

CPRC Update

WHAT A BIRD NEEDS

Research at the Poultry Welfare Centre

Poultry producers understand that the success of their industry depends on the health and wellbeing of their flocks. They have always been committed to giving their poultry what they need to thrive. Historically, those needs have been defined under such parameters as production performance and freedom from disease. Significant strides continue to be made in both of those areas, but there is also growing interest in understanding how the welfare of our poultry is impacted by the production systems in which they are placed and, in turn, what birds need to further enhance their welfare. A thorough understanding of this impact becomes increasingly important as concern for the welfare of food animals continues to rise in Canada and around the world.

Poultry welfare is consistently identified by industry as a major research priority area and has included it in the "National Research Strategy for Canada's Poultry Sector" (for a copy of this document, search for "strategy" from the CPRC website). In response to a need for a more coordinated poultry welfare research program, the Poultry Welfare Centre was established in 2009 as part of a four-way agreement between CPRC, Poultry Industry Council, Agriculture and Agri-Food Canada (AAFC) and the University of Guelph. A lot has been going on at the Centre ever since, both in terms of capacity building and research activities.

Dr. Stephanie Torrey, an Agriculture and Agri-Food Canada Research Scientist co-located at the Centre is leading a team of researchers from Guelph, Saskatchewan and the Scottish Agricultural College that is investigating the welfare and production implications of alternative broiler breeder feeding strategies. Successful implementation of this research will allow the industry to preserve the reproductive potential of its breeder stock while mitigating the welfare impacts of restricted feeding.

Dr. Tina Widowski, a professor in the Department of Animal & Poultry Science at Guelph was named the Egg Farmers of Canada Research Chair in Poultry Welfare in 2011. Dr. Widowski is involved in a number of research programs. One of which is looking at the effects of rearing experience and housing system of parent laying hens on behaviour and stress susceptibility of their offspring, and determining if these epigenetic effects differ among commercial strains.

A recent addition to the Centre is Dr. Alexandra Harlander-Matauschek, who moved in January to Guelph from the University of Bern, Switzerland. Dr. Harlander-Matauschek is interested in continuing her past work on feather-pecking in laying hens, and is embarking on a study to determine if common commercial strains of layers differ in locomotory skill development and their ability to adapt to complex production environments such as aviaries. Results from this research, coupled with those from Dr. Widowski's work described above, will provide the layer industry with information to help select birds that are appropriate for the production system in which they are placed and adjust management practices that help prepare young birds for those different environments. Drs. Harlander-Matauschek, Torrey and Widowski are also collaborating on a study looking at the impact of ammonia on the welfare of layers, broilers and turkeys.

These are just a few examples of research led by members of the Poultry Welfare Centre. These scientists are also actively teaching and training welfare scientists of the future. The Welfare Centre is part of a larger group at Guelph known as the Campbell Centre for the Study of Animal Welfare (CCSAW);

Dr. Widowski is the Director) including some 40 associated faculty members with expertise ranging from biological sciences to humanities to economics. CCSAW is the largest group of its type in North America and is an extremely valuable resource that fosters collaboration and information exchange among researchers across Canada and beyond.

Behaviour and welfare science is an essential part of Canada's poultry research strategy. Researchers at the Poultry Welfare Centre are working with scientists across the country in virtually all other aspects of animal research to help us understand what our poultry need and how best to provide it.

For more details on these or any other CPRC activities, please contact The Canadian Poultry Research Council, 350 Sparks Street, Suite 1007, Ottawa, Ontario, K1R 7S8, phone: (613) 566-5916, fax: (613) 241-5999, email: info@cp-rc.ca, or visit us at www.cp-rc.ca.

The membership of the CPRC consists of Chicken Farmers of Canada, Canadian Hatching Egg Producers, Turkey Farmers of Canada, Egg Farmers of Canada and the Canadian Poultry and Egg Processors' Council. CPRC's mission is to address its members' needs through dynamic leadership in the creation and implementation of programs for poultry research in Canada, which may also include societal concerns.