

Understanding and Utilizing Economic Indexes in Sire Selection

Pedigree, scrotal measurement, EPDs, accuracies, actual weights, \$ values, DNA tests.... and you haven't even looked at the bull yet. There is no doubt that sire selection can be a daunting task, but economic indexes may be the tool to help simplify your selection process.

Economic indexes are a collection of EPDs that are weighted depending on their economic importance in a given scenario. The goal of these index values is to simultaneously emphasize economically-relevant traits while using a multi-trait selection approach.

Often these indexes are not fully understood and the name of the index doesn't always accurately portray the goal of the index. Read these descriptions carefully so you can accurately use these selection tools to improve the profitability of your cattle.

Angus complete list at (www.angus.org)

Weaned Calf Value (\$W)

An index that is designed for cattlemen that primarily sell calves at weaning. This index also assumes that replacement heifers are retained. EPDs for birth weight, weaning weight, milk, and mature cow size are focused on. Lower birth weights, heavier weaning weights, and lower mature cow size are desirable. Milk production is weighted both positively and negatively as it directly impacts calf weaning weights, but also increases cow maintenance requirements.

Feedlot Value (\$F)

This is an index that focuses on post-weaning characteristics. Yearling weight is the driving factor in this index. It is useful for cattlemen marketing fed cattle on a live basis.

Grid Value (\$G)

This index puts focus on carcass traits. If you want to emphasize improving both quality and yield grade in your herd, this is useful tool.

Beef Value (\$B)

This is a combination of \$F and \$G, but is not a simple addition of the two. \$B is a terminal index. Emphasis is put on yearling weight and carcass traits. Significant selection pressure on \$B index can result in selecting for a larger mature cow size. If replacement heifers are retained, you should not apply blind selection pressure to this index. \$B is not a comprehensive index, which I frequently hear it misrepresented as. It is a terminal index.

Hereford complete list at (www.hereford.org)

Baldy Maternal Index (BMI\$)

A maternal index that assumes a production system based on Hereford x Angus cross females. The index places positive weight on calving ease, scrotal circumference, and weaning weight. A slight negative weight is placed on YW in effort to promote early growth to keep cow size manageable. Positive weight is also placed on marbling,

more so than REA. The index assumes cull progeny are marketed in a branded beef program. This is a maternal-focused index that also places selection pressure on carcass quality.

Certified Hereford Beef (CHB\$)

A terminal index that targets the CHB market. Slight pressure is put on calving ease, positive weight is put on weaning weight, yearling weight, and carcass traits. This index is useful for ranchers producing bulls for a terminal breeding program. It also has value for selecting cattle that will be more profitable in the feedlot. No replacement females are retained in this scenario, thus no selection pressure is put on fertility.

Simmental

All-Purpose Index (API)

An index that assumes bulls will be used on cows and heifers. It assumes heifers will be retained as replacements. All other progeny will be sold on a grade and yield grid based system. This index is designed to assist producers in selecting cattle that will maximize revenue from fed cattle while maintaining maternal attributes in replacement heifers.

Terminal Index (TI)

No smoke and mirrors here. This index assumes all progeny will be sold grade and yield. Used for selecting bulls to be used on cows only.

In conclusion, sire selection sets the stage for your future in the cattle business. Progeny from the bulls you choose today will determine your reputation, your profitability, and your brand. Understanding economic index values can result in more profitable cattle for your operation as well as your customer base.