

The Prevalence and Impact of Dairy/Beef Crosses on Cattle Producers in New Hampshire

Eleanor Braun

Advisor Dr. Drew Conroy, University of New Hampshire

Introduction

- In a typical dairy operation bull calves are a low value asset.
- Two conventional uses for dairy bulls: veal and raising them as dairy beef.
- Dairy animals raised for beef often do not finish to a grade comparable to beef cattle and therefore receive a lower price when sold (Holden & Butler, 2018).
- In the last decade, the number of dairy farmers breeding their dairy cows to beef semen has increased dramatically. This breeding pattern can be seen by examining beef semen sales against dairy semen sales and overall dairy production (Geiger 2019, 2022, Cadloff 2022, NASS 2022).
- **The objective of this research was to determine the prevalence and impact of dairy x beef crosses on farmers and stakeholders in New Hampshire.**

Methods

- An electronic survey, developed using Qualtrics, was sent out to all 97 dairy farms in New Hampshire.
- The addresses of all the farms in NH were obtained with the help of Dr. Pete Erickson, the NH Dairy Production Specialist for UNH Cooperative Extension.
- A paper copy of the survey was sent to farms with a return envelope, as well as a web address to access the survey online.
- The questions for the survey were devised after conducting several in person and telephone open ended interviews with stakeholders who have interest in NH dairy/beef crosses.
- The response rate was 36%.

Results

- 30 out of 35 respondents answered that they currently breed beef semen to their dairy cows. 5 respondents answered that they did not breed dairy x beef.
- 86% of respondents who have bred dairy x beef calves said that they will continue to do so, while the other 14% said they were unsure.
- 34% of respondents raise their dairy/beef calves on their farms. The other 66% sell the calves at auction or to private buyers.
- 26% of respondents began breeding dairy x beef in the year 2000 or prior. 65% of farms began breeding dairy x beef in 2014 or later. There were only two outliers that fell outside these ranges, in 2003 and 2010.



Figure 1. Dairy and dairy x beef heifers raised together at Bohanan Farm in New Hampshire.

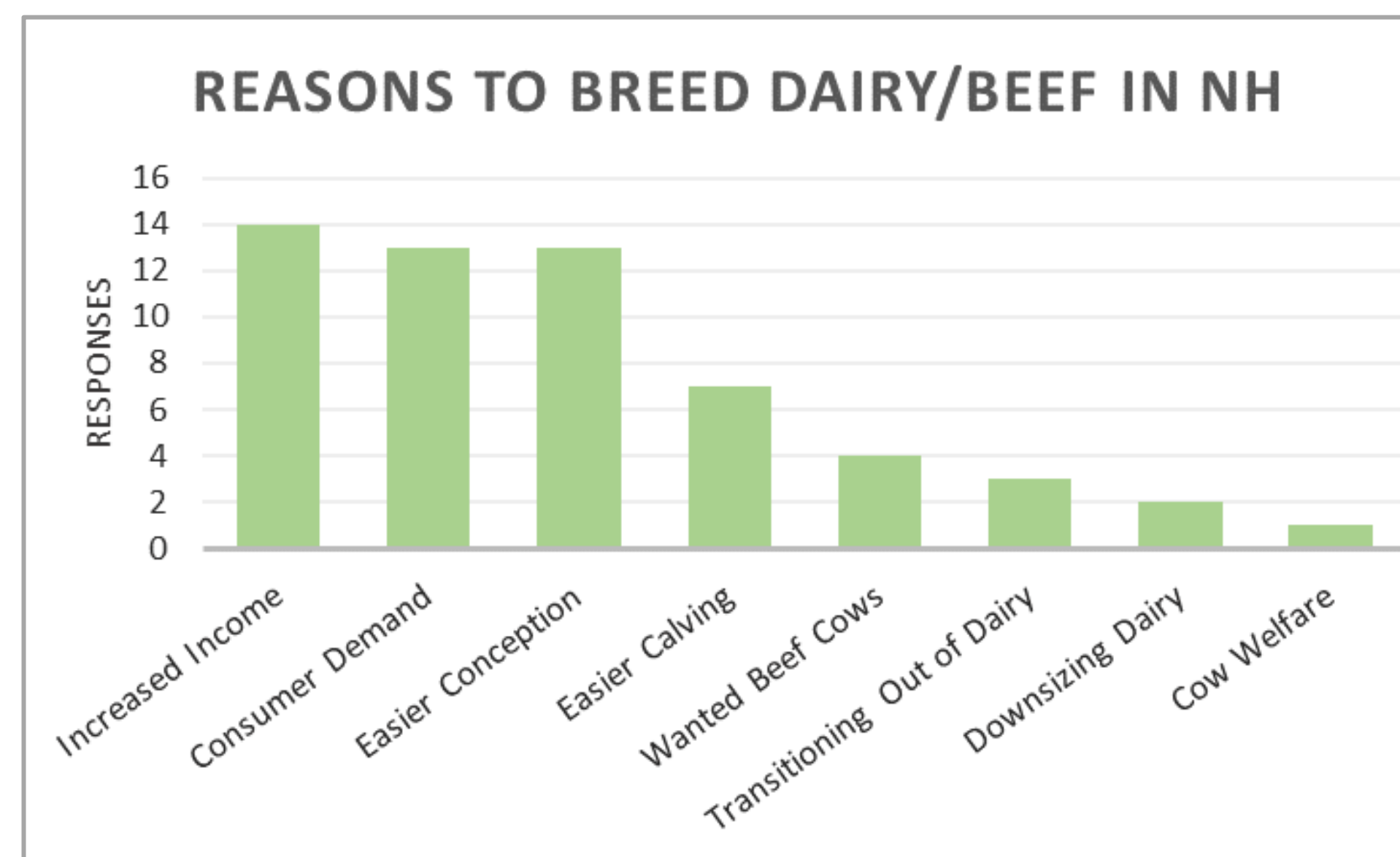


Figure 2. Respondent answers to "Why did you begin to breed dairy x beef calves?". Respondents were able to pick more than one response.

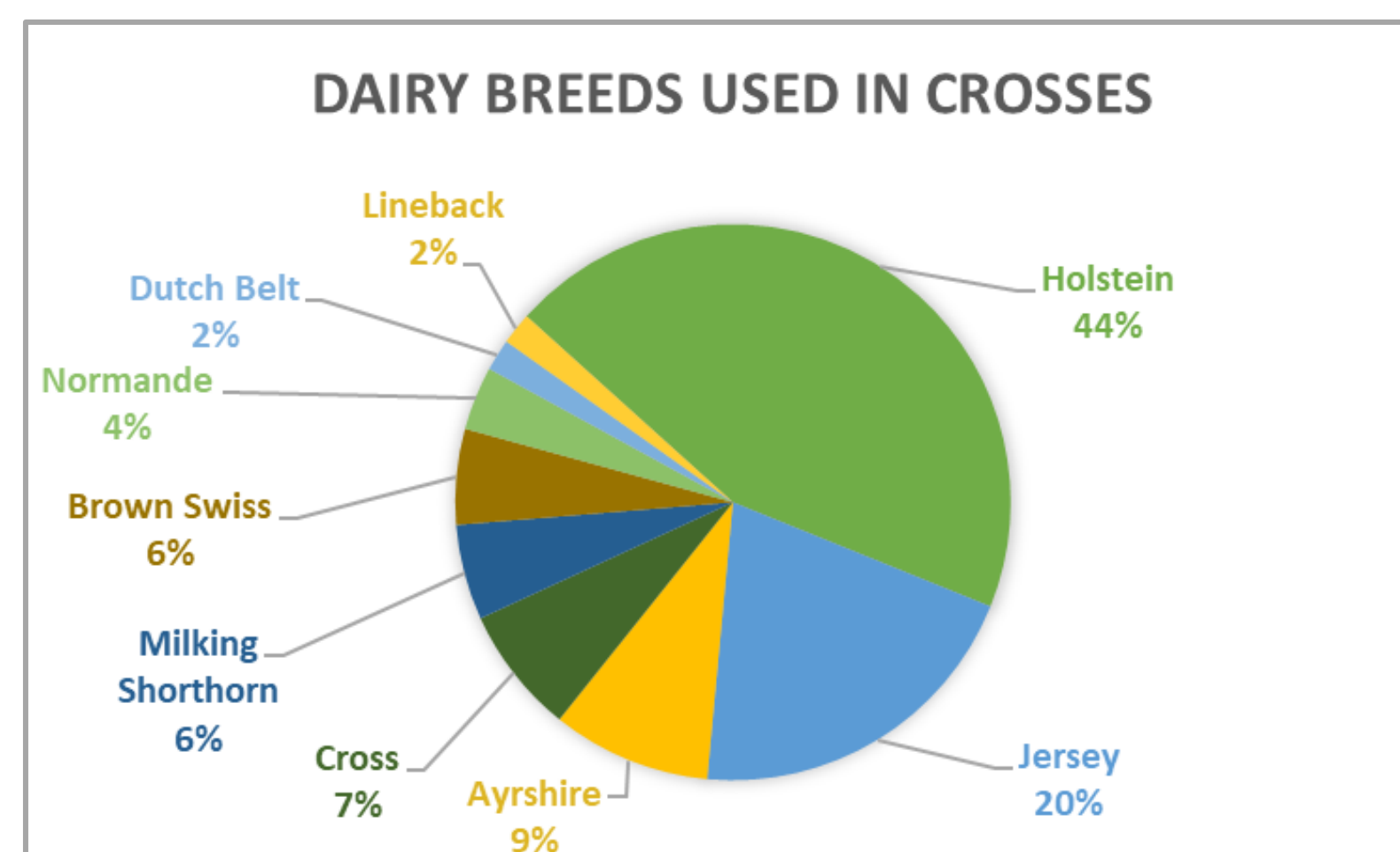


Figure 3. Responses for dairy breeds used in dairy x beef crosses. Respondents were able to pick more than one response. There were 54 total responses.

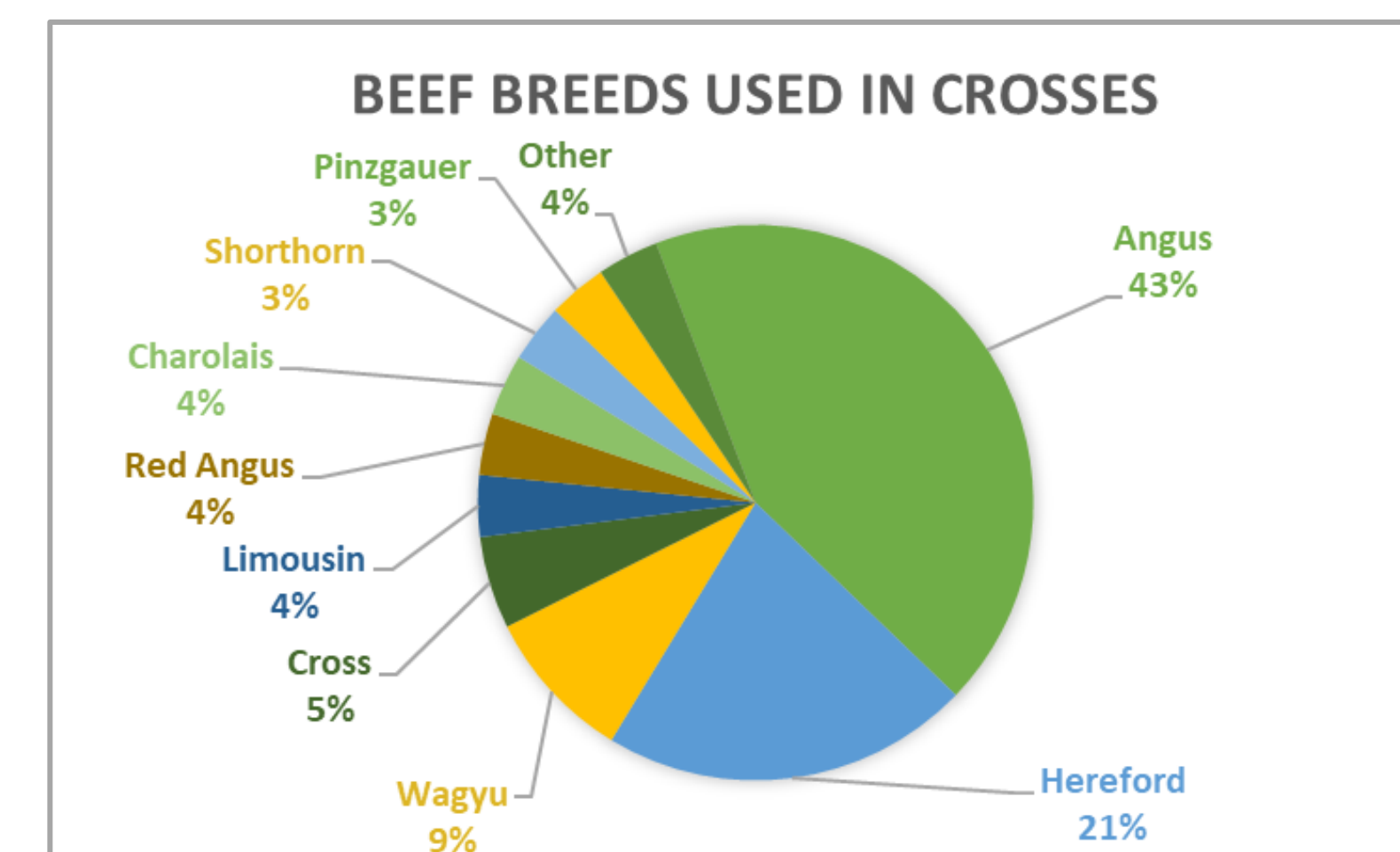


Figure 4. Responses for beef breeds used in dairy x beef crosses. "Other" category includes one response for Simmental, and one for North Devon. Respondents were able to pick more than one response. There were 56 total responses.

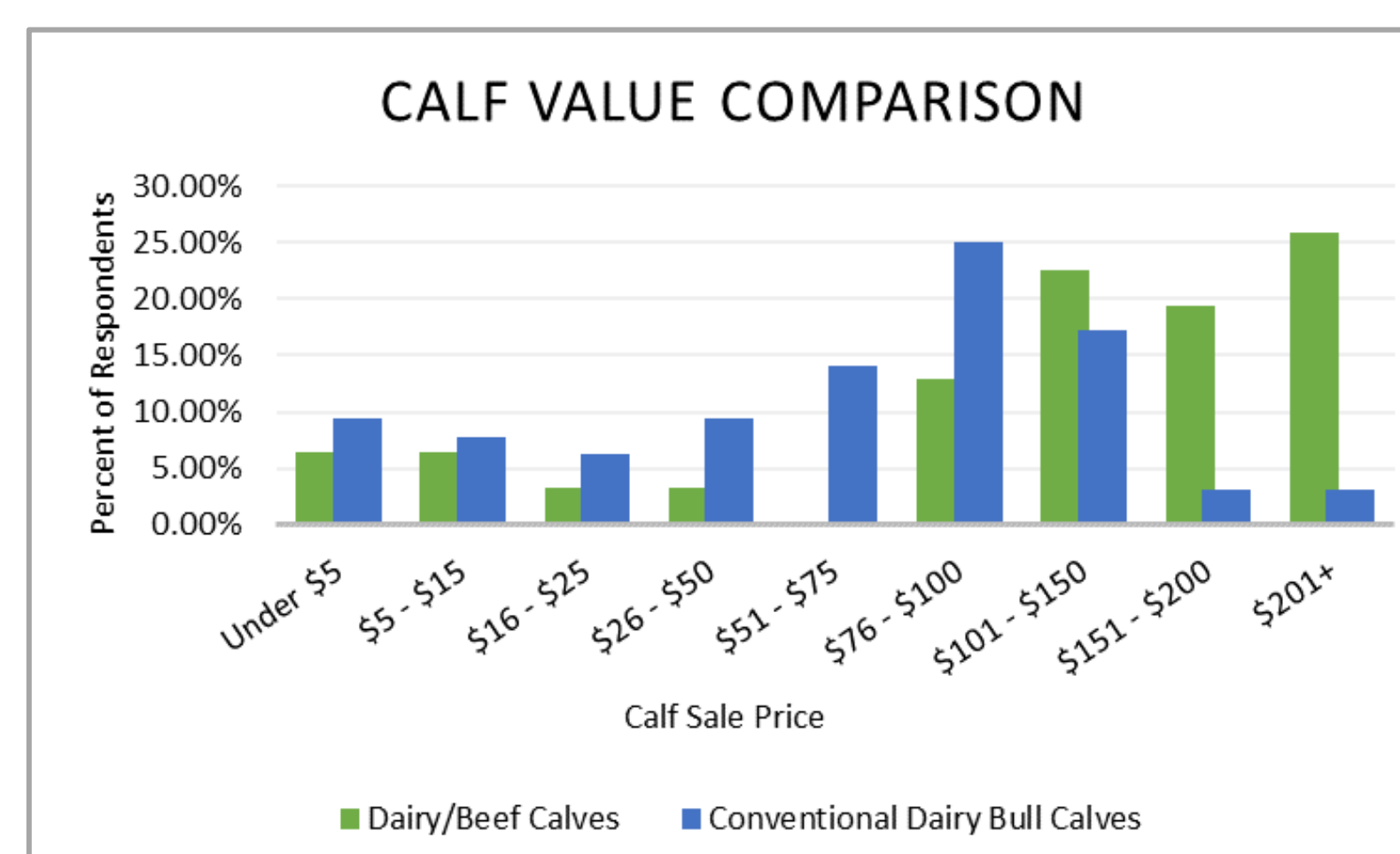


Figure 5. The sale price of dairy x beef calves compared to the sale price of conventional dairy bull calves as a percentage of responses. Respondents were able to pick more than one response.

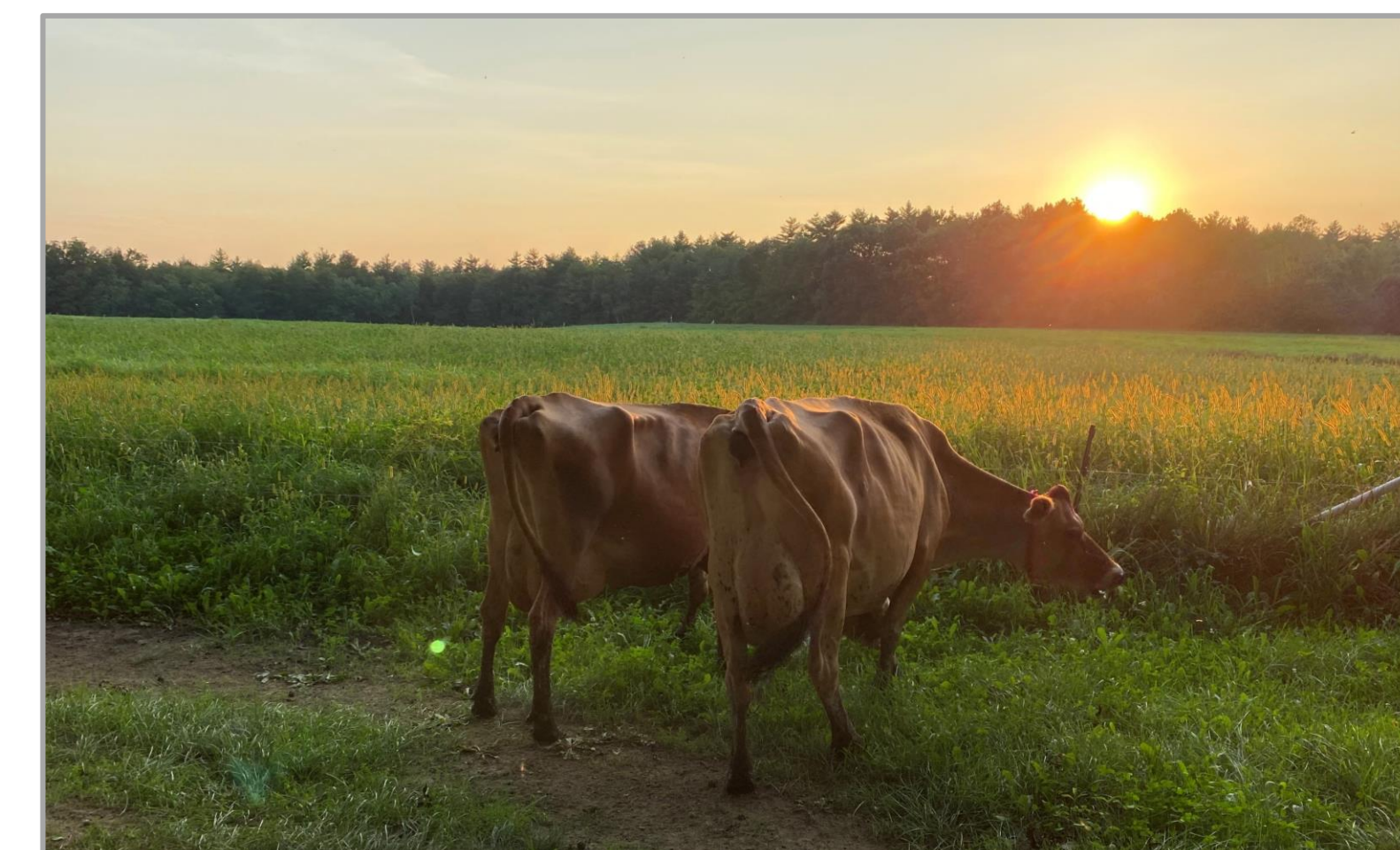


Figure 6. Jersey cows from the UNH Organic Research Dairy.

Discussion

- **At least 31% of dairy farms in New Hampshire breed dairy x beef cattle.**
- Easier conception was listed as one of the biggest reasons farmers surveyed began to breed dairy x beef calves. However, previous research found no significant increase or decrease in the rate of conception by beef sires (T.M. McWhorter, et al., 2020).
- Lack of processing options in NH was mentioned by all stakeholders interviewed for this research.
- Four dairy farms replied to the survey explaining they could not fill it out as they had retired from dairy farming. Additionally, five respondents listed either "transitioning out of dairy" or "downsizing dairy" as a reason for breeding dairy x beef. This may suggest a decrease in NH dairies in the coming years.
- **The increase in dairy/beef crosses can be attributed to farmers...**
 - Increasing the economic value of bull calves
 - Decreasing their excess dairy heifers
 - Diversifying farm income
 - Capitalizing on consumer interest in local beef

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