Breed Improvement Article

Breed Average EPDs

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Expected Progeny Differences (EPD) are calculated by breed associations using data submitted by breeders. Generally a new evaluation is conducted by each association every 6 months of so, typically in the fall and spring of the year. The major breeds shown below conduct North American evaluations. This means that data from Canadian breeders is pooled with the data from their American counterparts and then the genetic evaluation is performed.

EPDs are a useful tool to compare animals WITHIN a breed and cannot be used to compare animals between breeds directly. EPDs are a much more accurate method of comparing potential breeding stock than using adjusted weights, ranks or indexes because they include information from all of an animal's relatives, as well as factoring out environmental effects through the use of contemporary grouping and other statistical techniques.

EPDs predict the differences in performance of the calves from a sire. They indicate the genetic merit of the sire, rather than his own performance. What is important when buying a sire is how his calves perform, not how the sire himself performed.

Average EPD Values of Major Breeds (Spring 2004)												
	CE	**BW**	**WW**	**YW**	**MCE**	**Milk**	**SC**	**CW**	**REA**	**FAT**	**MARB**	**LY**
Angus	n/a	3.2	30.9	55.4	n/a	12.4	0.2	n/a	n/a	n/a	n/a	n/a
Red Angus	n/a	1.3	24.5	41	n/a	10.0	n/a	n/a	n/a	n/a	n/a	n/a
Charolais	n/a	1.5	18.7	32.8	n/a	5.59	n/a	3.9	0.10	0.04	0.00	-0.02
Hereford	-0.5	3.8	36.0	61.0	0.4	13.0	0.6	n/a	0.07	0.00	-0.01	n/a
Limousin	5.3	2.3	34.2	64.1	3.4	18.0	0.2	14.8	0.11	0.01	0.00	n/a
Simmental*	2.9	3.0	35.8	59.9	0.5	7.9	n/a	0.3	0.05	0.01	0.08	0.01

* Simmental statistics are for male calves born in the last two years (2002, 2003) all other breeds include all calves born over the last two years.

CE – Calving Ease – a larger number means calves that are born more easily (more calving ease)

BW – Birth Weight – a smaller number indicates calves that are lighter at birth

WW – Weaning Weight – a larger number indicates calves that are heavier at 205 days of age (more weaning weight)

YW – Yearling Weight – a larger number indicates calves that are heavier at 365 days of age (more yearling weight). The difference between YW and WW is the post-weaning gain. If YW is

much higher than WW, then the calves should exhibit more gain post-weaning, if YW and WW are close then most growth will occur pre-weaning.

MCE – Maternal Calving Ease – a larger number means that replacement heifers from the sire will calve more easily (easier calving heifers result)

Milk – Milk – a larger number means that replacement heifers from the sire will provide more milk for their calves (more pounds of calf from milk production)

SC – Scrotal – a larger number means bigger scrotal circumference

CW – Carcass Weight – a larger number means heavier carcasses

REA – Rib-Eye Area – a larger number means bigger rib-eye area

Fat – Back Fat – a larger number means more backfat on slaughter progeny

Marb – Marbling – a larger number means offspring will exhibit a higher level of marbling

LY – Lean Yield (Percent Retail Cuts) – a larger number means that the calves will produce more saleable meat as a percentage of body weight.

Several breeds produce EPDs for more traits than those listed. Please contact the respective association for more information on their evaluations.

Not all bulls will be better than average for all traits. For use on heifers higher than average calving ease and/or lower than average birthweight EPDs are recommended, however this is not necessarily the most profitable combination when selecting a bull for use on mature cows that can handle slightly heavier birthweight calves. Also, it is important to consider management styles, breed complementarities, skeletal structure and marketing method when making a sire selection decision.

IMPORTANT: EPDs CAN ONLY BE USED TO COMPARE ANIMALS WITHIN A BREED. THEY CANNOT BE DIRECTLY COMPARED BETWEEN ANIMALS FROM DIFFERENT BREEDS!!!