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Image created in the Dairy Research and Technology Centre, University of Alberta

Hidden Clues

Semi-Finalist

Infrared thermography is a non-invasive technique of thermal visualization by which temperatures are monitored and recorded. It is used to measure heat radiated from a surface which is then displayed as a temperature distribution image. Infrared pictures provide real-time data for various physiological conditions in cows and calves (e.g., infectious diseases, parturition, and estrus). Infrared cameras can detect ovulation using skin temperature changes in vulva and muzzle. Currently our project is using infrared thermography to measure physiological changes as temperature and skin dilatation added to behaviour estrus to increase heat detection in dairy cattle.