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For dairy farmers, where does the time go?

A new study in the July Journal of Dairy Science® examines labor time-use on pasture-based dairy farms in Ireland

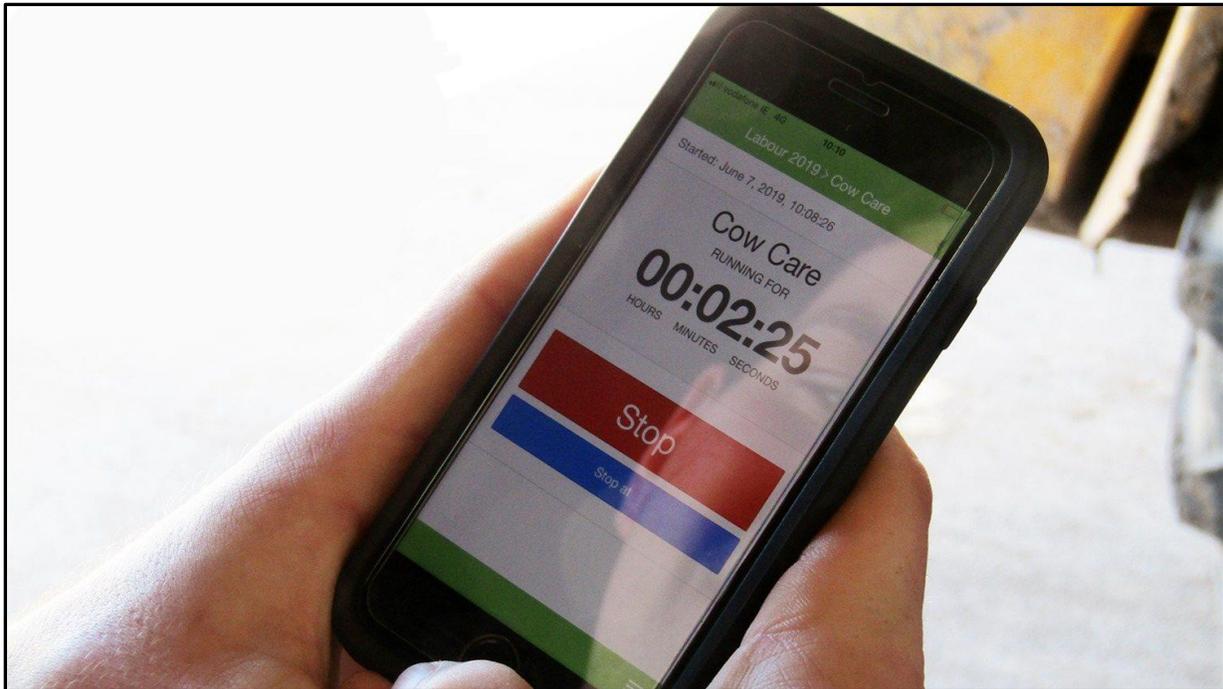
Philadelphia, July 25, 2022 – Globally, dairy producers face increasing challenges regarding sustainability, including declining numbers of workers in the agricultural sector, while continuing to meet increasing demand for nutritious and affordable food. Dairy systems must now focus on more sustainable production that reflects economic, environmental, and social goals. A new [report](#) in the [Journal of Dairy Science®](#), published by Elsevier, explores labor time-use on Irish pasture-based dairy farms in the busy spring and summer seasons.

Employment in agriculture, as a share of total worldwide employment, has declined by 29.8% since the year 2000. Due to this reduced availability of workers, management of labor input is becoming a crucial challenge for dairy farms internationally, especially in expanding dairy markets. The seasonal workload associated with pasture-based dairy farming—a system that promotes farm profitability along with favorable environmental impacts—combined with increasing herd sizes, has led to a renewed focus on labor time-use and efficiency on these farms.

The study used up-to-date technology, including a mobile phone app, to track labor time-use across 82 spring-calving pasture-based Irish dairy farms from February 1 to June 30, 2019. This allowed the research team to begin examining the often-overlooked social dimension of sustainable farming, including working hours and quality of life.

First author Conor Hogan, of Teagasc Animal & Grassland Research & Innovation Centre (Moorepark, Fermoy, County Cork, Ireland) and the School of Agriculture and Food Science, University College Dublin

(Dublin, Ireland), explains, “Each farmer recorded their labor input on one alternating day each week, using a smartphone app. Any labor input by farm workers not using the app was recorded through a weekly online survey.”



Caption: The labor-tracking smartphone app used to study time use on Irish pasture-based dairy farms in 2019 (Credit: Conor Hogan, Teagasc Animal & Grassland Research & Innovation Centre, Ireland).

The team found that milking was the most time-consuming task, representing 31% of farm labor input, making it an important focus for potential improvements in efficiency. The next most time-consuming tasks were calf care (14%), grassland management (13%), cow care (10%), repairs and maintenance (10%), and administration/business (8%). The researchers further report that participating farmers worked, on average, 60 hours a week across the study period, and that the busiest months on most of the farms were February and March.

The team emphasizes the importance of understanding labor use during the most labor-demanding time of year on pasture-based dairy farms, as this points to areas where labor efficiency improvements can be made. As Hogan points out, “Improved time-use in spring and summer, resulting in reduced work hours, can have associated positive effects on many aspects of dairy farming, including enhanced health and safety of farm operators and reduced stress and fatigue among farmers, creating more attractive workplaces and improving farm profitability.”

Notes for editors

The article is “An examination of labor time-use on spring-calving dairy farms in Ireland,” by C. Hogan, J. Kinsella, B. O’Brien, M. Gorman, and M. Beecher (<https://doi.org/10.3168/jds.2022-21935>). It appears online in the *Journal of Dairy Science*, volume 105, issue 7 (July 2022), published by Fass Inc. and [Elsevier](#).

The article is openly available at [https://www.journalofdairyscience.org/article/S0022-0302\(22\)00322-8/fulltext](https://www.journalofdairyscience.org/article/S0022-0302(22)00322-8/fulltext).

Full text of the article is also available to credentialed journalists upon request. Contact Eileen Leahy at +1 732 238 3628 or jdsmedia@elsevier.com to obtain copies. Journalists wishing to interview the authors should contact the corresponding author, Conor Hogan, Teagasc, Animal & Grassland Research & Innovation Centre, Moorepark, Fermoy, Co. Cork, Ireland, at conor.hogan@teagasc.ie.

About the *Journal of Dairy Science*

The *Journal of Dairy Science*® (JDS), an official journal of the American Dairy Science Association®, is co-published by Elsevier and FASS Inc. for the American Dairy Science Association. It is the leading general dairy research journal in the world. JDS readers represent education, industry, and government agencies in more than 70 countries, with interests in biochemistry, breeding, economics, engineering, environment, food science, genetics, microbiology, nutrition, pathology, physiology, processing, public health, quality assurance, and sanitation. JDS has a 2021 Journal Impact Factor of 4.225 and five-year Journal Impact Factor of 4.987 according to Journal Citation Reports™ (Source: Clarivate™ 2022). www.journalofdairyscience.org

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