

## **Conversion of US genetic evaluations into Canadian equivalents**

The Canadian Centre for Swine Improvement (CCSI) computes national genetic evaluations for swine in Canada. In the United States, national evaluations are provided by National Swine Registry (NSR) under the Swine Testing and Evaluation System (STAGES). Although both systems provide evaluations for essentially the same traits, it is usually difficult to compare evaluations because of differences in genetic levels between the two countries and because of differences in how breeding values are expressed. For example, CCSI provides Estimated Breeding Values (EBVs) whereas STAGES computes Estimated Progeny Differences (EPDs). US genetic evaluations for backfat and lean yield are expressed in inches and pounds, whereas the Canadian system uses millimeters and kilograms.



Over the past years, Canada and the US have been exchanging breeding stock on a regular basis, as live animals or through semen. CCSI, in collaboration with the US National Swine Registry (NSR) has developed conversion formulas in order to express US EPDs into Canadian equivalents. The analysis was based on a limited number of US sires with at least five progeny tested in the US and in Canada during the last 10 years. More data on US boars imported in Canada and Canadian boars imported in US will be useful to update the conversion methods. Now, any pig evaluated in the STAGES system can be evaluated using Canadian equivalent EBVs.

CCSI is pleased to offer this new service to its members through a new report available in the Member Services area of its website (see 'Reports' section, under 'US EBVs'). Conversion formulas will be updated regularly and will get more accurate as more data accumulate. They will help importers of US genetics to better estimate the genetic merit of imported animals before they actually have progeny born in Canada, and thus allow a more efficient selection using US genetics in the Canadian Swine Improvement Program.

If you have any question, please contact:

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