

Develop a faster thermometer for use in cattle

Project Code: POC.15.20

Completed: *In Progress. Results expected in April 2022.*

Project Title:

Development and Evaluation of a Novel Optical Sensor Thermometer for the Measurement of Core Body Temperature in Cattle

Researchers:

Dr. Brian Wildman Feedlot Health Management Services Ltd brianw@feedlothealth.com
Calvin Booker, Feedlot Health Management Services Ltd Alan McGuire, CATTLEytics

Background

Measuring rectal temperature is a key step in identifying animals that are sick. Taking an animal's temperature is one of the few practical confirmatory methods to diagnose feedlot diseases like BRD but currently available thermometers require up to 30 seconds or more to get an accurate reading. This extended time frame can have a negative effect on animal welfare and limits the usefulness of the tool when handling groups of animals.

Objectives

- Develop and validate a new and more rapid thermometer.

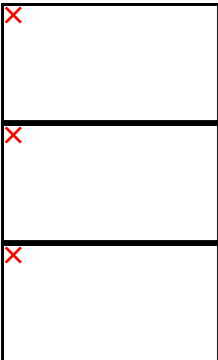
What they will do

These researchers want to develop and test an infrared probe that can instantly measure bovine rectal temperature to aid in the diagnosis of BRD. The idea is they will develop an infrared probe that when inserted into the rectum provides an instant and accurate measure of body temperature. Once the probe has been developed, it will be tested in the lab against currently available thermometers and then tested on 50-100 feedlot cattle that have been pulled for treatment.

Implications

This project has the potential to benefit the beef industry by improving animal health and welfare, reducing economic losses associated with BRD, and promoting antimicrobial stewardship, thereby improving industry sustainability and increasing public/consumer confidence.

Proudly Funded By:



For more information, visit www.beefresearch.ca

RESEARCH AND TECHNOLOGY DEVELOPMENT FOR THE CANADIAN BEEF INDUSTRY