Improving hoof health in Canadian dairy farms

Hoof lesions have been identified as a major cause of economic losses, and a cow health and welfare concern in Canadian dairy herds. The incidence and severity of hoof lesions in dairy herds has not improved over the years and it has become necessary to use new approaches to improve hoof health based on actual data.

The objectives of this activity are a) to organize and use hoof health data collected by hoof trimmers in the normal course of their work into a coherent and sustainable national database, and b) to develop herd management tools and genetic/genomic evaluations to improve hoof health in Canada.

The activity takes advantage of recent developments in computerized recording of hoof health data at time of hoof trimming. The collection of standardized data on hoof health traits and their inclusion into a central database will provide better benchmarks and reports on hoof health, and a wealth of quality data to support work in facilities design, cow comfort and welfare, health management, biosecurity and immunology.

The national database will also allow the development of genetic and genomic improvement programs that will help improve dairy cattle resistance to hoof problems. This information will be combined with existing type trait evaluations and locomotion scoring to better identify the genetics that make cows less prone to hoof lesions, and reduce treatment costs and losses due to premature culling. Genomics is a promising avenue for the genetic improvement of hoof health, because it permits selection for traits much earlier in life than was possible with traditional methods.

Summary 2014

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