

The question has arisen in recent months as to the most accurate and correct way to express expected progeny differences (EPDs) in advertisements and sale catalogs. In the case of bulls and females with complete AHIR records, there, of course, is no problem simply use the performance data and EPDs listed on the official documents. However, for animals with incomplete records, for unborn calves and embryos there is a problem in calculating EPDs.

EPDs can be calculated in the following situations:

- 1. The animal must have registered parents.
- **2** The animal must have been weighed at weaning with at least one other animal of the same sex in a proper contemporary group with not more than 3 days between weigh dates.
- Individual weights of twins are used for interim EPDs, but not in National Cattle Evaluation (NCE).
- 4 Individual weights of embryo transplants are not used at the present time.
- **5** Individual weight ratios and average daily gain ratios between weaning and yearling must not be less than 60 or more than 140.
- Interim EPDs are not calculated from interim EPDs of parents.
- For EPD purposes, birth weights are divided into four seasonal groups in addition to the weaning weight grouping:

a Winter:	December, January, February
b. spring	March, April, May, June
c. Summer:	July, August
d Fall	September, October, November

8. Extreme out-liers with respect to weight are excluded from the analysis.

EXAMPLES

1. Both parents have NCE EPDs, calf has an individual weight in a proper contemporary group.

Interim EPDs will be generated from parental EPDs and the individual weight of the calf. Accuracies will be based on parental accuracies with a factor which accounts for the individual weight contribution.

- 2 Both parents have NCE EPDs, calf has no individual weight. Interim EPDs will be generated from the EPDs of the parents with accuracies of .09 for birth, .08 for weaning, .09 for milk, and .07 for yearling.
- One parent has NCE EPDs, one parent has interim EPDs, and the calf has an individual weight in a proper contemporary group.

Interim EPDs will be generated based on the parent with NCE EPds, the EPDs of the sire and dam of the parent with interim EPDs and the individual weight factor.

Neither parent has NCE EPds and the calf has an individual weight in a proper contemporary group.

Interim EPDs will be generated based on NCE EPDs of the grandparents and the individual weight of the calf. In the event of missing EPDs for a grandparent, then the birth year average EPDs for that grandparent will be used.

- Only one parent or neither parent has NCE EPDs and the calf has no individual weight. Interim EPDs will not be generated.
- Both parents have interim EPDs and the calf has no individual weight record or is the result of embryo transfer. Interim EPDs will not be generated.

In cases where embryos or unborn calves are advertised, the most accurate means of determining genetic value is by examining and advertising the most current EPDs of the parents. Any attempt to publish non-existing EPDs derived from parental values, compromises the integrity of the system.

As advertisers and sellers, we must always place ourselves on the other side of the fence and envision we are buyers. We must, above all things, protect our integrity in making sure the performance information advertised is the most current available and that it is officially documented. We can then ensure that when the buyer receives a newly transferred performance registration certificate, he or she will not be surprised.

-John Crouch, director of performance records