Establishing a long term surveillance network to support Canadian beef cattle research

Project Title:
Implementation of a longitudinal disease surveillance network for cow-calf operations in western Canada

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Background

Canada has no structured surveillance program to collect animal health management or disease incidence information in the beef industry. Over the past 20 years, this research group has generated surveillance and research information for the cow-calf industry on BVDV, antimicrobial resistance, Neospora, Johne’s disease, calf loss, Trichomoniasis, vibrio, bull management, nutrition, environmental issues, and animal behavior. In each case, significant time, effort and resources were needed to recruit herds for relatively short-term projects. In the USA, the National Animal Health Monitoring Service (NAHMS) has a long term surveillance network that supports a variety of animal industries and is a critical resource for specific research initiatives. A similar strategy would be beneficial in Canada.

Objectives

To establish a western Canadian cow-calf surveillance network

What they will do

A group of 120 beef cow-calf herds from across Western Canada representing the industry at large and reflecting the most important regional, demographic, and size characteristics of the national herd will be recruited. This group of herds would become a “living laboratory” and the foundation of a surveillance network for the Canadian cow-calf industry. Vital baseline information on
biosecurity practices, economics of production limiting diseases, animal welfare practices, antibiotic use, and herd nutrition and management will be gathered. A serum bank will also be created to use for additional research projects and to investigate emerging disease threats. These herds would also act as sentinel herds to detect disease and management changes in Western Canada’s beef industry.

**Implications**

This surveillance network will provide very timely and efficient answers to questions regarding animal health, welfare, biosecurity, and animal nutrition and other production practices and economics. If successful, it is expected that this network can be maintained beyond the 5 year time frame of the current project.

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