

Assessing dairy farmers' knowledge, behaviours, and attitudes towards dairy cow heat stress on farms in high-risk regions

Participant Information Sheet

We would like to invite you to participate in our study which is looking to understand how summer conditions affect dairy cows and gather farmers' experiences and views on this issue. Please read this information sheet carefully. It tells you why we are doing this research and what it might mean for you. Please ask if you have any questions.

Background to the project

This research aims to enhance DairyNZ's understanding of dairy cow heat stress awareness and management among dairy farmers in New Zealand, particularly in regions most at risk. Heat stress in dairy cows negatively impacts animal welfare, milk production, and farm productivity. By identifying knowledge gaps, behaviours, and resource needs, the research will enable DairyNZ to develop targeted interventions, educational resources, and support tools. This will ultimately contribute to the sustainability and profitability of New Zealand's dairy industry.

Who is involved in the project?

The project is being conducted by DairyNZ (Kirsty Verhoek, Charlotte Reed, Jacqueline McGowan, Jenny Jago, Paul Edwards) and Susan Cuthbert from Cuthbert & Associates. The work is funded by dairy farmers of New Zealand through the DairyNZ levy.

What will we ask of you?

We will ask if you are willing to participate in an phone survey and answer a series of questions that will take approximately 12-15 minutes of your time. Your participation will involve sharing your experiences and views on managing heat stress in dairy cows. Your insights will be invaluable in helping us develop targeted interventions and support tools for the dairy industry. Rest assured, all information you provide will be kept confidential and used solely for the purposes of this research.

What will happen with your data?

- Data collected by Cuthbert & Associates will be stored by QuestionPro, an online survey and research platform that collects and manages data. The system will securely store data as long as the account is current and active. If the account becomes inactive the files are deleted. The data held on QuestionPro will not contain any info that identifies the respondent. The QuestionPro license held by Cuthbert & Associates does not allow AI to play a role in data handling and storage. Cuthbert & Associates have the ability to delete the data from QuestionPro after the conclusion of the project.

- Data will be stored in password locked spreadsheets, which can only be accessed by those involved in the research analysis.
- Participants will be given a number with any identifying features removed before analysis, therefore all data will be anonymous.
- Results may be published anonymously in a project report, a scientific journal, dairy farm media such as DairyNZ's farmer magazine 'Inside Dairy', DairyNZ's website or farming press – individual results will not be presented.

What are the benefits and risks of this study?

Some potential risks we have identified include emotional and professional vulnerability, privacy concerns, and survey fatigue. To manage these, we have designed the survey to acknowledge varying farming practices, ensuring no 'right or wrong' answers to minimize feelings of inadequacy. All responses will be anonymized, with results reported at an industry level to prevent judgment of individual practices. We will secure your data with strict privacy protocols, ensuring no identifying information is included in the final dataset. Additionally, the survey is designed to be brief, taking no more than 15 minutes to complete, and will be conducted at a convenient time for you.

Ethical considerations

We follow a research ethics process and therefore, you retain the right to:

- withdraw from the interview at any time without explanation or prejudice and to withdraw any unprocessed data previously supplied.
- ask questions about the study at any time.
- decline to answer any question.
- provide information on the understanding that your name will not be used in reports about the study.

We commit to protect your anonymity and the confidentiality of your responses. At the end of the data collection, your name and contact details will be kept separate from any information that you supply. The anonymised data will be stored in a password-protected file, subject to your name and identifying information being removed, for a maximum of 10 years before being destroyed.

Researcher contact:

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Ms Susan Cuthbert, Cuthbert & Associates, 027 687 4165, susan.cuthbert25@gmail.co.nz

If you have any concerns about the project please contact the Science team leader, DairyNZ – Nicolas Lyons 0278084906, Nicolas.Lyons@dairynz.co.nz

This research has been assessed and approved by the Aotearoa Research Ethics Committee (AREC Application 24_30). If you have any questions or concerns, please contact the Manager of AREC, Dr Keely Blanch, on manager@aotearoaresearchethics.org