

## ADJUSTMENT FACTORS FOR CHAROLAIS EPD COMPARISONS BETWEEN U.S. AND CANADA

International exchange of Charolais genetics between the United States and Canada creates opportunities for cattle breeders in both countries. With the benefit of new genetic resources, the obvious question surfaces. How do the EPDs compare? The EPDs from the two independently-conducted genetic evaluations of the American International Charolais Association (AICA) and the Canadian Charolais Association (CCA) cannot be directly compared in the respective published forms.

Dan Moser of Angus Genetics Inc. (AGI), the entity providing the AICA and CCA genetic evaluation, calculated additive adjustment factors to convert a given set of CCA EPDs to a AICA base. Alternatively, the adjustment factors can be utilized to convert AICA EPDs to CCA base.

Potential use of these adjustments would be for initial comparisons between the CCA and AICA EPDs when considering international purchases or developing marketing materials where both sets of EPDs are displayed. Below is an example of how to convert a set of CCA EPDs to an AICA base. This approach using the adjustment factors reflects an additive increase in birth weight EPD and a numerical decrease in weaning, yearling and milk EPDs.

### To adjust CCA EPDs to AICA EPDs:

Add **0.5 lb** to the CCA Birth Weight EPD  
Subtract **17 lb** from the CCA Weaning Weight EPD  
Subtract **34 lb** from the CCA Yearling Weight EPD  
Subtract **11 lb** from the CCA Milk EPD

### To adjust AICA EPDs to CCA EPDs:

Subtract **0.5 lb** from the AICA Birth Weight EPD  
Add **17 lb** to the AICA Weaning Weight EPD  
Add **34 lb** to the AICA Yearling Weight EPD  
Add **11 lb** to the AICA Milk EPD

### **FOR EXAMPLE:**

#### Converting CCA EPDs to the AICA base using Adjustment Factors

	<b>BW</b>	<b>WW</b>	<b>YW</b>	<b>Milk</b>
CCA EPDs	1.6	43	81	21
Adjustment Factors	+0.5	-17	-34	-11
CCA EPDs on AICA base	2.1	26	47	10

### Converting AICA EPDs to the CCA base using Adjustment Factors

	<b>BW</b>	<b>WW</b>	<b>YW</b>	<b>Milk</b>
AICA EPDs	0.6	27	48	9
Adjustment Factors	-0.5	+17	+34	+11
AICA EPDs on CCA base	0.1	44	82	20

The resulting conversion provides a snapshot comparison using the adjustment factors derived from a sampling of active sires represented in both countries. The use of these factors is not intended to replace genetic evaluation procedures.

*Prepared by AICA and CCA, January 2016*