



# By the Numbers

by American Angus Association staff

## Association releases the Fall 2010 NCE

The *Fall 2010 Sire Evaluation Report* was made available to breeders online July 10 and in print in August.

From a total of **205,712** sires with progeny records in the American Angus Association database, the *Fall 2010 Sire Evaluation Report* lists **2,318** sires with the following qualifications:

1. The sire must have at least 35 yearling progeny weights in proper contemporary groups on Angus Herd Improvement Records (AHIR®).
2. The sire must have a yearling accuracy value of at least 0.40.
3. The sire must have had at least five calves recorded in the American Angus Association Herd Book since **June 1, 2008**.

The Young Sire Supplement lists **3,553** bulls born after **Jan. 1, 2006**, which have at least 10 progeny weaning weights on AHIR and have a weaning accuracy of at least 0.30.

Expected progeny differences (EPDs) and associated accuracies (ACC) are listed for calving ease direct (CED) and maternal (CEM), birth weight (BW), weaning weight (WW), yearling weight (YW) and height (YH), scrotal circumference (SC), milk (MILK), mature weight (MW) and height (MH), carcass weight (CW), marbling (Marb), ribeye area (REA) and fat (Fat).

Dollar values (\$Values) are listed for weaned calf value (\$W), cow energy value (\$EN), feedlot value (\$F), grid value (\$G), quality grade value (\$QG), yield grade value (\$YG) and beef value (\$B).

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**Table 1: Expected progeny difference (EPD) and \$Values averages, standard deviations (SD) and minimum/maximum**

| Trait                                   | No. records        | No. EPD     | Avg.      | SD          | Min.        | Max. |
|---|--------------------|-------------|-----------|-------------|-------------|------|
| <i>Production:</i>                      |                    |             |           |             |             |      |
| Calving ease direct, %                  | 1,091,099          | 6,821,449   | 2         | 5           | -36         | 20   |
| Birth weight, lb.                       | 5,685,615          | 7,696,807   | 1.4       | 2.4         | -11.5       | 15.8 |
| Weaning direct, lb.                     | 6,373,262          | 7,696,807   | 23        | 18          | -62         | 88   |
| Yearling weight, lb.                    | 3,194,915          | 7,696,807   | 42        | 33          | -85         | 146  |
| Yearling height, in.                    | 608,341            | 1,106,106   | .4        | .4          | -2.1        | 2.6  |
| Scrotal circumference, cm               | 565,885            | 1,234,304   | .18       | .46         | -3.57       | 3.30 |
| <i>Maternal:</i>                        |                    |             |           |             |             |      |
| Calving ease maternal, %                | 1,091,099          | 6,821,499   | 4         | 4           | -33         | 20   |
| Maternal milk, lb.                      | 6,373,262          | 7,696,807   | 11        | 9           | -38         | 48   |
| Mature weight, lb.                      | 147,363            | 337,044     | 20        | 30          | -152        | 253  |
| Mature height, in.                      | 147,363            | 337,044     | .5        | .3          | -3.8        | 5.1  |
| <i>Carcass:</i>                         |                    |             |           |             |             |      |
| Carcass weight, lb.                     | 87,664             | 1,985,736   | 7         | 8           | -64         | 70   |
| Marbling score                          | 87,664             | 1,976,255   | .21       | .21         | -.70        | 1.43 |
| Ribeye area, sq. in.                    | 87,664             | 1,985,736   | .03       | .18         | -.96        | 1.22 |
| 12th-rib fat thickness, in.             | 87,663             | 1,984,973   | .004      | .020        | -.125       | .174 |
| Ultrasound intramuscular fat, %         | 1,182,608          |             |           |             |             |      |
| Ultrasound ribeye area, sq. in.         | 1,187,916          |             |           |             |             |      |
| Ultrasound fat thickness, in.           | 1,191,515          |             |           |             |             |      |
| <b>Current sires<sup>1</sup></b>        |                    |             |           |             |             |      |
|   | <b>No. Indexes</b> | <b>Avg.</b> | <b>SD</b> | <b>Min.</b> | <b>Max.</b> |      |
| Wean Value (\$W), \$/head               | 19,669             | 24.48       | 5.02      | -12.91      | 45.17       |      |
| Feedlot Value (\$F), \$/head            | 19,669             | 22.81       | 12.98     | -44.71      | 83.19       |      |
| Grid Value (\$G), \$/head               | 16,633             | 20.21       | 8.82      | -17.24      | 48.52       |      |
| Beef Value (\$B), \$/head               | 16,633             | 38.70       | 12.79     | -35.55      | 77.66       |      |
| Cow Energy (\$EN), savings, \$/cow/year | 19,669             | 3.01        | 8.73      | -28.69      | 56.05       |      |

<sup>1</sup>Current sires have at least one calf recorded in the American Angus Association Herd Book within the past two years.

**Fig. 1: Fall 2010 breed average EPD and \$Values**

|                            | Production |      |     |     |    |      | Maternal |      |     |    |       | Carcass |      |     |        | \$Values |        |        |        |
|----------------------------|------------|------|-----|-----|----|------|----------|------|-----|----|-------|---------|------|-----|--------|----------|--------|--------|--------|
|                            | CED        | BW   | WW  | YW  | YH | SC   | CEM      | Milk | MW  | MH | \$EN  | CW      | Marb | RE  | Fat    | \$W      | \$F    | \$G    | \$B    |
| Current Sires <sup>1</sup> | +5         | +2.0 | +43 | +80 | +4 | +3.9 | +7       | +21  | +31 | +4 | +3.36 | +12     | +31  | +12 | +0.009 | +24.42   | +21.96 | +20.75 | +39.11 |
| Main Sires                 | +5         | +1.9 | +46 | +84 | +3 | +4.1 | +7       | +21  | +31 | +4 | +2.26 | +12     | +31  | +13 | +0.010 | +25.52   | +25.65 | +20.10 | +39.09 |
| Supplemental Sires         | +6         | +1.7 | +47 | +86 | +4 | +5.1 | +7       | +22  |     |    | +2.27 | +14     | +34  | +15 | +0.013 | +25.65   | +26.46 | +21.19 | +42.34 |
| Current Dams <sup>1</sup>  | +4         | +2.3 | +39 | +71 | +4 | +2.8 | +6       | +20  | +31 | +5 | +7.02 | +9      | +26  | +06 | +0.007 | +22.94   | +15.67 | +19.14 | +34.12 |
| Non-Parent Bulls           | +5         | +1.9 | +45 | +83 | +3 | +4.4 | +7       | +22  |     |    | +1.63 | +12     | +35  | +15 | +0.012 | +25.28   | +24.20 | +22.75 | +42.37 |
| Non-Parent Cows            | +5         | +1.9 | +45 | +82 | +3 |      | +7       | +22  |     |    | +1.64 | +12     | +40  | +18 | +0.012 | +25.30   | +24.08 | +23.21 | +42.86 |

<sup>1</sup>At least one calf recorded in herd book within the past two years.

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Descriptions of each of these values are provided in the printed summary and online at [www.angus.org/nce/](http://www.angus.org/nce/). Table 1 shows the number of records used to calculate each EPD, the number of EPDs generated, along with the average, minimum and maximum values among current sires. Fig. 1 shows the breed average EPDs and \$values for current sires, main sires, supplemental sires, current dams, and non-parent bulls and cows. Figs. 2-5 show the genetic trends for various traits.

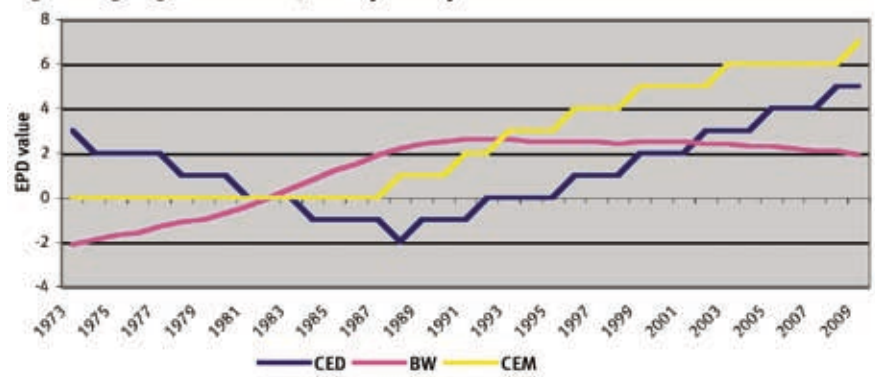
### Carcass

Weekly genomic-enhanced carcass EPDs are calculated from an integrated analysis of the Beef Improvement Records (BIR) carcass, ultrasound, and genomic profile databases. The weekly genetic evaluations result in a single genomic-enhanced EPD for carcass weight, marbling score, ribeye area, and fat thickness. Every Friday morning, the updated genomic-enhanced NCE EPDs are available at [www.angus.org](http://www.angus.org). The Fall 2010 report reflects data available July 10, 2010.

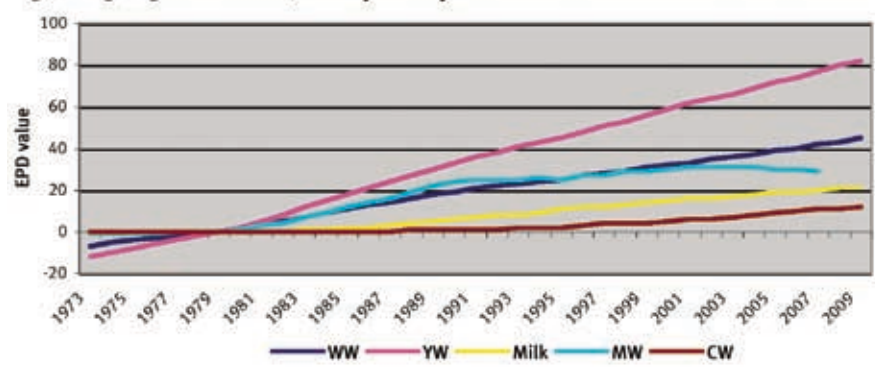
### Research reports

The *Fall 2010 Sire Evaluation Report*

**Fig. 2: Angus genetic trend, EPD by birth year**



**Fig. 3: Angus genetic trend, EPD by birth year**



contains research reports for docility (DOC) and heifer pregnancy (HP) EPDs.

The docility report includes sires with a minimum of 0.35 accuracy and at least 15 progeny and two progeny groups. The report contains DOC EPDs for 832 sires. Temperament scores of 90,240 animals within 8,240 contemporary groups provided EPDs for 263,322 animals. The average EPD was 8, with a minimum of -33 and a maximum of +43.

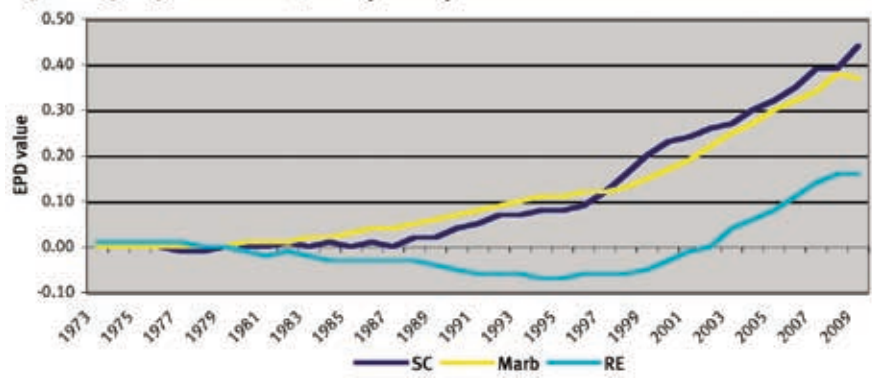
The heifer pregnancy report includes sires with a minimum of 0.30 accuracy. The report contains HP EPDs for 719 sires. Heifer breeding records on 26,746 heifers within 761 contemporary groups provided EPDs for 66,833 animals. The average EPD was 8, with a minimum of -6 and a maximum of +19.

**Full report, summaries**

Active members who returned their blue request cards to receive a printed copy of the *Fall 2010 Sire Evaluation Report* will receive it automatically. Other members and commercial producers who want a printed report should request it via e-mail or by calling the Association. All requests should be submitted to Brenda Gabriel at [bgabriel@angus.org](mailto:bgabriel@angus.org) or 816-383-5144.



**Fig. 4: Angus genetic trend, EPD by birth year**



**Fig. 5: Angus genetic trend, EPD by birth year, for fat**

