



Beef x Dairy Crossbreeding and Calf Management Practices on Wisconsin Dairy Farms

Part 2: Calf Care & Marketing

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A beef x dairy genetics survey was conducted in 2018, which led to additional research in 2021 when extension educators and specialists surveyed 40 Wisconsin dairy farms utilizing beef x dairy genetics. In addition to sire selection, the 2021 survey included newborn calf care and milk feeding practices. This factsheet highlights some of the calf management results, with greater detail available in the corresponding white paper. Both the 2018 and 2021 white papers are available for download at <https://go.wisc.edu/e9a3x0>. Part one of this series highlights the survey results regarding beef semen use and how beef sires are selected on Wisconsin dairy farms.

Calf Care Practices

One of the key objectives of the 2021 survey was to dig deeper into calf care practices. Thirty farms marketed most of their beef x dairy crossbred calves at 2 weeks of age or less, and ten farms marketed the majority at six weeks or greater. For the beef x dairy crossbred market to remain sustainable, crossbred calves need healthy immune systems when they leave the farm. Healthy immune systems allow these calves to better cope with the stress of moving to grower facilities. When asked about their overall care of beef x dairy crossbred calves, 87% of respondents indicated both dairy replacement and beef x dairy crossbred calves received the same newborn practices. However, when we asked about specific practices, differences emerged. For example, vaccine use varied depending on if the farmer retained ownership of the calf. When asked about scours and/or respiratory vaccine usage on the crossbred calves, 50% said they administered these vaccines (Table 1). Farmers retaining ownership provided neonatal vaccinations more often. The decision to vaccinate, or not vaccinate, young calves before leaving the farm may be based on the product used (and its associated meat withdrawal), where the calves are going, and the calf's age. Neonatal vaccine use by farmers on calves before they leave the farm is an area for future research.

All farmers reported the amount of colostrum fed at first feeding and how soon after birth beef x dairy calves received their first feeding. Ninety-five percent (95%) reported feeding colostrum within six hours of birth, with the remaining 5% feeding colostrum within 12 hours of birth (Table 2).

Table 1. Administer Neonatal Calf Vaccinations for Scours and/or Respiratory Disease			
Yes		No	
50%		50%	
Market ≤ 2 Weeks		Market at 6+ Weeks	
Yes	No	Yes	No
33%	67%	100%	0%

Sixty-eight percent (68%) reported feeding at least 4 quarts of colostrum (Table 3), with the remaining 32% feeding lesser amounts (13 farmers).

Table 2. How Soon After Birth is Colostrum Fed to Beef x Dairy Crossbred Calves?		
Within 6 Hours	Within 12 Hours	After 12 Hours
95%	5%	0%

Table 3. What Amount of Colostrum is Provided to Beef x Dairy Crossbred Calves at 1st Feeding?				
None	1 Quart	2 Quarts	3 Quarts	4 Quarts
0%	2.5%	17.5%	12.5%	67.5%

Based on these results, it appears that farmers are feeding colostrum in a timely manner. It is less clear if sufficient amounts of colostrum were being fed. Nine of the 13 farmers providing less than 4 quarts of colostrum at first feeding reported providing a second feeding of colostrum. Four of the 13 farmers providing less than 4 quarts of colostrum at first feeding did not provide a second feeding. Without testing calves IgG levels and collecting further information, it is unknown if the farms feeding less than 4 quarts at first feeding are achieving adequate passive transfer of immunity.

Marketing

Wisconsin dairy bull calves have traditionally been sold at a young age. To determine if beef x dairy crossbred calves are also sold at a young age, we asked farmers to indicate the calf's age when the majority of their beef x dairy crossbred calves are marketed.

Our survey results indicated 65% of farms market beef x dairy crossbred calves at less than one week of age (Table 4). Some farmers retain ownership of their beef x dairy crossbred calves through weaning or to finish.

Table 4. Age Beef x Dairy Crossbred Calves are Marketed		
	# of Survey Farms	Percent
< 1 week	26	65%
1-2 weeks	4	10%
2-8 weeks	1	2.5%
8 weeks-1 year	4	10%
Finished	5	12.5%

This presents new opportunities and challenges to determine how a beef x dairy enterprise can efficiently utilize the dairy farm's resources. Dairy managers will also need to learn how to adopt sound practices for managing crossbred cattle on feed.

Marketing of beef x dairy crossbred calves was evenly split between using auction barns (60%) and private sales (57%) (Table 5). Several farmers indicated they used more than one marketing method. Farmers also indicated they used contract programs. One farmer harvests their finished cattle for direct sale to consumers. The number of farmers using auctions, direct sales, and contract programs shows potential for enhancing communication between beef x dairy calf producers and buyers. Sharing the calf's genetics and health records with the buyer will increase trust between the dairy and beef sectors.

Table 5. How Beef x Dairy Crossbred Calves are Marketed		
	# of Survey Farms	Percent
Auction	24	60%
Private Sale	22	57%
Contract Program	4	10%
Other	1	2%