



Western Canadian Cow-Calf Survey

2014 Western Canadian Cow-Calf Survey

Aggregate Results

June 2015

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Western Canadian Cow-Calf Productivity Survey

2013 Breeding to 2014 Weaning

There were a series of cow-calf production surveys - named the Alberta Cow-Calf Audit – administered annually between 1988-1991 and lastly in 1998.¹ The goal of these surveys was to gather information on cow-calf production in order to “establish industry benchmarks for production indicators and management practices, establish industry trends and identify weaknesses in production and management practices”. The results also aided in guiding research and extension efforts. The industry benchmarks were also populated into Alberta Agriculture’s CowChips record keeping program.

Sixteen years later, the survey has been revived, revised and expanded to western Canada through a combined effort involving representatives from the Provincial Producer Associations, Provincial Ministry of Agriculture specialists, the Beef Cattle Research Council, Canfax and the Western Beef Development Centre.

The survey asked 58 questions about cow-calf producers’ operations and management and marketing practices as they related to their 2014 calf crop, starting with breeding in Summer 2013 and ending with weaning. The survey was made available in both hard copy (paper) and online formats and distributed at producer association meetings, producer events and beef industry conferences from late October 2014 until February 28, 2015.

A response rate is not reportable given the mixed method approach – handout 2000+ hard copies and widely promote link to online survey. A total of 411 surveys were completed – 32% by mail and 68% online – representing 76,000 breeding females or 2.2% of the 3.45 million cows reported by Statistics Canada to be in Western Canada as of July 1, 2013.²

Survey respondents were invited to provide their contact information if they wished to received a summary report of their production indicators. A total of 233 producers (57% of survey respondents) requested summary reports.

The benchmark results and a summary report of the survey findings are being made available through the provincial producer associations, the provincial ministries of agriculture, the Beef Cattle Research Council and the Western Beef Development Centre website.

The survey was part of a collaborative venture with funding contributed by the Saskatchewan Ministry of Agriculture and the Canada-Saskatchewan Growing Forward bi-lateral agreement.

¹ The Alberta Herd Audit report can be found on WBDC’s website: www.wbdc.sk.ca/pdfs/economics/AB_CowCalf_Audit.pdf

² In 1998, the response rate was nearly 21% with 1,712 survey respondents representing 205,281 breeding females.

TIP – How to interpret the table data

Given that it was not mandatory to answer all of the questions, it becomes useful to know how many survey respondents answered each question. Under each topic heading there is a row named “% who responded” which indicates what percentage of the 133 mail surveys and 278 online surveys had this particular survey question answered. The reported percentages and averages in the rows below it are based off the total responses received for that question.

For example, for the topic of calving span, 93% of mail survey respondents provided the dates necessary to properly calculate calving span while only 72% of online survey respondents did, for an average of 79% of total survey respondents. Of the respondents who did provide the dates needed to calculate calving span, the average span was 92 days.

	MAIL	ONLINE	TOTAL
Calving Span			
% who responded	93%	72%	79%
Average Calving Span (d) for Cows	93	92	92

SECTION 1. ABOUT WCCCS RESPONDENTS & THEIR OPERATIONS

Survey respondents were asked to provide details on their age, location, number of years farming, number of farm labourers (both paid and unpaid) and 2014 farm sales. A total of 411 survey responses were received representing 76,088 females with an average of 167 females calving in 2014. The majority of surveys (68%) were completed online with the remainder being mailed in paper versions.

While this survey was open to all cow-calf producers across Western Canada, the majority of respondents were from Alberta (49%) followed by Saskatchewan (24%), Manitoba (18%) and British Columbia (8%).

Survey respondents could request a complimentary production performance indicator report for comparison with survey benchmarks. A total of 233 (57%) of survey respondents requested a report. See Appendix A for an example of the production performance indicator report.

Table 1. WCCCS Survey Response Details

	MAIL	ONLINE	TOTAL
No. of Responses Received	133	278	411
Average Herd Size (females calved in 2014)	133	184	167
Total Cows Represented (females exposed in 2013)	24,080	52,008	76,088
Province			
% who responded	98%	100%	99.5%
% of Responses from BC	5%	10%	8%
% of Responses from AB	60%	44%	49%
% of Responses from SK	12%	30%	24%
% of Responses from MB	23%	16%	18%
Feedback and Future Survey Participation			
No. Requesting Feedback	93	140	233
% Requesting Feedback	70%	50%	57%

Table 2. WCCC Survey Respondent Demographics – Age, Gender, Years Raising Cattle

	MAIL	ONLINE	TOTAL
Age of Respondent			
% who responded	98%	99%	99%
Average Age	56	48	50
% 35 years of age or younger	12%	22%	18%
% 55 years of age or older	61%	39%	46%
Gender			
% who responded	100%	98%	99%
% of respondents Male	84%	86%	86%
% of respondents Female	16%	14%	14%
Years Raising Cattle			
% who responded	98%	99%	99%
Average No. of Years	31	26	28
% 10 years or less	9.2%	13.4%	12%
% 25 years or more	65%	53%	57%

Nearly all survey respondents provided their age, with an average age of 50 years, which is below the average age of Western Canadian farmers (54.4 in 2011 Census; StatsCan Table 004-0239). On average, the online survey respondents were younger than the mail survey respondents. Eighteen percent (18%) of the survey respondents were 35 years of age or younger, while 46% were 55 years of age and older (Figure 1).

The majority (86%) of survey respondents were male. When it came to number of years the survey respondents had been raising cattle, the average number of years was 28 with 57% having 25+ years in the cow-calf industry. Only 12% of the survey respondents were new entrants with 10 years or less in the industry and only 4% had entered the industry in the last five years.

When survey respondents were asked about the number of family and non-family labourers that worked on their operation, most (44%) question respondents had 2 family labourers (see Table 3). Without any follow-up question for clarification, it is not possible to know what percentage of these were husband-wife operations and what percentage were parent-child (i.e. father-son) operations. Twenty-two percent (22%) of question respondents reported having non-family (paid) labour on their operation, with over half (51%) having only one paid labourer.

Figure 1. WCCCS Respondents by Age Category

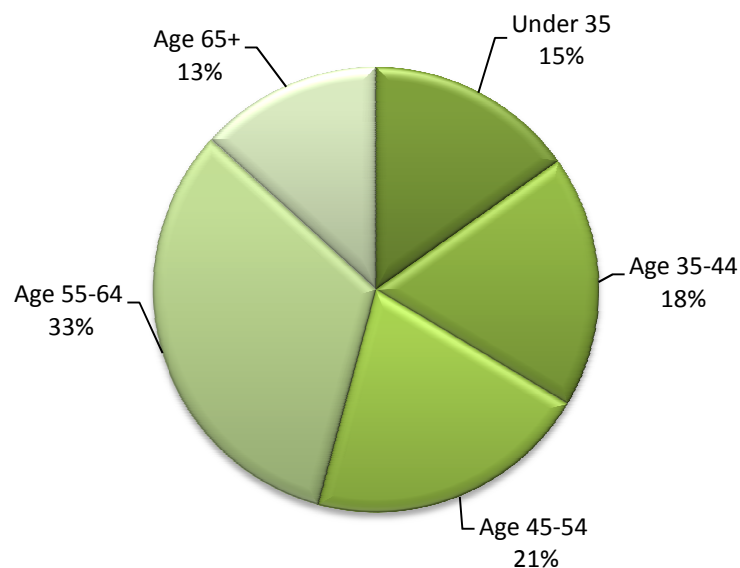


Table 3. WCCCS Farm Labour, Family and Non-Family (Paid)

	MAIL	ONLINE	TOTAL
Family and Non-Family Labour			
% who responded	95%	98%	98%
% with 1 family labourer	18%	13%	15%
% with 2 family labourers	42%	45%	44%
% with 3 or more family labourers	39%	42%	41%
<hr/>			
% who had non-family labourers	20%	23%	22%
% with 1 non-family labourer	10%	12%	11%
% with 2 non-family labourers	4%	5%	5%
% with 3 or more non-family labourers	6%	5%	6%

Table 4. WCCCS 2014 Farm Sales, Livestock Enterprises, Herd Make-Up

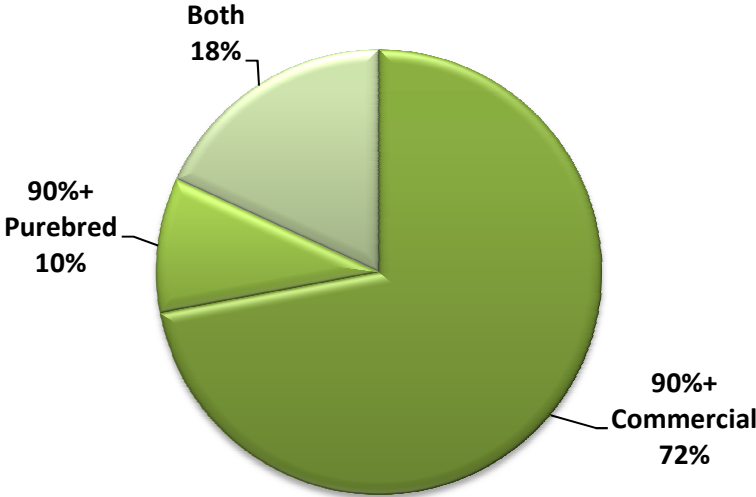
	MAIL	ONLINE	TOTAL
Beef Cattle Sales as Percentage of 2014 Farm Sales			
% who responded	98%	99%	99%
% with 100% cattle sales	44%	45%	44%
% with 50% or less cattle sales	22%	18%	19%
Livestock Enterprises			
% who responded	99.2%	99.6%	99.5%
% with cow-calf	100.0%	100.0%	100.0%
% with replacements	58%	62%	60%
% with backgrounders	35%	36%	36%
% with grassers/stockers	21%	22%	22%
% with finishers/feedlot	9%	6%	7%
Percentage of Herd That is Commercial			
% who responded	98%	99%	99%
% with 90%+ Commercial Herd	82%	68%	72%
% with 50% or less Commercial Herd	9%	20%	17%
% with 90%+ Purebred Herd	5%	12%	10%

Survey respondents were asked to provide what percentage of their 2014 farm sales came from: beef cattle; grains, pulses and oilseeds; forage, and; other. The majority of survey respondents were mixed operations, generating revenues from more than just cattle sales. While 44% of survey respondents generated all of their 2014 farm sales from beef cattle sales, close to 20% of respondents generated less than half of their farm sales from beef cattle. Forty-one percent reported cash crop sales (grains, oilseeds and pulses) while 28% reported forage sales and 30% reported “other” farm sales.

While every survey respondent reported having a cow-calf enterprise, only 60% indicated they raised replacement heifers (which may indicate a misinterpretation of the question), 36% backgrounded, 22% grassed stockers and 7% feedlot finished.

The majority of survey respondents were commercial cow-calf producers with 72% having ninety percent or greater of their herd being cross-bred. Only 10% of survey respondents were purebred producers (i.e. more than 90% of their herd was purebred). As Figure 2 illustrates, 72% of herds were commercial, 10% were purebred and 18% had both commercial and purebred cattle on their operation.

Figure 2. Distribution of WCCCS respondents by herd type in Western Canada



SECTION 2. IMPORTANT DATES AND COUNTS RELATED TO THE 2013 BREEDING SEASON

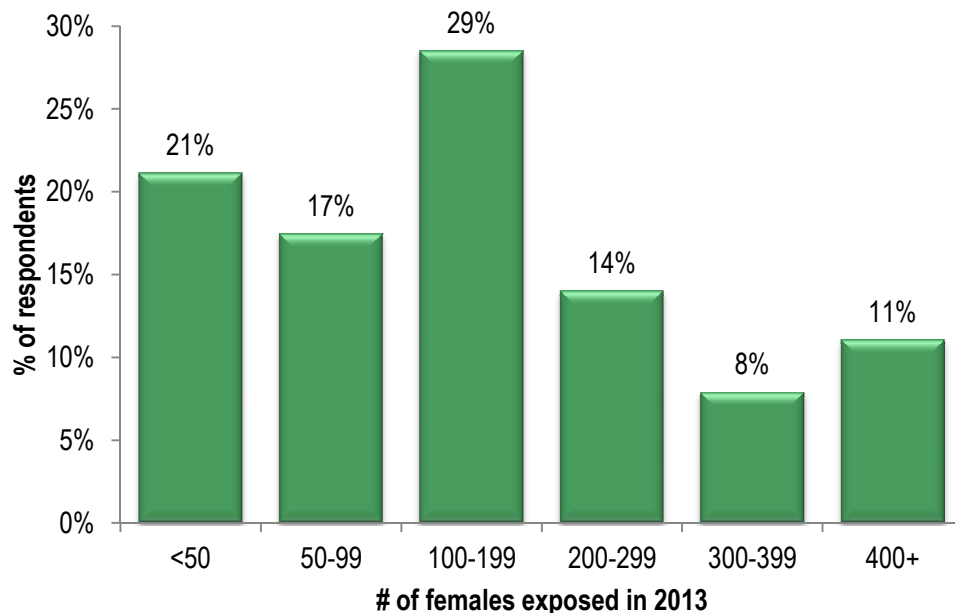
Survey respondents were asked to provide dates and head counts related to their 2013 breeding season. If an operation had both a spring and fall calving herd, they were to only provide dates and head counts for one of the groups. Respondents were asked to report dates and numbers separately for cows and heifers.

On the question of cow:bull ratio, 95% of survey respondents answered this question with the average ratio being 24:1 for cows and 17.5:1 for heifers (Table 5). On average, survey respondents exposed 203 females to breeding an average of 91 days in 2013. Thirty-eight percent of respondents had fewer than 100 cows, 29% had 100-199 cows, while 19% had 300 cows or greater (see Figure 3).³

It is recommended to expose cows to breeding for 63 days or less and for heifers to be bred earlier than cows given their biological need for a longer post partum interval (80-100 d vs 50-60 d for cows). Ninety-one percent of survey respondents provided the dates needed to calculate the length of their 2013 breeding season. On average, breeding season length was 92 d for cows and 89 d for heifers. The average breeding season start date was June 1. (average of both commercial and purebred herds). Purebred producers started their breeding seasons May 1 on average.

Only 25% of respondents had breeding seasons of 63 days or less. And only 26% exposed their heifers earlier than the rest of their cows, with the average being about 2 weeks earlier.

Figure 3. Distribution of WCCCS respondents by herd size (females exposed in 2013)



³ The 1997/98 Alberta Herd Audit targeted producers with over 25 cows, the WCCCS did not have a minimum herd size requirement to participate.

Table 5. WCCCS Reproduction Parameters – Cow:Bull Ratio, Breeding Season Length, Open Rate, Calving Rate

	MAIL	ONLINE	TOTAL
Cow:Bull Ratio			
% who responded	95%	95%	95%
Average Cow:Bull Ratio	23.9 : 1	24.4 : 1	24.2 : 1
Average Heifer:Bull Ratio	17 : 1	17.8 : 1	17.5 : 1
Average Herd Size			
% who responded	100%	97%	98%
Average # Females Exposed in 2013	200	205	203
Average # Females that Calved in 2014	133	184	167
2013 Breeding Season			
% who responded	89%	92%	91%
Avg Breeding Season Length (d) - Cows	98	90	92
Avg Breeding Season Length (d) - Hfrs	97	85	89
% With Breeding Season 63 d or Less	16%	33%	24%
% Who Exposed Heifers Earlier than Cows	27%	26%	26%
Avg Days Earlier Exposure for Heifers	13	13	13
Production Performance Indicators			
% who responded	96%	89%	91%
Open Rate Cows (%)	7%	8%	7%
Open Rate Heifers (%)	6%	12%	10%
Conception Rate ALL Females	93%	91%	93%
Calving Percentage Cows (%)	92%	89%	90%
Calving Percentage Heifers (%)	91%	94%	92%

Only 60% of survey respondents indicated they pregnancy check their cows (Table 11), while 66% checked some or all of their heifers. This is an improvement from the 1997/98 Alberta Cow-Calf Audit Survey which reported less than half of producers (49.4%) were pregnancy checking. Close to 90% of survey respondents provided the numbers required to calculate conception rate. Conception rate is calculated by dividing the number of bred females by the number of females exposed to breeding. Average conception rate for all females was 93%. On average, open rates were 7% for cows and 10% for heifers. Average calving percentage, which is calculated by dividing the number of calves born by number of females exposed, was 90% for cows and 92% for heifers.

SECTION 3. 2014 CALF CROP

3.1 2014 Calving Season

In this section survey respondents were asked to provide information on their 2014 calving season. Average calving span (length of calving season in d) was 92 days for cows and 66 days for heifers. Ideally, calving span should be 60 to 80 days for efficient use of labour, a more uniform calf crop, and improved productive and reproductive efficiency.

As Figure 4 shows, 34% of survey respondents started calving in January and February, 36% in March and 29% in April/May. In previous Alberta Herd Audit surveys February was the most common month for calving start. This shift in calving start suggests the research and extension about the high costs associated with calving during winter months influenced producers.

Calving distribution or calving pattern is another important indicator of reproductive performance. The target is to have 60%+ of females calving in the first 21 days of the calving season. Sixty-four percent of survey respondents provided the data necessary to calculate calving distribution. On average, 55% of females calved in the first 21 d which is an improvement from the 1997/98 Alberta Cow-Calf Audit survey which reported 47.6% of calves born in first 21 d (see Figure 5). Forty-two percent of WCCCS respondents who answered this question met or exceeded the target of 60% of females calving in first 21 d of the calving season.

When it comes to calving ease, 96% of respondents (82% response rate) indicated their cows calved unassisted while 84% of heifers were unassisted.

Just over 80% of survey respondents provided details on their calf death loss; the average calf death loss was just under 7% (Table 7). This is higher than the 1997/98 Alberta Herd Audit average of 4.4%. Figure 6 shows the most cited reason for calf death loss after the first 24H was due to illness or disease (i.e. scours, pneumonia, etc) at 30% of calf deaths, followed by accident/predator (29%), unknown causes (24%), and weather (16%).

Table 6. WCCCS 2014 Calving Season – Calving Span, Calving Start, Distribution

	MAIL	ONLINE	TOTAL
Calving Span			
% who responded	95%	72%	79%
Average Calving Span (d) for Cows	93	92	92
Average Calving Span (d) for Heifers	62	66	65
Calving Start			
% Calving Start in January	12%	17%	15%
% Calving Start in February	18%	19%	19%
% Calving Start in Mar 1-15	16%	19%	18%
% Calving Start in Mar 16-31	19%	18%	18%
% Calving Start April	29%	22%	24%
% Calving Start in May	5%	5%	5%
Calving Distribution			
% who responded	80%	57%	64%
% With 60%+ Calving in first 21 d	38%	45%	42%
Average % Calving Day 1-21	54%	56%	55%
Average % Calving Day 22-42	29%	31%	30%
Average % Calving Day 42-63	12%	9%	10%
Average % Calving Day 63+	6%	4%	5%

Figure 4. Calving Start Month for WCCCS Survey Respondents

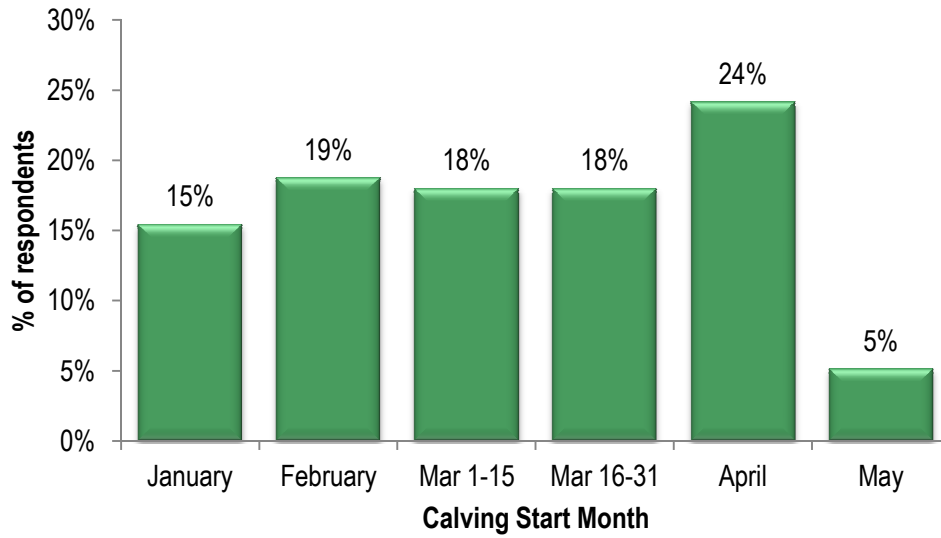


Figure 5. 2014 Calving Distribution of WCCCS Survey Respondents

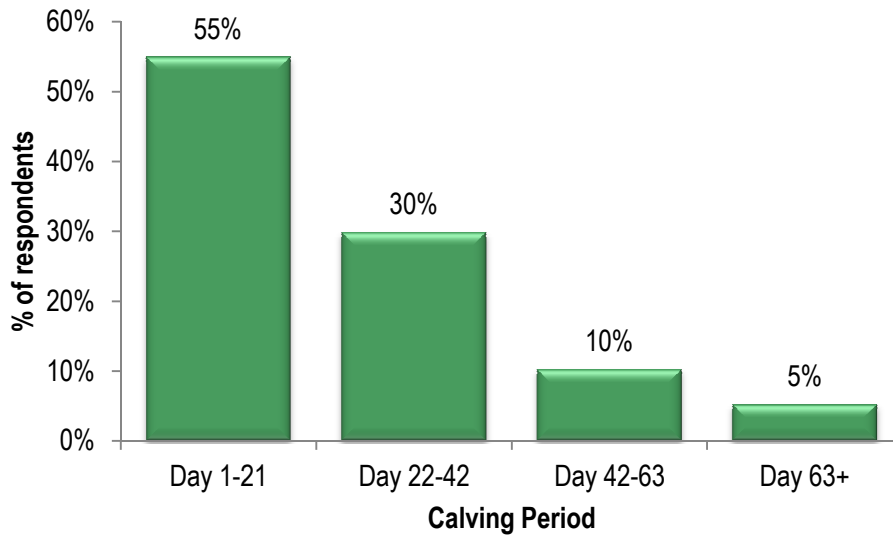
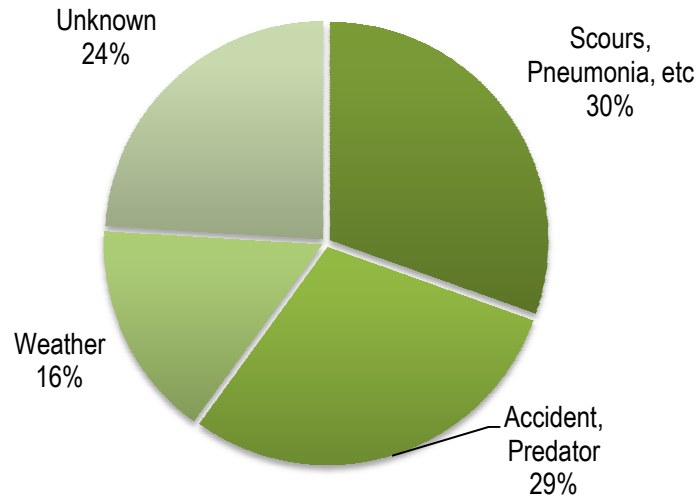


Table 7. WCCCS 2014 Calving – Calving Ease, Calf Death Loss

	MAIL	ONLINE	TOTAL
Calving Ease			
% who responded	94%	76%	82%
% Unassisted Cows	95%	97%	96%
% Unassisted Heifers	83%	85%	84%
Calf Death Loss			
% who responded	97%	73%	81%
Average Calf Death Loss (%)	6.8%	7.0%	6.9%

Figure 6. Death Reasons for Calves >1 Day Old, WCCCS 2014



3.2. 2014 WEANING DETAILS

In this section survey respondents were asked to provide information related to the weaning of their 2014 calf crop – weaning dates, head counts, average weaning weights, and marketing timing and method.

Close to 80% of survey respondents provided their weaning date(s). Producers who had more than one weaning date were asked to provide an average date. The majority of survey respondents weaned in October (42%). November (32%) was the next most popular month to wean calves followed by December or later (15%) and August/September (11%) (Table 8).

When it comes to weaning method, the majority (70%) of survey respondents still use the traditional method of separating cows from their calves (Table 8). Thirty percent used low-stress methods: 22% fenceline wean, 6% nose paddle or two-stage wean and 3% natural wean (i.e. leave the calves on the cows).

On the production side, the average pounds of calf weaned per cow exposed was 534 lbs. This number needs to be interpreted with caution as it is not adjusted to a 205-d weight given there was no collection of birthweight information which is needed for adjusted weight calculations. In 1997/98 the lbs weaned per cow exposed was 506 lbs. Pounds weaned per cow wintered rather than cows exposed is another way to evaluate; the average is 572 lb per cow wintered for this survey.

Sixty-six percent of survey respondents provided numbers to calculate calf crop (# calves weaned / # females exposed), the average calf crop or wean percentage was 85%. This wean percentage rate is slightly below the 85.6% reported in the 1997/98 Alberta Cow-Calf Audit survey.

Table 8. WCCCS – Weaning Date, Method, Lbs per Cow Exposed, Calf Crop (Wean Percentage)

	MAIL	ONLINE	TOTAL
Weaning Time			
% who responded	98%	70%	79%
% Weaning August & September	11%	11%	11%
% Weaning Early October (1-15)	23%	19%	21%
% Weaning Late October (16-31)	22%	20%	21%
% Weaning Early November (1-15)	22%	25%	24%
% Weaning Late November (16-30)	6%	10%	8%
% Weaning December or later	15%	15%	15%
Weaning Method			
% who responded	98%	65%	76%
% Who Use Traditional Separation	76%	65%	70%
% Who Use Fence Line Separation	15%	27%	22%
% Who Use Natural Wean	4%	2%	3%
% Who Used Nose Paddle, Two Stage Wean	5%	7%	6%
Lbs Weaned per Cow Exposed			
% who responded	86%	58%	67%
Average Lbs Weaned per Cow Exposed	494	554	534
Calf Crop			
% who responded	93%	53%	66%
Average Weaning Percentage	86%	85%	85%

3.3. 2014 WEANED CALF MARKETING and PRICING

When survey respondents were asked about their marketing and selling methods for their 2014 calves, 79% of question respondents indicated that they retained calves for breeding stock replacements with an average of nearly 27% of their 2014 calves being retained. For non-replacement calves, the majority of question respondents (72%) sold some of their calves at weaning. On average, respondents sold close to half of their calves (45.5%) at weaning. Approximately 17% of question respondents indicated that they sold 90%+ of their calves at weaning. Nine percent (9%) of question respondents pre-conditioned a portion of their 2014 calves for 30-60 days before selling, 35% retained a portion of their 2014 calves to background, and 9% retained a portion to finish.

Seventy-two percent (72%) of survey respondents provided percentage breakouts on the marketing of their 2014 calves. Eighty-eight percent (88%) of question respondents had only one selling method for their calves. For example, 75% of respondents sold 100% of their 2014 calves marketed at or close to time of weaning via live auction. Close to 80% of question respondents marketed a portion of their 2014 weaned calves through live auction, 9% sold calves through satellite/video auction, 7% used an order buyer, 12% sold calves direct (i.e. private treaty) and 2% custom fed at least a portion of their 2014 calves in a custom feedlot.

Table 9. WCCCS Benchmarks on Marketing and Pricing of Weaned Calves

	MAIL	ONLINE	TOTAL
Weaned Calf Marketing†			
% who responded	96%	68%	77%
% Who Sold Calves at Weaning	70%	73%	72%
% Who Pre-Conditioned Calves 30-60 d	9%	10%	9%
% Who Background	33%	37%	35%
% Who Retain & Sell as Fed Cattle	11%	8%	9%
% Who Retain for Replacements	68%	86%	79%
Weaned Calf Marketing Method†			
% who responded	89%	64%	72%
% Who Sold via Live Auction	83%	78%	80%
% Who Sold via Electronic Auction (satellite/video)	8%	11%	9%
% Who Sold through Order Buyer	5%	8%	7%
% Who Sold Direct, Private Treaty	15%	10%	12%
% Who Custom Fed in Feedlot	2%	2%	2%

†Percentages exceed 100% as many producers have more than one marketing strategy and method.

SECTION 4: CULLING AND DEATH LOSS

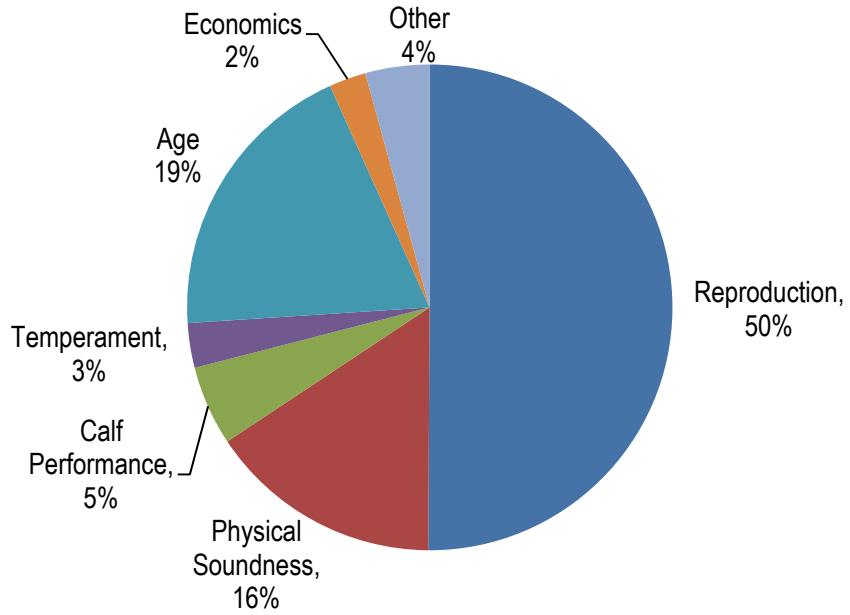
In this section survey respondents were asked to provide details on their culling practices and death loss for breeding stock. Of the 73% survey respondents that answered the question on breeding female culling, the average culling rate was 10.3%. As Figure 7 shows, the most common reason for culling was reproductive failure (e.g., open, late calving, aborted calf) (50%), followed by age (19%), physical soundness (16%), calf performance (5%), temperament (3%), economics (2%) and other (1%). For herd sires, the average culling rate was just under 23% based on responses from 68% of survey respondents. As Figure 8 shows, the most common reason for culling herd sires was physical soundness (e.g. lame, conformation) (32%) followed by age (27%), reproduction (21%) and progeny performance (13%).

Death loss of breeding stock averaged 1.4% for females and 2.4% for herd sires.

Table 10. WCCCS Benchmarks on Breeding Stock – Culling and Death Loss

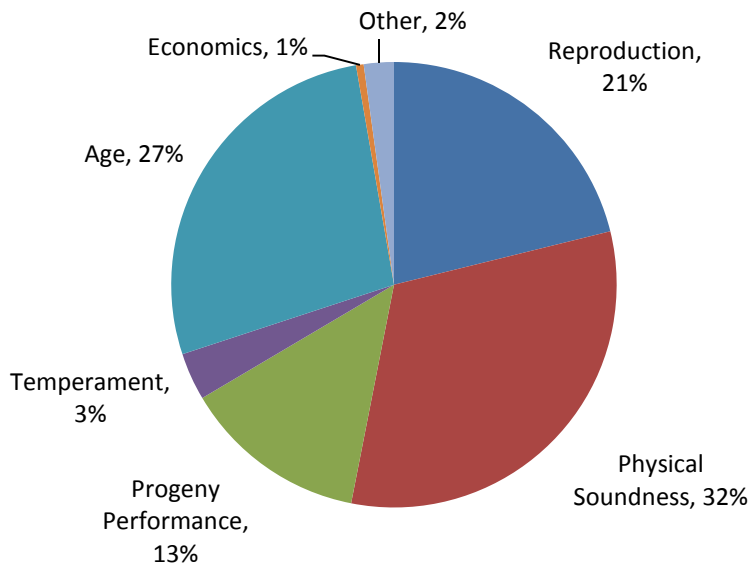
	MAIL	ONLINE	TOTAL
Breeding Female Culling			
% who responded	95%	62%	73%
Average % Culled	10.2%	10.0%	10.3%
Herd sire Culling			
% who responded	89%	59%	68%
Average % Culled	25.4%	20.3%	22.6%
Breeding Female Death Loss			
% who responded	96%	63%	74%
Average % Death Loss on Females	1.5%	1.3%	1.4%
Herd sire Death Loss			
% who responded	92%	62%	72%
Average % Death Loss on Herdsires	1.8%	2.8%	2.4%

Figure 7. Distribution of Breeding Female Culling by Reason, WCCCS 2014



Source: WCCCS 2014

Figure 8. Distribution of Herdsire Culling by Reason, WCCCS 2014



Source: WCCCS 2014

SECTION 5: REPRODUCTIVE MANAGEMENT PRACTICES

In this section survey respondents were asked to provide details related to reproductive management practices on their operations. On average, 18% of respondents utilized artificial insemination (AI) and 11.3% used estrus synchronization.

On average, only 60% of respondents pregnancy checked at least some of their cows while 66% checked some or all of their heifers. This rate is above the 49.4% average observed in the 1997/98 Alberta Herd Audit. It makes economic sense to pregnancy check – overwintering open cows is costly and issues with herd fertility can be identified and dealt with in a timely manner if pregnancy rate abnormalities are detected during pregnancy check.

Body condition scoring, which is a hands-on measurement of the fat cover on an animal (1 to 5 score), is performed by less than 20% of producers.⁴ Seventy-five percent of survey respondents provided cow weights; on average cows weighed 1374 lb, however, only 22% of question respondents provided an actual scale weight.

Table 11. Use of AI, Estrus Synch, Pregnancy Checking, Body Condition Scoring, and Cow Weight

	MAIL	ONLINE	TOTAL
Use of Artificial Insemination (AI) and Estrus Synchronization (ES)			
% who responded	98%	65%	76%
Average % using AI	10%	24%	18%
Average % using ES	5.5%	15%	11.3%
Pregnancy Checking			
% who responded	98%	66%	76%
Average % who checked SOME OR ALL - Cows	54%	64%	60%
Average % who checked SOME OR ALL - Heifers	59%	70%	66%
Body Condition Scoring			
% who responded	95%	65%	75%
% Who Regularly Body Condition Score Females	16%	22%	19%
Body Weight			
% who responded	96%	64%	75%
Avg Cow Weight	1369	1378	1374
% Who Provided Actual Scale Weight	17%	26%	22%

⁴ For more on body condition scoring, visit: <http://www.beefresearch.ca/research/body-condition-scoring.cfm>

When it comes to to herd sire reproductive management, only 64% of respondents performed breeding soundness evaluations on their herdsires and even fewer tested their bulls for trichomoniasis (~12%) and vibrio (9.5%) (Table 12).

Survey respondents were asked to pick their top three selection criteria from a list of nine: breed, price, performance tests, genetic tests, birth weight, polled, pedigree, conformation and EPDs. Breed, conformation and birth weight ranked #1, #2 and #3, respectively. The remainder of the criteria based on a tally of votes where a 1=3 points, 2 = 2 points and a 3 = 1 point, ranked as follows: EPDs, pedigree, performance tests, horn status (polled), price and genetic test results.

Table 12. Use of Breeding Soundness Evaluations, Trich and Vibrio Testing, Bull Selection Criteria

	MAIL	ONLINE	TOTAL
Breeding Soundness, Trich and Vibrio Testing			
% who responded	97%	68%	77%
Average % who Breeding Soundness Evaluation	57%	68%	64%
Average % who Trich tested Herdsires	10.2%	12.8%	11.8%
Average % who Vibrio tested Herdsires	7.7%	10.6%	9.5%
Bull Selection Criteria			
% who responded	95%	66%	76%
#1 Selection Criteria	Breed	Breed	Breed
#2 Selection Criteria	Conformation	Conformation	Conformation
#3 Selection Criteria	Birth Wt	Birth Wt	Birth Wt

SECTION 6: CALF MANAGEMENT PRACTICES – DEHORNING, CASTRATION, IMPLANTING

Seventy-six percent (76%) of survey respondents answered questions on dehorning 2014-born calves. Close to 70% of respondents had 90% or more of their calves born polled. For those who dehorn calves, over 80% of respondents dehorn early; 43% dehorning at birth and 38% at spring processing. The dehorning method of choice is dehorning paste (40%) followed by a debudder (electric hot iron) (34%), spoons/cut/gouge (16%), keystone (6%) and wire/saw (4%). Only 9% indicated they provide pain mitigation when dehorning; there were varied methods and timing for the operations that used pain mitigation when dehorning.

Table 13. WCCCS Calf Management – Dehorning

	MAIL	ONLINE	TOTAL
Polled Calves			
% who responded	95%	67%	76%
Average % with 90%+ calves born polled	69%	70%	69%
Dehorning			
% who responded	71%	44%	53%
% Who Dehorn Calves	65%	75%	71%
Dehorning Timing			
Of those who said they dehorn, % who responded	64%	75%	70%
% Who Dehorn Shortly After Birth	40%	45%	43%
% Who Dehorn at Spring Processing	38%	37%	38%
% Who Dehorn at Weaning	10%	11%	11%
% Who Dehorn at Other Time	12%	8%	9%
Dehorning Method			
Of those who said they dehorn, % who responded	100%	100%	100%
% Who Use Debudder, Hot Iron	27%	38%	34%
% Who Use Dehorning Paste	44%	38%	40%
% Who Use Spoons, Cut, Gouge	23%	11%	16%
% Who Use Keystone, Guillotine	3%	7%	6%
% Who Use Wire or Saw	3%	5%	4%
Pain Control Use When Dehorning			
% who responded	48%	36%	40%
% Who Use Pain Control When Dehorning	4.7%	12%	9%

Less than 25% of respondents implanted their 2014 calves (75% response rate) (Table 14). Of those who implanted, 61% implanted only non-replacements prior to weaning while 31% implanted all their calves prior to weaning. At weaning, 27% implanted only non-replacements. The percentages exceed 100% as 19% of respondents implanted their calves more than once – both prior to and at weaning.

Less than 20% of respondents indicated they provided creep feed to their 2014 calves.

Ninety-four percent (94%) of respondents castrate their male calves early; 64% shortly after birth and 30% at spring processing or branding (76% response rate) (Table 15). The most common method for castration was the elastrator (rubber ring) with 76% of respondents indicating they use this method. Just over 3% of survey respondents used pain mitigation when castrating; 50% of pain mitigation users castrate with elastrators and 50% castrate with a scalpel.

Table 14. WCCCS Calf Management – Implanting and Creep Feeding

	MAIL	ONLINE	TOTAL
Implanting			
% who responded	96%	66%	75%
% Who Implanted their 2014 Calves	27%	21%	24%
Implant Timing			
Of those who said they implant, % who responded	100%	100%	100%
% Who Implant ALL Calves PRIOR TO Weaning	37%	26%	31%
% Who Implant ONLY non-replacements PRIOR TO Weaning	51%	69%	61%
% Who Implant ALL Calves AT Weaning	0%	0%	0%
% Who Implant ONLY non-replacements AT Weaning	26%	28%	27%
% Who Implant PRIOR TO and AT Weaning	14%	23%	19%
Creep Feeding			
% who responded	98%	66%	76%
% Who Provided Creep Feed to 2014 Calves	20%	18%	19%

Table 15. WCCCS Calf Management - Castration

	MAIL	ONLINE	TOTAL
Castration Timing			
% who responded	98%	65%	76%
% Who Castrate Shortly After Birth	68%	61%	64%
% Who Castrate at Spring Processing, Branding	25%	34%	30%
% Who Castrate at Weaning	3%	3%	3%
% Who Castrate at "Other" Time	5%	2%	3%
Castration Method			
% who responded	96%	66%	76%
% Who Use Elastrator < 3 Mos Old	74%	69%	71%
% Who Use Elastrator > 3 Mos Old	6%	4%	5%
% Who Castrate Using Scalpel	20%	24%	22%
% Who Castrate Using Clamp, Burdizzo	0%	2.7%	1.6%
Pain Control Use When Castrating			
% who responded	95%	36%	55%
% Who Use Pain Control When Castrating	2.4%	5.4%	4.2%

SECTION 7: GRAZING AND FEEDING MANAGEMENT PRACTICES

In this section survey respondents were asked to provide details on their grazing and winter feeding practices. Seventy-six percent of survey respondents provided information on the tenure of their grazing land base. Close to 30% own 90% or more of their grazing land, while just over 25% have to rent half or more of their grazing land. Fifty-eight percent (58%) of respondents had to rent a portion of their pasture, 30% had crown lease and 17% utilized grazing co-operatives and/or community pastures.

When it comes to management of grazing lands, rotational grazing is most common for both native (67%) and tame (70%) pasture. Continuous grazing is done by 30% of respondents on their native pasture and 19% of respondents for their tame pasture (see Figure 9). Intensive grazing was practiced by 11% of respondents on tame pasture and 2.7% of respondents on native pasture.

One third of respondents indicated they never rejuvenate their pastures, while 38% rejuvenated once every 11+ years. One quarter (25%) rejuvenate forages every 6-10 years and 3.4% every 1 to 5 years.

Mineral supplementation is provided by a high percentage of respondents, 98% of respondents provide trace mineralized salt or loose mineral during the winter and 95% of respondents provide mineral in the summer (Table 17). Just over 40% of respondents (76% response rate) limit their cattle from having direct access to their drinking water source, through the provision of water pumps, troughs or gravity-fed systems.

Figure 9. Grazing Management of Native and Tame Pasture, WCCCS 2014

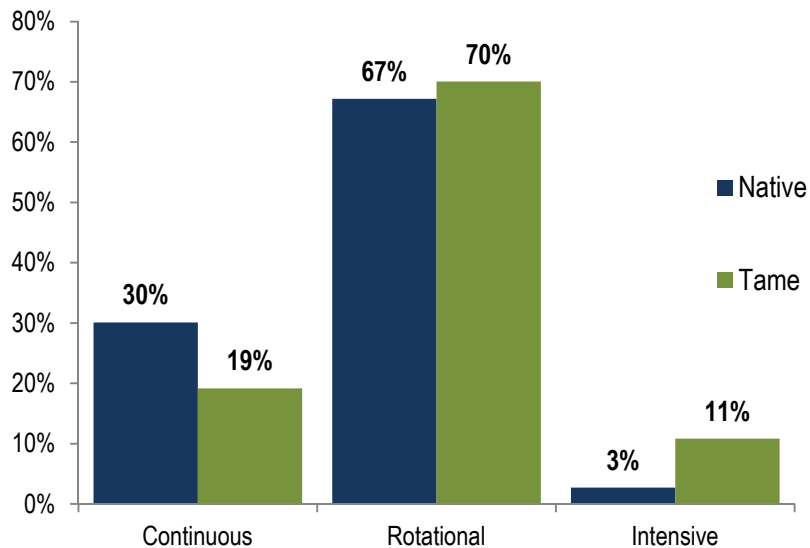


Table 16. WCCCS Grazing and Feeding Practices – Land Tenure, Grazing Management, Pasture Rejuvenation

	MAIL	ONLINE	TOTAL
Tenure of Grazing Land			
% who responded	98%	65%	76%
% Who Own 90%+ of their Grazing Land	34%	26%	29%
% Who Rent 50%+ of their Grazing Land	26%	26%	26%
% Who Rent Grazing Land	51%	63%	58%
% Who Have Crown Lease Grazing Land	30%	30%	30%
% Who Use Grazing Co-ops, Associations, Community Pastures	18%	17%	16%
Grazing Management			
<i>Native Pasture Grazing Management</i>			
% who responded	80%	55%	63%
% Who Continuous Graze	31%	29%	30%
% Who Rotational Graze	67%	67%	67%
% Who Intensively Graze	1.9%	3.3%	2.7%
<i>Tame Pasture Grazing Management</i>			
% who responded	86%	62%	63%
% Who Continuous Graze	15%	22%	19%
% Who Rotational Graze	77%	66%	70%
% Who Intensively Graze	9%	12%	11%
Pasture Rejuvenation			
% who responded	91%	61%	73%
1-5 Years	4.1%	2.9%	3.4%
6-10 Years	31%	21%	25%
+11 Years	34%	42%	38%
Never	31%	34%	33%

Table 17. WCCCS Feeding Management – Mineral Supplementation, Water Source Access

	MAIL	ONLINE	TOTAL
Mineral Supplementation			
% who responded	98%	66%	77%
% Who Provide TM Salt in SUMMER	75%	77%	76%
% Who Provide TM Salt in WINTER	67%	70%	69%
% Who Provide Mineral in SUMMER	57%	63%	60%
% Who Provide Mineral in WINTER	81%	82%	82%
Water Source Access			
% who responded	99%	65%	76%
% Who limit Direct Access to Drinking Water Source	41%	43%	42%

When it comes to winter feeding, less than 50% of respondents (77% response rate) tested their feed for quality. And of those who did test, only 80% used the results to develop balanced rations for their cattle. This is an improvement from the 1997/98 Alberta Herd Audit where 30% of respondents quality tested their forages and 17.5% tested grain with 25.7% developing balanced rations.

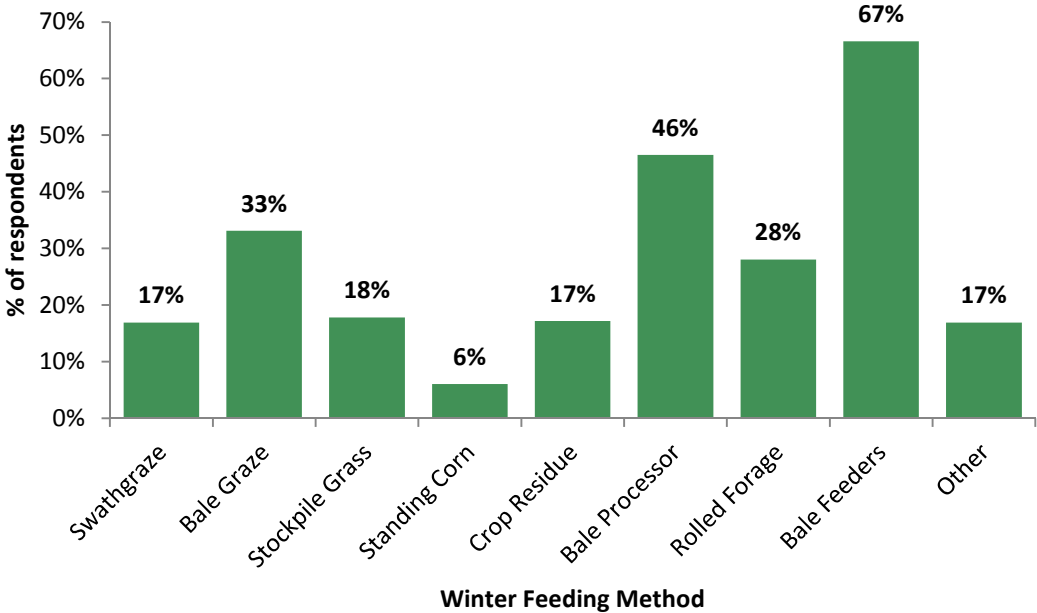
Sorting breeding females into groups for winter feeding is a recommended practice to ensure younger cows or older cows are not out-competed for feed. Only 56% of respondents indicated that they sort their females for winter feeding. When asked which sorting criteria are used, 83% sort by age, 26% sort by stage of pregnancy, and 66% sort by body condition. The percentages exceed 100% because some respondents used multiple criteria.

Winter feeding methods were reported by 76% of survey respondents. The use of bale feeders (67%) and bale processors (46%) still remain important winter feeding methods for respondents (see Figure 10). However, extensive methods (i.e. field feeding) are also being utilized; one-third (33%) use bale grazing for part of their winter feeding regimen, 28% roll forage out, 17% swath graze, 18% stockpile graze, 17% use crop residue and 6% use standing corn. Seventeen percent (17%) reporting other methods beyond the options to choose from in the survey with silage, TMR (total mixed ration) and grain/pellets being the most cited.

Table 18. WCCCS Feeding Management – Lab Testing Feed, Winter Feeding Methods, Sorting

	MAIL	ONLINE	TOTAL
Lab Testing Feed			
% who responded	99%	66%	77%
% Who Lab Test Feed for Quality	43%	49%	47%
% Who Use The Results to Balance Rations	74%	83%	80%
Sorting for Winter Feeding			
% who responded	98%	65%	75%
% Who Sort Their Breeding Females	50%	61%	56%
% Who Sort by Age	85%	83%	84%
% Who Sort by Stage	17%	32%	26%
% Who Sort by Condition	68%	66%	67%
Winter Feeding Methods			
% who responded	99%	65%	76%
% Who Swathgraze	11%	21%	17%
% Who Balegraze	25%	39%	33%
% Who Stockpile Graze	17%	18%	18%
% Who Graze Standing Corn	5%	7%	6%
% Who Graze Crop Residue	13%	20%	17%
% Who Utilize a Bale Processor	47%	46%	46%
% Who Roll Forage	24%	31%	28%
% Who Use Bale Feeders	63%	69%	67%
% Who Feed Using Other Methods	17%	17%	17%
Other: Silage, Standing Sorghum, Oats, Barley, Protein Pellets, TMR, Haylage			

Figure 10. Winter Feeding Methods, WCCCS 2014



SECTION 8: ANIMAL HEALTH MANAGEMENT PRACTICES

In the last section of the survey, respondents were asked about their animal health management practices. Seventy-one percent (71%) of survey respondents indicated which parasites they treat their cattle for, with high percentages treating for lice (93%) and internal worms (82%) (Table 19). Less than half treated for flies (46%), approximately one quarter (26%) treated for ticks and 17% treated for liver fluke.⁵

Over ninety percent (76% response rate) of respondents vaccinate their cattle. Respondents only had to indicate if they vaccinated or did not vaccinate, there were no questions as to what diseases animals were being vaccinated for or which animals were being vaccinated and at what time of year.⁶ The second vaccination question in the survey asked if breeding females were vaccinated pre-breeding, which is considered important to protect against reproductive diseases, close to 70% of respondents indicated that they did.

When treating animals on pasture, nearly three-quarters (74%) indicated they restrain the animal rather than treat it at large (with a stock dart, for example). Over ninety percent indicated their injection site of preference is the neck, which is the recommended practice.

⁵ Liver fluke has been a problem in some regions of Manitoba and was included in the parasite options on request from Manitoba Beef Producers.

⁶ This was largely due to the fact that more detailed results would come from surveys and animal biological samplings being taken as part of the five-year BCRC-funded Disease Surveillance Network project headed by Dr. John Campbell.

Table 19. WCCCS Health Management Practices – Parasite Treatment, Vaccinating, Treating Method and Injection Location

	MAIL	ONLINE	TOTAL
Parasite Treatment			
% who responded	91%	62%	71%
% Who Treated for Lice	94%	92%	93%
% Who Treated for Flies	39%	50%	46%
% Who Treated for Internal Worms	82%	81%	82%
% Who Treated for Ticks	18%	32%	26%
% Who Treated for Liver Fluke	16%	19%	17%
Vaccination			
% who responded	98%	66%	76%
% Who Vaccinate	90.8%	91.8%	91.4%
% Who Vaccinate Females Pre-Breeding	71%	68%	69%
Treatment on Pasture			
% who responded	92%	64%	73%
% Who Restrain Cattle to Treat on Pasture	78%	72%	74%
% Who Treat Cattle on Pasture At Large	22%	28%	26%
Location of Injections			
% who responded	98%	64%	75%
% Who Inject in Neck	90%	92%	91%
% Who Inject in Shoulder, Rump or Hind Quarter	10%	8%	9%

APPENDIX A: Example of Production Indicator Report



2014 PRODUCTION INDICATORS BASED ON WCCCS SURVEY RESPONSES.

Producer: WCCCS Aggregate Responses

Province: BC to MB

2014 REPRODUCTION PERFORMANCE

	COWS	HEIFERS	
	2-Jun	30-May	
Breeding Season Start			
Breeding Season Length (d)	92	89	
Calving Span (d)	92	65	
	COWS	HEIFERS	TOTAL
Conception Rate (# bred/# exposed)	93%	90%	93%
Calving Rate (# females calved/# exposed)	92%	86%	89%
Weaning Rate (# weaned/# live births)	95%	90%	95%
Calf Crop (# weaned/# exposed)	85%	81%	84%

CALVING EASE	Cows	Heifers	Total	CALF DEATH LOSS	Born Dead	Post 24H Loss
% Unassisted	95%	84%	90%	Percent	3.9%	3.4%

GRAZING

Pasture Days	193	
Extensive Days	23	
Total	216	days

Growth (weaning weight)	559
Open Cows	7%
Length of Calving Period	92
Death Loss on Calves	7.2%

PHYSICAL PERFORMANCE INDICATORS

% Females That Calved in First 21 d Cycle	55%	Mature Cow Weight	1374 lbs
Pounds weaned / female exposed	534	Cow:Bull Ratio	24 : 1
Wean weight as a % of cow weight	41%	Cull Rate	10.3%