

PROTECTING THE GENETIC DIVERSITY OF OUR CANADIAN LIVESTOCK

*Donate sperm or embryos from your animal to the
Canadian Animal Genetic Resource Program (CAGR)*

Mission of the CAGR program

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 abilities to adapt to different environments, including food and water availability, climate changes, pests and diseases, and changing socio-economic conditions. Recognizing this threat, Agriculture and Agri-Food Canada, in collaboration with the University of Saskatchewan, has initiated a program in 2006 to protect the genetic diversity of the Canadian livestock and poultry, named Canadian Animal Genetic Resource program. 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 preservation of animal genetic diversity will improve the competitiveness of the livestock industries to respond to environmental challenges as well as shifting consumer demands, and food security issues.

Building a national cryobank

To build this national germplasm repository, CAGR program is seeking donation from different 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. Moreover, DNA analyses is performed to evaluate the genetic diversity of a specific Canadian livestock. **The donated materials will not be released except in the eventuality of national emergency (outbreak disease) or a specific request by a breeder 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

CAGR team will be in Ontario and Québec between September 6th to September 17th, 2010. If you wish to contribute, you can contact Dr Carl Lessard (306-956-7221; email: carl.lessard@agr.gc.ca) or your member of the Rare Breed Canada Chapters (www.rarebreedscanada.ca/index.htm). If you cannot be available during these dates and are interested in contributing to this program, contact Dr Carl Lessard or Dr Yves Plante (306-956-7209; email: yves.plante@agr.gc.ca) to further discuss about different donation options.

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



Agriculture and
Agri-Food Canada

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