Sound Breeding Bulls Yield Producer Profits

How did your bulls score on their last breeding soundness exam? Providing balanced nutrition with the effective trace minerals in Availa®4 is critical to optimize bull fertility and maximize breeding season success.

Semen Quality and Quantity

Quality semen in ample quantities helps optimize cow conception rates. This sets the stage for greater pregnancy rates and more calves weaned.

- Annual breeding soundness exams prior to bull turnout are an excellent tool in evaluating bull breeding capabilities.
- Adequate levels of zinc, copper and manganese are essential for hormone synthesis, testicular development and semen quality.

Availa-4 fed bulls had improved sperm characteristics while under heat stress during 9 week collection period.

<table>
<thead>
<tr>
<th>Sperm Characteristics</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inorganic</td>
</tr>
<tr>
<td>Motility</td>
<td>56.1y</td>
</tr>
<tr>
<td>Progressive</td>
<td>38.4y</td>
</tr>
<tr>
<td>Rapid</td>
<td>52.8y</td>
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</tbody>
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*LS Means lacking a common superscript letter differ, P < 0.05
BG-234, 235, 236
Young Developing Bulls
Growing young bulls to sexual maturity can be costly. Many breeds take two to three years before fully reaching puberty. Costs that can impact the bottom line include:

- Lost revenue from growth to productive use
- Poor semen quality and quantity at a young age
- Delayed herd genetic improvements

Benefits of Availa-4 for the Beef Herd

- Improved reproduction in heifers, cows and bulls
- Higher quality colostrum for calf immune response
- Decreased incidence of scours in calves
- Minimize stress associated with weaning
- Heavier weaning weights

Structural Soundness and Foot Health
Keeping sound feet and legs on a bull during the breeding season allows for better coverage on the cows.

- Overall skeletal soundness relies on proper nutrition. Manganese, zinc and copper directly affect bone and joint development and function.
- Trace minerals are required for strong foot and skin integrity which is essential in the battle to prevent foot rot.

Did You Know?

Availa-4 is a combination of highly available complexed Zn, Mn, Cu and Co designed to help meet the trace mineral demands of the beef herd. Recommended feeding rate for bulls is is 7 grams per head daily.

Ask your nutritionist or feed company representative about including Availa-4 in your beef rations.

Bulls Reached Puberty Sooner

<table>
<thead>
<tr>
<th>Percent</th>
<th>Inorganic</th>
<th>Availa®4</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>47</td>
<td>79</td>
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</table>

Bulls fed Availa-4 had a higher percentage reach puberty by day 42 of supplementation and on the average they were pubertal 15 days sooner than those fed inorganic minerals.

Minimize Foot Rot

<table>
<thead>
<tr>
<th>Percent</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.44</td>
<td>12.28</td>
<td>11.32</td>
</tr>
<tr>
<td>5.22</td>
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</tbody>
</table>

Studies show feedlot steers fed Zinpro Performance Minerals as part of a well-balanced mineral program experience lower foot rot incidence.

a Zinpro Performance Minerals: ZINPRO® zinc methionine BCI-1