



Final report

Calf Rearers Survey

Contract number 21303-1

Date 19 July 2026

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Project summary

Dairy beef is becoming increasingly important to the New Zealand beef and dairy industries, and calf rearers play a critical role in the success of dairy beef systems. To understand the position of the industry we are conducting a survey of calf rearers to help inform future research and develop tools that enable efficient, profitable calf rearing. The survey will be used to gather information about who is rearing calves; at what scale and using what feeds. It will also gather information on the main challenges that rearers face and what areas of innovation the industry needs to focus on.

Objectives

A draft survey was developed in the online survey platform, Qualtrics® (Provo, UT, USA). Both the draft online survey and a MSWord® version were circulated on the 19/12/2025 for review by the wider team including Penny Timmer-Arends and Paul Edwards (Dairy NZ) and Duncan Elliott, Lucy Coleman and Jim Inglis (Beef + Lamb NZ). Once revisions were made a low-impact human ethics

application was submitted to the Massey University Human Ethics Committee. Notification of the approval of the application (4000031464) was received on the 05/01/2026.

The final survey contained five sections: 1) description of the farming enterprise, 2) source and management of calves, 3) rearing systems, 4) animal health and 5) the calf rearing industry with a total of 60 questions. The survey went live on the 20/01/2026 and was closed on 21/03/2026. Beef + Lamb NZ and Dairy NZ undertook promotion of the survey throughout this period.

Rationale

In order to expand the number of calves of dairy origin that are reared across dairy, sheep and beef and rears information on their practices are needed to identify current management practices, limitation and opportunities. To date the practices of calf rearers have not been surveyed

Key methods

The survey generated a total of 741 rows of data. Responses included in the analysis were those recorded as 'Finished' (n=387). Of these records 4 had a reCAPTCHA score of less than 0.5 which reported that it may have been bot generated and were therefore excluded. This resulted in an analysis data set of 383 records. A copy of the raw (anonymised) data was provided to Beef + Lamb NZ on the 09/04/2026.

Note the survey software automatically assigned each section of the survey a question number even if the section contained only information. Question 1 contained information about the survey's purpose and Question 2 contained information about the human ethics approval.

An initial analysis was conducted by creating summaries of responses for each of the 64 questions included in the survey. For questions in which respondents were asked to select an option (Q3 to 11, 13, 16 to 19, 22 to 28, 34, 36 to 38, 41 to 51, 55, 59, 61 and 62) the frequency of responses was summarised using pie charts.

For questions that asked respondents to provide a number, histograms were produced to visualise the distribution of responses (Q12, 14, 15, 31, 35, 37, 39, 40, 54, 55). In addition, the mean and standard error of the data were calculated. For questions that asked respondents to provide a value such as milk fed (Q30) or milk replacer mix rates (Q32) over the weeks of rearing data were summarised at the mean and standard error per week and summarised using a line graph.

In questions that respondents were asked to rate or rank a particular option data were summarise in bar charts showing each rank (Q17, 21, 29). Similarly, for Questions in which respondents were asked to rate the importance on a numerical scale (0 to 100) the mean score and standard error was calculated for each option and graphed in a bar chart (Q52).

Open questions that asked respondents to write a response (Q60, 63 and 64) were analysed using Microsoft co-pilot to identify themes among the responses. The frequency with which the themes were mentioned was presented in bar charts.

Once the initial analysis was completed variables that might influence the responses to other questions were identified such as type of farm type, reason for calf rearing, region, size of the calf rearing operation and source of calves. These were then used to assess the differences in the responses to other questions by creating bar charts.

Results & conclusions

Q3. Which best describes your farming operation?

The majority of the respondents (44%) were dairy/beef grower and finishers followed by dairy farmers (29%). Among the respondents 9% were standalone calf rearers.

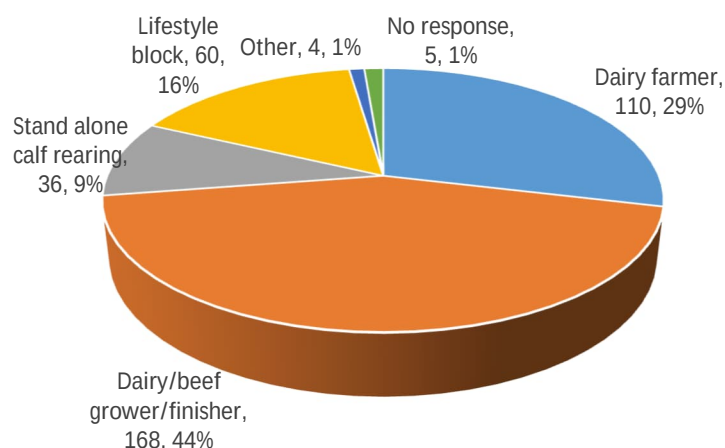


Figure 1. Pie chart of the number and percentage of respondents that reported that they had a dairy, dairy/beef grower/finisher, standalone calf rearing, lifestyle block, other operation or did not respond.

Q4. Is calf rearing your main source of income?

Calf rearing was the primary income for 11% of respondents. For most calf rearing provided secondary farm income (60%) or was secondary to external income (19%). Other responses included “It is a significant part of my salaried job” and “Not much more than a hobby”.

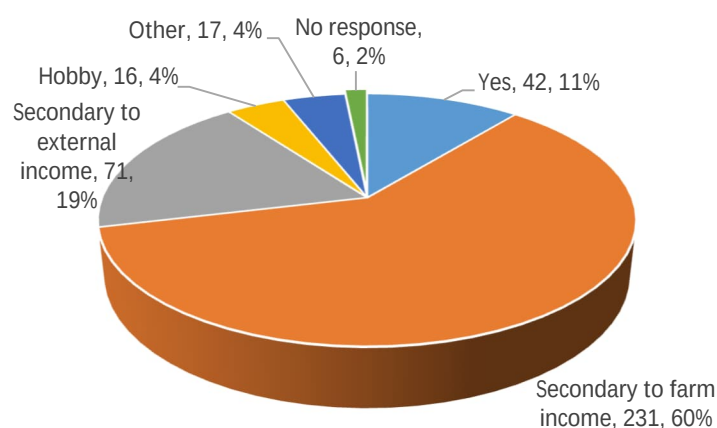


Figure 2. Pie chart of the number and percentage of respondents that reported that calf rearing was their main source of income ('Yes'), or was secondary to either farm or external income, a hobby, other or did not respond.

A comparison of farming types showed that standalone calf rearers had the highest percentage (39%) whose primary income was derived from calves followed by even numbers of dairy/beef growers and finishers (n=7, 12%) and lifestyle block (n=14, 12%) and only 2% (n=2) of dairy farmers. For 91% (n=101) of dairy farmers calf rearing provided secondary to farm income but was fewer for dairy/beef growers and finishers (n=118, 73%) and standalone calf rearers (n=7, 12%). For standalone calf rearers (n=31, 44%) and lifestyle block farmers (n=16, 52%) there were more respondents who supplemented external income.

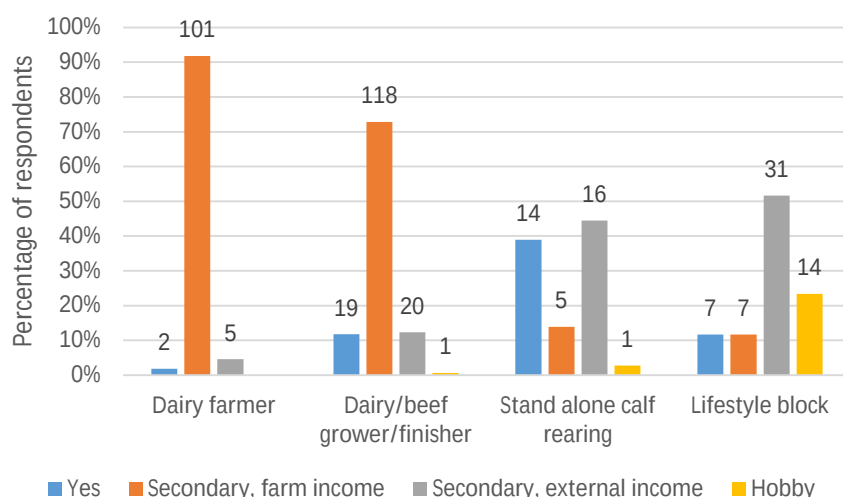


Figure 3. Summary of the percentage of respondents who identified that calf rearing was their main source of income or secondary to farm or external income or was a hobby by farm type (Dairy farmer, Dairy/beef grower/finisher, Standalone calf rearing, Lifestyle block). Note the number of respondents is given above each bar.

Q5. What is the main reason that you rear calves?

The reason that calves were reared was even split between for my own dairy herd or finishing farm (32%), rearing calves to sell (30%) or a combination of the two (26%). Some examples of the other responses included “cheaper than buying”, “I rear calves for my own beef supply” and “Feed my family”.

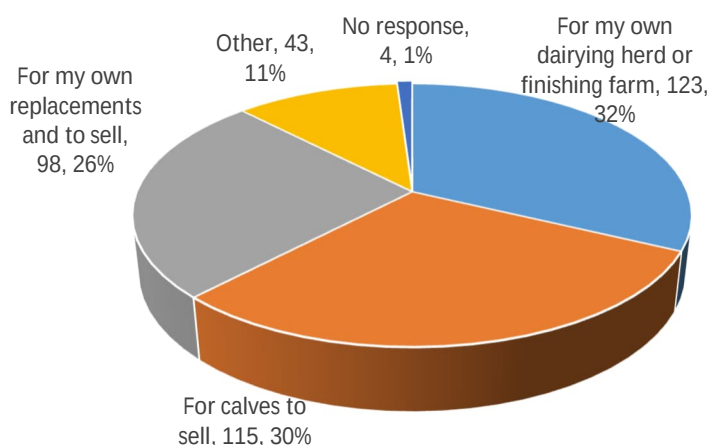


Figure 4. Pie chart of the number and percentage of respondents that reported that the main reason they rear calves was for calves to sell, for own dairy/finishing farm, replacements and to sell, sell and finish, other or did not respond.

The original options provided for this question were: “For my own dairying herd or finishing farm”, “For calves to sell”, “For my own replacements and to sell”, and “Other”. Due to the large number of “Other” responses, new categories (MainReasonCR_NEW) were created to allow these responses to be captured. The new categories were: “Calves to sell”, “For own dairy/finishing farm”, “Replacements and to sell” and “Other”. Throughout this report all further analyses were based on the new categories.

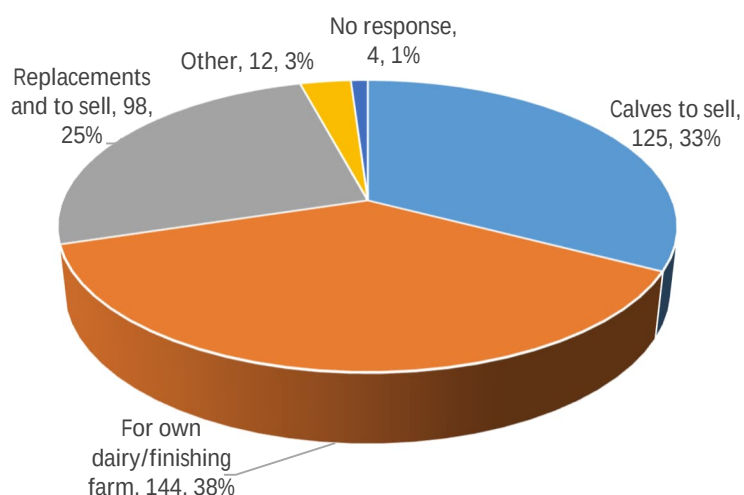


Figure 5. Figure 4. Pie chart of the number and percentage of respondents that reported that the main reason they rear calves was for calves to sell, for own dairy/finishing farm, replacements and to sell, pther or did not respond.

As expected, the majority of standalone rearers grew calves to sell (n=30, 83%) with lifestyle block respondents also showing a high percentage (n=36, 60%). For dairy farmers the reasons they reared calves were more diverse but were predominantly for their own operation (n=52, 47%) and rearing replacements and calves to sell (n=46, 42%). For dairy/beef growers/finishers a similar percentage reared for their own operation (n=69, 43%) and more only reared calves to sell (n=47, 29%) and fewer reared for their own operation and to sell (n=31, 19%).

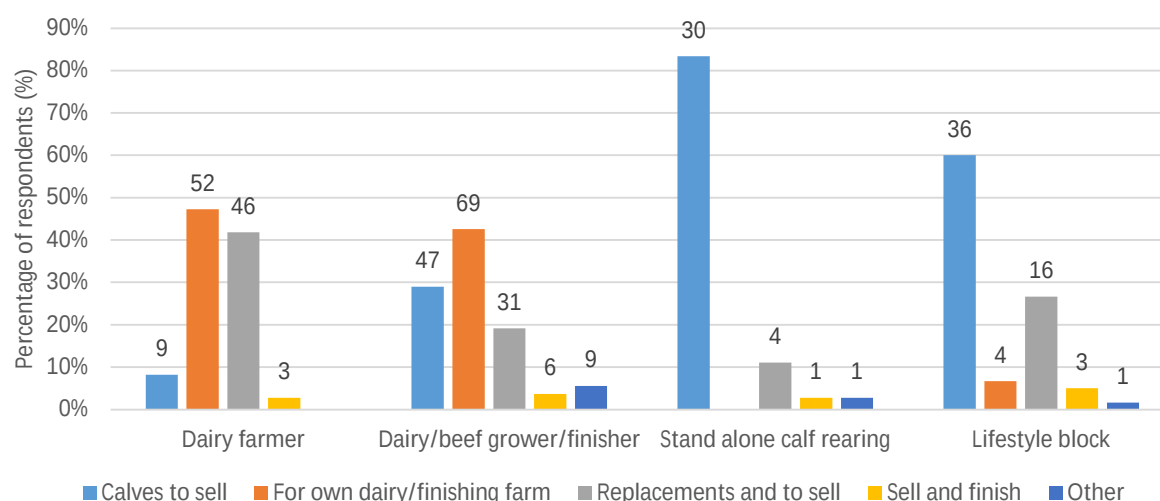


Figure 6. Summary of the percentage of respondents who identified that they rear calves to sell, for own dairy/finishing farm, for replacements and to sell, sell and finish, other by farm type (Dairy farmer, Dairy/beef grower/finisher, Standalone calf rearing, Lifestyle block). Note the number of respondents is given above each bar.

Q6. What is your gender?

There were slightly more female (54%) than male (44%) respondents to the survey.

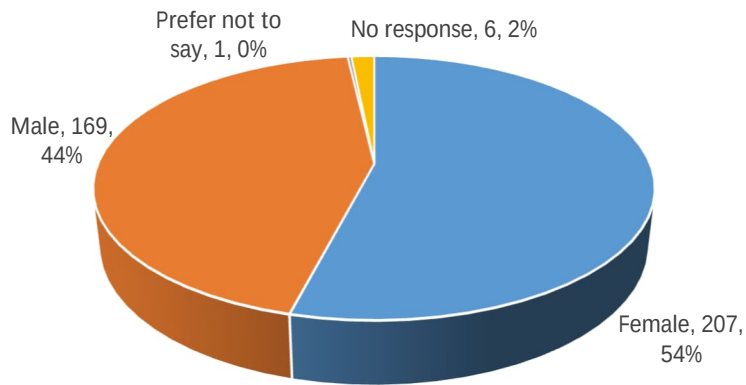


Figure 7. Pie chart of the number and percentage of respondents that reported that their gender was female, male, preferred not to say or did not respond.

Q7. Please indicate your age category

The majority of respondents were between the ages of 30 and 59 (73%). This distribution is similar to that reported by Statistics New Zealand who reported a median age of 49.8 years. Among respondents 15% reported they were 60 years or older compared with 21% reported by statistics New Zealand (Source: <https://www.stats.govt.nz/news/agricultural-snapshot-insights-into-farmers-lives/>).

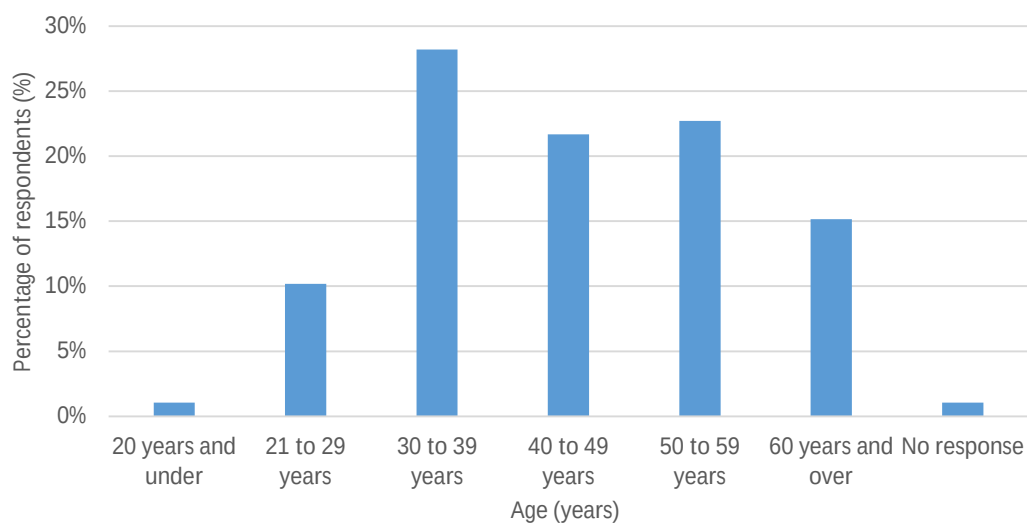


Figure 8. A histogram of the number of respondents that reported they were within each age category (20 years and under, 21 to 29 years, 30 to 39 years, 40 to 49 years, 50 to 59 years, 60 years and over or that did not respond).

Q8. Which of the following describes your roles in the calf rearing operation?

The respondents were overwhelmingly farm owners (42%) or owner / managers (33%) with 25% being farm workers or managers.

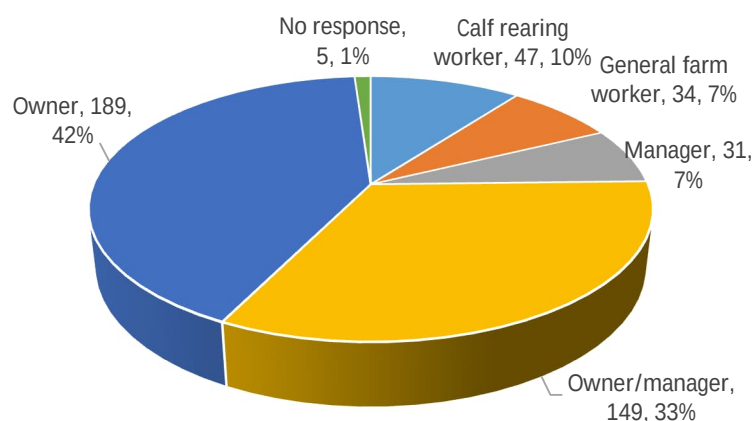


Figure 9. Pie chart of the number and percentage of respondents that reported that their role in the calf rearing operation was calf rearing worker, general farm worker, manager, owner/manager, owner or that did not respond.

Q9. Do you employ any additional labour for your calf rearing operation?

Of respondents, 70% did not employ any additional labour. For those that did employ additional staff they were split evenly between those for the wider business (16%) and those for calf rearing (13%).

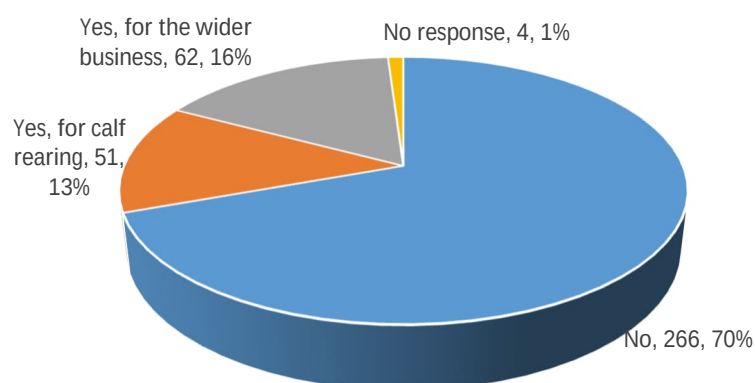


Figure 10. Pie chart of the number and percentage of respondents that reported that they did not employ additional labour, or for calf rearing or the wider business, or did not respond.

Across all farm types, the majority of respondents did not employ additional labour. Dairy farmers and dairy/beef grower/finishers employed labour for the wider business (n=31, 28%) more than for calf rearing (n=20, 18%). This pattern was also seen among dairy/beef grower/finishers with the wider business (n=21, 16%) being higher than for calf rearing (n=11, 8%). Standalone calf rearers and sheep and beef were similar with more labour for calf rearing (n=9, 25% and n=5, 24%, respectively) than for the wider business (n=2, 6% and n=2, 10%, respectively).

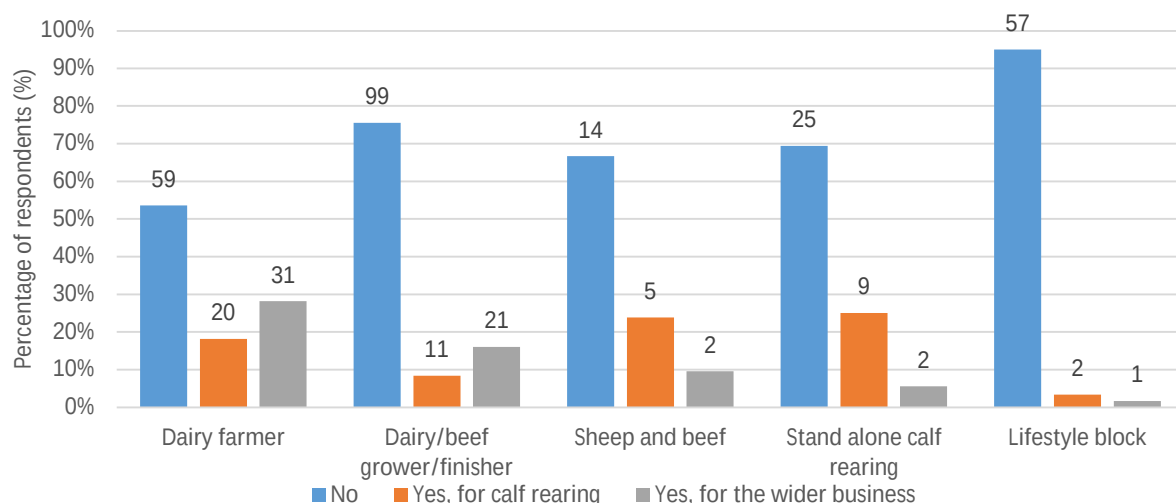


Figure 11. Summary of the percentage of respondents who identified that they employ additional labour for calf rearing, the wider business or do not employ additional labour by farm type (Dairy farmer, Dairy/beef grower/finisher, Standalone calf rearing, Lifestyle block). Note the number of respondents is given above each bar.

A comparison of the reason for rearing calves with whether additional labour was employed showed that between 62% and 78% of respondents in each category did not employ additional labour. Respondents that reared calves for their own operation and calves to sell showed a similar pattern with slightly more hiring labour for the wider farm business (n=30, 18% and n=12, 23%, respectively). The opposite was seen with those that rear replacements and calves to sell and those that rear calves to sell and finish (n=12, 15% and n=2, 17%).

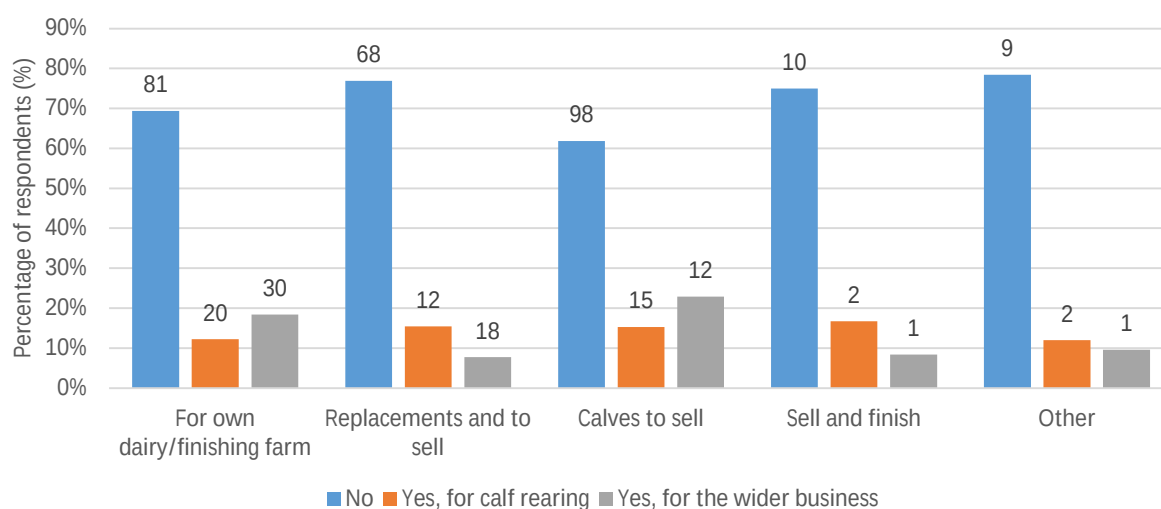


Figure 12. Summary of the percentage of respondents who identified that they reared calves for calves to sell, for their own dairy/finishing farm, replacements and to sell, sell and finish or other by farm type (Dairy farmer, Dairy/beef grower/finisher, Standalone calf rearing, Lifestyle block). Note the number of respondents is given above each bar.

Q10. How long have you been rearing calves?

Most respondents had more than 5 years' experience in rearing calves (76%) with the remainder having 2 to 5 years' experience (16%) or 2 or fewer years (7%).

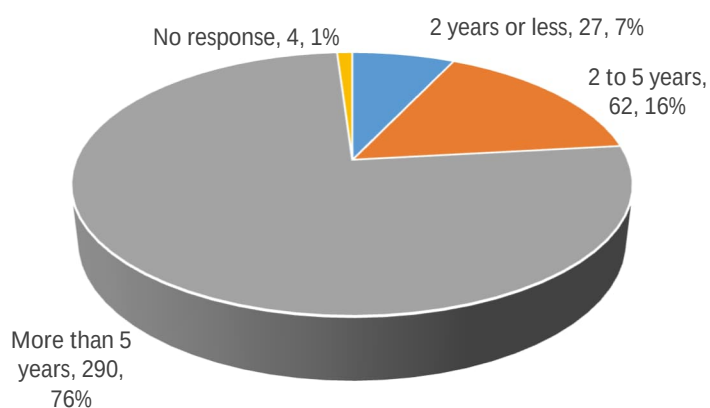


Figure 13. Pie chart of the number and percentage of respondents that reported that they had been rearing calves for 2 years or less, 2 to 5 years, more than 5 years or that did not respond.

Q11. In which region is your calf rearing operation located.

Responses were received from farmers from all regions of New Zealand but were concentrated in the Waikato (19%), Canterbury (14%), Manawatu-Whanganui (13%) and Southland (10%; Figure 14 and Table 1).

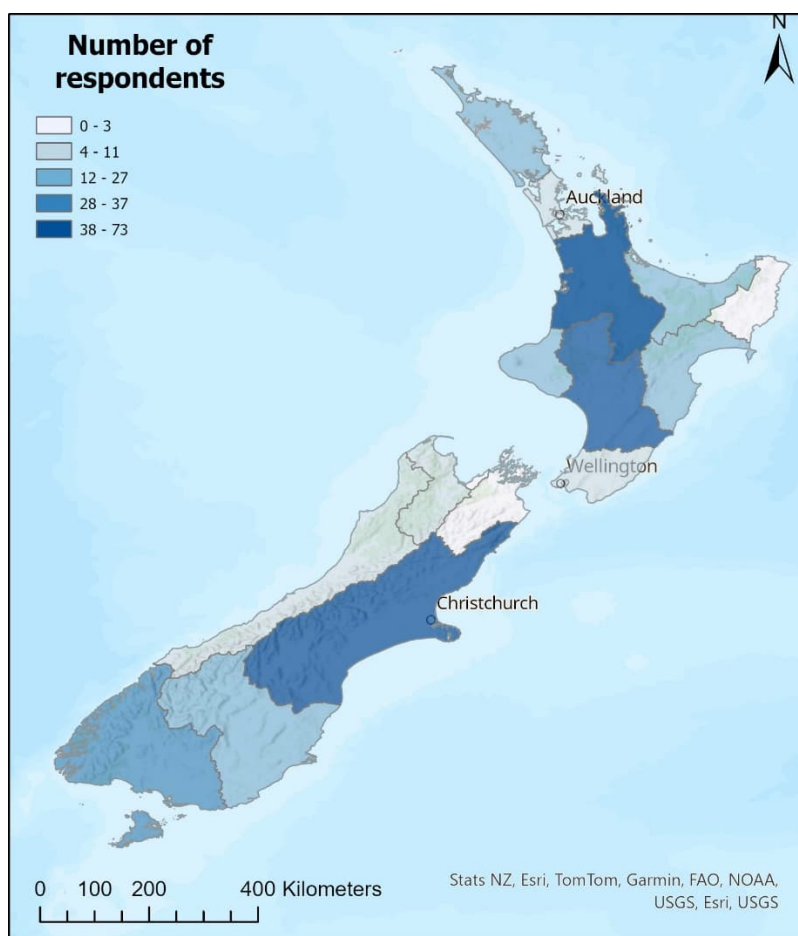


Figure 14. Map of New Zealand showing the number of respondents per region

Table 1. The number and percentage of responses received from each region of New Zealand

Region	Responses	%
Northland	27	7.0
Auckland	11	2.9
Bay of Plenty	20	5.2
Gisborne	3	0.8
Waikato	73	19.1
Hawkes Bay	19	5.0
Taranaki	21	5.5
Manawatu-Wanganui	51	13.3
Wellington	6	1.6
Tasman/Nelson	5	1.3
Marlborough	2	0.5
West Coast	5	1.3
Canterbury	53	13.8
Otago	27	7.0
Southland	37	9.7
No response	23	6.0

The distribution of farm types across the regions of New Zealand showed that most dairy farmers were located in the Waikato (n=26, 24%), Canterbury (n=14, 13%) and Manawatu-Whanganui (n=13, 12%). Dairy/beef grower/finishers were in the Waikato (n=24, 18%), Southland and Manawatu-Whanganui (n=18, 14%) and Canterbury regions (n=17, 13%). Standalone calf rearers were concentrated in three locations: Waikato and Manawatu-Whanganui (n=8, 22%) and Canterbury (n=17, 17%). Sheep and beef farmers were more diverse, although small in number, with Otago and Southland (n=4, 19%), Canterbury and Waikato (n=3, 14%) and Hawkes Bay and Manawatu-Wanganui (n=2, 10%).

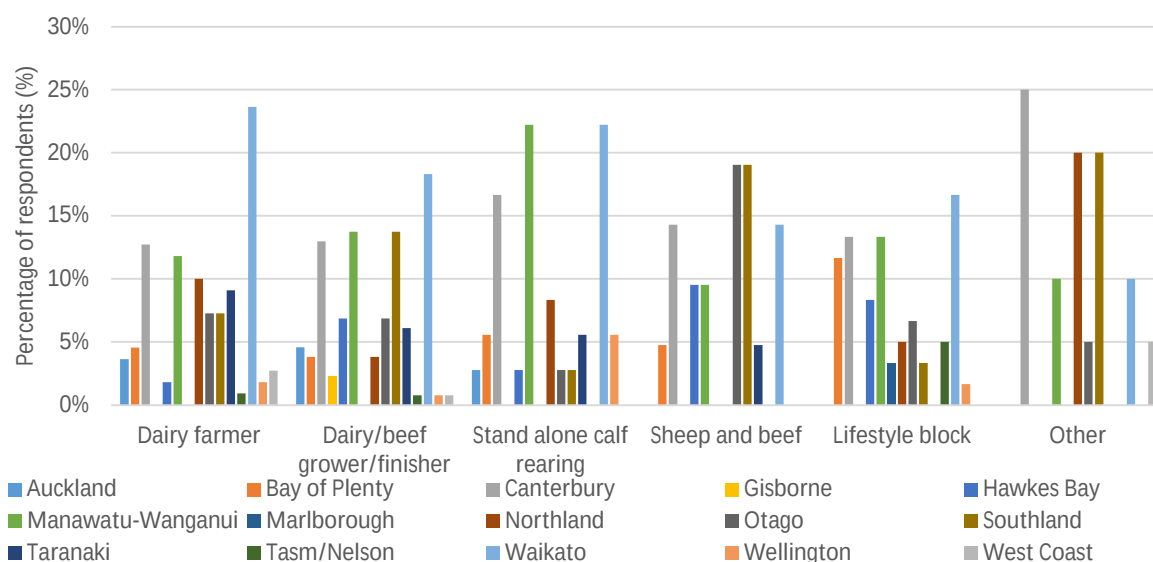


Figure 15. Summary of the percentage of respondents from each region by farm type (Dairy farmer, Dairy/beef grower/finisher, Standalone calf rearing, Lifestyle block).

Q12. What is the size of the land area that you use for rearing calves (ha)?

The mean size of the calf rearing area among respondents was 96 ± 14.6 ha with the majority of respondents reporting areas of less than 100 ha (68%). Three percent of respondents had calf rearing operations greater than 1000 ha.

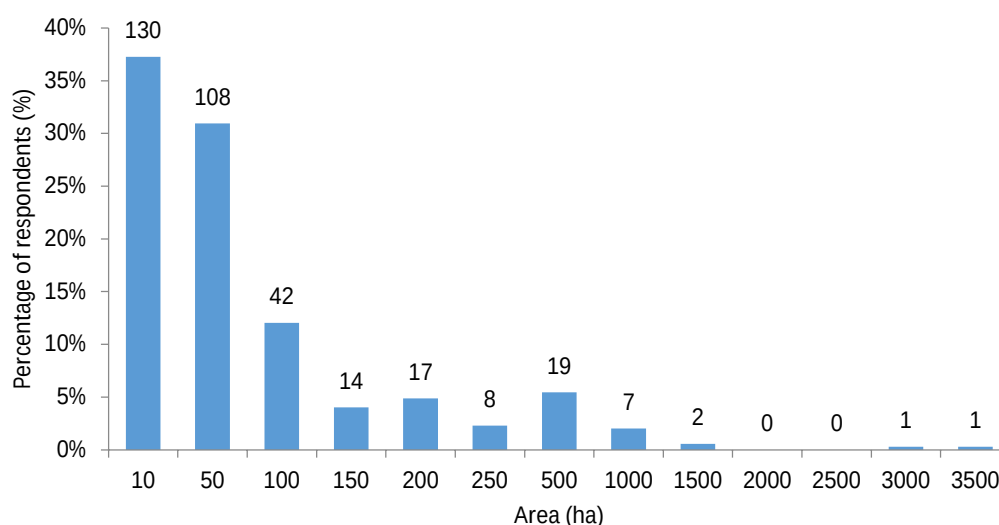


Figure 16. A histogram of the number of respondents that reported the size of their calf rearing operation category. Note the number of respondents is given above each bar.

Q13. Stock classes that are farmed on the property you rear calves on

Beef finishing cattle over 6 months were the most common stock class farmed followed by equal numbers of adult dairy cows, breeding ewes and finishing lambs (13%) and dairy heifers over 6 months of age (12%).

Table 2. The number and percentage of respondents that reported they had each stock class

Stock class	Responses	% of responses
Beef finishing cattle over 6 months of age	254	28%
Adult dairy cows	121	13%
Breeding ewes	121	13%
Finishing lambs	114	13%
Dairy heifers over 6 months of age	110	12%
Beef breeding cows	78	9%
Nurse cows or cows milked to feed calves	49	5%
Deer	12	1%
No other livestock	9	1%
Other	33	4%

Q14. In autumn 2025, how many calves did you rear?

Of the 383 respondents, 199 reported that they reared no calves in autumn 2025 and 44 did not provide a response. Of the respondents the reared calves, the mean number was 158.4 ± 28.5 and the median was 6 but the majority (70%) reared 10 or fewer calves.

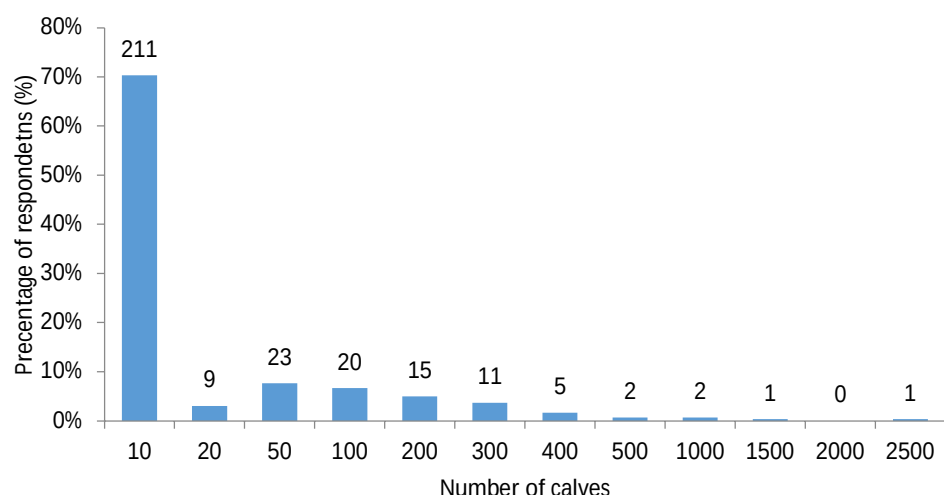


Figure 17. A histogram of the number of respondents that reported the number of calves they reared in autumn 2025. Note the number of respondents is given above each bar.

Among farmers that reared calves in autumn 2025, the average number by region showed that largest number of calves per farm were reared Canterbury (331 ± 173 , $n=8$ respondents) with similar numbers in Waikato (215 ± 94 , $n=23$), Taranaki (162.5 ± 74 , $n=4$), Hawkes Bay (134 ± 59 , $n=6$), Manawatu-Whanganui (126 ± 640 , $n=23$).

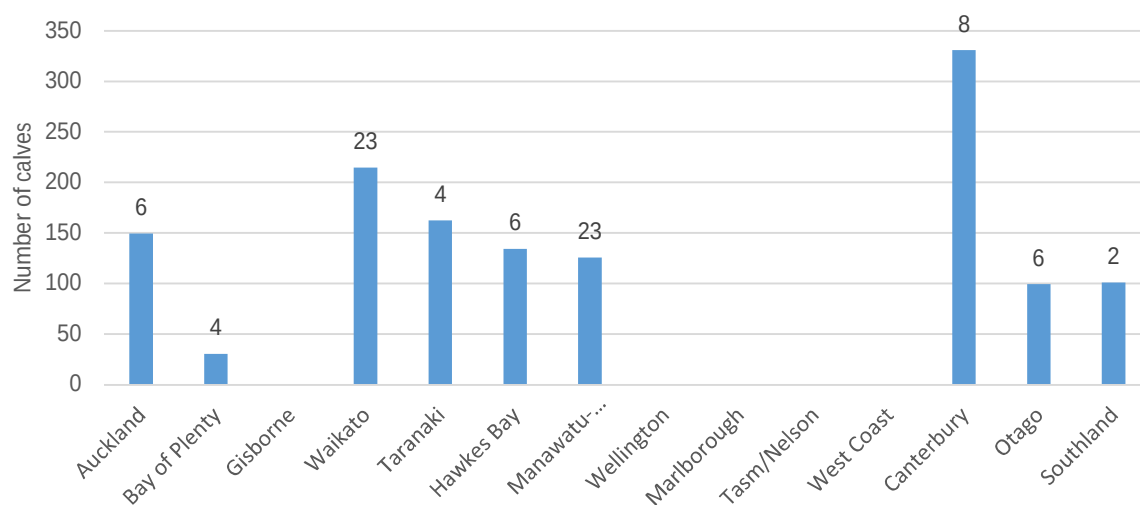


Figure 18. A summary of the mean number of calves reared in autumn 2025 by region. Note the number of respondents that provided data is given above each bar.

Q15. In spring 2025, how many calves did you rear?

Of the 383 respondents, 10 reported that they reared no calves in spring 2025 and 15 did not provide a response. Of the respondents that reared calves, the mean was 254 ± 20 and the median was 130. The spread of numbers of calves reared was greater than for autumn with 63% of respondents rearing between 50 and 300.

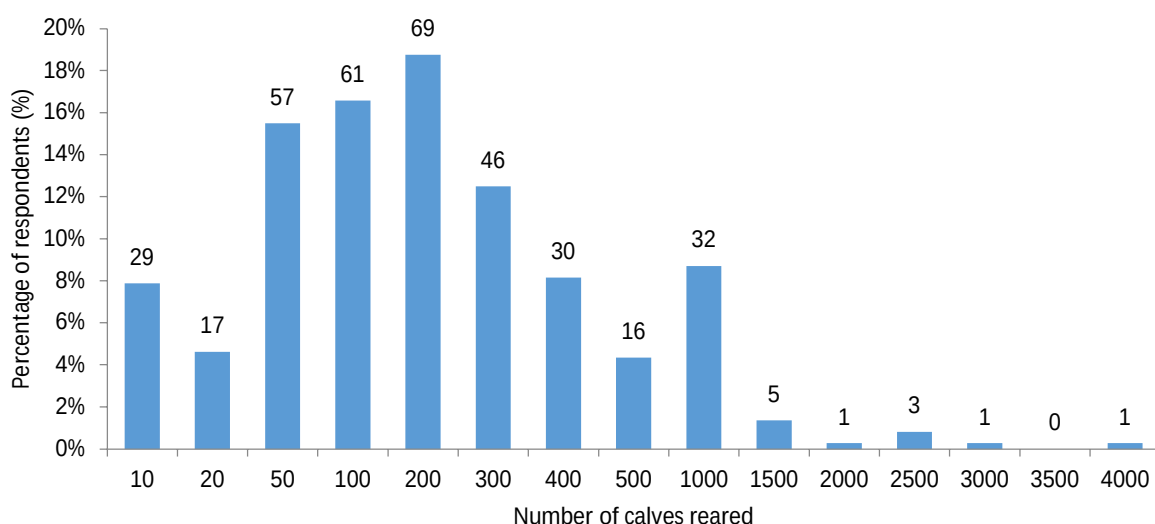


Figure 19. Histogram of the number of calves reared in autumn 2025 by each respondent. Note the number of respondents that provided data is given above each bar.

Total number of calves reared in 2025 (calculated from Q14 and Q15)

Of the 383 respondents, 2 reported that they reared no calves in 2025 and 14 did not provide a response. Of the respondents the reared calves the mean was 254 ± 20 and the median was 130. The spread of numbers of calves reared was showed 72% of respondents rearing between 50 and 500.

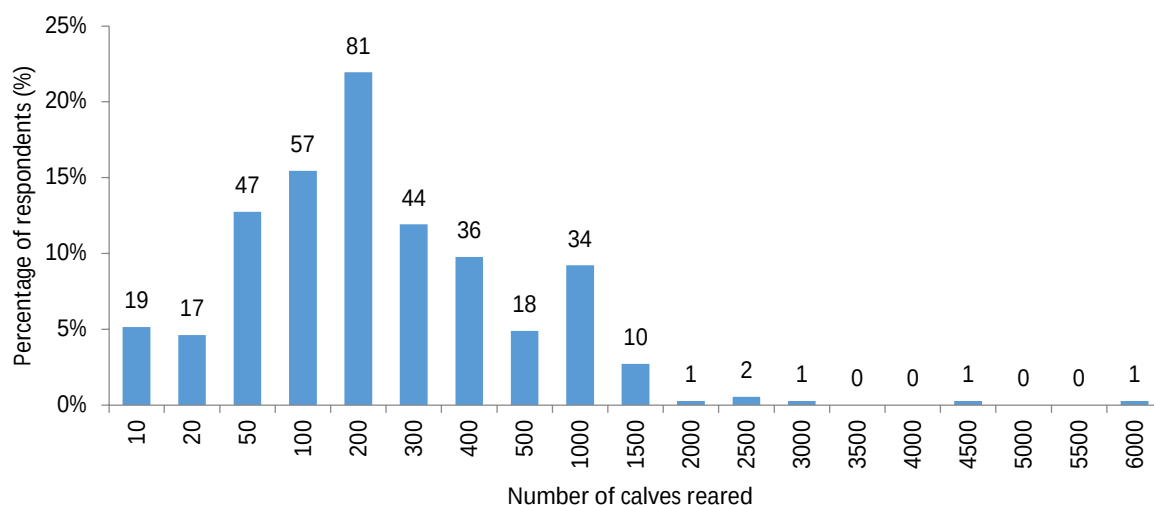


Figure 20. Histogram of the total number of calves reared by each respondent in 2025. Note the number of respondents that provided data is given above each bar.

A comparison of the total number of calves by farm type showed that standalone calf rearers had on average greater numbers of calves (765 ± 203) than all other types. Dairy farmers and dairy/beef/grower/finishes had similar numbers (269 ± 25 and 270 ± 24 , respectively).

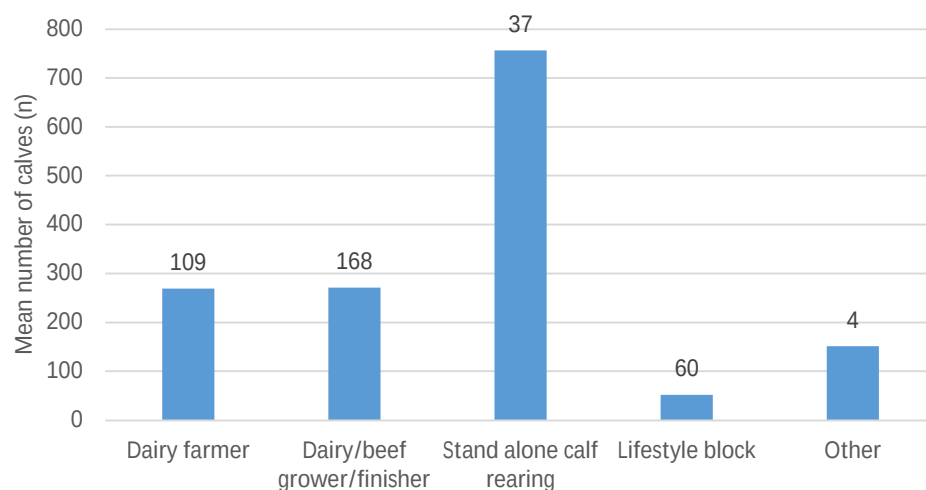


Figure 21. The mean total number of calves reared in 2025 by farm type (Dairy farmer, Dairy/beef grower/finisher, Standalone calf rearing, Lifestyle block). Note the number of respondents is given above each bar.

Among the different reasons that farmers reared calves those that grew calves to sell had the greatest mean number of calves (324 ± 66). Those the reared calves for their own operation (266 ± 27) or replacements and to sell (258 ± 27) had similar mean numbers followed by other reasons having the least (210 ± 90).

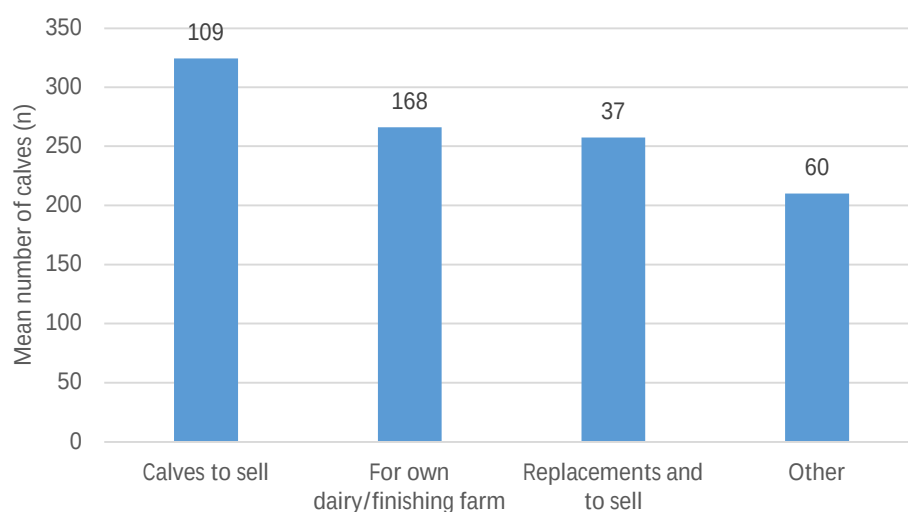


Figure 22. The mean total number of calves reared in 2025 by reason for calf rearing (calves to sell, for own dairy/finishing farm, replacements and to sell or other). Note the number of respondents is given above each bar.

Stocking rate in 2025 (calculated from Q14 and Q15)

Stocking rate was calculated by dividing the number of calves by the area of the calf rearing operation for respondents that provided this information. The results showed that the mean stocking rate was 14.3 ± 3.6 calves/ha.

When compared across farm types the highest stocking rate was reported by standalone calf rearers (25.6 ± 8.2 calves/ha). Dairy farmers had the next highest stocking rate (16.6 ± 3.6 calves/ha) followed by dairy/beef grower/finishers (12.5 ± 1.4). Lifestyle block and 'other' types were similar at 8.6 ± 1.7 and 7.7 ± 6.8 calves/ha, respectively).

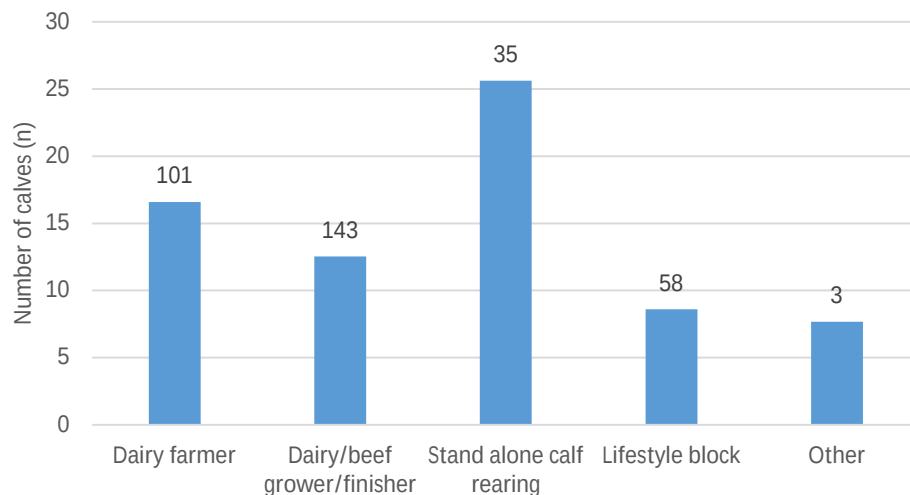


Figure 23. The mean stocking rate in 2025 by farm type (Dairy farmer, Dairy/beef grower/finisher, Standalone calf rearing, Lifestyle block). Note the number of respondents is given above each bar.

Q16. What types of calves did you rear in 2025?

Among respondents, 81% reported that they reared beef-cross bulls/steers (excluding Wagyu) with 38% rearing beef-cross heifers (excluding Wagyu), 48% Friesian bulls and 37% Dairy heifers. Jersey bulls and Wagyu calves were less common at 16% and 5%, respectively.

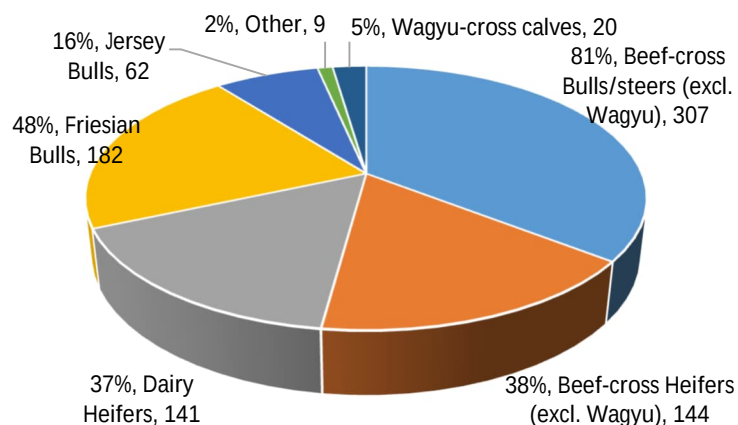


Figure 24. Pie chart of the number and percentage of respondents that reported the types of calves they reared (Beef-cross Bulls/steers (excl. Wagyu), Beef-cross Heifers (excl. Wagyu), Dairy Heifers, Friesian Bulls, Jersey Bulls, Wagyu-cross calves or Other)

A comparison of the types of calves reared by respondents from different farm types showed the majority of respondents from each farm type, except dairy, reared Beef-cross bulls/steers (excluding Wagyu) (between 77 and 85%). Unsurprisingly, among dairy farmers 95% had dairy heifers, while 85% had Beef-cross bulls/steers (excluding Wagyu). Friesian bulls were reared by 58% of dairy/beef grower/finishers and 50% of standalone rearers. Jersey bulls were less common, reared by 25% of dairy, 14% of dairy/beef grower/finishers and 12% of standalone rearers. Fewer than 5% respondents, regardless of farm type, reported they reared Wagyu calves except standalone rearers of which 11% has this stock class.

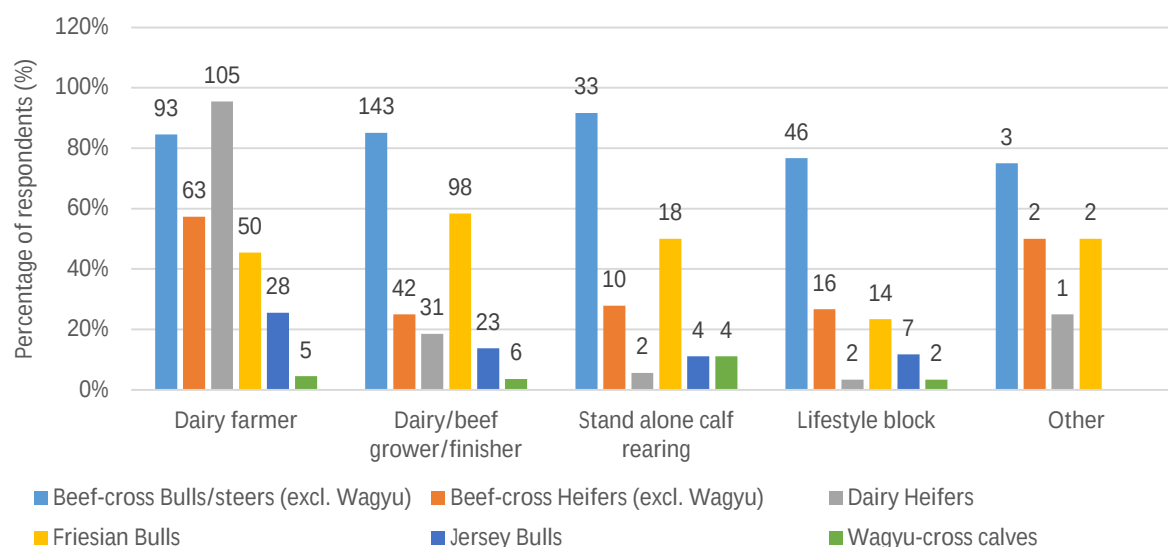
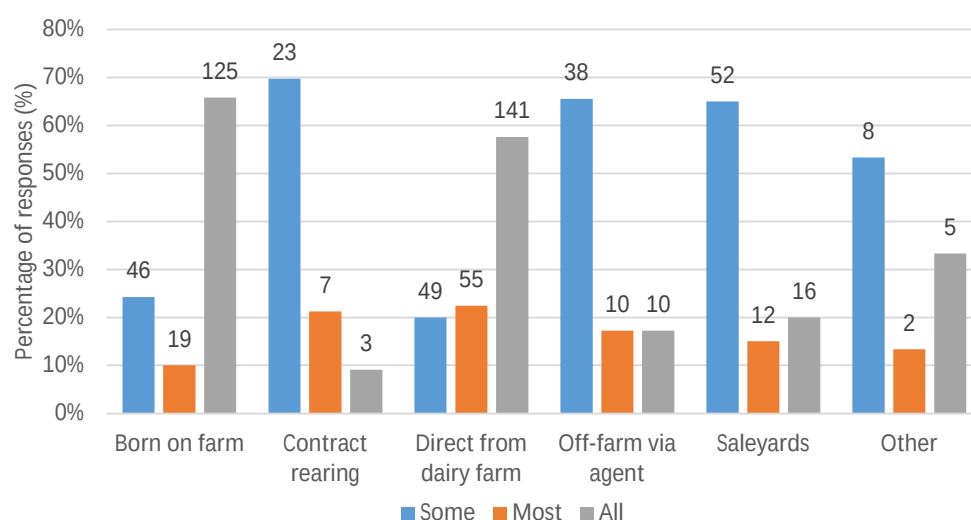


Figure 25. Summary of the percentage of respondents who identified that they rear Beef-cross Bulls/steers (excl. Wagyu), Beef-cross Heifers (excl. Wagyu), Dairy Heifers, Friesian Bulls, Jersey Bulls, Wagyu-cross calves by farm type (Dairy farmer, Dairy/beef grower/finisher, Standalone calf rearing, Lifestyle block). Note the number of respondents is given above each bar.

Q17. In 2025, how many calves did you obtain from each source?

Among the sources, the least common was contract rearing agreements (10%), off-farm via agent (18%), and saleyards (24%). The two most common sources were calves born on farm (52%) and direct from dairy farmers (69%).

The pattern of responses for calves born on farm and direct from dairy farmers showed a similar pattern of responses with most sourcing all calves (66% and 58%, respectively). For all other sources the most common response was that they sourced some calves suggesting they were more likely to use multiple sources.



The responses above were recategorized into a new variable “Main source of calves” which included only the source of calves that were categorised as “Most” or “All”. If respondents selected “Most” for more than one source all sources were counted. Among respondents 50% sourced calves direct from dairy farmers or off-farm sale via a stock agent, 40% were born on the farm, 7% from saleyards and 4% who had multiple sources which included saleyards and 3% who had contract rearing agreements.

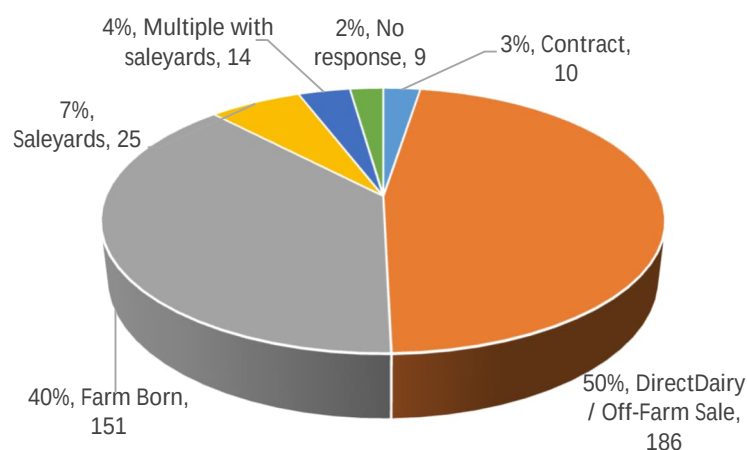


Figure 26. Pie chart of the number and percentage of respondents that reported the source of “All” or “Most” of their calves were sourced from Contract, Direct Dairy / On Farm Sale, Farm Born, Saleyards, Multiple with saleyards or that did not respond.

A comparison of farm type showed that 92% of dairy farmers had calves that were born on the farm with 5% sourcing calves direct from dairy farmers or on-farm sale via a stock agent. Among all other farm types, the majority (61% to 83%) sourced calves direct from dairy farmers or off-farm sale via a stock agent. Few respondents sourced calves from saleyards or multiple sources that included saleyards, however, they were most commonly used by dairy/beef grower/finishers (16%) and standalone calf rearers (17%).

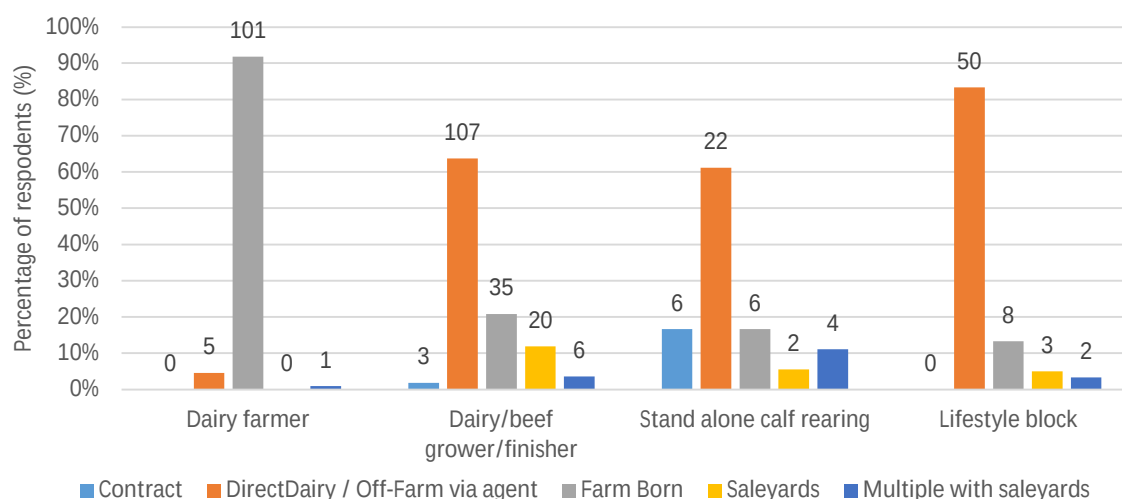


Figure 27. Summary of the percentage of respondents whose calves were born on farm, through contract rearing agreement, direct from dairy farmer, on-farm sale via a stock agent, saleyards or had multiple sources that included saleyards by farm type (Dairy farmer, Dairy/beef grower/finisher, Standalone calf rearing, Lifestyle block). Note the number of respondents is given above each bar.

Q18. If you buy direct from other farms, how many different farms do you get calves from?

Of respondents that indicated they sourced calves direct from other farms (n=246) the most frequent response was that they got calves from 2 to 5 farms (53%) followed by 1 farm (38%) and with fewest from 6 or more farms (9%).

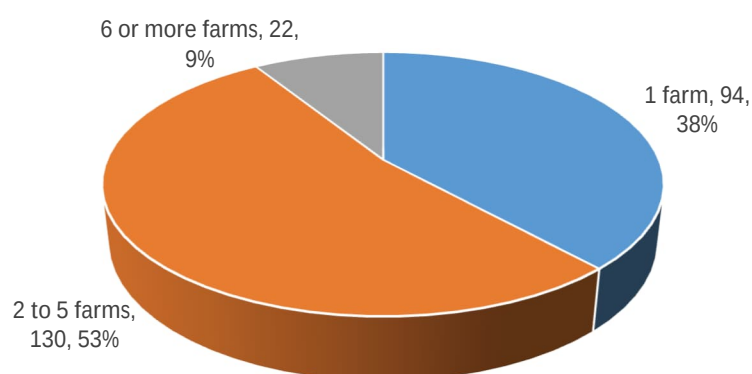


Figure 28. Pie chart of the number and percentage of respondents that reported they sourced calves from 1 farm, 2 to 5 farms, 6 or more farms, don't source directly from farms or that did not respond.

Q19. Dairy farmers only - Do you rear your beef calves differently to your replacement heifers?

Among dairy farmers, the majority reared their beef and dairy calves in mixed mobs (47%), whereas 21% feed them the same but reared them separately and 15% feed them differently.

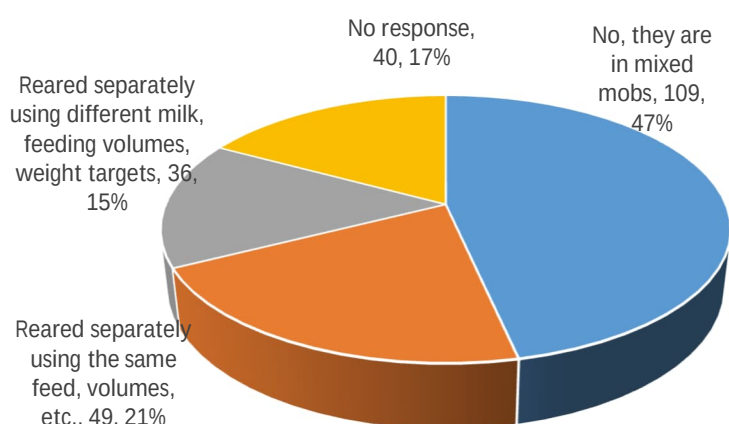


Figure 29. Pie chart of the number and percentage of dairy farmer respondents that reported they reared beef and dairy calves in mixed mobs, reared separately but fed the same volumes etc and reared separately and fed them differently.

Q19. When buying calves to rear indicate how much do the following criteria influence your decision to buy a particular calf?

Respondents were asked to rank criteria they used to make calf purchasing decisions from the following options: Apparent health, Breed, Coat colour, Colostrum management on source farm, Genetic merit or sire information, Location of source farm, Price, Sex, Size / weight, or Vaccination history. The ranks were "Not at all", "A bit" or "A lot".

Calf apparent health was ranked highest across respondents with 91% who considered it "A lot", 7% "A bit" and 2% "Not at all". The second highest criteria was colostrum management on source farm with 72% who considered it "A lot", 18% "A bit" and 10% "Not at all". The third highest ranked was breed with 66% considering it "A lot", 29% "A bit" and 6% "Not at all".

The criteria with the lowest score was genetic merit or sire information with 20% who considered it "A lot", 29% "A bit" and 51% "Not at all". Second lowest was vaccination history with 26% who considered it "A lot", 36% "A bit" and 38% "Not at all".

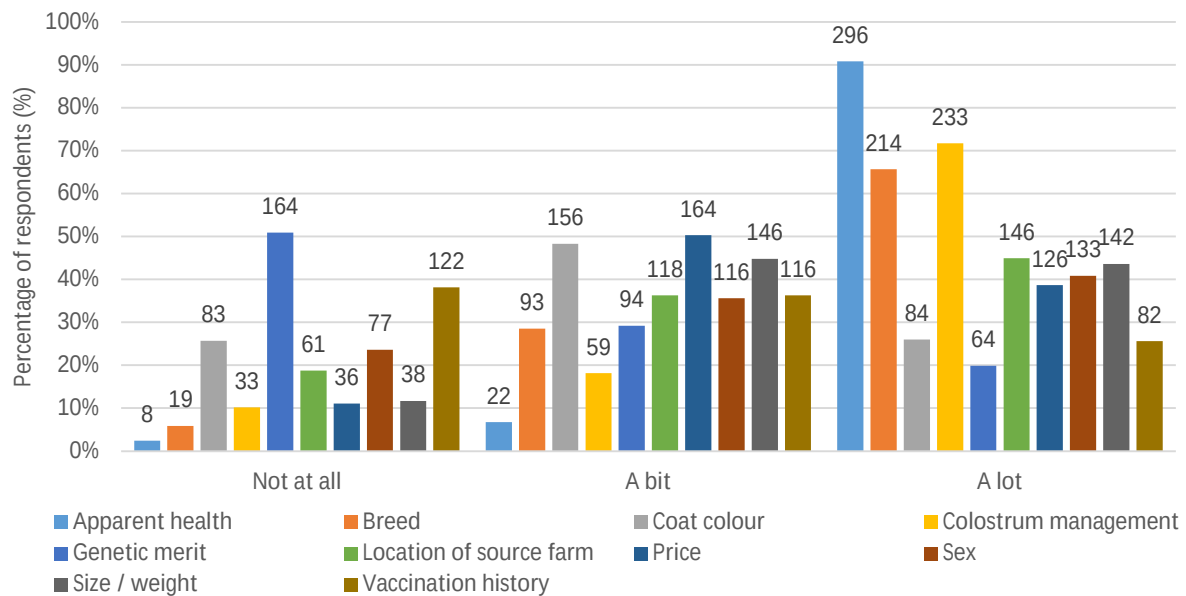


Figure 30. Summary of the percentage of respondents considered each calf purchasing criteria: Not at all, A bit and A lot. Note the number of respondents is shown at the top of each bar.

When compared between farm types, apparent health, breed and colostrum management were most commonly ranked as the criteria they considered “A lot” across all farm types.

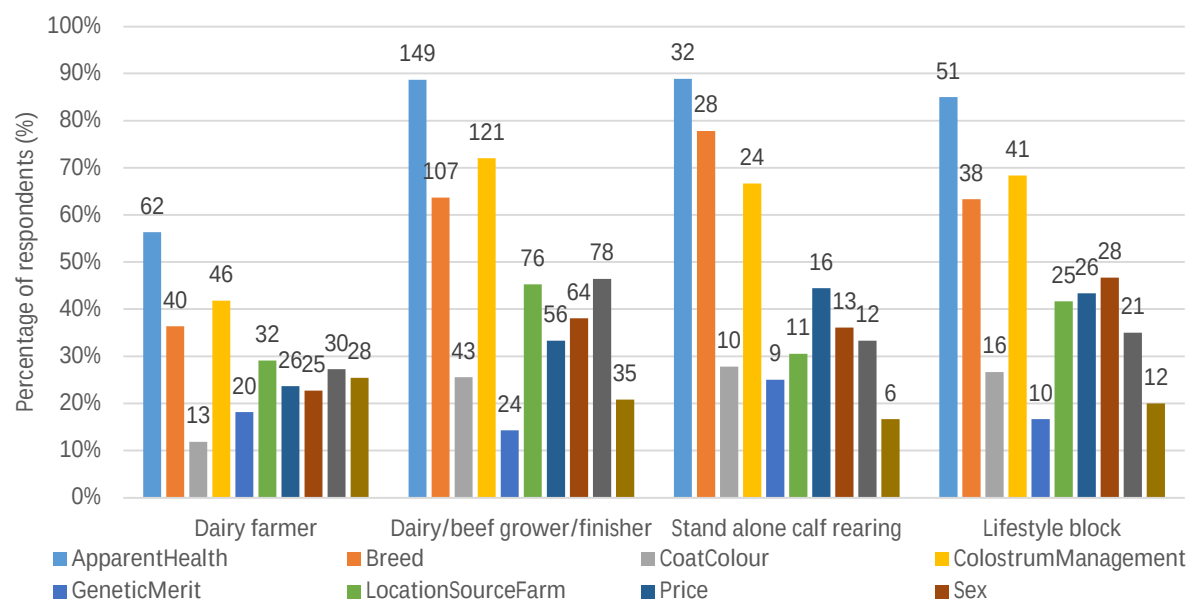


Figure 31. Summary of the percentage of respondents that considered each calf purchasing criteria “A lot” among farm types (dairy farmer, dairy/beef grower/finisher, standalone rearer and lifestyle block). Note the number of respondents is given above each bar.

The most common criteria that were not considered at all were genetic merit followed by vaccination history across all farm types. Fewer dairy farmers however did not consider genetic merit (21%) than all other farm types (range between 47 to 58%). Similarly fewer dairy farmers did not consider vaccination history (20%) than all other farm types (32 to 50%). All other criteria showed a similar % of respondents who ranked them as “Not at all”.

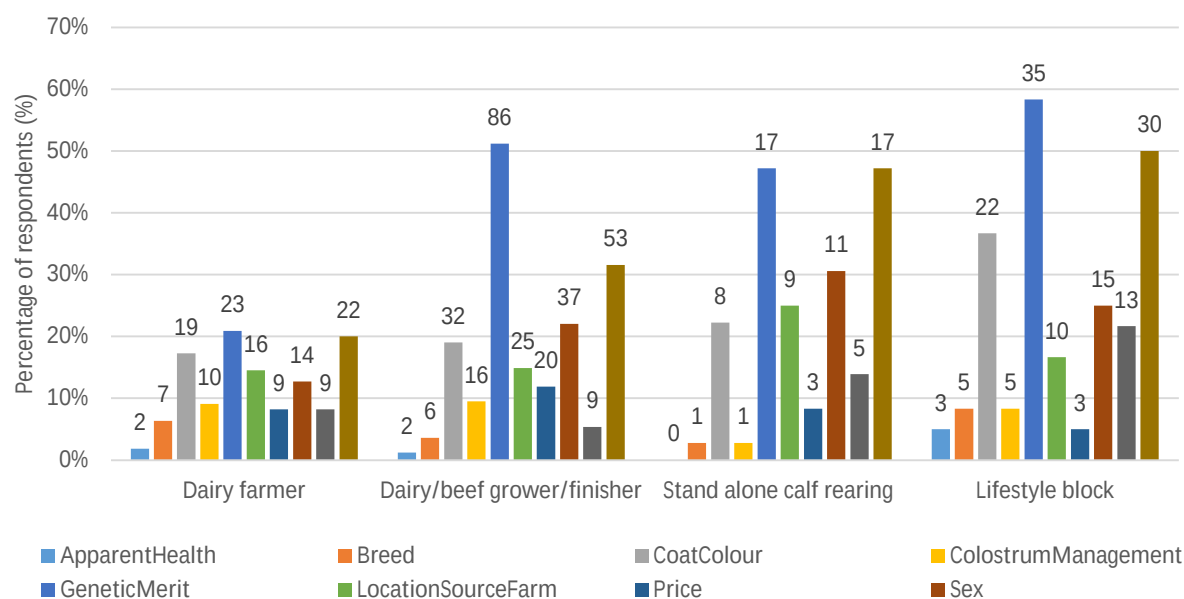


Figure 32. Summary of the percentage of respondents that considered each calf purchasing criteria "Not at all" among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearer and lifestyle block). Note the number of respondents is given above each bar.

When compared between reasons given for rearing calves apparent health, breed and colostrum management were consistently most commonly ranked as the criteria they considered "A lot" across all.

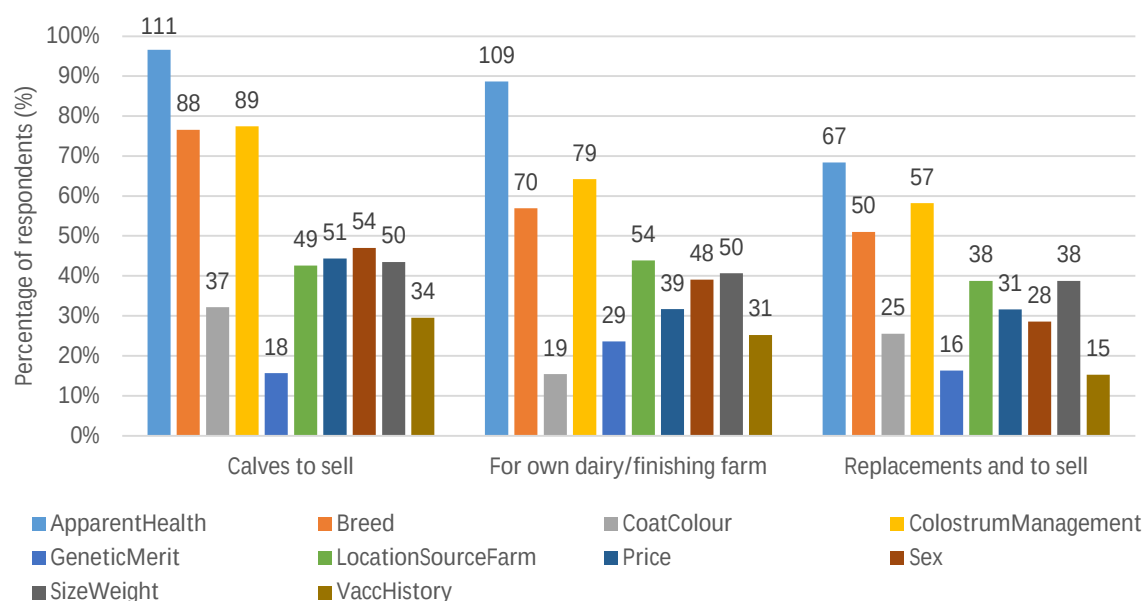


Figure 33. Summary of the percentage of respondents that considered each calf purchasing criteria "A lot" among respondents that rear calves to sell, for their own dairy farm/ finishing farm or both replacements and to sell. Note the number of respondents is given above each bar.

The most common criteria that were not considered at all were genetic merit followed by vaccination history across all reasons for rearing calves. Respondents that reared calves to sell had the highest percentage that did not consider genetic merit or sire information (57%) compared with those rearing calves for their own dairy/finishing farm (46%) or both replacements and to sell (38%). For all other criteria except location of source farm the percentage of respondents were similar across reasons for rearing calves. A greater percentage of respondents that rear calves to sell did not consider the

location of the source farm (23%) compared with those rearing calves for their own dairy/finishing farm (13%) or both replacements and to sell (18%).

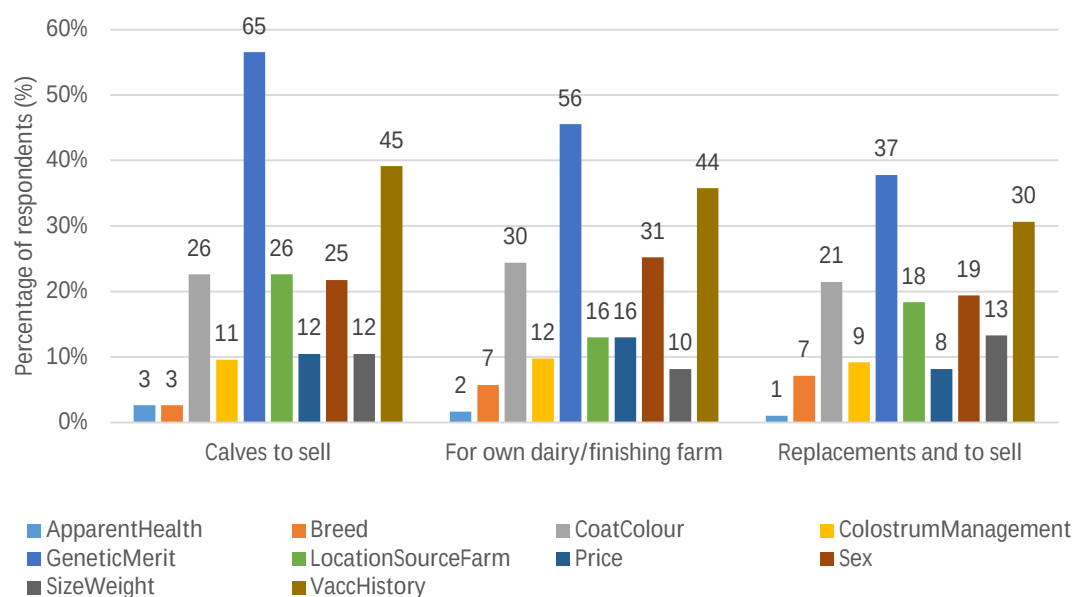


Figure 34. Summary of the percentage of respondents that considered each calf purchasing criteria "Not at all" among respondents that rear calves to sell, for their own dairy farm/ finishing farm or both replacements and to sell. Note the number of respondents is given above each bar.

Q22. What facilities do you have to house your dairy beef calves?

The most common facilities for rearing dairy beef calves was repurposed existing facilities (47%) followed by those purpose built (32%). Among all respondents, 10% used excess capacity in dairy rearing facilities and 9% had calves outside.

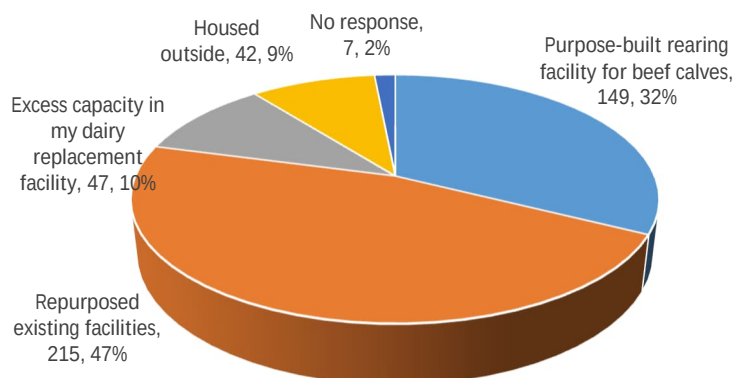


Figure 35. Pie chart of the number and percentage of respondents that housed calves in a purpose-built rearing facility for beef calves (or purpose-built beef capacity in my dairy replacement facility), repurposed existing facilities (e.g. woolshed, old milking shed, implement shed), excess capacity in my dairy replacement facility when it is available, outside and don't use special facilities or that did not respond.

When compared among farm types, dairy/beef grower/finishers (51%) and lifestyle block (55%) most commonly used repurposed existing facilities. Equal numbers of standalone rearers used purpose-built and repurposed facilities (42%). Unsurprisingly a greater percentage of dairy farmers used excess capacity in dairy replacement facilities (33%) than all other farm types (0 to 3%).

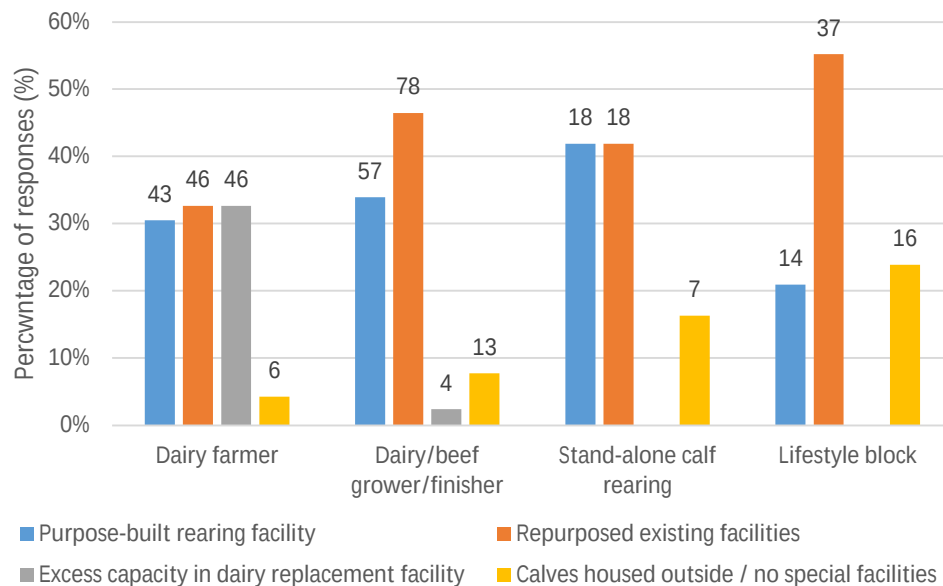


Figure 36. Summary of the percentage of responses that calves were housed in purpose-built rearing facility, repurposed existing facilities, excess capacity in dairy replacement facility or kept calves outside among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearer and lifestyle block). Note the number of respondents is given above each bar.

Facilities used by respondents was consistent across reasons for rearing calves with repurposed (53 to 59%) and purpose-built facilities with high percentages (range 33 to 45%). A higher percentage of those that reared calves to sell had calves outside (17%) than own dairy/finishing farm (12%) or both replacements and to sell (7%).

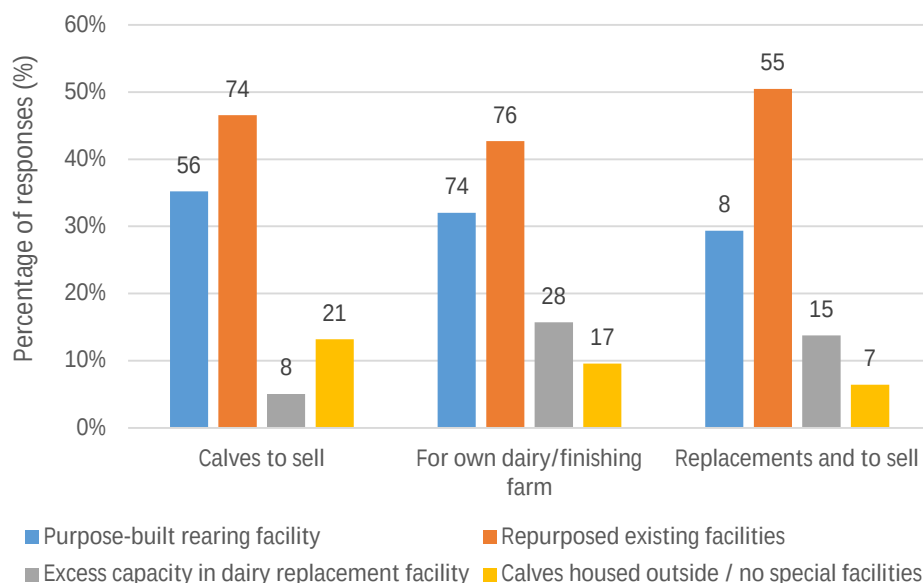


Figure 37. Summary of the percentage of responses that calves were housed in purpose-built rearing facility, repurposed existing facilities, excess capacity in dairy replacement facility or kept calves outside among those that rear calves to sell, for their own dairy/finishing farm or for replacements and to sell. Note the number of respondents is given above each bar.

A comparison of the responses of respondents with herd sizes greater than 400 showed the majority (67%) had purpose-built facilities whereas for all other herd sizes the highest percentage used repurposed facilities (55 to 65%).

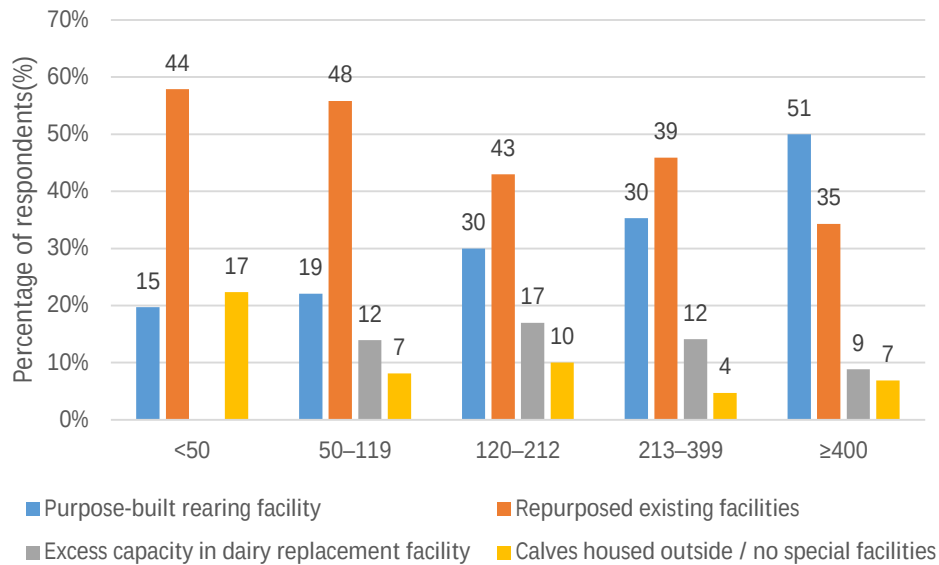


Figure 38. Summary of the percentage of responses that calves were housed in purpose-built rearing facility, repurposed existing facilities, excess capacity in dairy replacement facility or kept calves outside among those that rear <50, 50 to 119, 120 to 212, 213 to 399 or >400 calves. Note the number of respondents is given above each bar.

Q23. Do you check if the calves have had colostrum before they arrive on farm?

The majority of respondents reported that they check the colostrum status of calves before they arrive by asking the farmer about their feeding practices (54%). For a quarter of the respondents (25%) colostrum was not checked because calves were born on their farm while 16% did not check the status of calves.

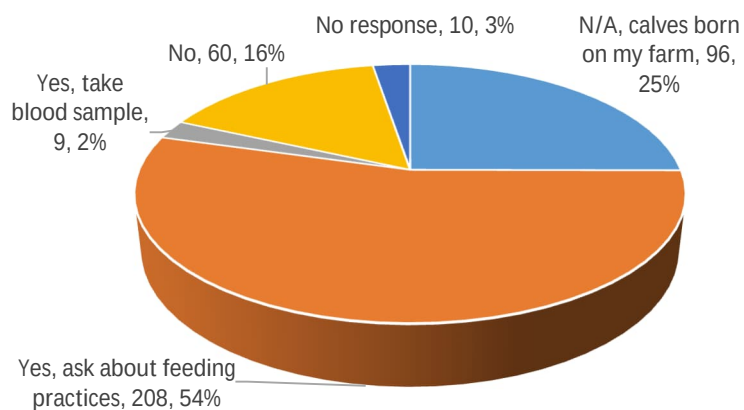


Figure 39. Pie chart of the number and percentage of respondents check calf colostrum status of calves before they arrive or that did not respond.

Q24. What is the most common method you use to feed milk to your calves?

The most common method of feeding milk to calves was using a calfeteria or trough (89%), followed by nurse cows (4%), automatic feeders (2%) or other (1) which included *ad-lib* from drums or combinations of sources.

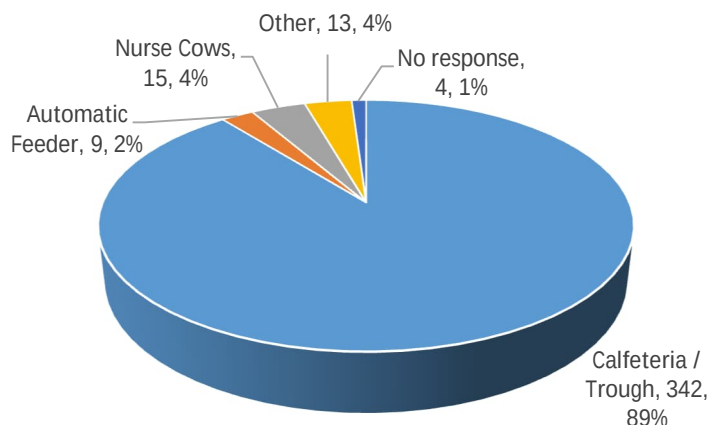


Figure 40. Pie chart of the number and percentage of respondents check calf colostrum status of calves before they arrive or that did not respond.

Q25. In the first week after calves arrive how often are calves fed?

In the first week after arrival the majority of respondents fed their calves twice per day (75%) followed by once per day (13%), ad libitum (9%), and using an automatic feeder (1%).

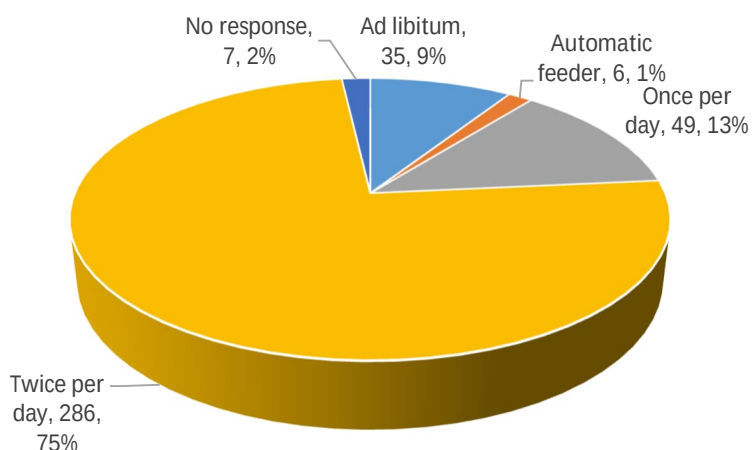


Figure 41. Pie chart of the number and percentage of respondents check calf colostrum status of calves before they arrive or that did not respond.

In a comparison of farm type, the most common feeding frequency in the first week after arrival was twice per day. More dairy farmers and standalone rearers fed calves *ad libitum* (17% and 14%, respectively) than in other farm types.

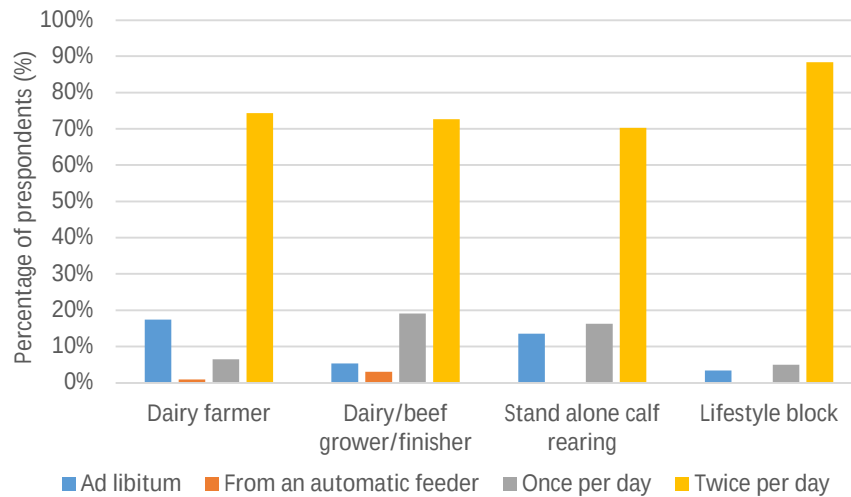


Figure 42. Summary of the percentage of respondents that fed calves in the first week after arrival ad libitum, from an automatic feeder, once a day or twice a day among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearing and lifestyle block).

In a comparison of rearer herd size, the percentage of respondents that fed once per day was higher among those that had >400 calves than all other herd sizes (25% compared with between 7 and 13%).

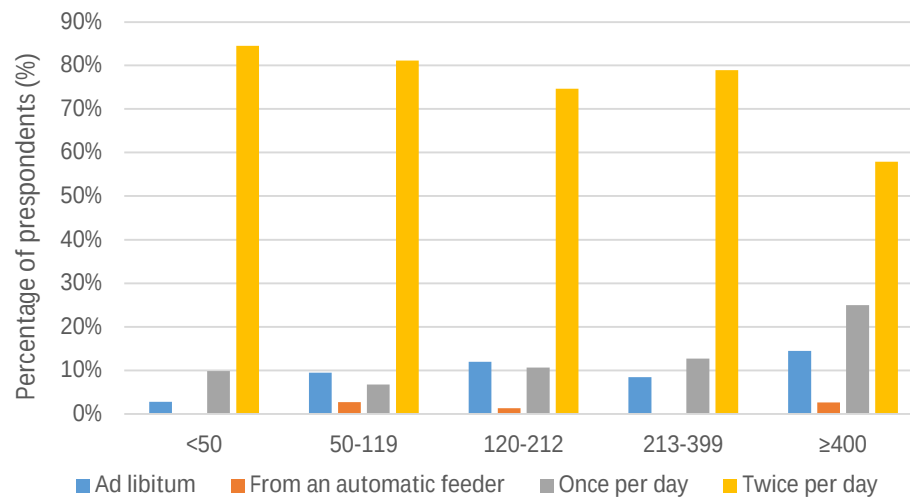


Figure 43. Summary of the percentage of respondents that fed calves in the first week after arrival ad libitum, from an automatic feeder, once a day or twice a day among rearers that have less than 50 calves, 50 to 119, 120 to 212, 213 to 399 or 400 or more.

Q26. Do you change to feed calves once per day?

The majority of respondents (70%) reported that they change the feeding frequency of their calves to once per day while 15% did not.

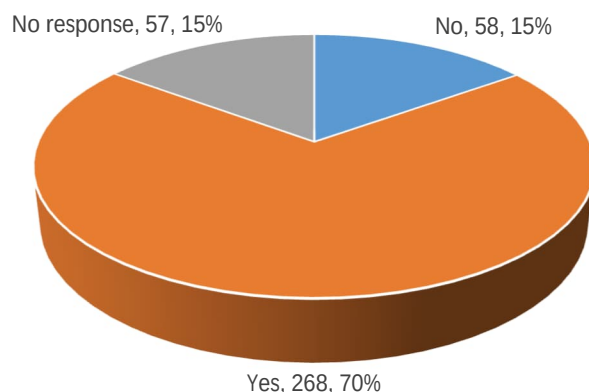


Figure 44. Pie chart of the number and percentage of respondents that do or do not change calves to once a day or that did not respond.

A comparison of herd size showed that a greater percentage of small herd (<50 calves) did not change to once-a-day feeding (28%) compared with larger herd sizes (10 to 15%).

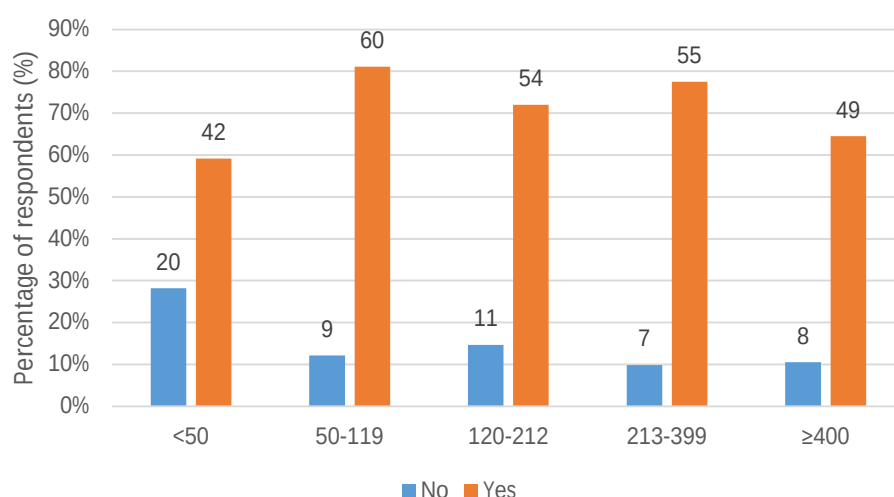


Figure 45. Summary of the percentage of respondents changed their calves to once a day feeding (Yes) or that did not (No) among rearers that have less than 50 calves, 50 to 119, 120 to 212, 213 to 399 or 400 or more.

Q27. What criteria do you use to move to once per day feeding?

The majority of respondents that changed to once-a-day feeding (n=262) based their decision on calf age (49%) followed by weight (7%), milk intake (2%) and milk replacer intake (1%). Among respondents 9% indicated they used other criteria which included health status, drinking ability, combined age and weight and when they are turned out to paddocks.

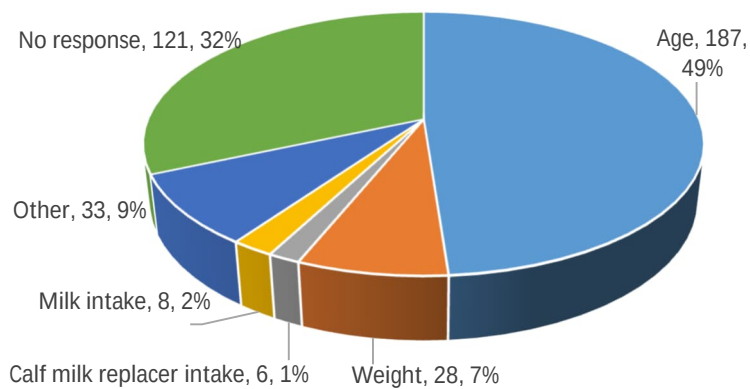


Figure 46. Pie chart of the number and percentage of respondents that changed to feed calves once a day based on age, weight, calf milk replacer intake, milk intake, other or that did not respond

Among respondents that used age as a criterion for transitioning to once-a-day (n=187), the majority were 3 weeks of age (25%) with 2 and 4 weeks also common (20 and 19%, respectively).

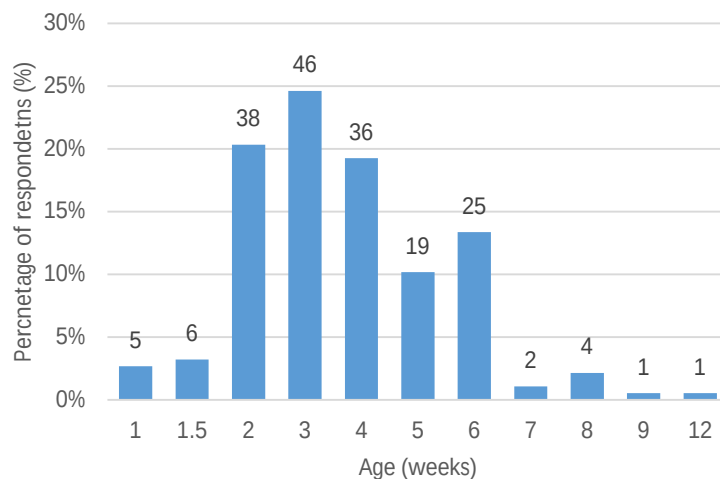


Figure 47. The number and percentage of respondents that reported the age that calves were transitioned to once-a-day feeding

Among respondents that used calf weight to transition to once-a-day the majority of calves were between 60 and 80 kg (75%).

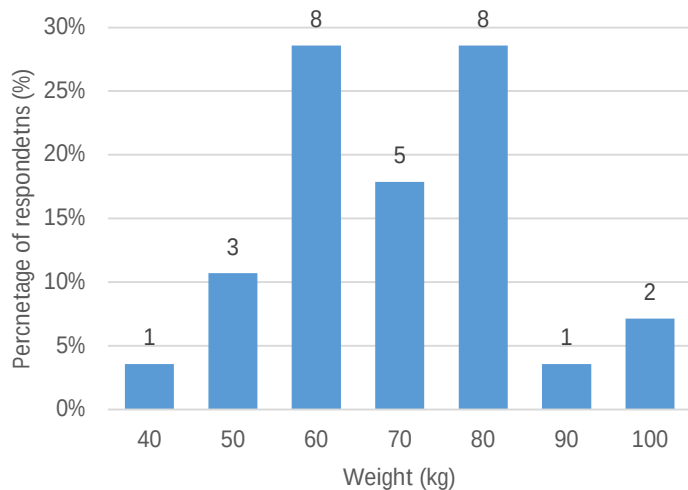


Figure 48. The number and percentage of respondents that reported the weight that calves were transitioned to once-a-day feeding

Q28. What do you usually feed your calves

Among respondents the majority fed calves only calf milk replacer (50%) followed by both whole milk and milk replacer (30%) with fewest only whole milk (18%).

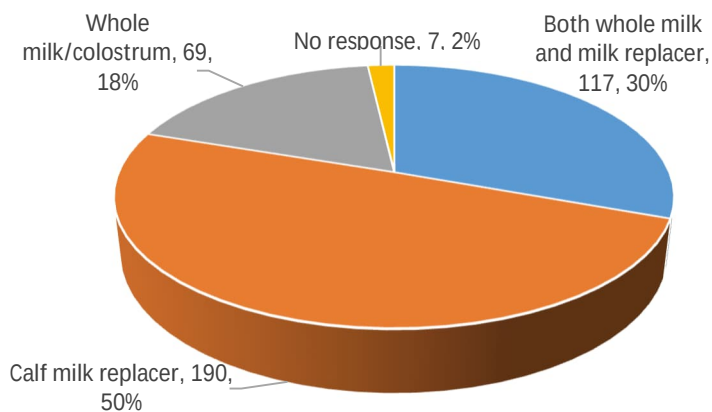


Figure 49. Pie chart of the number and percentage of respondents that fed calves calf milk replacer, milk or both or that did not respond

A comparison of farm type showed that a greater percentage of dairy farmers fed both whole milk and calf milk replacer (48%) and whole milk (46%). The majority of dairy/beef grower/finishers and lifestyle block respondents fed only fed calf milk replacer (69% and 77%, respectively). Equal numbers of standalone rearers fed milker replacer (49%) or both whole milk and milk replacer (46%).

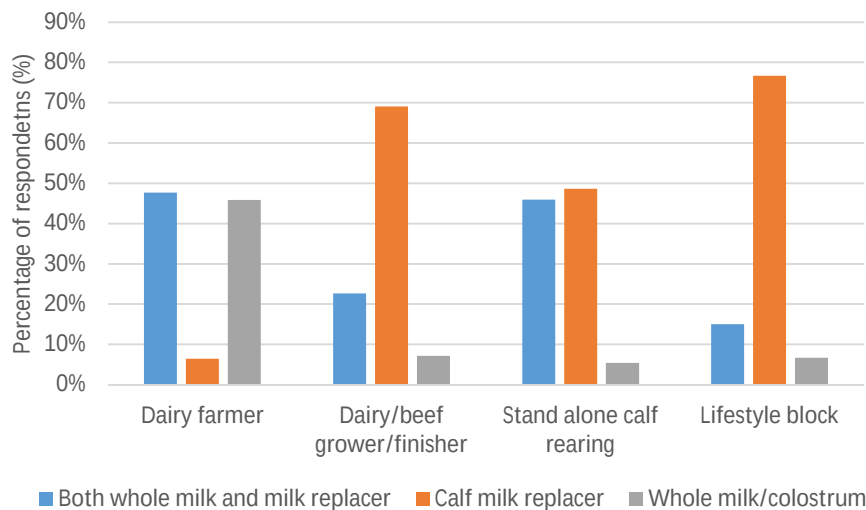


Figure 50. Summary of the percentage of respondents that fed calves only milk replacer, whole milk or both milk replacer and whole milk among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearer and lifestyle block). Note the number of respondents is given above each bar.

Q29. What is the source of milk that you feed to your calves?

Among respondents that selected whole milk/colostrum or both whole milk and replacer to Q28, 156 (84%) reported that they sourced milk/colostrum not suitable for sale, 116 (62%) saleable vat milk from their own farm, 85 (46%) milk from cows milked specifically to feed calves and 60 (32%) waste milk from other farms.

Of those that fed milk/colostrum not suitable for sale, they used it as the main source of milk (54%), secondary source (14%) and sometimes (16%).

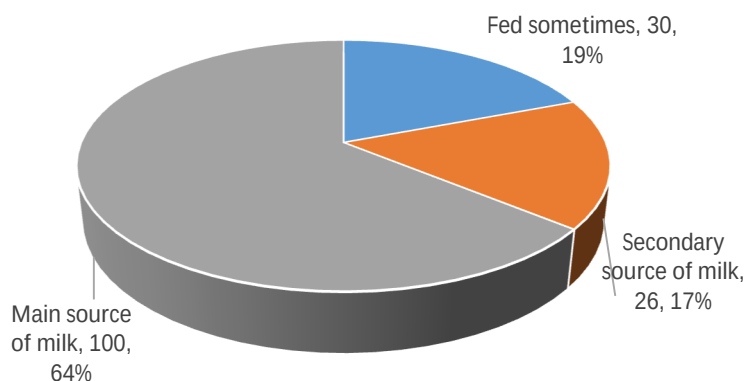


Figure 51. Pie chart of the number and percentage of respondents that fed calves milk/colostrum not suitable for sale either as their main source, secondary source or sometimes or that did not respond.

When farm type was compared, dairy farmers and dairy/beef growers/finishers fed milk/colostrum not suitable for sale as their main source (76% and 59% respectively) whereas more standalone rearers and lifestyle block respondents used sometimes (64% and 50%, respectively).

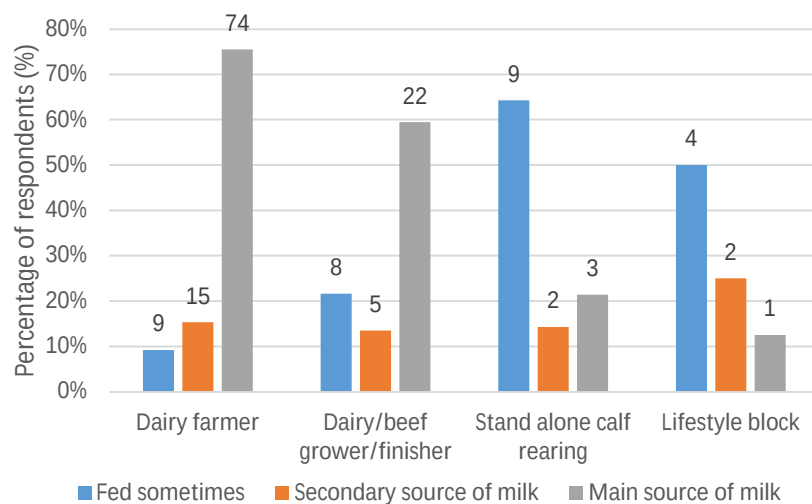


Figure 52. Summary of the percentage of respondents that fed calves milk/colostrum not suitable for sale either as their main source, secondary source or sometimes among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearer and lifestyle block). Note the number of respondents is given above each bar.

Of those that fed saleable vat milk from their own farming enterprise, they used it as the main source (11%), secondary source (20%) and sometimes (31%).

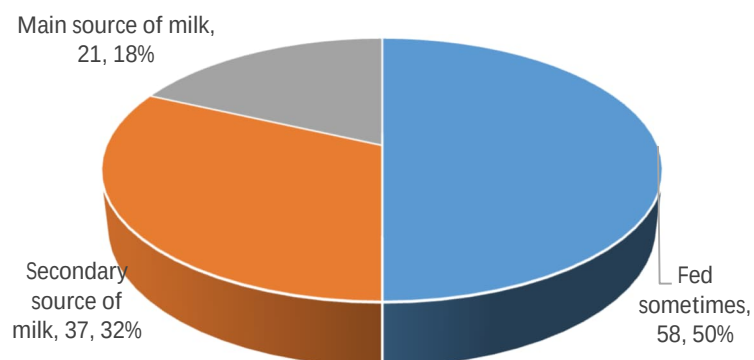


Figure 53. Pie chart of the number and percentage of respondents that fed calves saleable vat milk from their own farming enterprise either as their main source, secondary source or sometimes or that did not respond.

When farm type was compared, all farm types most commonly used it sometimes (range 45% to 80%. Only dairy farmers and dairy/beef grower/finishers fed it as their main source (19% and 21%, respectively).

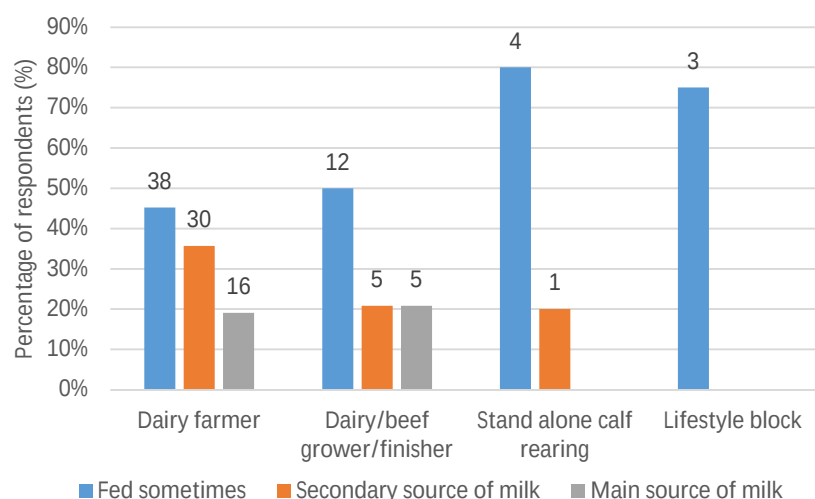


Figure 54. Summary of the percentage of respondents that fed saleable vat milk from their own farming enterprise either as their main source, secondary source or sometimes among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearing and lifestyle block). Note the number of respondents is given above each bar.

Of those that fed milk from cows specifically for feeding calves, they used it as the main source (40%), secondary source (12%) and sometimes (48%).

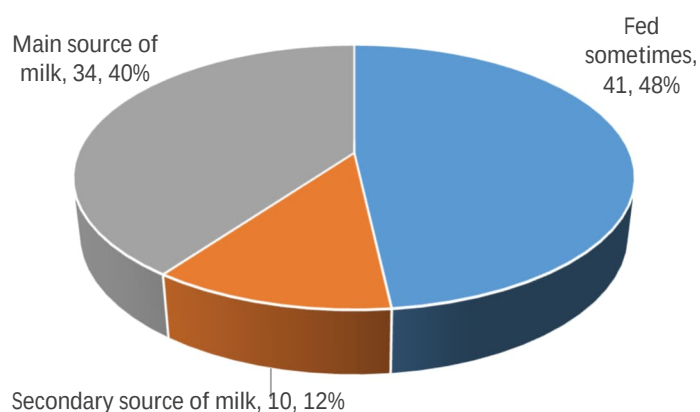


Figure 55. Pie chart of the number and percentage of respondents that fed calves milk from cows specifically for feeding calves either as their main source, secondary source or sometimes or that did not respond.

When farm type was compared, the majority of standalone rearers and lifestyle block respondents used it as their main source of milk (57% and 43%, respectively). For dairy farmers and dairy/beef growers/finishers the majority used milk from this source sometimes (56% and 43%, respectively).

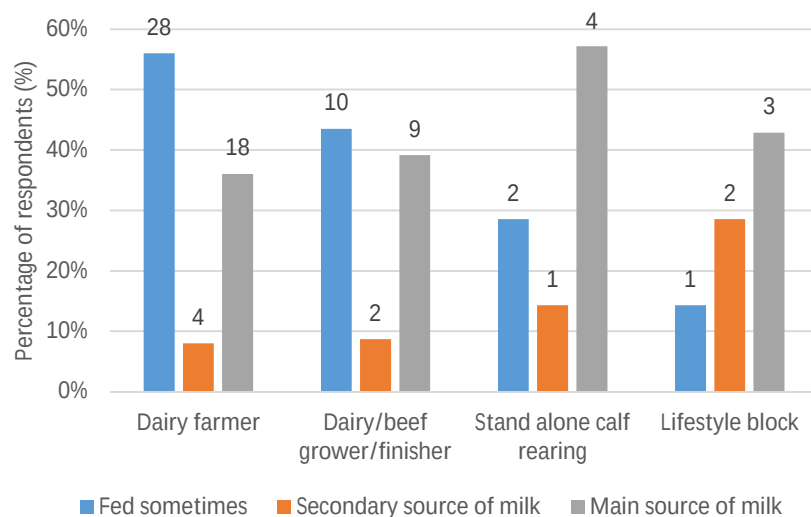


Figure 56. Summary of the percentage of respondents that fed milk from cows specifically for feeding calves either as their main source, secondary source or sometimes among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearing and lifestyle block). Note the number of respondents is given above each bar.

Of those that fed waste milk from other farms/factories, they used it as the main source (17%), secondary source (27%) and sometimes (56%).

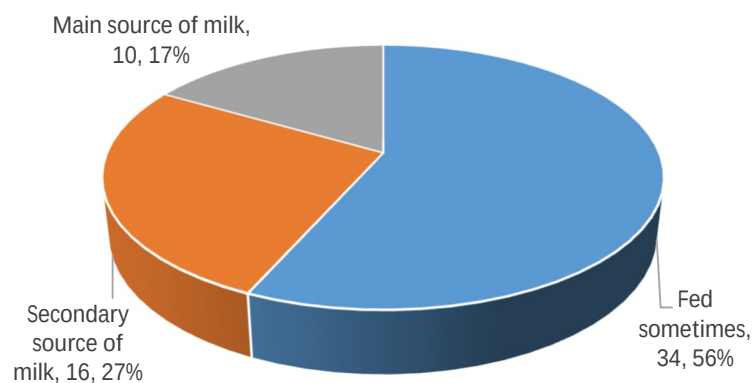


Figure 57. Pie chart of the number and percentage of respondents that fed calves waste milk from other farms/factories either as their main source, secondary source or sometimes or that did not respond.

When farm type was compared, all farm types most commonly used it sometimes (range 35% to 83%). Due to the small number of responses a clear pattern could not be determined.

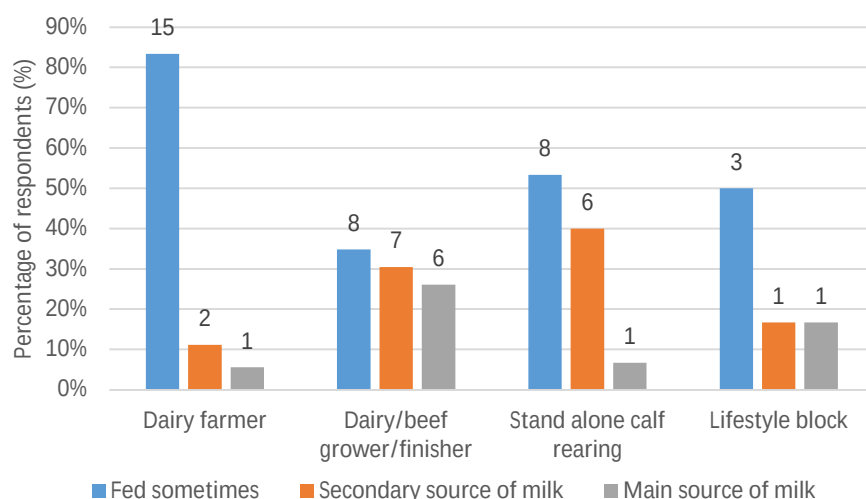


Figure 58. Summary of the percentage of respondents that fed milk from waste milk from other farms/factories either as their main source, secondary source or sometimes among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearing and lifestyle block). Note the number of respondents is given above each bar.

Q30. In each week after calves arrive, how many litres per day of milk/colostrum to you aim to feed?

Respondents that reported milk feeding rates, fed an average of 5 litres per calf per day. The feeding rate peaked at weeks 4 and 5 and decreased to week 10.

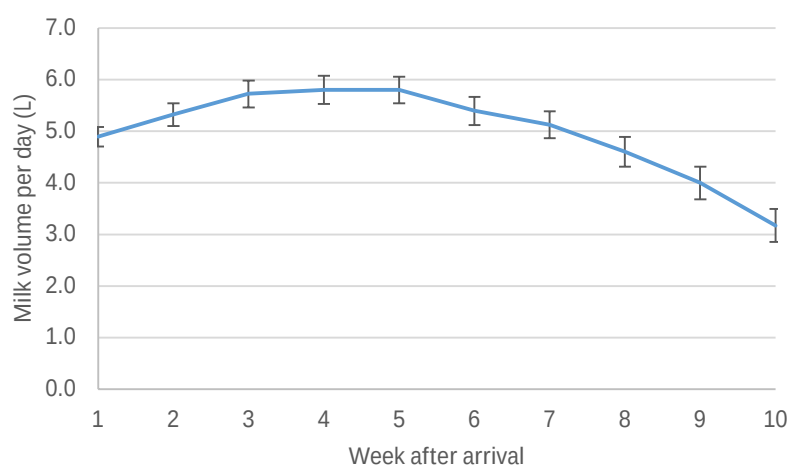


Figure 59. Milk volume (mean $\pm$ SEM) fed to calves over the rearing period

Q31. What rate do you mix your milk powder in grams per litre?

Only respondents that reported that they fed calf milk replacer in Q28 answered this question. Of those respondents the majority always mixed milk replacer at the same rate (57%) followed by those that changed the rate (42%). The mean rate of mixing was 188 ± 11 g/L.

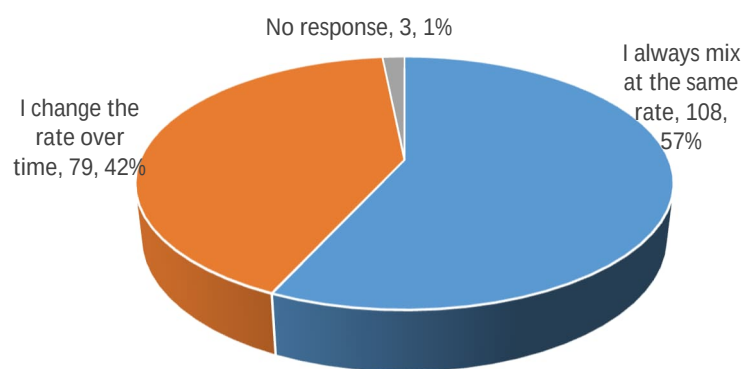


Figure 60. Pie chart of the number and percentage of respondents that who used calf milk replacer that always mix at the same rate, change the rate over time or that did not respond.

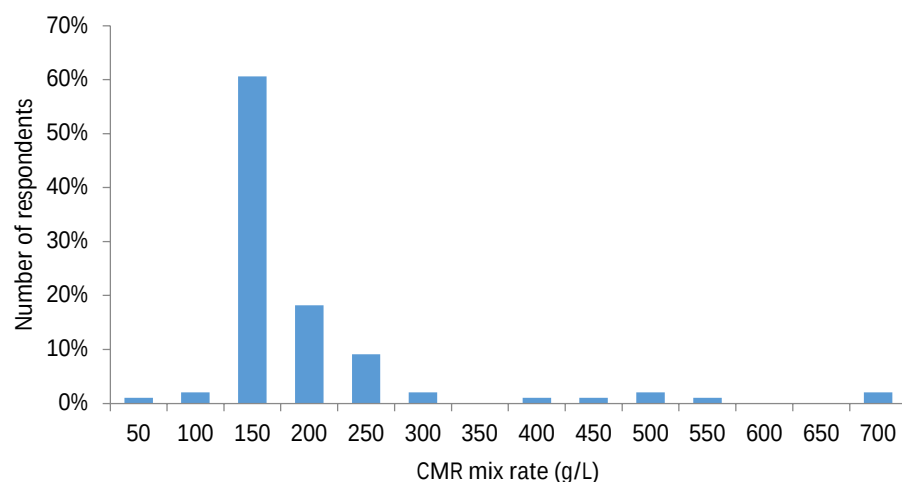


Figure 61. Histogram of the calf milk replacer mix rate reported by respondents that fed it to calves.

Q32. In each week after calves arrive, what is the rate that you mix your milk powder (grams per litre) and what is the total milk powder feed per day (grams)?

Respondents that reported their calf milk replacer mix rate did so in either grams per litre (panel 1) and grams per day (panel) and showed that mix rates peaked between week 5 and 6 and then decreased to week 10.

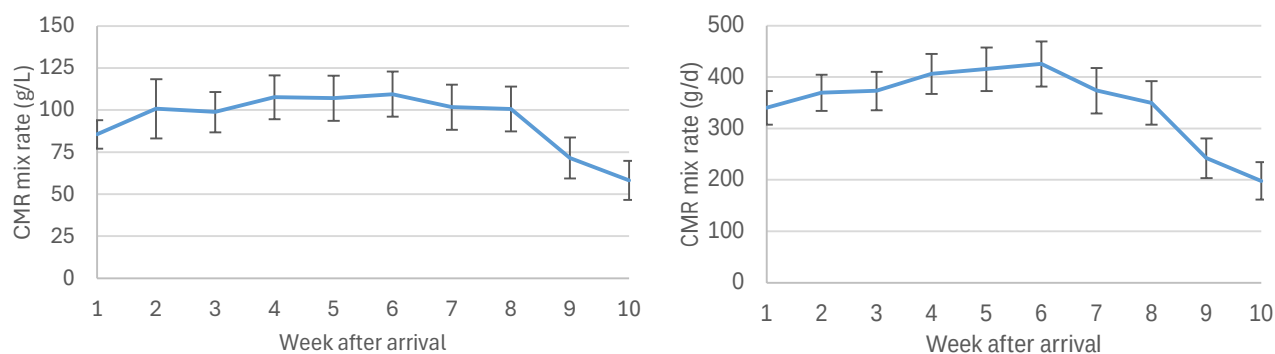


Figure 62. Calf milk replacer mix rate in grams per litre (mean $\pm$ SEM) and grams per day (mean $\pm$ SEM) reported for each week of rearing

A graph of the combined calf feeding data, calculated on a per kg of calf milk replacer basis, is shown in figure 61.

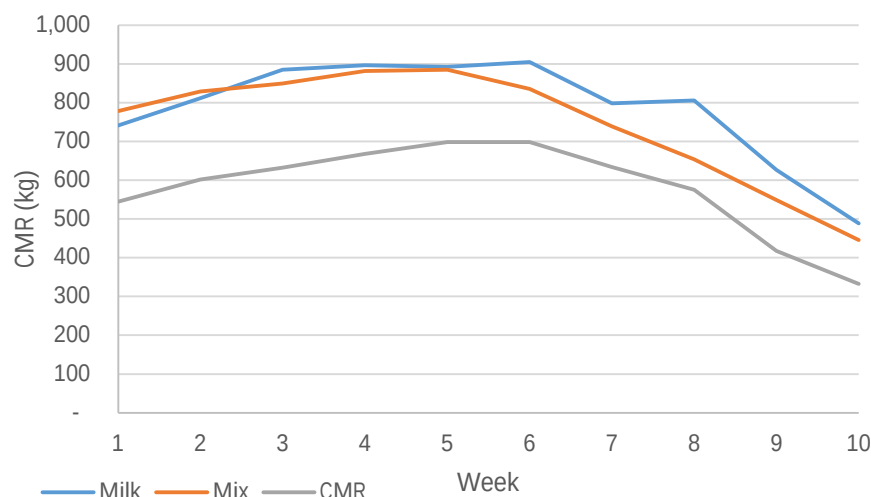


Figure 63. Calf feed provided in the equivalent of kg of milk replacer (mean $\pm$ SEM) by respondents that offered milk, milk replacer or a mix of both for each week of rearing

Q33. Describe how you combine milk replacer and whole milk?

The majority of respondents reported that they added milk powder and water to whole milk (48%), followed by feeding milk replacer and milk separately (35%) or fortified whole milk with milk replacer (18%).

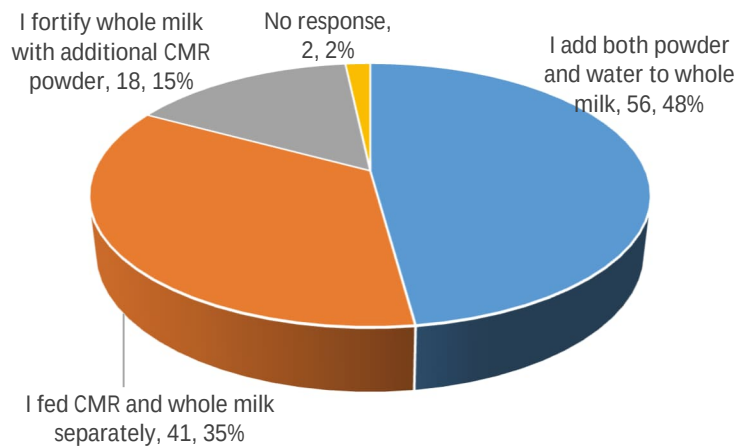


Figure 64. Pie chart of the number and percentage of respondents that who used calf milk replacer that always mix at the same rate, change the rate over time or that did not respond.

Q35. At what age in weeks do you usually wean calves off milk?

The age that respondents reported that they weaned their calves was reported by 254 respondents and had a mean of 10 ± 0.36 weeks of age. The distribution of ages showed a wide range from 1 to 25 weeks.

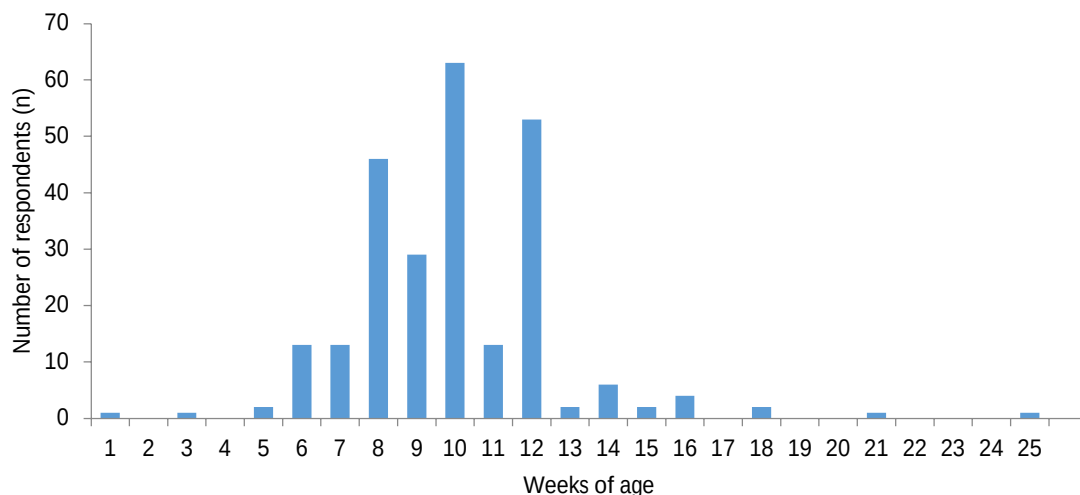


Figure 65. Histogram of the age at which respondents reported they weaned their calves

Q36. What criteria do you use to decide to when to wean a calf off milk?

The majority of respondents used calf weight (47%, 89.3 ± 0.9 kg) followed by meal intake (27%, 1.3 ± 0.4 kg), calf age (21%, mean 9.8 ± 0.5 weeks of age) and weight gained since birth or arrival (5%, 58.1 ± 11.0 kg) as criteria for the decision to wean calves.

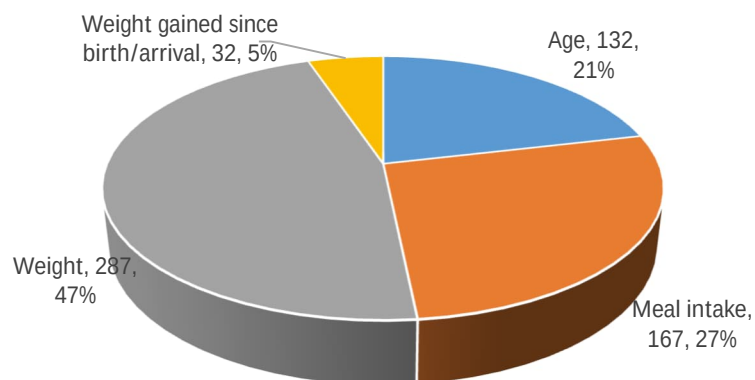


Figure 66. Pie chart of the number and percentage of respondents that used calf age, calf meal intake, calf weight, weight gained since birth/arrival as criteria for weaning their calves or that did not respond.

Q37. For each calf, from arrival to 100 kg (or exit, if at less than 100 kg live weight), approximately how much meal in total (kg) do your calves eat?

Among respondents 5% reported that they did not feed their calves meal, 56% reported the total meal which was on average 57.6 ± 2.4 kg and 34% reported the maximum per day of 1.78 ± 0.8 kg/d.

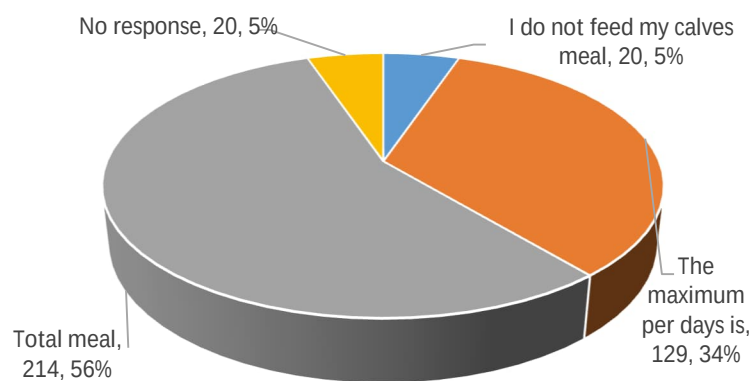


Figure 67. Pie chart of the number and percentage of respondents that reported they did not feed calves meal, total meal fed (kg) or the maximum meal per day (kg/d) or that did not respond.

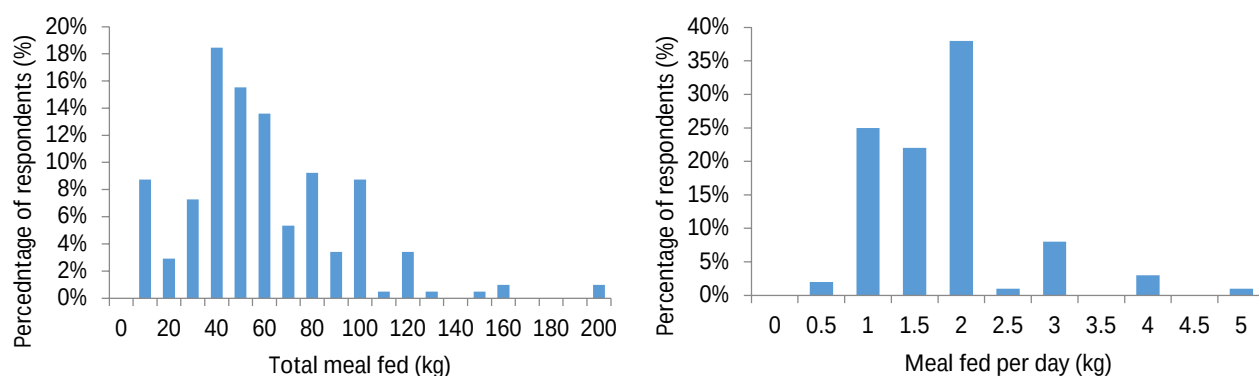


Figure 68. Histograms of the total meal fed to calves (kg) or the meal fed per day (kg/d)

Q38. Do you feed hay, straw or silage?

The majority of respondents fed calves hay, straw, or silage in the shed and the paddock (53%), followed by in the shed only (17%) or in the paddock only (11%) or did not feed it (16%).

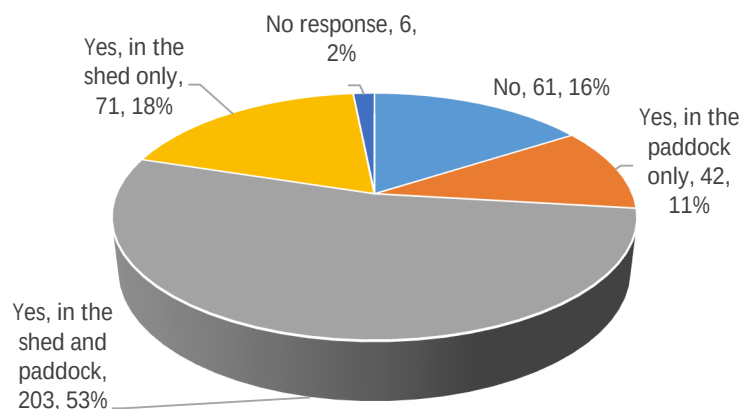


Figure 69. Pie chart of the number and percentage of respondents that reported they fed calves hay, straw or silage in the paddock only, in the shed and the paddock, in the shed only, did not feed hay, straw or silage or that did not respond.

Q39. At what age (in weeks) do you give calves access to pasture?

The age at which respondents gave calves access to pasture had a mean of 3.3 ± 0.1 . The majority gave calves access at 2 weeks of age.

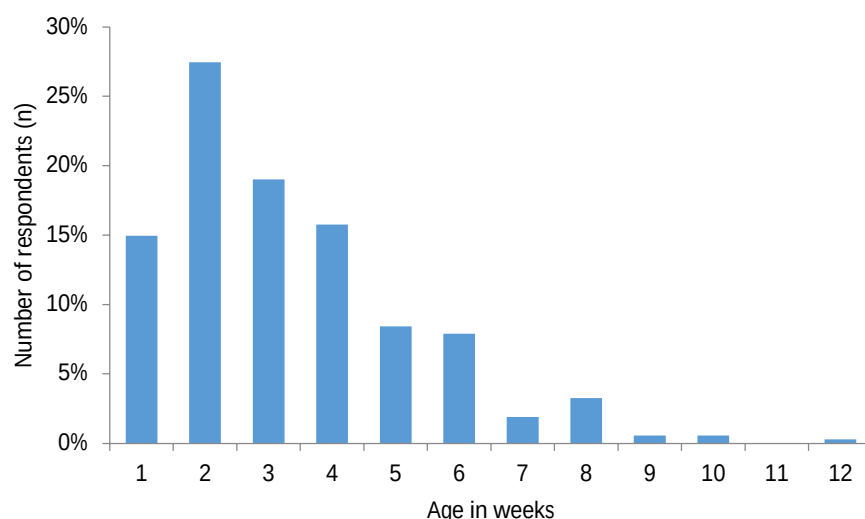


Figure 70. Histogram of the age (weeks) at which respondents gave calves access to access to pasture.

A comparison of farm type showed a similar pattern of the age at which calves were given access to pasture among all farm types except lifestyle block with the majority of respondents gave calves between 2 and 4 weeks access (range 61 to 76%). Lifestyle block respondents, however, gave calves access earlier with a higher percentage at 0 to 1 week (28%) and fewer at 2 to 4 weeks (48%).

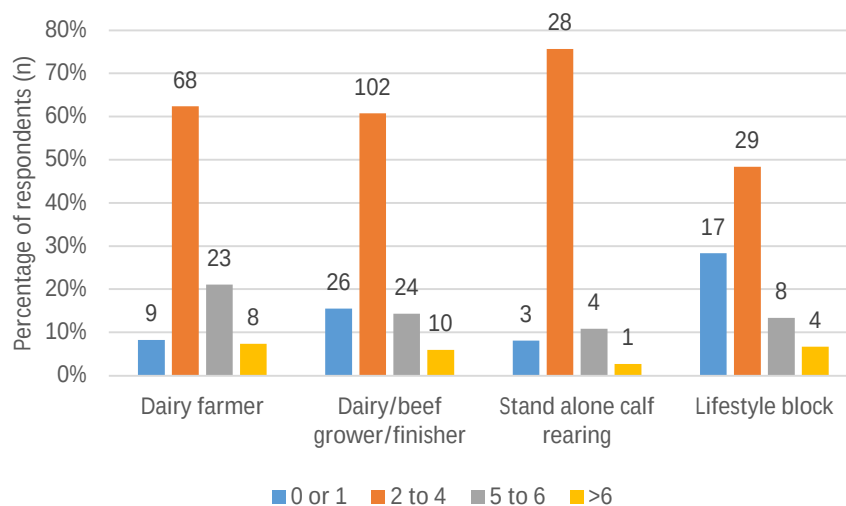


Figure 71. Summary of the percentage of respondents that gave calves access to pasture at 0 to 1, 2 to 4, 5 to 6 or >6 weeks of age among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearer and lifestyle block). Note the number of respondents is given above each bar.

A comparison of reason for calf rearing also showed a consistent pattern with the majority of respondents giving calves access to pasture at 2 to 4 weeks of age (range 55% to 68%).

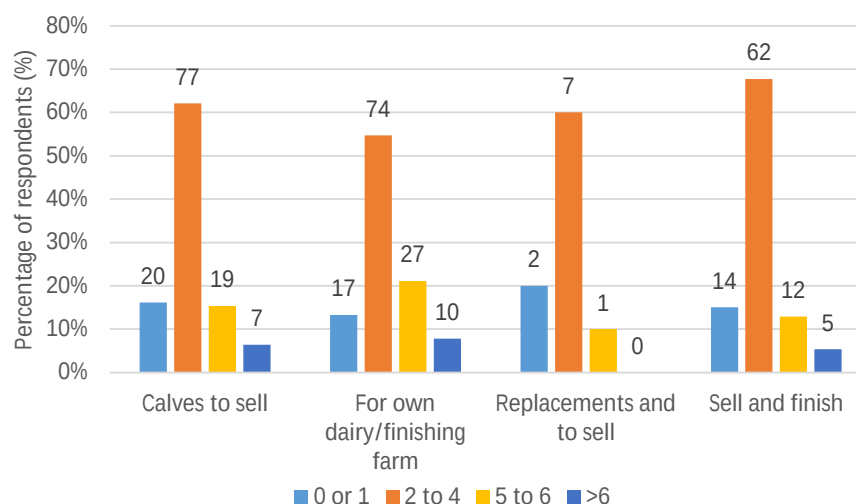


Figure 72. Summary of the percentage of respondents that gave calves access to pasture at 0 to 1, 2 to 4, 5 to 6 or >6 weeks of age among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearer and lifestyle block). Note the number of respondents is given above each bar.

A comparison of herd size showed that as sizes increased the percentage of calves given access to pasture at 2 to 4 weeks increased from 48% to 74%.

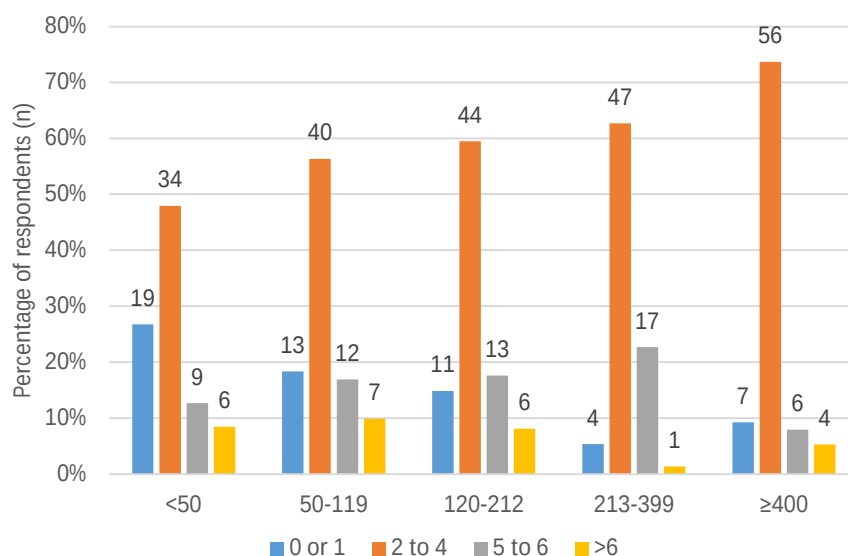


Figure 73. Summary of the percentage of respondents that gave calves access to pasture at 0 to 1, 2 to 4, 5 to 6 or >6 weeks of age among respondents with herd sizes of >50, 50 to 119, 120 to 212, 213 to 399 or ≥400. Note the number of respondents is given above each bar.

Q40. On average at what age (in weeks) do your calves reach 100 kg?

Respondents could either provide a weight if they weighed their calves or an estimate if they did not. Those respondents that weighed calves reported that the mean age that their calves reached 100 kg was 11.1 ± 0.4 weeks of age. For those that did not weigh their calves the mean age was 10.9 ± 0.2 weeks of age.

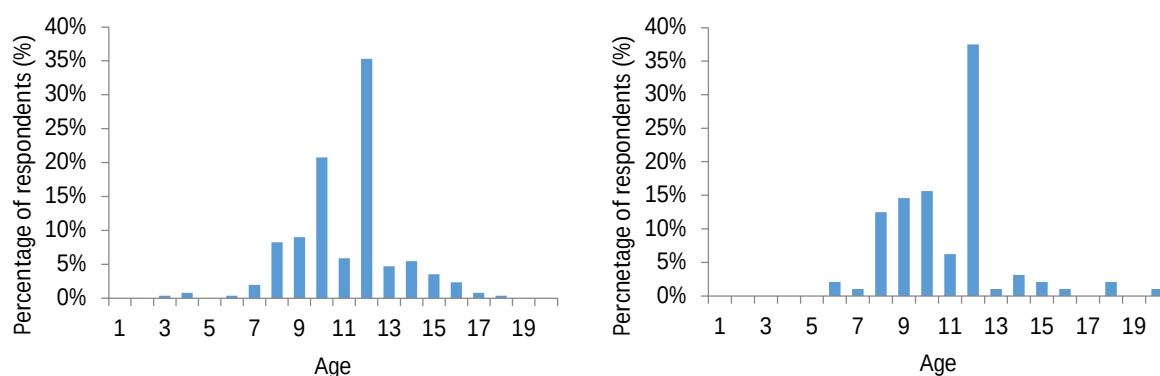


Figure 74. Histograms of the percentage of respondents of calf age at 100 kg for those who weighed their calves (panel 1) or that estimated their weight (panel 2).

Q41. Are you happy with the growth rate of your calves?

There was a similar percentage of respondents that were happy with their calf performance (41%) or achieved a good balance of performance and cost (46%). Among respondents 11% would like their calves to perform better.

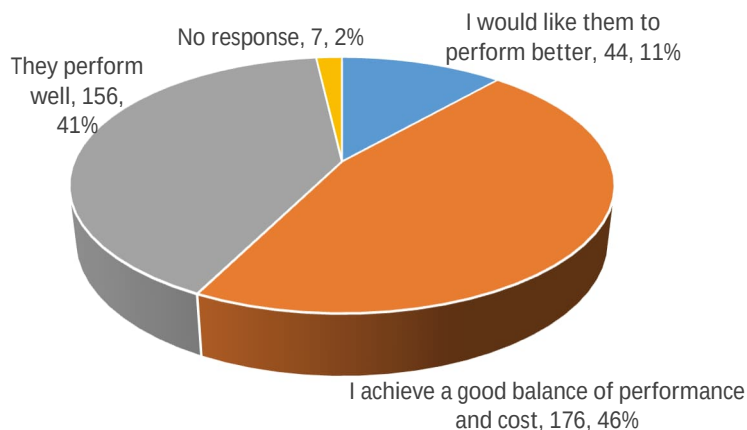


Figure 75. Pie chart of the number and percentage of respondents that reported that they would like calves to perform better, they achieve a good balance between performance and cost, that calves performed well or that did not respond.

Dairy farmers and lifestyle block respondents had a greater percentage who felt their calves performed well (58% and 50%, respectively) followed by achieving a good balance of performance and cost (35% and 45%, respectively). Dairy/beef grower/finishers and standalone calf rearers had a greater percentage who felt they achieved a good balance (53% and 51%, respectively) followed by they perform well (29% and 35%, respectively).

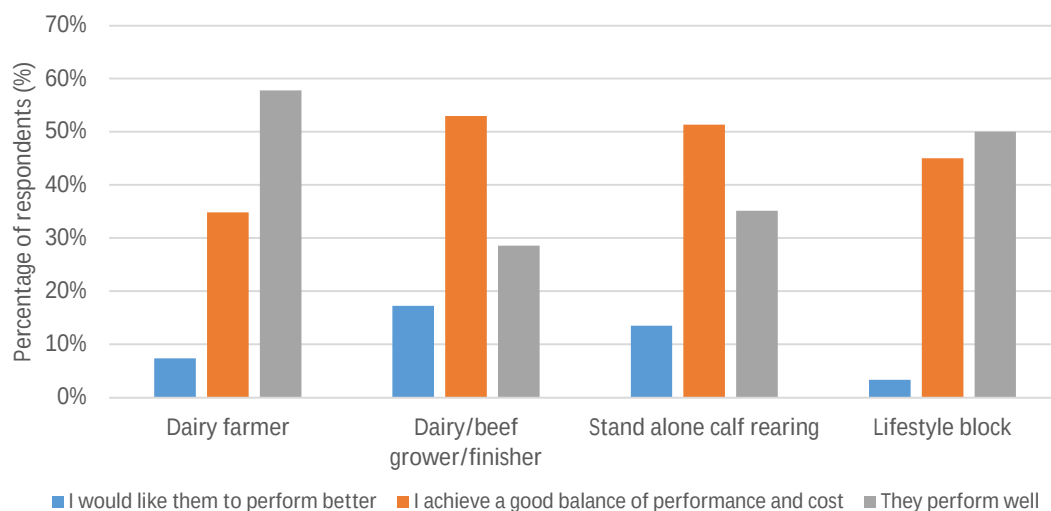


Figure 76. Summary of the percentage of respondents that would like calves to perform better, achieve a good balance between performance and cost or performed well among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearer and lifestyle block).

Respondents that had a herd size of 50 to 119, 213 to 399 and ≥ 400 had a higher percentage that felt they had a good balance between performance and cost (48 to 58%) and fewer that felt that calves performed well (31 to 42%). For all other herd sizes, a higher percentage felt that calves performed well (49 to 52%) and fewer felt they had a good balance between performance and cost (35 to 39%).

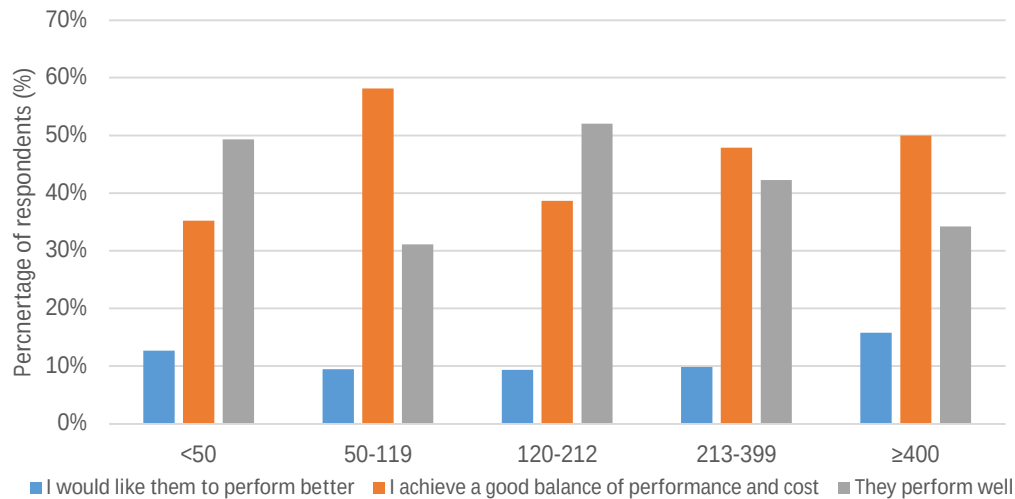


Figure 77. Summary of the percentage of respondents that would like calves to perform better, achieve a good balance between performance and cost or performed well among respondents with herd sizes >50, 50 to 119, 120 to 212, 213 to 399, ≥400.

Respondents that feed calves whole milk colostrum showed a higher percentage that were happy with their calves performance (58%) than those that feed milk replacer alone (32%) or milk and milk replacer (44%).

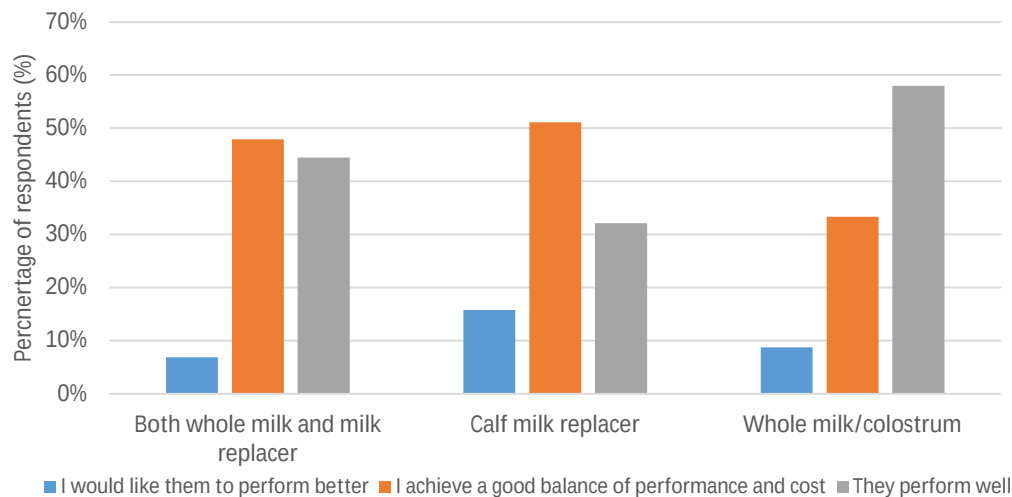


Figure 78. Summary of the percentage of respondents that would like calves to perform better, achieve a good balance between performance and cost or performed well among those that feed both whole milk and milk replacer, calf milk replacer, or whole milk/colostrum.

Q42. Do you use weigh scales to weigh your calves?

The majority of respondents had weigh scales (73%).

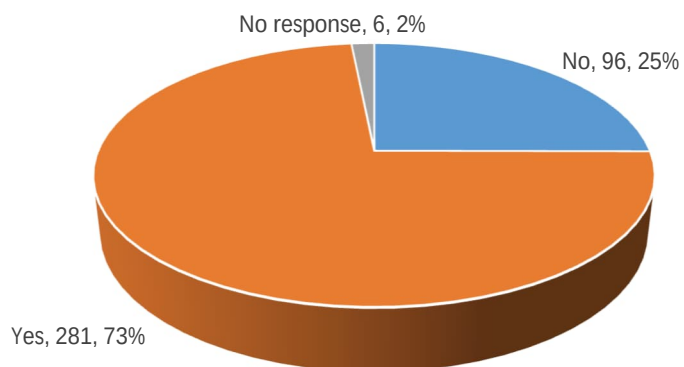


Figure 79. Pie chart of the number and percentage of respondents that had weigh scales to weigh their calves

Q43. At what weight do you sell the majority of your calves?

The majority of respondents sold their calves at 100 to 130 kg (54%) followed by over 230 kg (31%) with only 7% selling calves at 130 to 180 kg and 8% at 180 to 230 kg. This question was only answered by 53% of respondents.

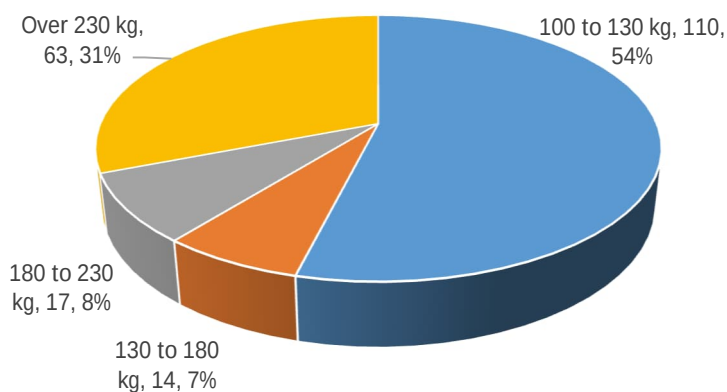


Figure 80. Pie chart of the number and percentage of respondents that sell their calves between 100 to 130, 130 to 180, 180 to 230 or >230kg.

Among different farm types, dairy farmers, lifestyle block and standalone rearers had the highest percentage of respondents who sold calves between 100 and 130 kg (70%, 47% and 73%, respectively). Dairy/beef grower/finishers had the highest percentage that sold calves over 230 kg (48%) followed by 100 to 130 kg (39%).

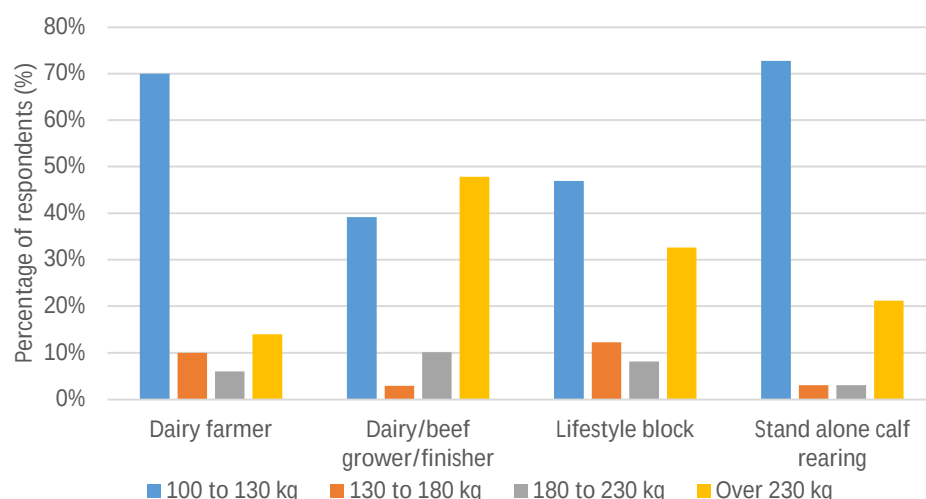


Figure 81. Summary of the percentage of respondents that sell calves between 100 and 130, 130 and 180, 180 and 230 or >230 kg among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearer and lifestyle block).

Q44. At what age do you sell the majority of your calves?

The response rate to this question was low at 53%. Among those that answered 54% sold calves at 5 months or less, 13% at 6 to 10 months or 33% at 11 months or more.

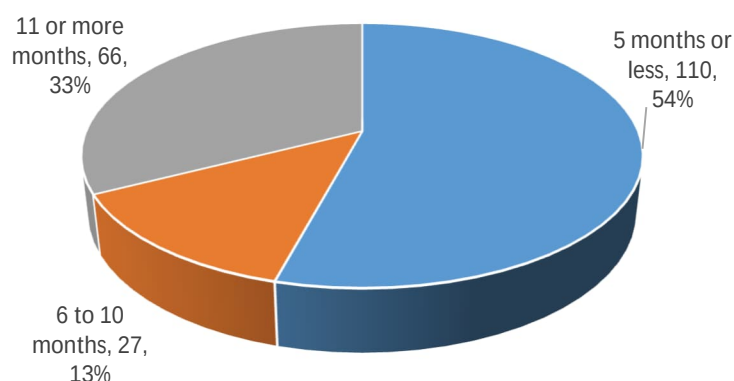


Figure 82. Pie chart of the number and percentage of respondents that sell their calves at less than 5 months, 6 to 10 months, more than 11 months or that did not respond.

Due to the low number of responses, there were no responses from respondents that reared calves for their own dairy or finishing farm. The pattern of responses for those that rear calves to sell or replacements and calves to sell were similar.

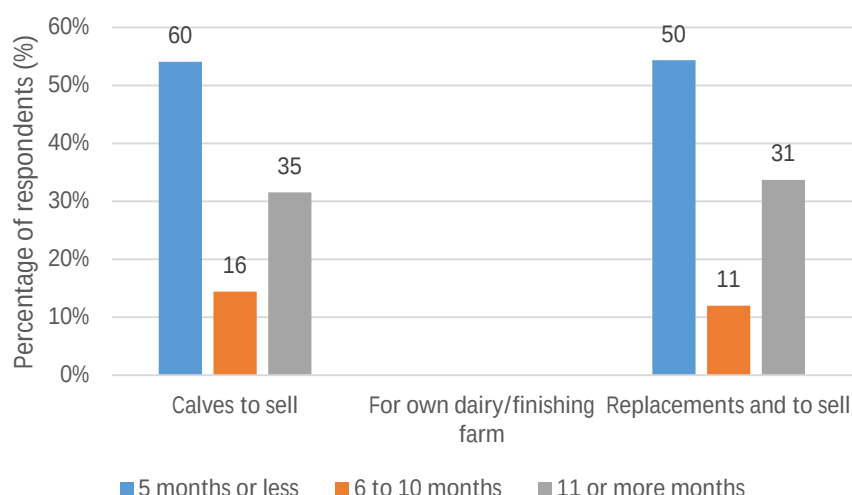


Figure 83. Summary of the percentage of respondents that sell calves at less than 5 months, 6 to 10 months, more than 11 months among respondents that reared calves to sell, for own dairy/finishing farm or , replacements and to sell.

Q45. Of the calves that you rear (excluding dairy replacements), what percentage have sale agreements in place at the time the feeder calf is purchased (or born)?

Responses were received from 51% of respondents. Among those that responded the majority (70%) had sale agreements for less than 10% of calves.

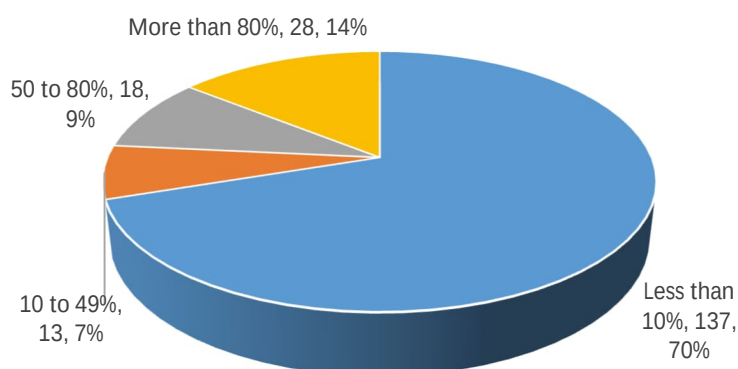


Figure 84. Pie chart of the number and percentage of respondents that had sale agreements for less than 10% of calves, 10 to 49%, 50 to 80%, more than 80% or that did not respond.

Among respondents that answered the question that pattern was similar except for standalone rearers who reported a higher percentage who had sale agreements for more than 80% of calves (30%) compared to the other farm types (range 9 to 14%).

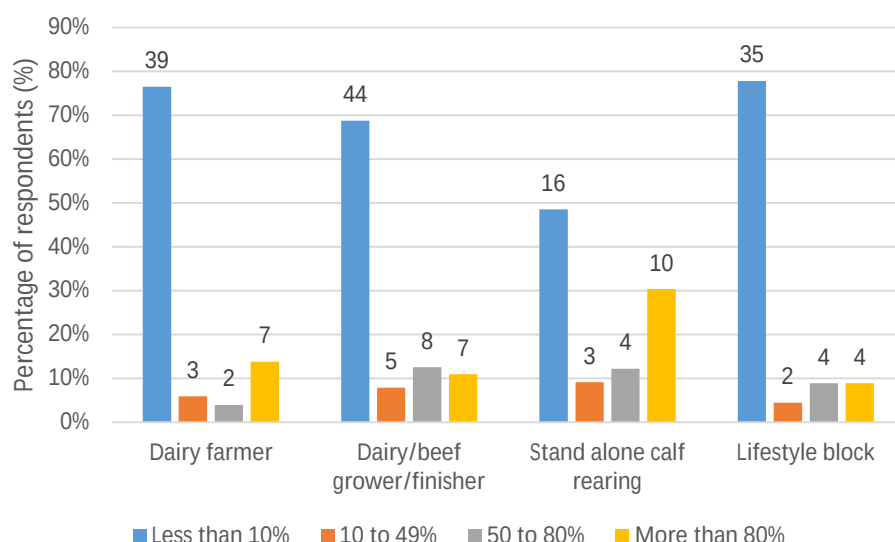


Figure 85. Summary of the percentage of respondents that sell calves between 100 and 130, 130 and 180, 180 and 230 or >230 kg among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearer and lifestyle block).

Q46. What is your main form(s) of sale agreement?

Of the 204 respondents that answered the question, the majority sold calves on the open market (51%), followed by both agreements negotiated either near the time, or in advance of the sale (17%). Few respondents agreed a sale price and deposit (2%) or rear calves for an agreed fee (1%).

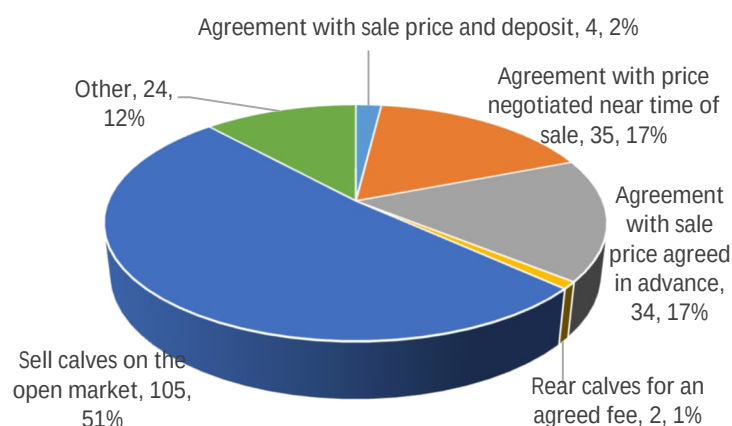


Figure 86. Pie chart of the number and percentage of respondents that had an agreement with sale price and deposit, agreement with price negotiated near time of sale, agreement with sale price agreed in advance, rear calves for an agreed fee or sell calves on the open market.

The pattern of responses among farm types was similar except that standalone rearers were more likely to have agreements negotiated in advance (31%) compared with all other farm types (10 to 13%).

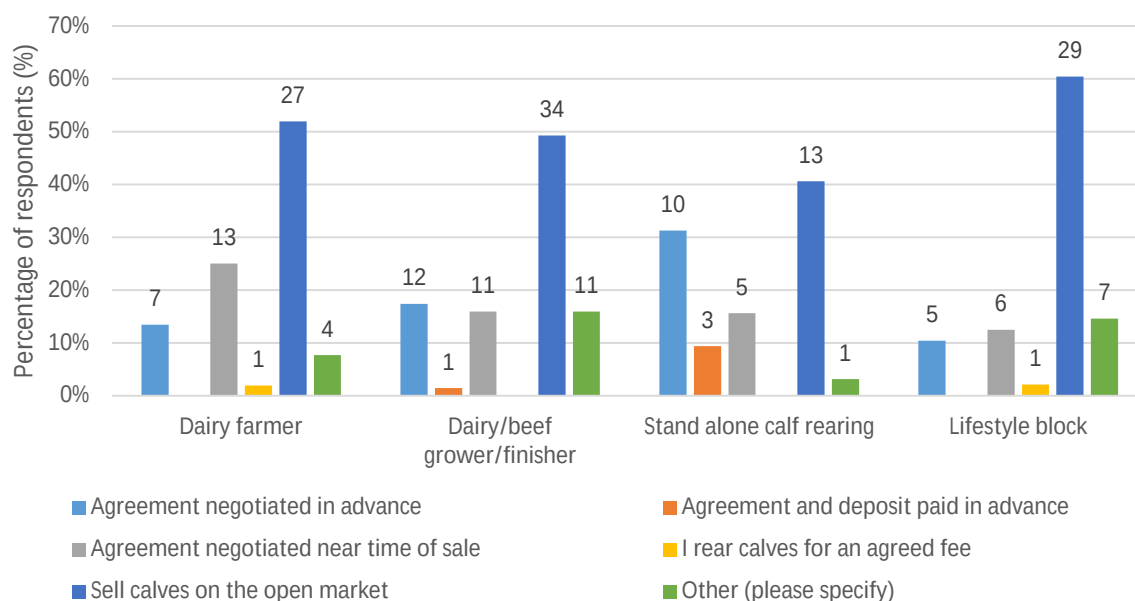


Figure 87. Summary of the percentage of respondents that an agreement with sale price and deposit, agreement with price negotiated near time of sale, agreement with sale price agreed in advance, rear calves for an agreed fee or sell calves on the open market among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearers and lifestyle block).

Q47. How satisfied are you with the profitability of your calf rearing operation?

Among respondents that answered the question the majority were satisfied calf rearing was contributing to the profitability of the wider business (43%) with slightly fewer satisfied that it was profitable in its own right (38%).

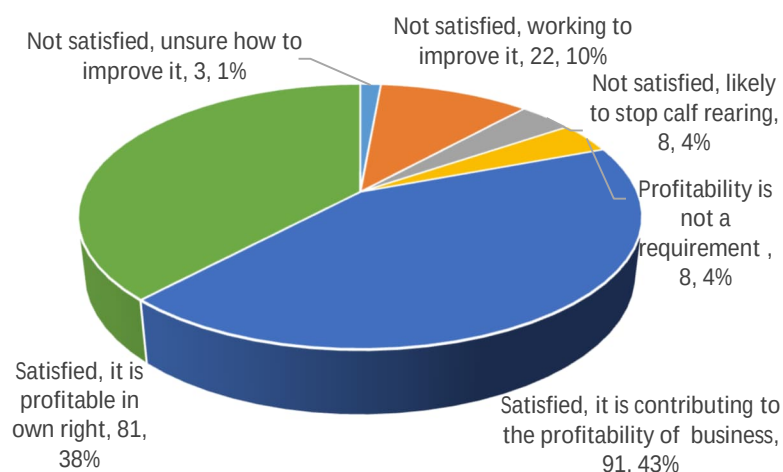


Figure 88. Pie chart of the number and percentage of respondents that were not satisfied with their profitability but were unsure how to improve it, working to improve it or likely to stop calf rearing or that were satisfied and contributing to wider farm business or profitable in its own right or profitability was not a requirement.

A comparison of farm type showed that dairy farmers were the most satisfied with 96% reporting that it contributed to the profitability of the wider business or was profitable in its own right. Similarly dairy/beef grower/finishers were also satisfied with 84% who felt it contributed to the profitability of the wider business or was profitable in its own right. Lifestyle block respondents were the least satisfied with 66% who felt it contributed to the profitability of the wider business or was profitable in its own right.

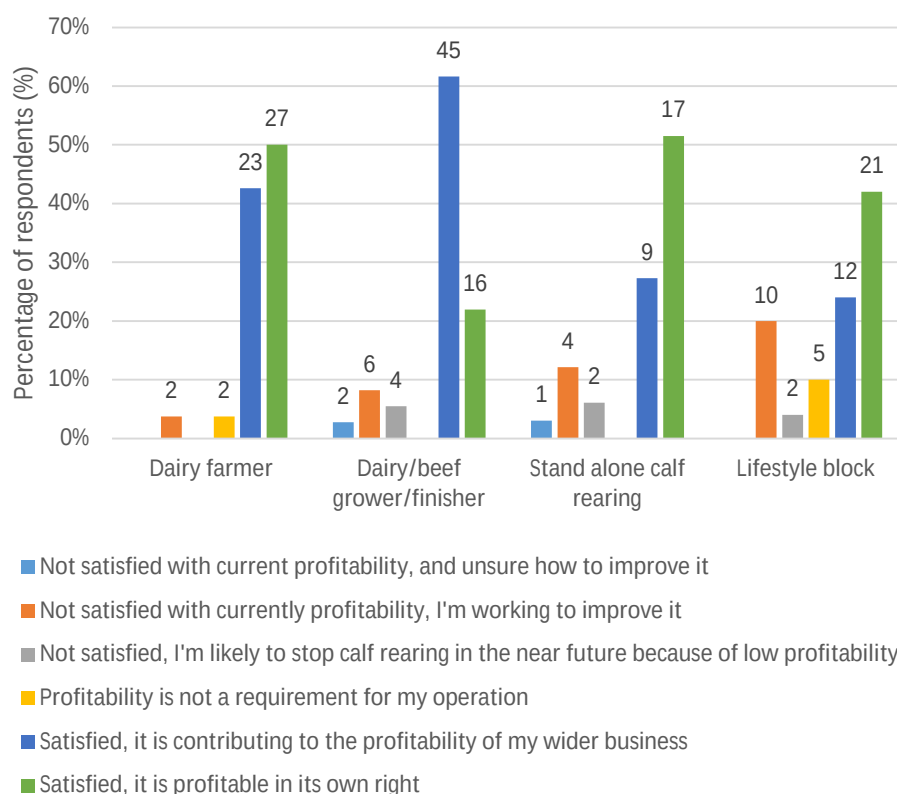


Figure 89. Summary of the percentage of respondents that were not satisfied with their profitability but were unsure how to improve it, working to improve it or likely to stop calf rearing or that were satisfied and contributing to wider farm business or profitable in its own right or profitability was not a requirement among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearers and lifestyle block).

Q48. Do you have an animal health plan for your calves that was developed and reviewed with your vet?

The majority of respondents had animal health plans either developed with a veterinarian (46%) or without a veterinarian (28%).

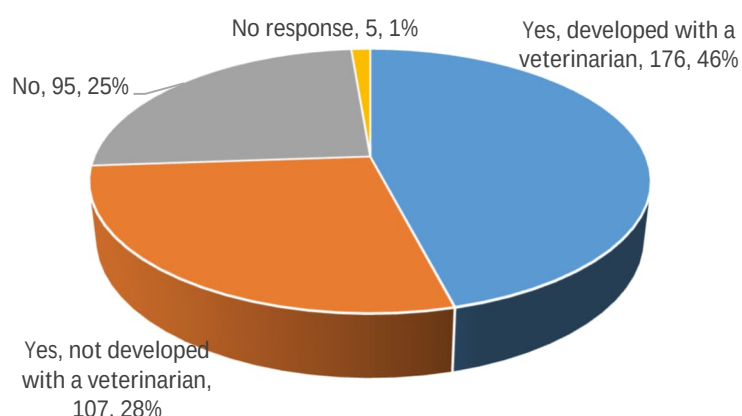


Figure 90. Pie chart of the number and percentage of respondents that had an animal health plan developed with a veterinarian, not developed with a veterinarian, no animal health plan or that did not respond.

Among different farm types, dairy farmers had the highest percentage of animal health plans developed with a veterinarian (69%) followed by dairy/beef grower/finishers (45%) and standalone

rearers (46%). Lifestyle block respondents had the lowest percentage with an animal health plan with 45% with a plan developed without a veterinarian and 12% with a veterinarian.

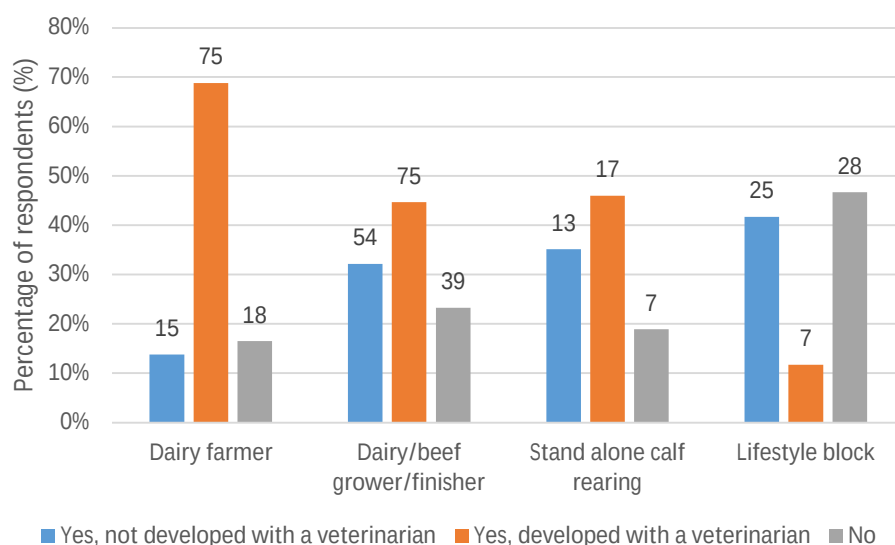


Figure 91. Summary of the percentage of respondents that had an animal health plan developed with a veterinarian, not developed with a veterinarian, no animal health plan among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearers and lifestyle block).

As herd size increased the percentage of respondents that had an animal health plan developed with a veterinarian increased from 15% to 67%.

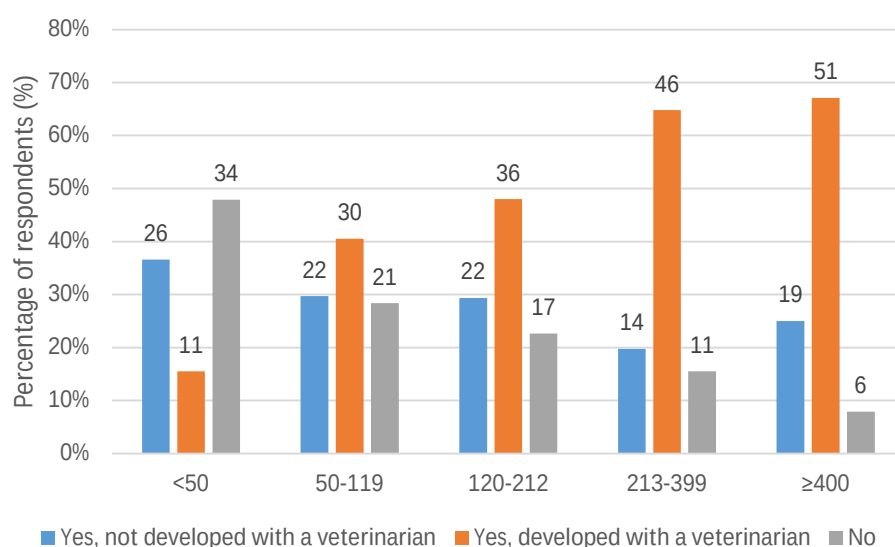


Figure 92. Summary of the percentage of respondents that had an animal health plan developed with a veterinarian, not developed with a veterinarian, no animal health plan among those with a herd size of <50, 50-119, 120-212, 213-399 or ≥400 calves.

Q49. In 2025 how often did a veterinarian visit your rearing operation to assess or treat calves?

The majority of respondents collected treatments from their vet clinic (57%) with only 38% who had a visit from a vet 1 to 3 times and 4% four or more times.

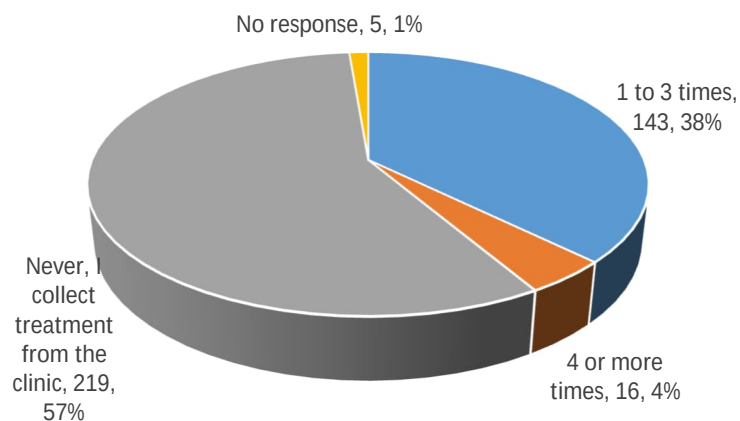


Figure 93. Pie chart of the number and percentage of respondents that had a veterinarian visit 1 to 3 times, 4 or more, that collected treatment from the clinic or that did not respond.

As herd size increased the percentage of respondents that had 4 or more visits increased from 0% to 11%.

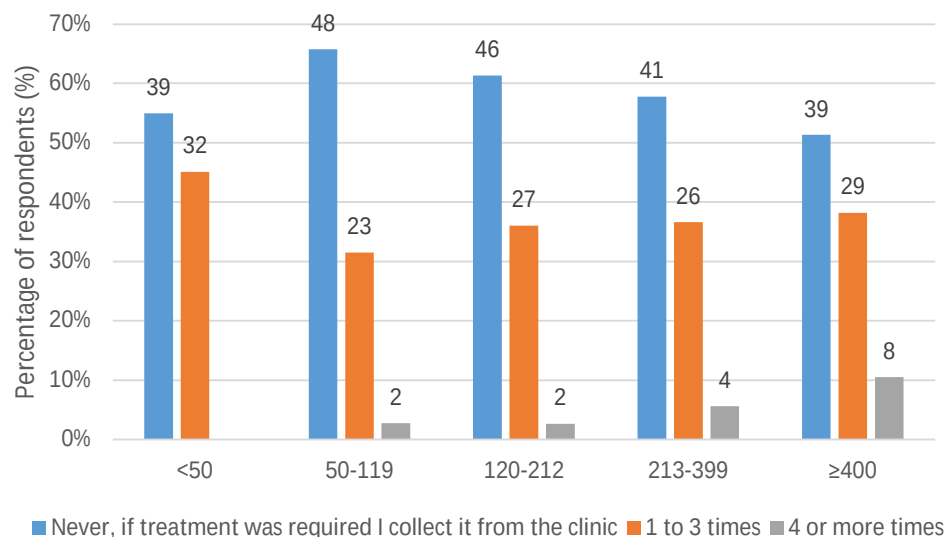


Figure 94. Summary of the percentage of respondents that had a veterinarian visit 1 to 3 times, 4 or more, or that collected treatment from the clinic among those with a herd size of <50, 50-119, 120-212, 213-399 or ≥400 calves.

Q50. Does your veterinarian understand your calf rearing operation?

The majority of respondents reported that they felt their veterinarian understood their operation (71%) with 18% that understood some aspects and 9% that did not understand.

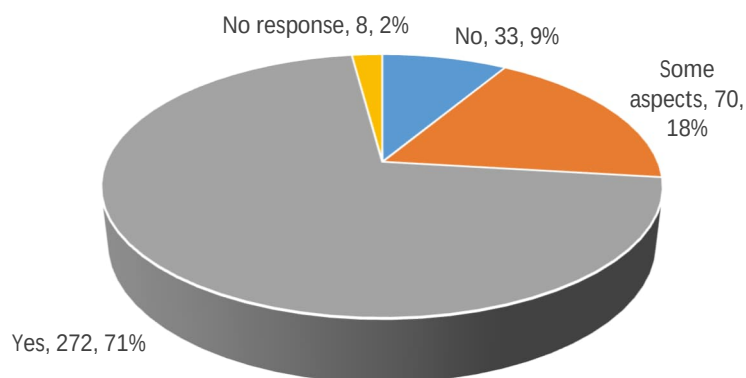


Figure 95. Pie chart of the number and percentage of respondents that felt their veterinarian understood their operation, understood some aspects, did not understand or that did not respond.

A comparison of farm type showed that although the majority of respondents felt their veterinarian understood their system, the percentage was highest among dairy farmers (81%) followed by dairy beef grower/finishers (73%), with standalone rearers and lifestyle block similar (65% and 62%, respectively).

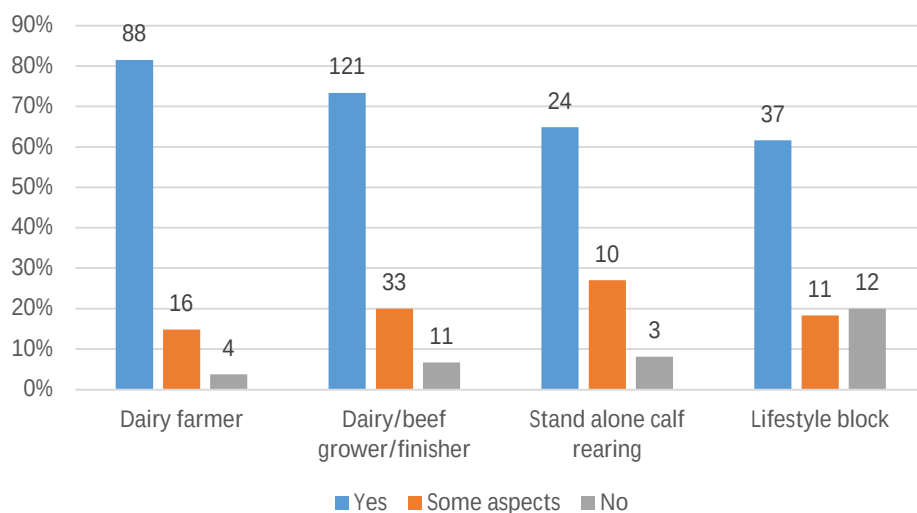


Figure 96. Summary of the percentage of respondents that felt their veterinarian understood their operation, understood some aspects, did not understand among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearers and lifestyle block).

A comparison of herd size showed that respondents from larger operations had greater confidence in their veterinarian's knowledge of the system.

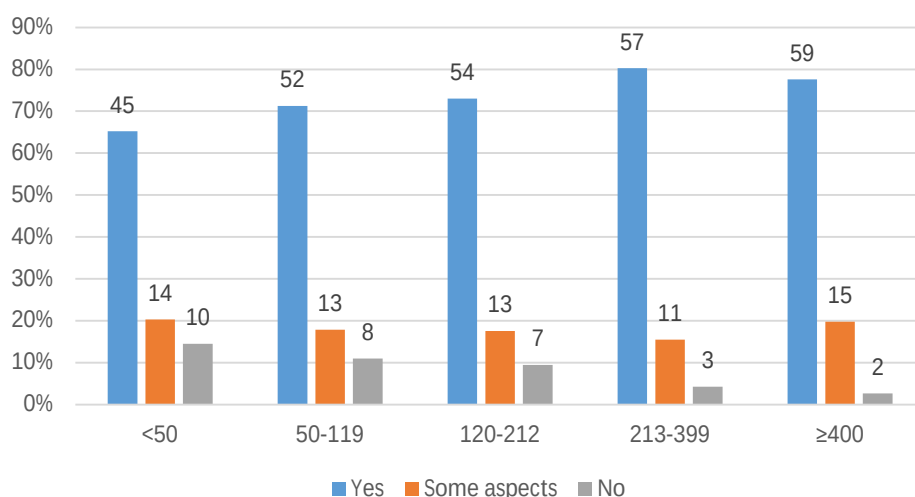


Figure 97. Summary of the percentage of respondents that felt their veterinarian understood their operation, understood some aspects, did not understand among those with a herd size of <50, 50-119, 120-212, 213-399 or ≥400 calves.

Q51. In 2025, what percentage of calves died prior to reaching 100 kg?

The majority of respondents reported that they had a mortality rate of less than 5% (88%) with 9% with mortality between 5 and 10% and 2% with more than 10%.

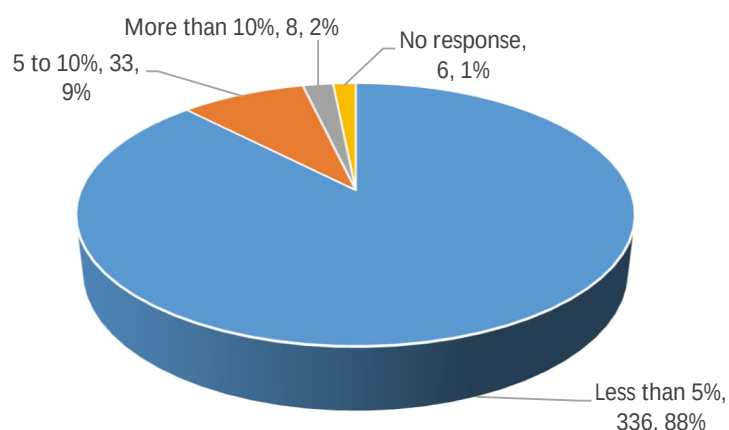


Figure 98. Pie chart of the number and percentage of respondents that reported a mortality rate of less than 5%, 5 to 10%, more than 10% or that did not respond.

The pattern of mortality did not differ among respondents that source calves from 1, 2 to 5 or more than 6 farms or those that don't source calves from farms.

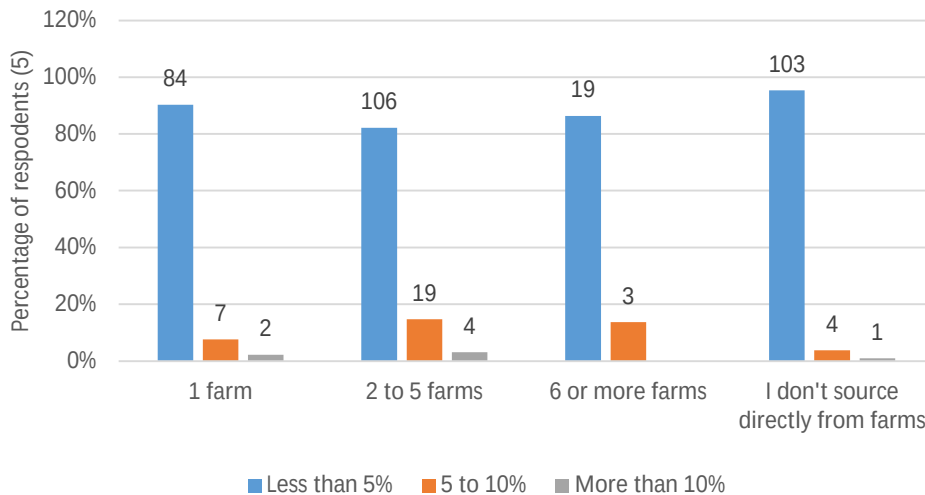


Figure 99. Summary of the percentage of respondents that had a mortality rate of less than 5%, 5 to 10%, more than 10% among those that sourced calves from 1, 2 to 5, 6 or more or that do not source calves from other farms.

Calves sourced either from saleyards or multiple sources which included saleyards or on-farm sales had a greater percentage with a mortality rate greater than 10% (8%, 8% and 7%, respectively).

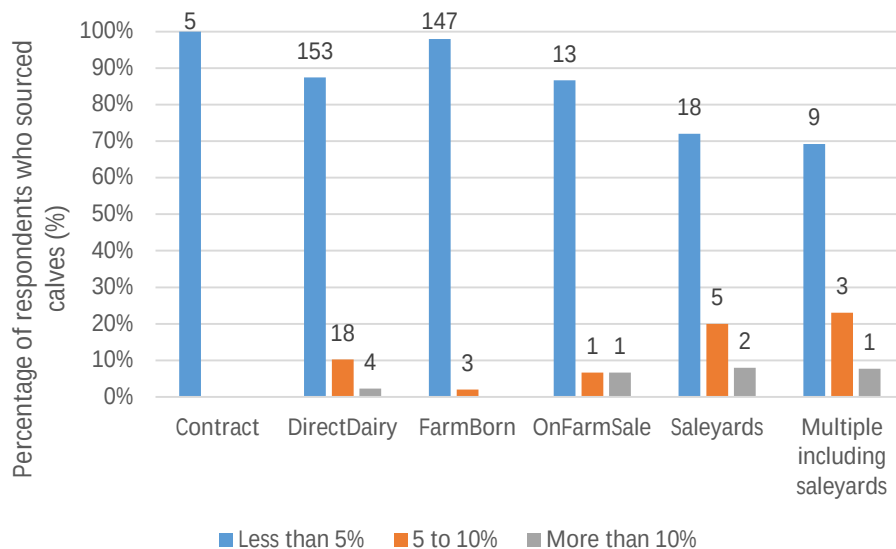


Figure 100. Summary of the percentage of respondents that had a mortality rate of less than 5%, 5 to 10%, more than 10% among those whose calves were born on their farm, contract rearing agreement, direct from dairy farmer, on-farm sale via a stock agent, saleyards.

Q52. Rate the importance that the following factors have in determining how many calves you rear.

Among the factors provided, mean scores ranged from 47 to 75 with calves needed for finishing, shed capacity, calves born in dairy system, enjoyment of rearing all scoring more than 70 out of 1200.

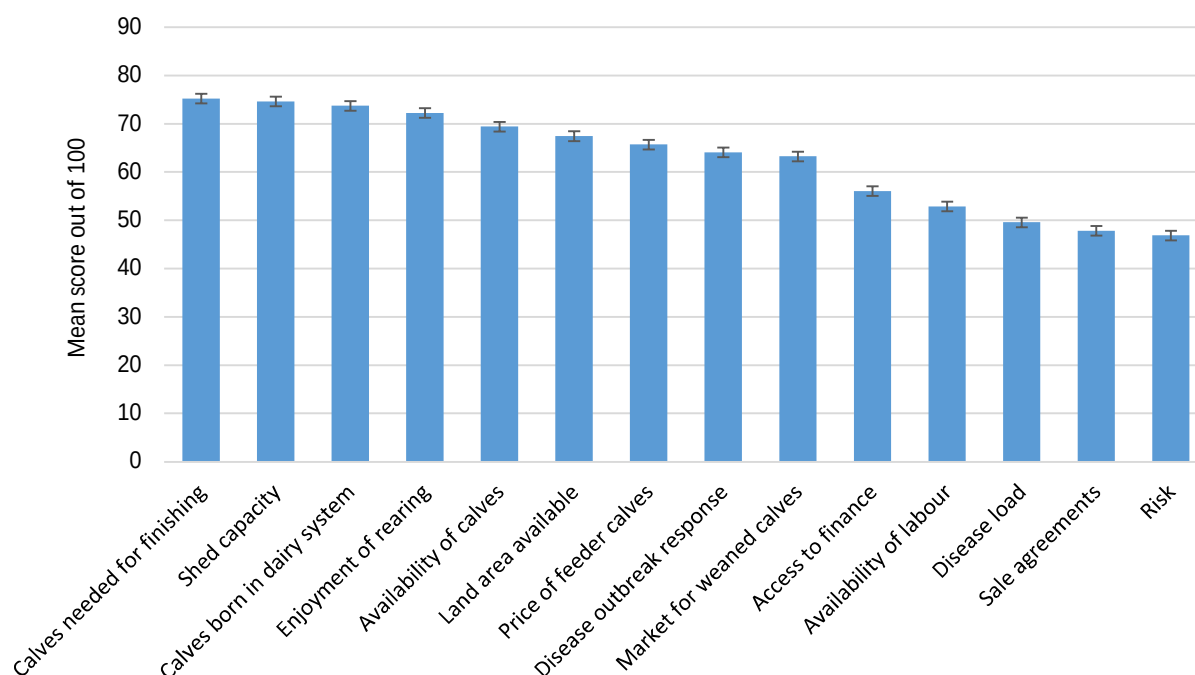


Figure 101. Mean ($\pm$ SEM) score out of 100 of factors that determine how many calves can be reared.

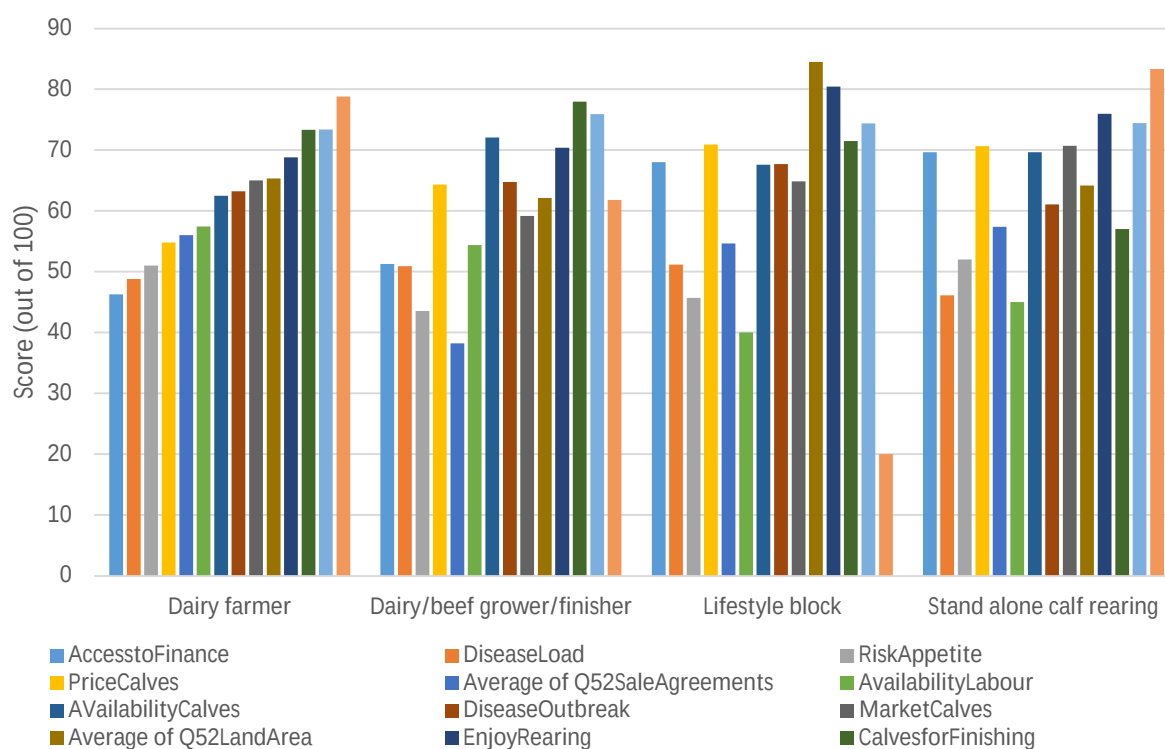


Figure 102. Mean ($\pm$ SEM) score out of 100 of factors that determine how many calves can be reared among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearers and lifestyle block).

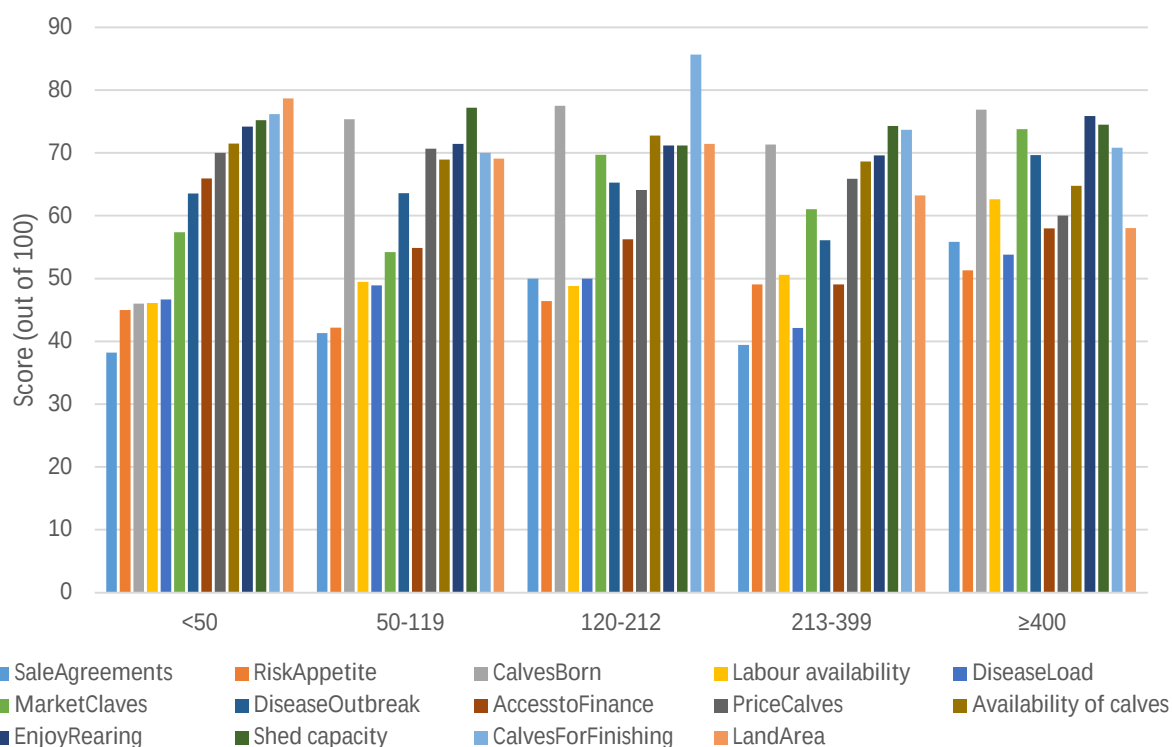


Figure 103. Mean ($\pm$ SEM) score out of 100 of factors that determine how many calves can be reared among respondents with less than 50 calves, 50 to 119, 120 to 212, 213 to 399 or ≥ 400 .

Q54 and 55. Change in calf numbers

The change in calf numbers was calculated based on the answers to “Q54 Approximately how many calves did you rear in the previous year (2024)?” and “Q55. How many calves do you plan to rear this year (2026)?” The majority of respondents indicated that they were planning to rear more calves (52%) with 23% no change and 17% less. When calculated as a percentage change between the numbers planned for 2026 and those reported in 2024 the mean was $146\% \pm 9\%$.

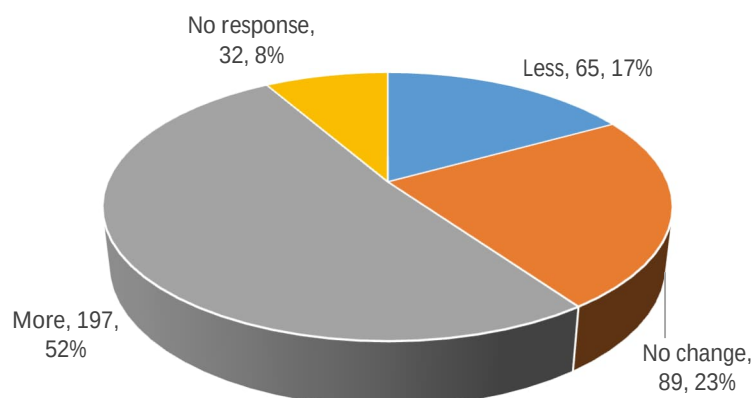


Figure 104. Pie chart of the number and percentage of respondents that planned to rear fewer, no change or more calves in 2026 than in 2024.

Q56. Select the three most common diseases in your calf rearing operation

The most common disease selected in the top three by respondents was scours (85%). Similar rates of navel ill (39%), pneumonia / respiratory disease (32%) and coccidiosis (34%) were also selected.

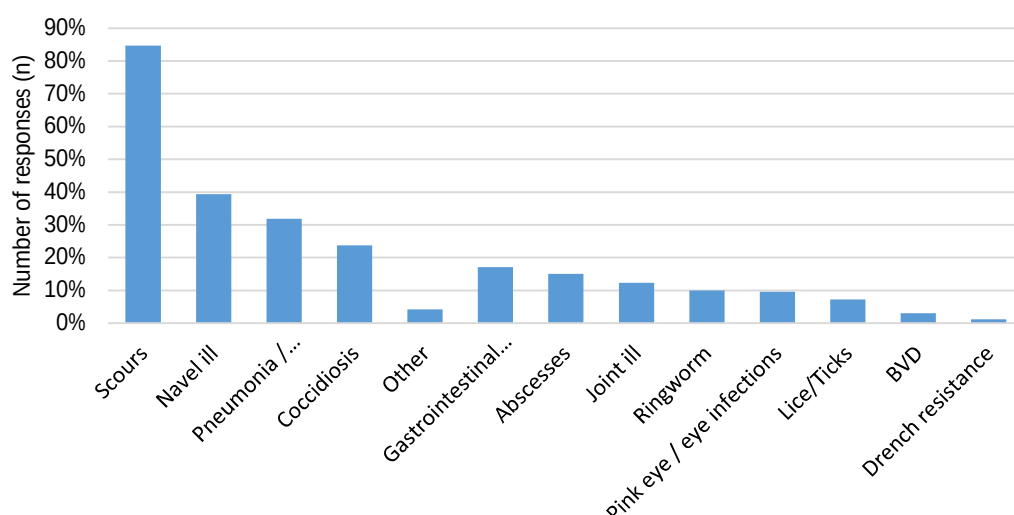


Figure 105. The percentage of respondents that reported each disease was in the most common three

Q57. Select the three diseases that are hardest to prevent/treat in your calf rearing operation

Similar to question 56, scours (26%), followed by pneumonia / respiratory (17%) and navel ill (12%) were identified in the top three hardest to prevent or treat.

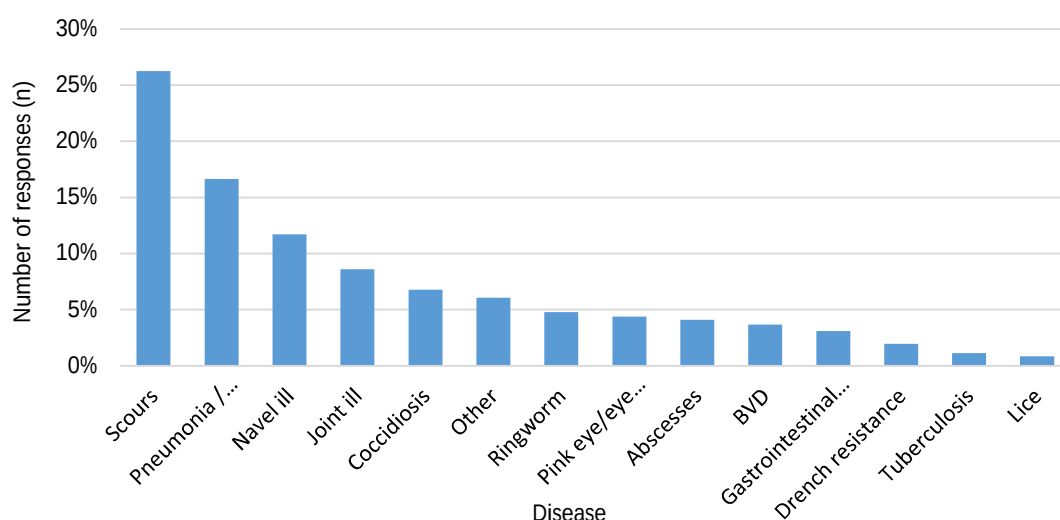


Figure 106. The percentage of respondents that reported each disease was hardest to prevent or treat.

Q58. Select the three diseases that cost your calf rearing operation the most

Again scours (33%), followed by pneumonia / respiratory (16%) were the most selected as being in the top three most costly diseases, however, coccidiosis was ranked third by 11% of respondents closely followed by navel ill (10%).

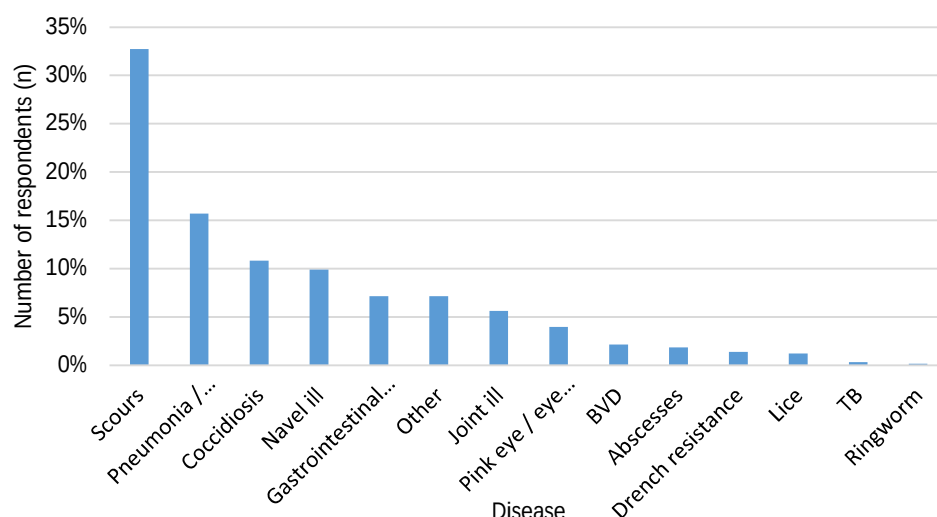
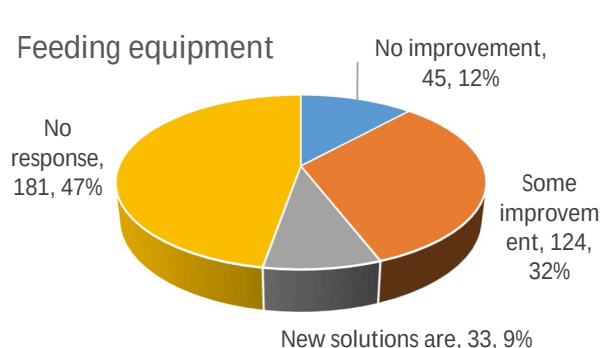
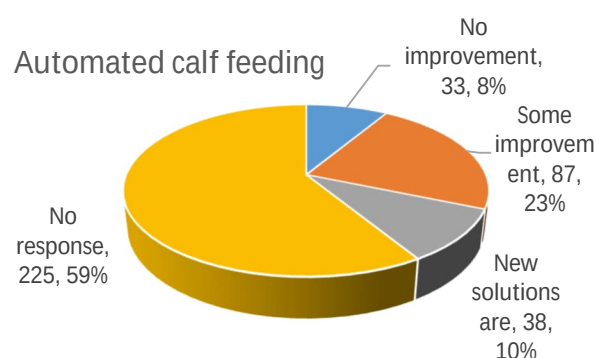
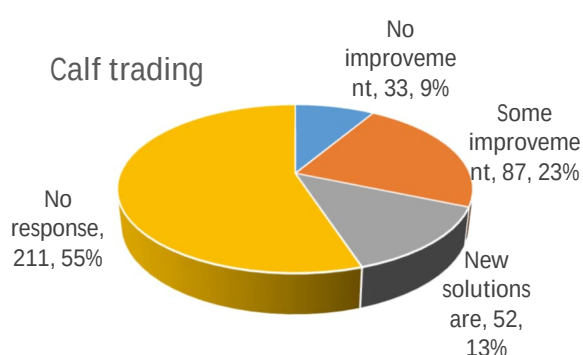
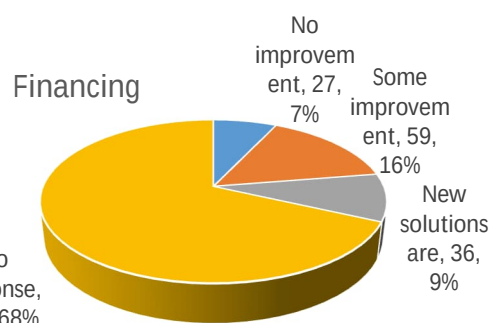


Figure 107. The percentage of respondents that reported each disease cost the operation the most.

Q59. Assign the following areas based on whether you think need innovation is needed to drive improvement in the effectiveness of calf rearing or to decrease costs.

The area that had the highest percentage of respondents that felt that new solutions were needed was in calf trading (13%) followed by automated calf feeding (10%). Some improvements were most commonly selected for feeding equipment (32%), automated calf feeding (23%) and calf trading (23%).



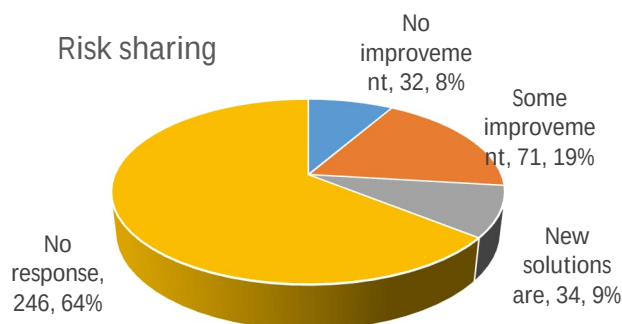


Figure 108. Pie charts of areas including bedding, housing, feeding equipment, automated calf feeding, calf trading, financing and risk sharing that need no improvement, some improvement, or new solutions to improve the effectiveness of calf rearing or to decrease costs.

Q60. Do you have a suggestion for an improved or new product/service/tool that would improve calf rearing?

The themes identified were wide ranging and included 1) colostrum management, testing, passive transfer; 2) calf health, disease prevention, monitoring; 3) feeding systems, milk replacer, nutrition; 4) calf sourcing, genetics, traceability; 5) marketing, sales systems, contracts, traceability; 6) infrastructure, facilities, equipment; 7) knowledge transfer, information, education; 8) industry standards, regulation, quality assurance; 9) economics, profitability, finance and 10) Labour and operational efficiency. The percentage of responses in which each theme was mentioned were 15% for colostrum management, testing and passive transfer, 13% for calf health, disease prevention, monitoring and feeding systems, milk replacer, nutrition, 12% for calf sourcing, genetics, traceability, 11% for marketing, sales systems, contracts, traceability.

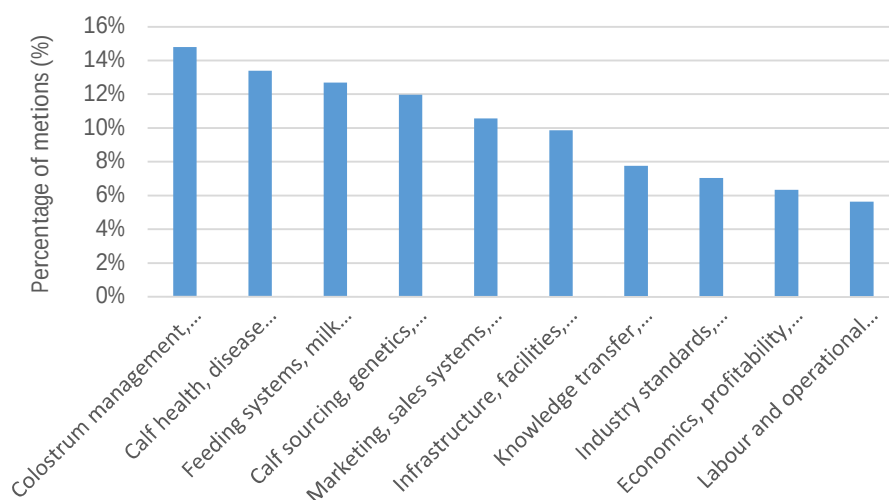


Figure 109. The percentage of responses in which each theme relating to new innovations was mentioned

Q61. From the list below select the three most useful sources of information on calf rearing.

The sources of information that respondents most commonly identified as in their three most useful were veterinarians (25%) and other farmers (24%). Dairy NZ and Ag retailers were ranked in the top three by 12% and 10%, respectively.

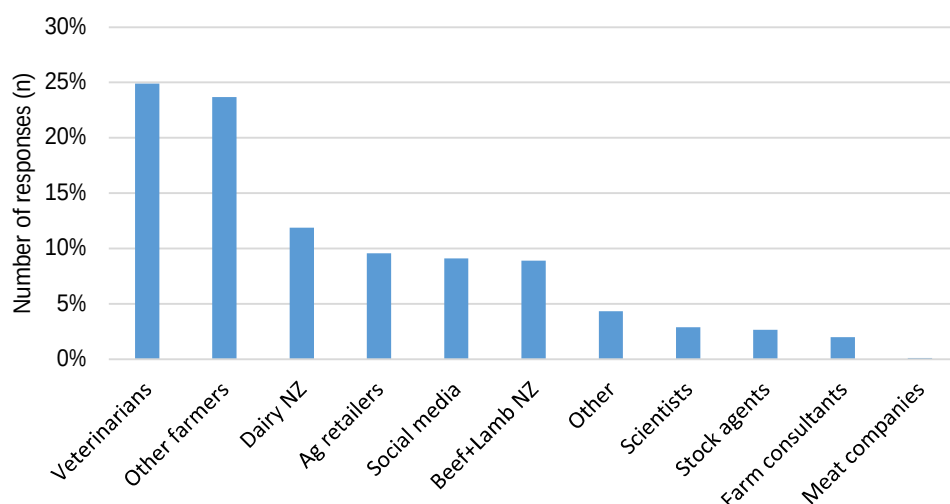


Figure 110. The percentage of respondents that identified each information source one of the most useful three sources.

A comparison of farm type showed that 20% of information sources selected by dairy farmers included DairyNZ in their top three compared with between 4 to 9% of other farm types. Other farmers were chosen in the top three by the majority of dairy/beef grower/finishers (24%), standalone calf rearers (26%) and lifestyle block (27%). Veterinarians were frequently selected by dairy/beef grower/finishers, standalone calf rearers and lifestyle block (19 to 24%).

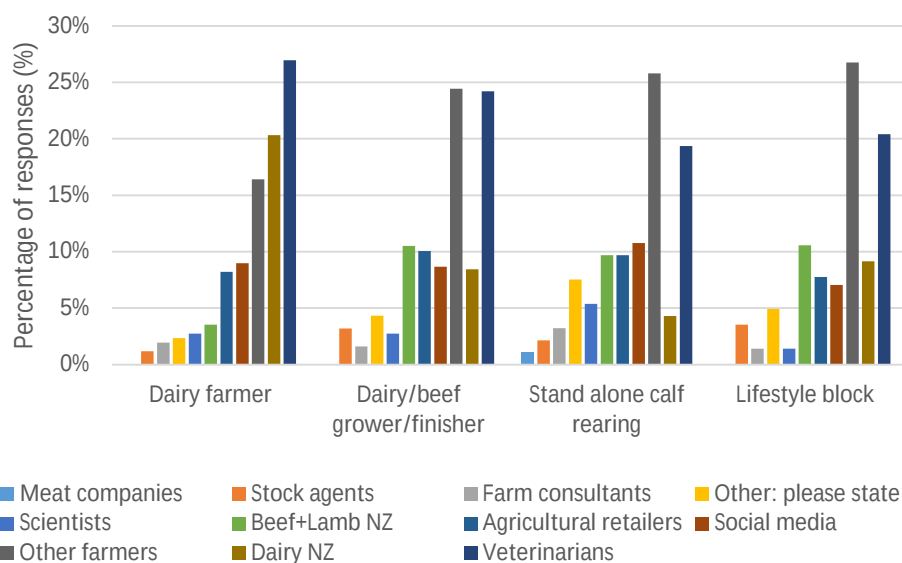


Figure 111. The percentage of responses of the top three most useful sources of information among farm types (dairy farmer, dairy/beef grower/finisher, standalone calf rearers and lifestyle block).

A comparison of herd size showed that those with small herds (less than 50 calves) selected a wider range of sources than those with more than 50 calves. Regardless of herd size, veterinarians (22 to 26%) and other farmers (18 to 26%) were often selected. Interestingly the third highest information sources selected by respondents with less than 50 calves was Beef+Lamb NZ (14%) compared with between 5 and 9% among other herd sizes.

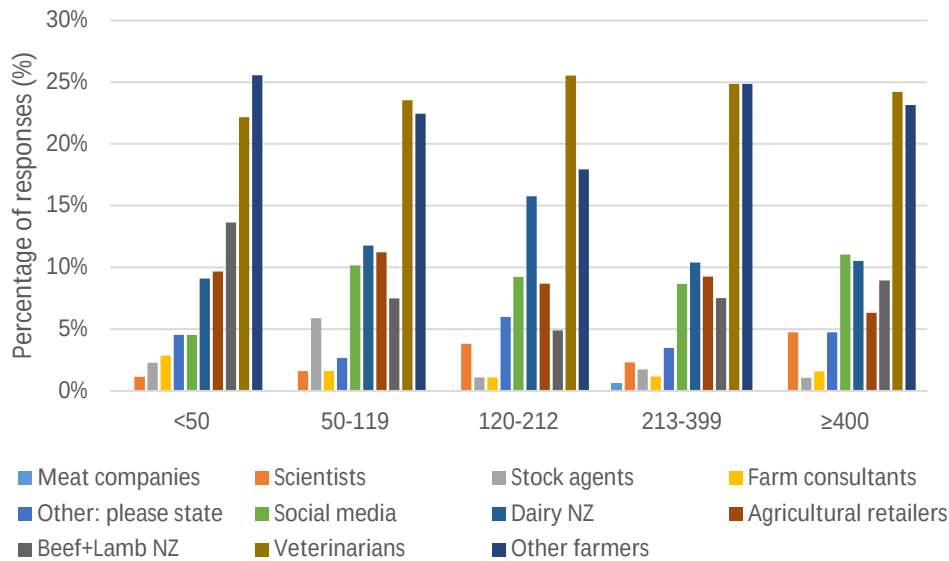


Figure 112. The percentage of responses of the top three most useful sources of information among respondents with less than 50 calves, 50 to 119, 120 to 212, 213 to 399 or ≥400

Q62. From the list below select the three topics you would most like more information about?

Similar percentages of respondents identified that they would more information about selecting calf milk replacer (15%), facility design (12%), milk feeding volumes (11%), animal health plans (11%), and selecting meal (11%).

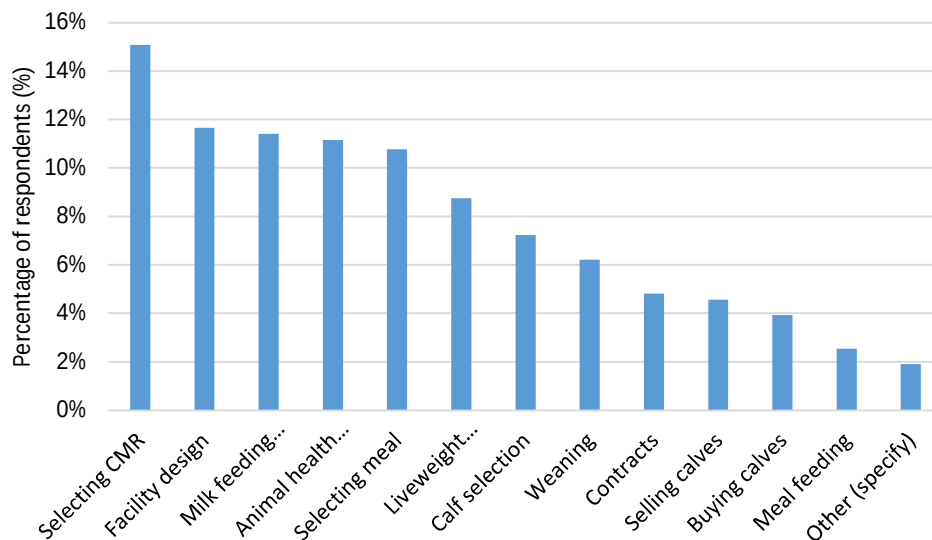


Figure 113. The percentage of respondents that identified that they would like more information about each topic.

Q63. If you could change one thing about your calf rearing operation, what would it be?

The themes identified in the analysis of this questions most often included housing, sheds, shelter, facilities, infrastructure (n=110, 36%), followed by feeding, milk, milk powder, nutrition systems (n=62, 20%) and expansion and capacity growth (n=30, 10%).

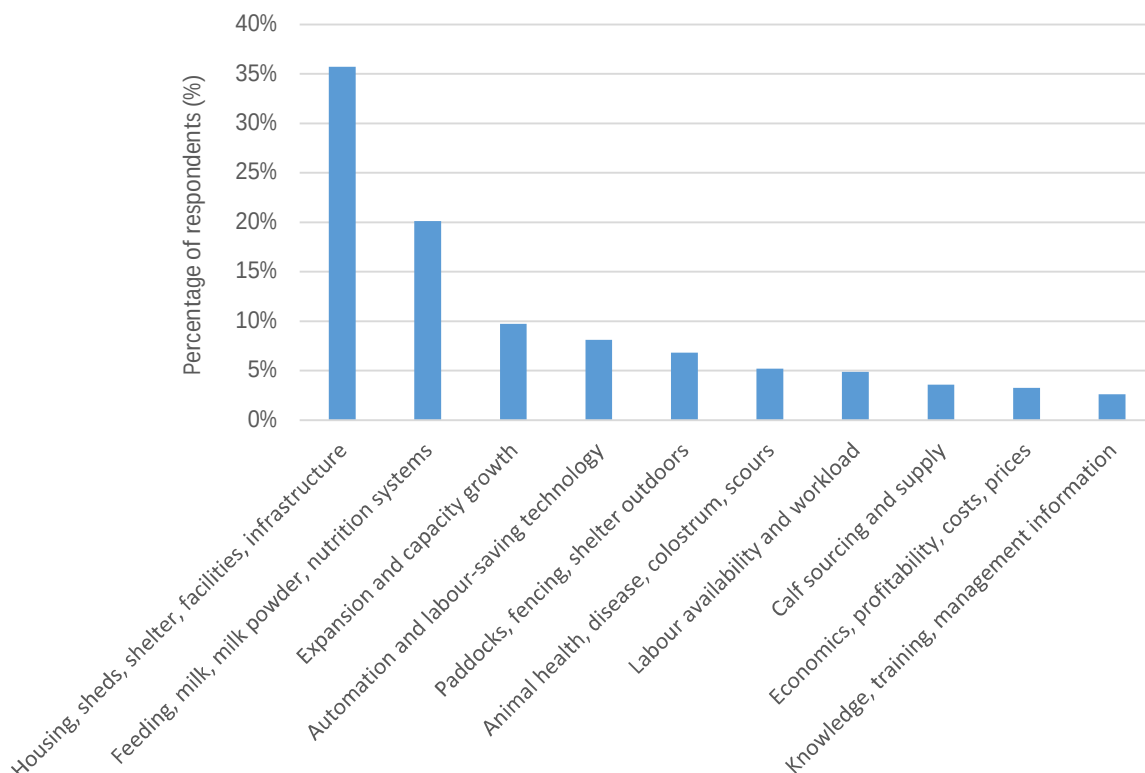


Figure 114. The percentage of times each theme relating to one change that could be made to the farming operation was mentioned.

Benefits/clear takeaway message(s)

This survey has provided a wide range of data from across the calf rearing industry. The survey collected responses from across the country and farm types with calf rearing operations ranging in size from 8 to 5800 calves. Calf management and rearing practices showed variation between farm types and herd sizes with feeding practices showing a high degree of variation. The data generated in will provide baseline data to investigate methods of maximising efficiency gains through calf feeding management, selection of calves based on genetic and sires and sourcing calves.