

Culling reasons on Australian dairy farms

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Optimising the longevity of dairy cows for production efficiency, profit, environmental sustainability, and cow welfare is a critical goal. Loss of cows result from either death/euthanasia or management decisions to sell cows. Culling decisions are influenced by both individual cow performance, risk of disease and farm or market level considerations. A retrospective study reported 37% of culling reasons in Australia were 'other reasons not reported', providing an incomplete understanding of culling risks on the farms. This prospective cohort trial aimed to describe the culling patterns in Australian dairy farms, with specific regard to cow age and dairy farm management systems which were pasture-based (PB) or total mixed ration (TMR) enterprises. Thirty dairy farms were purposively selected with 15 PB farms and 15 TMR farms. Enrolment took place from June 2022 to May 2023 and data gathering is ongoing. Culling and mortality reasons were codified and provided to farms at enrolment, with multiple reasons for removal permitted per cow. Cow data was captured from farm herd management software, audited, and stored on a SQL database. Our preliminary data found the most common reason for culling across both farming systems, was issues related to the udder, including mastitis (PB: 53.2%, TMR: 44.1%; Figure 1); the second most common reason was infertility (PB: 14.9%, TMR: 22.9%). Culling for udder problems increases with parity (Parity 1st: 31.2%, Parity >4 lactation: 56.1%); removal for infertility is greatest in 2nd Parity cows (31.7%); 1st lactation heifers were the most likely to be removed for temperament (14.6%). In contrast to our results, prior studies report infertility as the leading reason for culling. This disparity may indicate a rapid temporal change in culling risk factors. Understanding reasons for removal and differences between farming systems will help to identify targets to achieve optimal cow longevity.

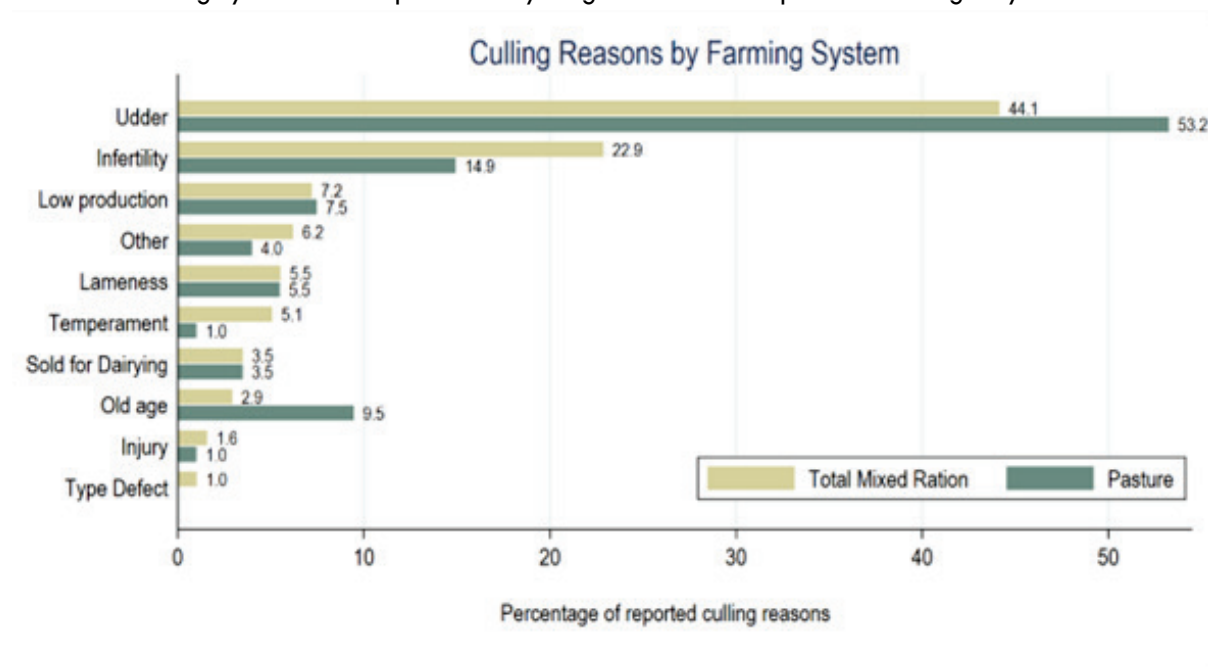


Figure 1: The percentage of reported culling reasons by farming system.