals present on your farm on or around December 31, 2014.

1 What was the total number of cows MILKING in your herd?

2 Please indicate the total number of milking cows in each parity / lactation:
   _____ Parity / Lactation 1
   _____ Parity / Lactation 2
   _____ Parity / Lactation 3+
3 What was the total number of DRY cows?

4 What was the total number of REPLACEMENT HEIFERS?

5 What was the total number of BULLS used to breed dairy heifers or cows by natural service?

For the next 3 questions we are asking about the 12 month period between January 1, 2014 and December 31, 2014.

6 What was the average production in kg per cow (305 days) in your herd in 2014?

7 How many total calvings occurred on your farm in 2014?

8 How many total stillbirths (calves born dead or died within the first 48 hours) occurred on your farm in 2014?

Farm Characteristics

1 Please choose the type of barn in which you house the majority of the MILKING animals in your herd:
   ○ Free stall
   ○ Tie stall
   ○ Pack
   ○ Other ____________________

2 What best describes the type of milking system you use to milk the majority of your herd?
   ○ Pipe-line
   ○ Parlour
   ○ Robotic milking system

If you use a robotic milking system, what is the manufacturer and model? (Check all that apply)
   □ BouMaticRobotics MR-S1
   □ BouMaticRobotics MR-D1
   □ BouMatic ProFlex
   □ DeLaval VMS
   □ GEA Mlone
   □ GM/AMS Liberty
   □ Insentec Galaxy Astrea 20.20 AMS
   □ Lely Astronaut A2
   □ Lely Astronaut A2 Evolution
   □ Lely Astronaut A3
   □ Lely Astronaut AMS A4
   □ Milkomax
3. For the majority of the year, how many times PER DAY is the herd milked?
   - Two
   - Three
   - Other ____________________

4. Which of the following best describes the main method of manure storage on your dairy farm?
   - Liquid
   - Solid
   - Other ____________________

Biosecurity I: Between herds, purchased animals

1. What percentage of all dairy animals (>7 days of age), currently have National Livestock Identification for Dairy (NLID) or Agri-Traçabilité (ATQ) ear tags in place?

2. On average, when are NLID or ATQ tags placed in the animal’s ear?
   - At birth
   - At weaning
   - At their first calving
   - When they are leaving the herd
   - Other ____________________

3. In 2014, did you consider your herd a CLOSED herd?
   - Yes
   - No

4. Were any ADULT CATTLE or YOUNGSTOCK added to this dairy farm during 2014? (Additions include: animals purchased, leased, or borrowed, but excludes calves that were born on the farm, raised off-site and returned to the farm)
   - Yes
   - No

5. Were any NON-PREGNANT DAIRY HEIFERS (weaned calves and "open" heifers) added during 2014?
   - Yes
   - No
Please indicate the relative number of NON-PREGNANT HEIFERS that came from each of the following sources:

<table>
<thead>
<tr>
<th>Source</th>
<th>None</th>
<th>Some</th>
<th>Most</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct from another dairy farm</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Market/Auction</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Livestock Dealer</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

6 Were any PREGNANT DAIRY HEIFERS added during 2014?
- ☐ Yes
- ☐ No

Please indicate the relative number of PREGNANT HEIFERS that came from each of the following sources:

<table>
<thead>
<tr>
<th>Source</th>
<th>None</th>
<th>Some</th>
<th>Most</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct from another dairy farm</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Market/Auction</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Livestock Dealer</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

7 Were any MILKING or DRY COWS added during 2014?
- ☐ Yes
- ☐ No

Please indicate the relative number of MILKING or DRY COWS that came from each of the following sources:

<table>
<thead>
<tr>
<th>Source</th>
<th>None</th>
<th>Some</th>
<th>Most</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct from another dairy farm</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Market/Auction</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Livestock Dealer</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
8 Were any BULLS used to breed dairy cows or heifers added during 2014?
- Yes
- No

Please indicate the relative number of BULLS used to breed dairy cows or heifers that came from each of the following sources:

<table>
<thead>
<tr>
<th>Source</th>
<th>None</th>
<th>Some</th>
<th>Most</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct from another dairy farm</td>
<td>⬜</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Market/Auction</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Livestock Dealer</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

9 When bringing dairy animals into your herd do you typically:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Occasionally</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inquire about the disease status of the herd the animal(s) originated from</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>House these new additions separately for a minimum of 48 hours</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Administer any vaccines to the new additions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

10 Do you typically test new additions to your farm for any diseases?
- No
- Yes, before they arrive on-farm
- Yes, after they arrive, but before they enter the herd
- Yes, after they arrive and have entered the herd
11 Please indicate which diseases you typically test new additions for: (Check all that apply)

☐ Bovine viral diarrhea (BVD)
☐ Johne’s disease (Mycobacterium avium ssp. paratuberculosis)
☐ Bovine leukosis virus (BLV)
☐ Infectious bovine rhinotracheitis (IBR)
☐ Leptospirosis
☐ Listeria
☐ Neospora
☐ Salmonella
☐ Mycoplasma
☐ Contagious mastitis pathogens (e.g. Staph. aureus, Strep. agalactiae)
☐ Tuberculosis
☐ Other ____________________

12 During 2014, did any cattle temporarily leave your farm (e.g. to a cattle show, petting zoo, were loaned out, to a veterinary clinic, etc.) and then return?

☐ Yes
☐ No

Please identify the strategies you have adopted to manage the risk of these traveling animals introducing disease when they return to your farm.

☐ They are housed separately from the herd for a minimum of 48 hours
☐ They are tested for diseases of concern
☐ They are vaccinated against all diseases of concern
☐ No strategies have been implemented
☐ Other ____________________

13 Please identify the top 3 diseases YOU DO NOT HAVE on your farm and are actively trying to prevent from entering. (Check only 3)

☐ Bovine leukosis virus (BLV)
☐ Bovine viral diarrhea (BVD)
☐ Cryptosporidiosis
☐ Digital dermatitis
☐ Foreign animal diseases (ex. Foot and Mouth disease)
☐ Johne’s disease (paratuberculosis)
☐ Leptospirosis
☐ Listeria
☐ Neospora
☐ Ringworm
☐ Staphylococcus aureus mastitis
☐ Streptococcus agalactiae mastitis
☐ Other ____________________
14 Please identify the top 3 diseases YOU HAVE on your farm and wish to ELIMINATE or CONTROL. (Check only 3)

☐ Bovine leukosis virus (BLV)
☐ Bovine viral diarrhea (BVD)
☐ Cryptosporidiosis
☐ Digital dermatitis
☐ Johne’s disease (paratuberculosis)
☐ Leptospirosis
☐ Listeria
☐ Neospora
☐ Ringworm
☐ Staphylococcus aureus mastitis
☐ Streptococcus agalactiae mastitis
☐ Other ____________________

15 During 2014, did your herd have direct contact on your farm, or at the fence-line with a neighboring farm with any of the following animals? (Check all that apply)

☐ Dairy cattle from a neighboring operation
☐ Beef cattle
☐ Chickens or other poultry
☐ Horses, donkeys, or mules
☐ Pigs
☐ Sheep
☐ Goats
☐ Pet dog
☐ Barn cats
☐ Farmed Deer
☐ Bison
☐ Llamas, alpacas
☐ Other ____________________

16 Do you share any of the following with a neighbor’s farm? (Check all that apply)

☐ Grazing land
☐ Pond / watercourse
☐ Breeding bulls
☐ Farm vehicles / equipment
☐ Farm staff / labour
☐ None
☐ Other ____________________
17 How are calf and cow carcasses (deadstock) dealt with on your dairy farm?

<table>
<thead>
<tr>
<th></th>
<th>Buried</th>
<th>Composted</th>
<th>Picked up by licensed deadstock remover</th>
<th>Burned / incinerated</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calves in the winter months</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Calves in the summer months</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Cows in the winter months</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Cows in the summer months</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Please specify:

**Biosecurity II: Human movement onto farm**

1 Do you require ALL visitors including farm service providers (e.g. AI technicians, veterinarians, hoof trimmers) to:

<table>
<thead>
<tr>
<th>Clean their footwear or wear disposable or farm-provided footwear</th>
<th>Never</th>
<th>Occasionally</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wear clean coveralls or wear disposable or farm-provided coveralls</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
1 Please identify how often you perform the following:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Occasionally</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use written standard operating procedures (SOPs) for dealing with specific cases of infectious diseases</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>House sick or lame animals in calving pens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean out, sanitize, and re-bed the calving pen after each calving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 Please identify how often you perform the following:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Occasionally</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>When vaccinating or treating animals, use a new needle for each animal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure cow udders and lower legs are free of manure before calving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 Please identify how often you perform the following:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Occasionally</th>
<th>Most of the time</th>
<th>Always</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevent animals from grazing pastures where manure has been spread in the same growing season</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 Please identify how often you perform the following:
<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Occasionally</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the same equipment to</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>handle both manure and cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>feed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Disease Prevalence**

1 During 2014, were heifer calves routinely tested for bovine viral diarrhea (BVD)?
   ○ Yes
   ○ No

Which of the following samples from dairy heifers were tested for BVD: (Check all that apply)
   ☐ Individual ear notch
   ☐ Pooled ear notch
   ☐ Individual blood sample
   ☐ Pooled blood sample
   ☐ Other ____________________
   ☐ I don't know

Did any heifers test positive for BVD?
   ○ Yes
   ○ No
2 In the last 5 years, was your herd tested for Johne’s disease (Mycobacterium avium ssp. paratuberculosis)?
  ○ Yes
  ○ No

Which of the following Johne’s disease tests did you use during that time frame? (Check all that apply)
  □ Fecal culture / PCR
  □ Blood ELISA
  □ Milk ELISA
  □ Bulk Tank milk ELISA
  □ Post-mortem
  □ I don’t know

Were there any positive tests during that period?
  ○ Yes
  ○ No

3 In the last 5 years have you participated in a provincial or regional voluntary Johne’s disease control program?
  ○ Yes
  ○ No

**Calf Health**

1 Regarding newborn heifer calves on your dairy farm how often do you...

<table>
<thead>
<tr>
<th>...allow them to nurse their dam?</th>
<th>Never</th>
<th>Occasionally</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>...remove them within 30 minutes of birth?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...ensure they receive at least 4L good quality colostrum within the first 12 hours?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...feed colostrum between 9pm and 5am?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...feed heat-treated milk from your farm to calves?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
2 What is the maximum volume of milk (or milk replacer) in litres you feed to a heifer calf per day prior to weaning?

3 What type of housing do you keep MOST of your heifer calves in prior to weaning?
   ○ Hutches
   ○ Pens
   ○ Other ________________

4 How many preweaned heifer calves typically are kept together in one hutch or pen?
   ○ One
   ○ Two
   ○ Three or more

What is the maximum number of preweaned heifer calves kept per individual hutch or pen?

**Animal Welfare**

1 Are you aware of the **Canadian Code of Practice** for the Care and Handling of Dairy Cattle?
   ○ Yes
   ○ No

How often have you consulted this document over the last 12 months?
   ○ Never
   ○ Once
   ○ More than once

2 Identify which groups of animals have access to pasture for at least part of the year. (Check all that apply)
   - Lactating Cows
   - Dry Cows
   - Weaned youngstock
   - None

For how many weeks of the year do the lactating cows have access?

For how many weeks of the year do the dry cows have access?

For how many weeks of the year do the youngstock have access?
Are your lactating cows, which are housed in tie-stall housing, untied on a regular basis for exercise?
- Yes, all year round
- Yes, but only in the warmer parts of the year
- No, they are not untied

For how many hours per day are they untied?

4 In 2014, did any calves or cows undergo tail-docking for NON-MEDICAL REASONS?
- Yes
- No

5 When removing horns from dairy heifers please indicate which method(s) are typically used on your farm: (Check all that apply)
- Disbudded before they are 3 weeks of age
- Disbudded between 3-8 weeks
- Dehorned between 8 weeks and 4 months
- Dehorned after 4 months
- Other ____________________

What method(s) do you use to disbudd animals < 3 weeks of age? (Check all that apply)
- Caustic paste
- Disbudding iron - electric or propane / butane burners
- Barnes-type dehorner / gouge
- Other ____________________

Do you use any of the following methods of pain control during or following the use of a disbudding iron on animals <3 weeks of age? (Check all that apply)
- Non-steroidal anti-inflammatory injection (ex. anafen, banamine, metacam)
- Sedative (ex. rompun, xylazine)
- Local anesthesia (ex. lidocaine local block)
- Not applicable

Do you use any of the following methods of pain control during or following the use of a Barnes-type dehorner when disbudding animals <3 weeks of age? (Check all that apply)
- Non-steroidal anti-inflammatory injection (ex. anafen, banamine, metacam)
- Sedative (ex. rompun, xylazine)
- Local anesthesia (ex. lidocaine local block)
- Not applicable
What method(s) do you use to disbud animals 3-8 weeks of age? (Check all that apply)

- Caustic paste
- Disbudding iron - electric or propane / butane burners
- Barnes-type dehorner / gouge
- Other ____________________

Do you use any of the following methods of pain control during or following the use of a disbudding iron on animals between 3-8 weeks of age? (Check all that apply)

- Non-steroidal anti-inflammatory injection (ex. anafen, banamine, metacam)
- Sedative (ex. rompun, xylazine)
- Local anesthesia (ex. lidocaine local block)
- Not applicable

Do you use any of the following methods of pain control during or following the use of a Barnes-type dehorner on animals between 3-8 weeks of age? (Check all that apply)

- Non-steroidal anti-inflammatory injection (ex. anafen, banamine, metacam)
- Sedative (ex. rompun, xylazine)
- Local anesthesia (ex. lidocaine local block)
- Not applicable

What method(s) do you use to dehorn animals between 8 weeks and 4 months? (Check all that apply)

- Caustic paste
- Disbudding iron - electric or propane / butane burners
- Barnes-type dehorner / gouge
- Other ____________________

Do you use any of the following methods of pain control during or following the use of a disbudding iron on animals between 8 weeks and 4 months of age? (Check all that apply)

- Non-steroidal anti-inflammatory injection (ex. anafen, banamine, metacam)
- Sedative (ex. rompun, xylazine)
- Local anesthesia (ex. lidocaine local block)
- Not applicable

Do you use any of the following methods of pain control during or following the use of a Barnes-type dehorner on animals between 8 weeks and 4 months of age? (Check all that apply)

- Non-steroidal anti-inflammatory injection (ex. anafen, banamine, metacam)
- Sedative (ex. rompun, xylazine)
- Local anesthesia (ex. lidocaine local block)
- Not applicable
What method(s) do you use to dehorn animals over 4 months of age? (Check all that apply)

- Caustic paste
- Disbudding iron - electric or propane / butane burners
- Barnes-type dehorner / gouge
- Other ____________________

Do you use any of the following methods of pain control during or following use of a disbudding iron on animals over 4 months of age? (Check all that apply)

- Non-steroidal anti-inflammatory injection (ex. anafen, banamine, metacam)
- Sedative (ex. rompun, xylazine)
- Local anesthesia (ex. lidocaine local block)
- Not applicable

Do you use any of the following methods of pain control during or following the use of a Barnes-type dehorner on animals over 4 months of age? (Check all that apply)

- Non-steroidal anti-inflammatory injection (ex. anafen, banamine, metacam)
- Sedative (ex. rompun, xylazine)
- Local anesthesia (ex. lidocaine local block)
- Not applicable

6 In the last 12 months, of the number of cows (milking or dry) permanently removed from the herd, how many went to:

- Another dairy farm
- Auction / stockyard / market
- Direct to slaughter
- Other
7 How important are the following factors when deciding to cull and transport sick or lame cows:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Unimportant</th>
<th>Of little importance</th>
<th>Moderately important</th>
<th>Important</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quota incentive period / season</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
<tr>
<td>Current cull cow price</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
<tr>
<td>Drug withdrawal status</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
<tr>
<td>Number of cows that need to be transported</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
<tr>
<td>Availability of transport to sale or slaughter</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
<tr>
<td>Body condition score of the cow</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
<tr>
<td>Current SCC of the cow</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
<tr>
<td>Ability of the cow to stand and stay standing</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
<tr>
<td>Length of trip for the cow</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
<tr>
<td>Reproductive status of the cow (bred or not bred)</td>
<td>❇</td>
<td>✗</td>
<td>○</td>
<td>❇</td>
<td>❇</td>
</tr>
</tbody>
</table>
8 Typically, how much time passes between making the decision to cull a lame or sick cow and when she actually leaves the farm? (This does not include culling of otherwise healthy cows for reproduction or conformation characteristics)

<table>
<thead>
<tr>
<th></th>
<th>Less than 3 days</th>
<th>3 days to 1 week</th>
<th>&gt;1 week to 3 weeks</th>
<th>&gt;3 weeks to 6 weeks</th>
<th>Greater than 6 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>lame</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>sick</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

9 Please indicate your confidence level by sliding the marker on a scale of 0 to 10, with 0 representing not confident and 10 representing completely confident, in the following situation. With consideration to most of the SICK or LAME cows you sent to slaughter in the last 12 months how confident were you that...

______ ...they would arrive at the slaughter facility in the same condition as they left?
______ ...you knew which slaughter facility she would arrive at?

10 Did any animals die on-farm (not euthanized) in 2014?
○ Yes
○ No

How many of the following animals in each group died (not euthanized) on-farm in the last 12 months?

______ Dairy cows
______ Weaned dairy heifers
______ Unweaned dairy heifers

How many died of unknown cause?

______ Dairy cows
______ Weaned dairy heifers
______ Unweaned dairy heifers

How many of those which died had a post-mortem performed?

______ Dairy cows
______ Weaned dairy heifers
______ Unweaned dairy heifers

11 Were any animals euthanized on-farm in 2014?
○ Yes
○ No
How many of the following animals were euthanized on-farm in the last 12 months:

______ Dairy cows
______ Weaned dairy heifers
______ Unweaned dairy heifers

How many of these animals were euthanized due to an unknown cause?

______ Dairy cows
______ Weaned dairy heifers
______ Unweaned dairy heifers

How many of these animals euthanized had a post-mortem performed?

______ Dairy cows
______ Weaned dairy heifers
______ Unweaned dairy heifers

Please indicate all methods used to euthanize heifers / cows:

❑ Farm employee by gun
❑ Farm employee by captive bolt
❑ Farm employee by blunt trauma
❑ Veterinary euthanasia
❑ Other ____________________

12 In the last 12 months, were any bull calves euthanized at birth?

○ Yes
○ No

Approximately, how many?

Please indicate all methods used to euthanize these bull calves:

❑ Farm employee by gun
❑ Farm employee by captive bolt
❑ Farm employee by blunt trauma
❑ Veterinary euthanasia
❑ Other ____________________

13 In the last 12 months, what percentage of bull calves were:

______ Sold within 2 weeks
______ Raised on farm
In the last 12 months, how frequently did the bull calves that were to be RAISED ON YOUR FARM...

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Very often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>...receive colostrum?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...get offered the same amount</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>of feed (milk replacer and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>concentrate) or more as heifers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the same age?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...get vaccinated?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...get navel dipped?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

In the last 12 months, how often did bull calves that were going to be SOLD...

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Very often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>...receive colostrum?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...get offered the same amount</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>of feed (milk replacer and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>concentrate) or more as heifers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the same age?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...get vaccinated?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...get navel dipped?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Lameness/Hoof Health

1 How often does a typical cow in your herd have its hooves trimmed?
   ○ Only when needed
   ○ Once a year
   ○ Twice per year
   ○ > Twice per year

2 Who is trimming the hooves of the majority of your dairy cows? (Check all that apply)
   □ Owner / farm employee
   □ Professional hoof trimmer
   □ Veterinarian
   □ Other ____________________

3 In your dairy herd...

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Occasionally</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>...are dry cows trimmed before calving?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...are heifers trimmed before calving?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

4 In your herd, do you look for hoof lesions, other than at routine trimming?
   ○ Never
   ○ Occasionally
   ○ Most of the time
   ○ Always

5 On your farm how often is a medicated / chemical foot bath used...

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Less than once a week</th>
<th>1-3 times a week</th>
<th>4-6 times a week</th>
<th>Once a day</th>
<th>2 or more times a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>...in milking cows</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...in dry cows</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>...in heifers</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
What is the main product used in your footbath for milking cows?
- Quaternary ammonium compound (e.g. Hoofcare)
- Glutaraldehyde/formalin (e.g. Vircoid)
- Organic acids and hydrogen peroxide (KickStart)
- Copper sulfate
- Hypochlorite (e.g. bleach)
- Formaldehyde
- Tetracycline / Oxytetracycline
- Other ____________________

What is the main product used in your footbath for dry cows?
- Quaternary ammonium compound (e.g. Hoofcare)
- Glutaraldehyde/formalin (e.g. Vircoid)
- Organic acids and hydrogen peroxide (KickStart)
- Copper sulfate
- Hypochlorite (e.g. bleach)
- Formaldehyde
- Tetracycline / Oxytetracycline
- Other ____________________

What is the main product used in your footbath for heifers?
- Quaternary ammonium compound (e.g. Hoofcare)
- Glutaraldehyde/formalin (e.g. Vircoid)
- Organic acids and hydrogen peroxide (KickStart)
- Copper sulfate
- Hypochlorite (e.g. bleach)
- Formaldehyde
- Tetracycline / Oxytetracycline
- Other ____________________

6 In 2014, besides casually looking at cows entering and leaving your parlor during standard milkings, how often did you (or an outside company) consciously evaluate your entire lactating herd for lameness?
- Never
- Once per year
- Twice a year
- Three times a year
- > 3 times per year
7 On a scale of 0-10, with 0 representing no confidence and 10 representing complete confidence, slide each marker to indicate the degree of confidence you have in your ability to successfully perform each task listed.

______ My ability to identify mild to moderately lame cows in my lactating herd using the 5 point system (score of 2.0-3.0)
______ My ability to identify severely lame cows in my lactating herd using the 5 point system (score of 4.0-5.0)
______ My ability to Body Condition Score my lactating herd, using the 5 point system

8 In the 2014 calendar year, when you identified a cow with mild to moderate lameness in your lactating herd, typically how soon would someone pick up and examine the cow’s feet?
  o Within the same day
  o Within 48 hours
  o Within a week
  o More than a week
  o When the hoof trimmer comes
  o When the vet comes

9 In the 2014 calendar year, when you identified a cow with severe lameness in your lactating herd, typically how soon would someone pick up and examine the cow’s feet?
  o Within the same day
  o Within 48 hours
  o Within a week
  o More than a week
  o When the hoof trimmer comes
  o When the vet comes

10 If you were to assess lameness in your lactating cows today, what percentage of your herd would be mild to moderately lame cows? (If you are familiar with the 5 point gait scoring system, this would be a score of 2.0 or 3.0) i.e. arches back when walking, shortened strides
  o 0-5%
  o 6-10%
  o 11-20%
  o 21-30%
  o 31-40%
  o 41-50%
  o 51-60%
  o >60%
11 If you were to assess lameness in your lactating cows today, what percentage of our cows would be severely lame? (If you are familiar with the 5 point gait scoring system, this would be a score of 4.0 or 5.0) i.e. favoring one or more limbs, more pronounced arch back
- 0-5%
- 6-10%
- 11-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%
- >60%

12 During the 2014 calendar year, please indicate how often you could attribute lameness in your lactating cows to...:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Occasionally</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infectious hoof lesion (e.g. digital dermatitis, strawberry foot, hairy heel warts)</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>Non-infectious hoof lesion (e.g. white line disease, sole or toe ulcers)</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>Swollen knees or hocks</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>Other injury (e.g. broken bones, bruising, back injury)</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
</tbody>
</table>

For the 2014 calendar year, please consider the typical rest area for your lactating cows when housed.

13 For the lactating cows, what was the stall base made of? (Check all that apply)
- Concrete / cement
- Gel mattress
- Waterbed mattress
- Rubber-filled mattress
- Rubber matt
- Sand
- Dirt
- Other ____________________
14 What was the bedding material used on top of the stall base? (Check all that apply)

- Straw and or hay
- Sand
- Sawdust
- Composted dried manure
- Peat moss
- Wood shavings
- No bedding
- Other ____________________

Typically how deep was the bedding material on top of the stall base?

- 0 - 1 inch (0 - 2.5cm)
- > 1 - 3 inches (2.6cm - 7.6cm)
- > 3 - 6 inches (7.7cm - 15.3cm)
- > 6 - 12 inches (15.4cm - 30.5cm)
- > 12 inches (> 30.5cm)

15 Please select the level of agreement you have with the following statements. The rest area for my lactating cows provides:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Warmth</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Dryness</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Traction</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ease</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Standing</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Lying</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ability</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Resting</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Hock</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Knee</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Injuries</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
For the 2014 calendar year, please consider the typical rest area of your dry cows when housed.

16 For the dry cows, what was the stall base made of? (Check all that apply)
☐ Concrete / cement
☐ Gel mattress
☐ Waterbed mattress
☐ Rubber-filled mattress
☐ Rubber mat
☐ Sand
☐ Dirt
☐ Other ____________________

17 What was the bedding material used on top of the stall base? (Check all that apply)
☐ Straw and or hay
☐ Sand
☐ Sawdust
☐ Composted dried manure
☐ Peat moss
☐ Wood shavings
☐ No bedding
☐ Other ____________________

Typically how deep was the bedding material on top of the stall base?
○ 0 - 1 inch (0 - 2.5cm)
○ >1 inch - 3 inches (2.6cm - 7.6cm)
○ > 3 inches - 6 inches (7.7cm - 15.3cm)
○ > 6 inches - 12 inches (15.4cm - 30.5cm)
○ > 12 inches (> 30.5cm)
18 Please select the level of agreement you have with the following statements. The rest area for my dry cows provides:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Warmth</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Dryness</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Traction</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Ease for standing and lying down</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Ability to perform normal resting postures</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Minimization of hock and knee injuries</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

For the 2014 calendar year, please consider your calving area for your heifers and cows.

19 For the calving pens, what was the stall base made of? (Check all that apply)
- [ ] Concrete / cement
- [ ] Gel mattress
- [ ] Waterbed mattress
- [ ] Rubber-filled mattress
- [ ] Rubber mat
- [ ] Sand
- [ ] Dirt
- [ ] Other ____________________

20 What was the bedding material used on top of the stall base? (Check all that apply)
- [ ] Straw and or hay
- [ ] Sand
- [ ] Sawdust
- [ ] Composted dried manure
- [ ] Peat moss
- [ ] Wood shavings
- [ ] No bedding
- [ ] Other ____________________
Typically how deep was the bedding material on top of the stall base?
- 0 - 1 inch (0 - 2.5cm)
- > 1 inch - 3 inches (2.6cm - 7.6cm)
- > 3 inches - 6 inches (7.7cm - 15.3cm)
- > 6 inches - 12 inches (15.4cm - 30.5cm)
- > 12 inches (> 30.5cm)

21 Please select the level of agreement you have with the following statements. My calving area provides:

<table>
<thead>
<tr>
<th>statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Warmth</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Dryness</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Traction</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ease for standing and lying down</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ability to perform normal resting postures</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Minimization of hock and knee injuries</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
22 Is there an area other than the calving pen where you house sick or lame animals?
  ○ Yes
  ○ No

For the hospital pens, what was the stall base made of? (Check all that apply)
  ■ Concrete / cement
  ■ Gel mattress
  ■ Waterbed mattress
  ■ Rubber-filled mattress
  ■ Rubber mat
  ■ Sand
  ■ Dirt
  ■ Other ____________________

What was the bedding material used on top of the stall base? (Check all that apply)
  ■ Straw and or hay
  ■ Sand
  ■ Sawdust
  ■ Composted dried manure
  ■ Peat moss
  ■ Wood shavings
  ■ No bedding
  ■ Other ____________________

Typically how deep was the bedding material on top of the stall base?
  ○ 0 - 1 inch (0 - 2.5cm)
  ○ > 1 inch - 3 inches (2.6cm - 7.6cm)
  ○ > 3 inches - 6 inches (7.7cm - 15.3cm)
  ○ > 6 inches - 12 inches (15.4cm - 30.5cm)
  ○ > 12 inches (> 30.5cm)
Please select the level of agreement you have with the following statements. The sick cow resting area on my farm provides:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Warmth</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Dryness</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Traction</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ease for standing and lying down</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ability to perform normal resting postures</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Minimization of hock and knee injuries</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

**Udder health and milking hygiene**

It would be preferable to have a person routinely involved in the milking on the farm complete this section of the questionnaire.

1 What percentage of milkings do YOU take part in?

2 In the last 3 months, how many different people have milked cows on your farm?

3 How often do the people milking cows in your herd get trained / retrained to use the same milking routine?
   - ○ Only when they are hired / start milking
   - ○ Less than once a year
   - ○ Once a year
   - ○ More than once a year
   - ○ Not trained

4 How many people milk cows per milking?
5 On your farm, which milkers routinely wear latex gloves (or similar) during milking?
- None
- Some
- All

How often do these milkers wear gloves during milking?
- Occasionally
- Most of the time
- Always

Do milkers clean their gloves during milking?
- Yes
- No

How often?
- Between each cow
- Regularly, but less often than between each cow
- Only if they get dirty

How do they clean them?
- Rinse with water
- Rinse in a disinfecting solution
- Other ____________________

6 Do you use pre-milking dip?
- Yes
- No

7 Do you ever fore-strip milk prior to attaching the milking unit?
- Yes
- No

In which situation(s) do you typically fore-strip milk? (Check all that apply)
- On every cow, at every milking
- On cows that are suspect for mastitis
- On cows that have clinical mastitis
- On cows with elevated Somatic Cell Counts (SCC)
- Other ____________________
8 How do you clean teats before attaching milking units? (Check all that apply)
- Dry wipe
- Clean with pre-milking teat dip
- Clean with water and udder wash
- Clean with water (without udder wash)
- Clean with commercially available wet disinfecting towelette (e.g. ReadyWipe®)
- I do not clean the teats
- Other ____________________

9 How do you dry teats prior to milking?
- Disposable paper towel
- Reusable cloth towel
- I do not dry teats
- Other ____________________

Do you use the same towel to dry teats of different cows?
- Yes
- No

Do you wash or disinfect these towels after every milking?
- Yes
- No

10 How often do you use automatic take-offs when milking?
- With all the cows
- With most of the cows
- With some of the cows
- I do not use automatic take-off

11 Do you use post-milking disinfectant?
- Yes
- No

12 Which of the following procedures do you regularly use to monitor subclinical mastitis in your herd? (Check all that apply)
- I review the individual somatic cell counts (SCC) of my cows
- I use the California Mastitis Test (CMT) to detect subclinical mastitis
- I take milk samples, then culture and / or test for PCR to detect subclinical mastitis
- I do not have a regular program to monitor subclinical mastitis
13 Do you have a system to identify cows with chronic mastitis infections?
   □ Yes
   □ No

How do you identify them? (Check all that apply)
   □ I visually tag them (leg tags, hip spraying, etc.)
   □ I keep a record of them
   □ Other ____________________

14 How do you milk cows that have chronic mastitis infections (e.g. Staph. aureus)? (Check all that apply)
   □ They are milked last
   □ They are milked with a specific milking unit
   □ I / we do not milk them
   □ None of the above
   □ Other ____________________

15 When drying off cows in your herd, which best describes your usual practice. (Check all that apply)
   □ Dry cow intramammary antibiotic in every quarter of every cow
   □ Dry cow intramammary antibiotic used for some, but not all cows / quarters
   □ Dry cow intramammary antibiotic is never used
   □ Internal teat sealant in every quarter of every cow
   □ Internal teat sealant is used for some, but not all cows / quarters
   □ Internal teat sealant is never used

How do you select cows to receive dry cow intramammary antibiotic? (Check all that apply)
   □ DHI Somatic Cell Count from the last 1, 2, or 3 tests
   □ History of clinical mastitis in one or more quarters during the current lactation
   □ California mastitis test applied to all quarters at dry-off
   □ Other ____________________

Reproduction

1 In general, what is the breeding method used on your operation:
   □ Artificial insemination (AI) only
   □ Both AI and natural service (NS)
   □ NS only
When using the natural service method, do you: (Check all that apply)

- Use your own farm-raised bull(s) for the breeding
- Use hired (acquired off-farm) bull with good fertility (CR) records and known vaccination status
- Use hired (acquired off-farm) bull without fertility records and known vaccination status
- Use hired (acquired off-farm) bull without fertility records and unknown vaccination status

How many times per day is artificial insemination performed on your farm? (not per cow)

<table>
<thead>
<tr>
<th></th>
<th>Less than once a day</th>
<th>Once per day</th>
<th>Twice a day</th>
<th>More than twice daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactating Cows</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Heifers (non-lactating)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

On your farm, what is the approximate percentage of artificial insemination performed by each of the following people:

- Professional inseminator or AI unit
- Herd Owner
- Herdsman or employee

2 Please give an approximate percentage of each method of heat detection used when lactating cows are inseminated for the first time.

- Visual heat detection
- Hormonal synchronization for timed artificial insemination
- Automated activity system (ex. pedometer, activity tag)
- Bull
- Other

3 Please give an approximate percentage of each method used when lactating cows undergo a repeat insemination (second and greater).

- Visual heat detection
- Hormonal synchronization for timed artificial insemination
- Automated activity system (ex. pedometer, activity tag)
- Bull
- Other

4 Please give an approximate percentage of each method used for insemination of heifers.

- Visual heat detection
- Hormonal synchronization for timed artificial insemination
- Automated activity system (ex. pedometer, activity tag)
- Bull
- Other
How many TIMES PER DAY are LACTATING COWS observed for signs of heat?

In total, how many MINUTES PER DAY are spent on heat detection in LACTATING COWS?

Is heat detection the only task performed at this time?
  ○ Yes
  ○ No

How many times per day are heifers (non-lactating) observed for signs of heat?

In total, how many minutes per day are spent on heat detection in heifers?

Is heat detection the only task performed at this time?
  ○ Yes
  ○ No

Which hormonal protocol(s) do you use (for at least 10% of AIs) to synchronize lactating cows? (check all that apply)

<table>
<thead>
<tr>
<th>OvSynch (7-2-1)</th>
<th>Lactating Cows</th>
</tr>
</thead>
<tbody>
<tr>
<td>OvSynch and progesterone device (CIDR or PRID)</td>
<td>□</td>
</tr>
<tr>
<td>Presynchronization + OvSynch (ex. Double-OvSynch, PreSynch-OvSynch)</td>
<td>□</td>
</tr>
<tr>
<td>Prostaglandin injection followed by heat detection</td>
<td>□</td>
</tr>
<tr>
<td>Other</td>
<td>□</td>
</tr>
<tr>
<td>None</td>
<td>□</td>
</tr>
</tbody>
</table>

Q228 Which hormonal protocol(s) do you use (for at least 10% of AIs) to synchronize heifers? (check all that apply)

<table>
<thead>
<tr>
<th>OvSynch (7-2-1)</th>
<th>Heifers</th>
</tr>
</thead>
<tbody>
<tr>
<td>OvSynch and progesterone device (CIDR or PRID)</td>
<td>□</td>
</tr>
<tr>
<td>Presynchronization + OvSynch (ex. Double-OvSynch, PreSynch-OvSynch)</td>
<td>□</td>
</tr>
<tr>
<td>Prostaglandin injection followed by heat detection</td>
<td>□</td>
</tr>
<tr>
<td>Other</td>
<td>□</td>
</tr>
<tr>
<td>None</td>
<td>□</td>
</tr>
</tbody>
</table>
5 On average, how soon after insemination are cows checked for pregnancy?
- Before 30 days
- 30-34 days
- 35-39 days
- 40-45 days
- After 45 days

6 What is the method first used to identify pregnancy in your herd?
- Rectal palpation
- Ultrasound
- Blood test
- Milk test
- Other ____________________

7 Do you routinely confirm or re-check pregnancies?
- Yes
- No

How long after insemination is this usually done?
- Before 60 days
- 61-79 days
- 80-100 days
- At or just before dry-off
- Other ____________________

What method is most commonly used for pregnancy confirmation?
- Rectal palpation
- Ultrasound
- Blood test
- Milk test
- Other ____________________

8 Did your operation experience a higher than average (>5 cases/100 calvings) number of abortion cases in 2014.
- Yes
- No

Did your farm attempt to identify the cause of the abortions through follow-up testing?
- Yes, once
- Aware and interested, but concerned about the costs and resources involved
- Not interested, happy with clinical case diagnostic facility I have
- Not aware of the importance
Internet Use/Social Media

1 During 2014, did this operation access the internet for dairy information?
   ✔ Yes
   ☐ No

What method was used to access the internet? (Check all that apply)
   ☐ Dial-up via telephone line
   ☐ High-speed phone-line / DSL (Digital Subscriber Line)
   ☐ Cable
   ☐ Wireless (router, hub, stick)
   ☐ Cell phone
   ☐ Other ____________________

2 During 2014, did this operation use computer technology to: (Check all that apply)
   ☐ Record daily milk weights for individual cows
   ☐ Manage reproductive records
   ☐ Communicate with other producers, dairy organizations
   ☐ Online purchase of equipment or supplies for the dairy operation
   ☐ Continuing education, on-line courses
   ☐ Other ____________________

3 On a scale of 1 to 5, with 1 representing very unimportant and 5 representing very important, please rank the importance of each of the following sources for obtaining information about dairy herd health and management:
   _____ Veterinarians
   _____ Extension personnel
   _____ Scientific journals
   _____ Social media
   _____ Other producers
   _____ Researchers
   _____ Producer organizations
   _____ Blogs / Forums / LISTSERVs
   _____ DHI / Valacta / Marketing Board reps
   _____ Magazines / Newsletters
   _____ Websites
   _____ Other
4 For each of the social media platforms listed below, please answer the following questions:

<table>
<thead>
<tr>
<th>Platform</th>
<th>In the last 12 months have you used this media platform?</th>
<th>Do you use this platform to interact with other farmers?</th>
<th>Do you use this media platform to obtain or share information about herd health and management?</th>
<th>How often do you use this media platform? (Please select one of the options from the drop-down menu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
<tr>
<td>Twitter</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
<tr>
<td>Google (and other search engines)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
<tr>
<td>YouTube</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
<tr>
<td>Vimeo</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
<tr>
<td>Vine</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
<tr>
<td>Tumblr</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
<tr>
<td>Instagram</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
<tr>
<td>Flickr</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Daily</td>
</tr>
</tbody>
</table>

5 We would like to use a software program that uses Twitter handles / names to map how dairy farmers interact online. This will allow us to better understand the use of social media for communicating with dairy farmers. To participate in this project, please enter your Twitter handle / name in the box below:
This now concludes the National Dairy Study Questionnaire.

In the near future, we will be asking a number of questionnaire respondents whether they would like to participate in the farm visit phase of the study. The visits are strictly voluntary and you are under no obligation to participate. The visits will take place in the summer of 2015 and will include free herd-level disease testing for bovine leukosis, Johne’s disease, digital dermatitis, three mastitis pathogens (Staph aureus, Strep. agalactiae, and Mycoplasma). All results will be reported aggregately with no identifiable information included. Would you like to be participate in the second phase of the study if you are chosen?
- Yes, I would like to participate
- No, I do not wish to participate

Since you answered yes, do you give your provincial marketing board permission to provide us with the contact information associated with your unique code so we can contact you regarding the visit. This contact information will be kept strictly confidential and will be used solely for the purpose of arranging the visit, and will not be associated with any data collected from this questionnaire or the farm visit. The information will be destroyed upon the completion of the last farm visit in your province.
- Yes, my provincial marketing board can release my information to the research team organizing the visits
- No, I do not wish the marketing board to release my information, I no longer wish to participate in the visits
- No, I do not wish the marketing board to release my information, I will enter it voluntarily below

cont’d Please enter your name, address and phone number below, it will only be used to contact you to arrange a visit and then the information will be physically removed from the database upon completion of that visit. If you prefer to be contacted by email please include that as well.