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

**Researchers:**
John Campbell, DVM, DVSc  john.campbell@usask.ca
John Campbell, DVM, DVSc, University of Saskatchewan, Cheryl Waldner, DVM, Ph.D., Murray Jekinski, DVM MSc., Steve Hendrick DVM, DVSc., Joseph Stookey, Ph.D., and Greg Penner, Ph.D. (University of Saskatchewan) and Eugene Janzen, DVM, MSc. (University of Calgary)

**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.

**Proudly Funded By:**

The Beef Cattle Industry Science Cluster is funded by the Beef Cattle Research Council, a division of the Canadian Cattlemen’s Association, and Agriculture and Agri-Food Canada to advance research and technology transfer supporting the Canadian beef industry’s vision to be recognized as a preferred supplier of healthy, high quality beef, cattle and genetics.

**For More Information Contact:**
Beef Cattle Research Council
#180, 6815 - 8th St. NE
Calgary, AB T2E 7H7
Tel: (403) 275-8558 Fax: (403) 274-5686
info@beefresearch.ca

**For More Information Visit:**
www.beefresearch.ca