



BY RACHEL ENDECOTT, BEEF CATTLE SPECIALIST

COW SENSE CHRONICLE

OCTOBER 2013

MANAGING COW BODY CONDITION

It's finally starting to feel like fall, and with that come chores like weaning, shipping, and pregnancy checking. While those cows are in the pen for pregnancy checking, it might be worth your while to evaluate their body condition.

Body condition scores describe relative fatness of a cow herd using a 9-point system, where 1 is "emaciated" and 9 is "obese". The main components of body condition scoring are visible bone structure, muscling, and fat cover. A body condition score 1 cow has shoulders, ribs, backbone, hooks, and pins that are sharp to the touch and easily visible. She would exhibit no evidence of fat or muscling. In contrast, the bone structure of a body condition score 9 cow is not seen or easily felt and her tailhead is buried in fat. My theory is that most body condition score 9 cows have names, not numbers! Happily, neither body condition score 1 or 9 cows are common sights in Montana beef cattle herds.

Most industry recommendations suggest that mature cows be in condition score 5 at calving and that first-calf heifers be in condition score 6 for optimal reproductive performance and colostrum production. Characteristics of a body condition score 5 cow include that her 12th and 13th ribs are only visible if she is shrunk, and she has visible muscling and some fat on each side of her tailhead. On the other hand, the ribs of a body condition score 6 cow are fully covered and not visible, and she has noticeable springiness over her foreribs and tailhead.

Post-weaning is a great time to improve condition of thin cows because it coincides with their lowest nutrient requirements of their production cycle. This phenomenon can often be observed when cows graze dormant forage pastures post-weaning and gain body condition going into the winter, and shows that even in late lactation, the production of milk requires a large proportion of nutrients. Energy requirements decrease nearly 25% when a cow transitions from late lactation to a dry cow in mid-gestation, and protein requirements decrease by nearly a third from pre-weaning to post-weaning.

We can take advantage of the lower nutrient requirements post-weaning to put weight back on thin cows, who tend to use nutrients quite efficiently. Let's say during the 3rd trimester, we feed 28 pounds of good quality alfalfa-grass hay to a mature, 1400-lb cow in body condition score 6. She would maintain weight and body condition, depending on the weather. If we had a similar cow in body condition score 3 and we fed her 28 pounds of the same hay, she would gain about 0.2 pounds per day. The thinner cow has lower maintenance requirements because she is smaller (thinner) and has more nutrients left over from the 28 pounds of hay to use for weight gain, thus she uses nutrients very efficiently.

What would happen if we decided to intervene earlier in the production calendar to get the thin cow to gain weight? If that same body condition score 3 cow were in mid-gestation instead of late gestation, she would gain about 1.65 pounds per day when fed 28 pounds of the hay. That's right, the thin cow in mid-gestation has an average daily gain 8 times higher than the cow in late gestation when fed the same amount of hay! This shows just how much the nutrient requirements increase from mid-gestation to the third trimester. Because the fetus has considerably lower nutrient demands during mid-gestation, the cow has more nutrients to devote to her body weight gain.

Three important times of the year to take a critical look at body condition would be at weaning/preg check, the start of the third trimester, and calving. Keep in mind that as time passes between weaning and calving, the opportunity to take advantage of lower nutrient requirements of the cow slips away. Post-weaning is usually the best time to put weight on thin cows in an economical and efficient manner.

STEER-A-YEAR PROGRAM RETURNS TO MSU

After a one-year hiatus, the Steer-A-Year program will run again in 2013-14. Donated steers make a direct impact on MSU students, particularly those in the Livestock Judging program. In addition to the judging team, steers donated to SAY make important contributions to the educational experiences of dozens of students in the College of Agriculture. The steers are used in Animal Science courses during both fall and spring semesters, including Beef Cattle Management, Livestock Management – Beef Cattle, Meat Science, and Livestock Evaluation.

Delivery of steers will be taken during the week of October 14-18, 2013. Steers will be housed at the Bozeman Agriculture Research and Teaching Farm. Performance data (28-day gains, carcass) will be sent out to donors as it is collected. Donated steers compete in two contests, the Best Initial Feeder Steer and the Best Carcass. Donors will also be honored at MSU Celebrate Agriculture!! Weekend on October 25-26.

If you'd like more information about the Steer-A-Year program, or would like to donate a steer, please contact Rachel Endecott at (406) 994-3747 or rachel.endecott@montana.edu.

Questions for Rachel?
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Sun	Mon	Tue	Wed	Thu	Fri	Sat
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i> Great Falls	<i>5</i> Shelby
<i>6</i> Gallatin Co Carcass Awards, Belgrade	<i>7</i>	<i>8</i>	<i>9</i> Collegiate Stockgrowers 7 pm	<i>10</i>	<i>11</i>	<i>12</i>
<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i> MSU Friday	<i>19</i>
-----W-1012 Meetings, Las Cruces, NM-----						
<i>20</i> 4-H Market Beef Workshop, Forsyth	<i>21</i>	<i>22</i>	<i>23</i> Collegiate Stockgrowers 7 pm	<i>24</i>	<i>25</i>	<i>26</i> Celebrate Ag!!
<i>27</i>	<i>28</i>	<i>29</i>	<i>30</i>	<i>31</i>		