**Application**: This research highlights that the lower perceived value of dairy-beef and bull calves from block calving systems has led to the differing management of many of these calves compared to replacement heifers.

**Introduction:** With the rise of plant-based milk alternatives and studies indicating the awareness of consumers towards dairy calf welfare (Perttu et al., 2021; Sirovica et al., 2022), the UK dairy industry has seen the introduction of more calf welfare-focused policies. For example, the GB dairy calf strategy (NFU and AHDB, 2021) sets several key targets including the standardisation of treatment of dairy-bred beef and bull calves with that of dairy heifers along with a milk purchaser commitment to prevent the slaughter of healthy calves. Similarly, a milk processor operates a calf policy within their milk contract terms that encompasses these aims, stating that no healthy calf may be slaughtered on farm before eight weeks of age (Arla, 2019). In the 2023 season, over 1.9million dairy-bred calves were sent to slaughter from four days of age (Ministry for Primary Industries, 2024). Policies such as those operated by Arla remove the option for the early culling of calves. With the majority of block calving systems aiming to calve the herd within a 12-week period, calves for the production cycle are reared within a small proportion of the year. With the increased management pressure on these systems and the potential for other milk buyers to implement such policies in the future, the objective of the study was therefore to investigate the perceived value of surplus and replacement calves, and the effect this has on management and welfare.

**Materials and Methods:** Participants were recruited through purposive and snowball sampling (Cohen, Manion and Morrison, 2007), starting with existing contact networks followed by farmers suggested by participants, usually through farmer discussion groups.

In total, 32 face-to-face semi-structured interviews were conducted with spring and autumn block calving farmers (16 spring, 16 autumn) in the West Midlands and South-East of England.

The topic guide used to inform the interviews contained a mix of question types to allow for the collection of demographic data as well as to explore opinions and experiences relating to system management, the farmer’s experience in dairying, and the care of calves. Interviews were audio recorded and manually transcribed with transcripts thematically coded in NVivo for Windows (QSR International, Version 14).

**Results:** Spring calving farms in the sample had greater herd sizes, yet lower average yields per animal than autumn herds ((mean ± SD) 563±332 cows producing 5359±682 l/lactation compared to 416±134 cows producing 7232±969l/lactation). While Friesian and Jersey were the two most common cow breeds (pure- or crossbred) in both systems, Jersey was more commonly seen in spring calving herds (62.5%). A third of the farms in the sample were under Arla milk contracts.

While both spring and autumn calving herds produced dairy-bred beef calves from Angus and Hereford sires, the use of continental beef sires was only reported in the autumn cohort (43.7% of herds). Spring calving farms were almost twice as likely to provide beef and dairy bull calves with the same quality colostrum as replacement heifers. However, while the majority (87.5% of spring and 92.9% of autumn) of farms fed replacements on milk replacer, spring calving farms were more likely to feed beef and dairy bull calves on waste or whole milk (62.5% compared to 50% of autumn farms).

Many participants viewed beef and bull calves as having a lower value than heifer replacements, with beef calves perceived as ‘second class citizens’ (F6) while replacement calves were ‘the future of what we’re doing’ (F12).

For the majority of participants, the treatment of calves was generally driven by one of three factors:

(i) Value to the system: ‘We’re going to have only heifers… and then we’re going to have all Belgian blue calves so they’re all really valuable lives…’(F27), ‘then you’ve got your tail end calves and you know the fate of them anyway (slaughter) so it’s a matter of fact of keeping them alive for ten days’ (F1).

(ii) Welfare: ‘Welfare is massive here and we’ve worked really hard the past two or three seasons… we’re very lucky that we’ve got a really very passionate team when it comes to cow health and calf health’ (F2).

(iii) Simplicity: ‘You can only do it (the same) across all the calves, you can’t pick and choose. We're not a laboratory or anything’ (F11).

**Conclusions:** Dairy-beef and bull calves were generally viewed as being of lower or little value in comparison to replacement heifers, with the majority of farms managing the two cohorts differently, usually with regards to colostrum and/or milk feeding. Despite this, many participants described striving to meet a minimum standard of care for all calves, driven by a range of social and economic factors, but particularly the requirements of their milk supply contracts.

**References:**

Arla. (2019). Arla calls for industry to help support dairy farmers ensure every calf has a value. Retrieved on 26/03/2024 from <https://news.arlafoods.co.uk/news/arla-calls-for-industry-to-help-support-dairy-farmers-ensure-every-calf-has-a-value>

Ministry for Primary Industries (2024). Mortality rates in young calves in the 2023 spring calving season. Retrieved on 16/01/2025 from <https://www.mpi.govt.nz/dmsdocument/65274-Mortality-rates-in-young-calves-in-the-2023-spring-calving-season>

NFU and AHDB (2021). GB Dairy Calf Strategy 2020-2023. Retrieved on 26/03/2024 from <https://projectblue.blob.core.windows.net/media/Default/Dairy/Publications/DairyCalfStrategy_200826_WEB.pdf>

Perttu, R.K., Ventura, B.A., Rendahl, A.K. and Endres, M.I. (2021). Frontiers in Veterinary Science, 8, 693173

Sirovica, L.V., Ritter, C., Hendricks, J., Weary, D.M., Gulati, S. and von Keyserlingk, M.A.G. (2022). Journal of dairy science, 105(4),3248–3268.