Milk EPD an Accurate Indicator of Milk Production and Calf Performance

In a long-term study, Oklahoma State Univ. researchers mated crossbred cows to Angus or Hereford bulls that were either very high or very low for milk expected progeny differences (EPDs). The difference in High and Low Milk EPDs for Angus sires was 27.3 lbs. Heifers from these matings were born over a 5-year period (1989 through 1993). When the heifers were 6, 7, and 8 years old, milk production was measured, and weaning weights of their calves were compared. Following is a summary of results:

- Cows sired by High Milk bulls produced significantly (P<0.05) more milk than cows sired by Low Milk bulls in all months except for the seventh month.
- Cows sired by High Milk bulls had 30.5 lb heavier calves at weaning than those sired by Low Milk EPD bulls. The difference was 30.8 lb for Angus cows and 30.2 lb for Hereford cows.
- Cows sired by High Milk Angus bulls were significantly lighter than those sired by Low Milk Angus bulls (1156 vs. 1210 lb). However, High and Low Milk Hereford cows did not differ significantly in body weight.
- Cows sired by High Milk bulls had significantly lower body condition scores than cows sired by Low Milk bulls (4.97 vs. 5.27 for Angus and 5.10 vs. 5.27 for Hereford).
- Compared to Low Milk cows, there was a tendency for High Milk cows to have longer calving intervals, later calving dates, and lower calving percentages than Low Milk cows. However, the differences were not statistically significant.

These results indicate that High Milk EPD bulls sire cows that produce more milk and wean heavier calves than cows sired by Low Milk EPD bulls, but may do so at the expense of body condition and reproductive efficiency (Erat and Buchanan. 2005. Oklahoma State Univ. Beef Res. Report).

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Cow Costs Are Up

According to its annual survey, Cattle-Fax® reported that the average annual cash cost to carry a beef cow increased by $36/head, from $315 in 2004 to $351 in 2005. Cash costs do not include depreciation, opportunity costs, or returns to management. Cow costs were moderately higher in all regions. The Northwest region had the highest average cost of $397, followed by the Southwest region at $358, the Midwest region at $349, the Southern Plains at $328, and the Southeast region at $324.

Total feed costs accounted for the largest percentage of the total cash costs at about 60%. They ranged from an average of $190/head in the Southeast region to $234/head in the Midwest region. Much of the increase in costs can be attributed to increased energy costs, which not only impacts fuel and utility expenses, but also the cost of mineral and protein supplements. The majority of cow/calf producers felt the pinch of higher costs in 2005, but because of the extremely strong cattle prices, profitability remained historically high. However, Cattle-Fax analysts cautioned that the reality of a turning cattle cycle, increasing cattle supplies, and lower prices is upon us. As a result, the most profitable producers in the next several years will likely evaluate and manage their costs very closely (SOURCE: Cattle-Fax Special Edition, April, 2006).

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Top Ten Beef Quality Challenges

Results of the 2005 National Beef Quality Audit were reported at the annual meeting of the Beef Improvement Federation (BIF) in Choctah, Mississippi. A Strategy Workshop representing all segments of the beef industry ranked the “Top Ten Quality Challenges” faced by the industry. They are as follows (Smith et al. 2006. Proceedings, BIF).

(1st) Lack of Traceability/Individual Animal ID/Source & Age Verification/Chronological Age.
(2nd) Low Overall Uniformity of Cattle, Carcass & Cuts.
(3rd) Need for Implementation of Instrument Grading.
(4th) Inappropriate Market Signals.
(5th) Segmentation of Groups Within the Beef Industry.
(6th) Carcass & Cut Weights Too Heavy.
(7th) Yield Grades Too High/Low Cutability.
(8th) Inappropriate Ribeye Size (Too Small or Too Large).
(9th) Reduced Quality Grade & Tenderness Due to Use of Implants.
(10th) Insufficient Marbling.

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The Natural Resources Conservation Service (NRCS) has announced that applications are now being accepted from Colusa County farmers and ranchers wishing to participate in the 2007 Environmental Quality Incentives Program (EQIP). To be eligible for EQIP during this funding cycle, the applicant must have applied for Conservation Planning Assistance and completed all eligibility requirements by December 1, 2006.

The EQIP program offers technical and financial assistance to eligible participants to install or implement structural and management conservation practices on eligible agricultural land to address priority natural resource concerns. In Colusa County issues of high concern address soil erosion on cropland and along stream-banks, the protection and improvement of grazing lands, sedimentation of water bodies, and protection and conservation of the state’s ground and surface water supply. Additional priority is given to those applications whose treatments address restoring or improving at-risk species habitat. In Glenn County specialized funds have been set aside to address Pest Management including following UC IPM guidelines for the Olive Fruit Fly, and other orchard and crop pests, rangeland management including livestock water facilities, fencing and other rangeland improvements, and Air Management including removal of Olive orchards less than 5 acres. A separate Ground and Surface Water EQIP will be available to eligible producers interested in improving irrigation efficiency including installation of sprinkler and/or micro sprinkler systems. In 2006, Tehama County farmers and ranchers were awarded contracts totaling $276,992.00, enrolling over 1,900 acres into the EQIP program, and addressing concerns such as soil erosion, water quality, and grazing land health. Tehama County applications will be ranked based on national, state, and local resource concerns.

Other USDA programs are available for 2007 and will follow the same application deadlines as EQIP. These include the Wildlife Habit Incentives Program (WHIP), Wetlands Reserve Program (WRP), and Conservation Reserve Program (CRP), among others. Landowners wanting more information about EQIP and other USDA programs should contact their local NRCS office (contact information below). Additional information can be found by visiting www.ca.nrcs.usda.gov.

Tehama County
United States Department of Agriculture
2 Sutter Street, Suite D Red Bluff, California 96080
Phone # (530) 527-3013 ext.3 • FAX # (530) 527 7451

Glenn County
United States Department of Agriculture
132 N Enright Ave., Suite B Willows, CA 95988
Phone # (530) 934-4601 ext.3 • FAX # (530) 934-8667

Colusa County
United States Department of Agriculture
100 Sunrise Blvd. Street, Suite B, Colusa, California 95932
Phone # (530) 458-2931 ext.3 • FAX # (530) 458-3683

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Comparing Prussic Acid and Nitrate Toxicity in Cattle Operations
by Glenn Selk - From August 18, 2006 Cow/Calf Corner

Much confusion exists about the two major toxins that are deadly or costly because of production loss to cattle owners. Both prussic acid and nitrates become health concerns during heat and drought stress on hay or pasture crops. Below is a comparative list of the major differences that producers need to keep in mind about these two problems. Prussic acid and nitrates are capable of happening together or separately in any given drought-stressed situation.

<table>
<thead>
<tr>
<th>Prussic Acid</th>
<th>Nitrate Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caused by hydrocyanic acid</td>
<td>Caused by excess nitrate – excess nitrite</td>
</tr>
<tr>
<td>Primarily in leaves</td>
<td>Primarily in stems</td>
</tr>
<tr>
<td>Kills very quickly</td>
<td>Kills in a few hours</td>
</tr>
<tr>
<td>Blood is bright cherry red</td>
<td>Blood is chocolate brown</td>
</tr>
<tr>
<td>Most dissipated when hay is cut and cured</td>
<td>Stays in hay indefinitely</td>
</tr>
<tr>
<td>Most occurs in grazing cattle</td>
<td>Occurs in both grazing and hay feeding</td>
</tr>
<tr>
<td>Drought stress OR re-growth after frost</td>
<td>Drought stress and/or high fertility</td>
</tr>
</tbody>
</table>

_Treatment of sick animals must be done immediately by veterinarian!_