



UNIVERSITY OF  
SASKATCHEWAN



Agriculture and  
Agri-Food Canada

Agriculture et  
Agroalimentaire Canada

## Donate Sperm or Embryos From Your Animal to the Canadian Animal Genetic Resource (CAGR) To Protect the Genetic Diversity of the Canadian Livestock

### Mission of the CAGR:

The global industrialization of agriculture and the enormous pressure to streamline animal breeding and production have led to the rapid erosion of animal genetic diversity, including Canadian livestock. Genetic diversity defines not only the animal breeds' production and functional traits, but also their ability to adapt to different environments, including food and water availability, climate changes, pests, diseases, and changing socio-economic conditions. Recognizing this threat, Agriculture and Agri-Food Canada, in collaboration with the University of Saskatchewan, initiated the Canadian Animal Genetic Resource program in 2006. The CAGR's mission is to ensure the genetic diversity of Canadian livestock and poultry, support environmentally friendly livestock and poultry production, and maintain food security, by acquiring, evaluating, and cryopreserving tissue and germplasm (sperm, embryos, oocytes). Canada is rich in livestock breed diversity and the current and future preservation of these valuable resources will improve the competitiveness of the livestock industries, facilitate response to environmental challenges as well as shifting consumer demands, and food security issues.

### Building a national cryobank:

To build this national germplasm repository, the CAGR is seeking donations from Canadian producers and industries. Sperm, embryos, gonad and somatic (skin) tissues can be collected and preserved following the standard procedures. Every donation is carefully evaluated and stored indefinitely. In addition, DNA analyses is conducted to evaluate the genetic diversity and determine relationships with other breeds of interest. The donated materials will not be released except in the eventuality of national emergency (disease outbreak) or a specific request by a breed association. Thus, this national cryobank is an insurance for the Canadian livestock industry and the success of this repository depends of your contribution.

### If you wish to contribute at this program

A CAGR team will be in Ontario, Québec, New Brunswick, and Nova Scotia between September 15<sup>th</sup> to October 10<sup>th</sup>, 2014. If you wish to contribute, you can contact Dr Carl Lessard (306-956-7221; email: carl.lessard@agr.gc.ca), Crissandra Auckland (306-956-2906; crissandra.auckland@agr.gc.ca) or a member of the Rare Breed Canada ([www.rarebreedscanada.com](http://www.rarebreedscanada.com)). If you cannot be available during these dates and you are still interested to contribute to this program, contact Dr Carl Lessard to discuss other options to donate germplasm from your precious animals.

**Every donation contributes to protect the genetic diversity of our  
Canadian Animal resources!**