Body Condition Scoring of Sheep and Goats

By Dr. Jodie Pennington

One of the most important management skills of livestock producers is the ability to recognize when their animals are too skinny or too fat or just right in their fat reserves. The body condition or flesh on an animal affects its ability to resist infection and parasites, its ability to grow and produce milk, and its likelihood of breeding.

Body condition scoring methods have been developed for sheep, goats, beef cattle, dairy cattle, horses, and chickens. They are used for evaluating the current and past feeding program, assessing the health status of individual animals, and establishing the condition of animals during routine animal management. Condition scores also may be useful during assessment of animal welfare.

Body condition scores provide an indication of the energy status of sheep and goats, being largely an index of the amount of muscle and degree of fatness of the animals. Condition scores can be used for all ages of animals, although primarily they are used on the lactating animals. Body condition scoring provides an objective indication of the amount of fat cover on sheep and goats. This evaluation is accomplished by assigning a score to the amount of fat observed on several skeletal parts of an animal. Various point systems are used to score the animal.

The two most common scoring systems for body condition for sheep and goats range from 1 to 5 or from 1 to 9. The two systems utilize a middle point of 3 or 5, respectively, as neither too fat nor too skinny. A score of 1 is very, very skinny or an emaciated animal while a score of 5 or 9, respectively, is a very, very fat animal. For dairy animals, the most commonly used system ranges from 1.0 to 5.0, in increments of 0.1 or 0.25. One point of body condition equals 10 to 15 pounds gain in body weight in sheep and goats. Larger frame animals require additional body weight to increase one point, compared to smaller frame or narrow animals. For beef cattle, the 1 to 9 system is often used but both systems are utilized with meat goats and sheep.

In contrast to body condition scoring for dairy or beef cattle, it is usually necessary to put your hands on sheep and goats to properly evaluate their body condition. An exception is with dairy goats where visual appraisal may be adequate.

For most producers, it is not necessary to score each animal in the herd or flock, but it is essential that they recognize proper body condition and changes plus know that body condition scores are an index of the energy status of sheep and goats. The two most common scoring systems for body condition for sheep and goats range from 1 to 5 or from 1 to 9. The two systems utilize a middle point of 3 or 5, respectively, as neither too fat nor too skinny. A score of 1 is very, very skinny or an emaciated animal while a score of 5 or 9, respectively, is a very, very fat animal. For dairy animals, the most commonly used system ranges from 1.0 to 5.0, in increments of 0.1 or 0.25. One point of body condition equals 10 to 15 pounds gain in body weight in sheep and goats. Larger frame animals require additional body weight to increase one point, compared to smaller frame or narrow animals. For beef cattle, the 1 to 9 system is often used but both systems are utilized with meat goats and sheep.

In contrast to body condition scoring for dairy or beef cattle, it is usually necessary to put your hands on sheep and goats to properly evaluate their body condition. An exception is with dairy goats where visual appraisal may be adequate.

For most producers, it is not necessary to score each animal in the herd or flock, but it is essential that they recognize proper body condition and changes plus know that body condition scores are an index of the energy status of sheep and goats.
Below Average Year?
By Ed Browning

Our average annual rainfall is 40” to 42” in southwest Missouri. Average just means somewhere near the middle of low and high. It’s easy to forget how much rain you’ve actually had when there are periods of no rain and crops are wilting and drying up. 2010 is no exception. Although we started out with plenty of rain, summer heat and drought left a lot to be desired. Yields in many cases were down from normal and soil moisture is probably below normal currently; whatever normal is this time of year.

Here’s a look back at inches of rainfall recorded at the University of Missouri Commercial Ag weather station just outside Lamar, MO, January 1 to October 14 as well as annual rainfall. Snowfall is recorded as inches of water equivalent.

<table>
<thead>
<tr>
<th>Year</th>
<th>1/1 to 10/14</th>
<th>1/1 to 12/31</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>35.16</td>
<td>------</td>
</tr>
<tr>
<td>2009</td>
<td>39.85</td>
<td>44.56</td>
</tr>
<tr>
<td>2008</td>
<td>53.83</td>
<td>59.55</td>
</tr>
<tr>
<td>2007</td>
<td>45.46</td>
<td>50.63</td>
</tr>
<tr>
<td>2006</td>
<td>22.09</td>
<td>28.60</td>
</tr>
<tr>
<td>2005</td>
<td>26.14</td>
<td>28.92</td>
</tr>
<tr>
<td>2004</td>
<td>35.44</td>
<td>46.92</td>
</tr>
<tr>
<td>2003</td>
<td>29.96</td>
<td>37.79</td>
</tr>
<tr>
<td>2002</td>
<td>28.63</td>
<td>31.91</td>
</tr>
<tr>
<td>2001</td>
<td>39.11</td>
<td>43.01</td>
</tr>
<tr>
<td>2000</td>
<td>31.04</td>
<td>37.09</td>
</tr>
</tbody>
</table>

I’ve recorded 38” of precipitation at my house thus far this year; May being the highest month at 8.8” and March and September at 5.49” and 6.31” respectively. Other months of the year have been unimpressive unless you’re impressed by very little rain or lack thereof.

After experiencing a very hot, dry summer this year (and garden that didn’t produce well even with irrigation), I just don’t remember nearly 60” of rain in 2008. Nor do I specifically remember the droughty 2005 and 2006 at roughly 12” below average. I do remember when I moved to Carthage, someone said “if you don’t like the weather today, stick around it’ll be different tomorrow.” That’s Missouri.

Missouri Farmers Can Grow Their Communities One Donation at a Time

Rural communities are important to farmers. They give farmers a place to call home, a place to meet with friends for breakfast, a place to raise families. Now, Missouri farmers in 71 counties have the opportunity to win $2,500 awards for their favorite nonprofit organization. The awards are available through Monsanto Fund’s America’s Farmers Grow CommunitiesSM program. The program’s first two pilots provided nearly 500 farmers in 10 states with $2,500 awards to direct to their favorite nonprofit. That totals nearly $1.2 million invested since the first pilot program began in January. The program has now expanded to more than 1,200 counties across 38 states.

The America’s Farmers Grow Communities program is intended to benefit non-profit community groups such as ag youth organizations, schools and other civic groups important to America’s farmers. Farmers can call 1-877-267-3332 to apply by phone or apply online at www.growcommunities.com.

Farmers, age 21 and over, who are actively engaged in farming a minimum of 250 acres of corn, soybeans and/or cotton, or 40 acres of open field vegetables, or at least 10 acres of tomatoes, peppers and/or cucumbers grown in protected culture are eligible. Farmers can enter now through December 31, 2010. The program is open to all qualifying farmers, and no purchase is necessary in order to enter or win. One winner will be drawn from each of the participating counties, and Monsanto Fund will announce winning farmers and recipient organizations by February 2011.

A partial list of eligible counties in Missouri include: Barton, Dade, Jasper, and Vernon.
Time to Work Cows Again
By Dona Goede

Winter will be here before we know it so now is a great time to get things done to prepare for it. Here are a few timely tips for your herd.

Spring-Calving Cows
- Schedule a pregnancy examination of cows if not done previously. Winter feeding costs can be minimized by eliminating open cows prior to winterfeeding.
- Wean calves before cows lose body condition.
- If you have already done a preweaning working, revaccinate (booster) calves as needed. Treat calves for internal and external parasites.
- Weaning is the time to do your first round of culling and selecting breeding stock. It is not too early to begin thinking about replacements now.
- Evaluate the body condition of your cows. It is easier to improve their condition prior to winter.

Fall-calving herds
- The calving season is in full swing for fall calvers. Check cows frequently, even though weather related stress isn’t as much of a problem as spring-calving can be.
- It is time to get everything ready for the fall-breeding season, too. Line-up semen, supplies, etc. and get your bulls ready to go (don’t forget their breeding soundness evaluation).
- Put fall-calving cows on accumulated pasture before the breeding season.

General Reminders
- Remove fly-control eartags from all animals, dispose of according to instructions on package. Treat for grubs/lice.
- Test hay quality and make inventory of hay supplies and needs. Make adjustments (buy feed or sell cattle) before you run out in the winter.
- Avoid prussic acid poisoning which can happen when frosts rupture the plant cells in sorghums, sorghum-sudan hybrids, sudangrass and johnsongrass releasing prussic (hydrocyanic) acid. Pastures can be grazed after the plants have dried up after a frost. New growth that occurs in stalk fields is potentially dangerous whether frosted or not.
- Take soil samples for soil analysis to determine pasture fertility needs. Apply phosphate, potash and lime accordingly.

MAESTRO

The University of Missouri and Extension is partnering with the Missouri Department of Agriculture (MDA), Missouri Department of Natural Resources (MDNR), the Missouri Agriculture and Small Business Development Authority (MASBDA) and EnSave, Inc. to provide livestock operations with energy audits, low interest loans, and rebates to install energy-saving equipment for the farm operation and the farm residence. This program is called the Missouri Agricultural Energy Saving Team: A Revolutionary Opportunity (MAESTRO).

Options available to the farmers through the MAESTRO program include:
- Comprehensive energy audits for the farm and farm residence
- Rebate on energy audit cost when equipment is installed, and,
- Loan interest rate buy-down to 3% or equivalent amount in cash down payment

Lending institutions can benefit from a 75% loan loss reserve program (loan guarantee).

Currently, the mission is to educate as many people as possible about this program and to instill confidence that MAESTRO will help conserve energy and save money. In the future, a website will be available to further explain the program details, guidelines, contact information, deadlines, and provide additional educational materials.

The program is open to all livestock producers in Missouri who are not required to be permitted as a confined animal feeding operation (CAFO). Applicants must be a legal Missouri resident and at least 18 years old, and be able to provide proof of citizenship or immigration status, identity and residence. If the borrower employs laborers, he/she must also provide proof of enrollment and participation in the federal work authorization program. Other restrictions may apply; refer to the program forms at: http://mda.mo.gov/abd/financial/maestro.php or call EnSave at (800) 732-1399 to discuss the MAESTRO program.
condition varies for each stage of life of the sheep or goat. Once a producer can identify a body condition score of 3 out of 5 or 5 out of 9, then it is important to note changes in body condition. If an animal loses weight and condition, then extra feed or a higher quality feed may be needed for the animals to get back to proper body reserves. Animals in late lactation or heavily pregnant will have a higher condition score (i.e., 3.5 - 3.75 on a 5.0 scale) than animals that have been milking for two months after giving birth (i.e., 2.5 on a 5.0 point scale).

Pictures to show examples of body condition scores ranging from 1 to 5 are available at http://www.luresext.edu/goats/research/bcs.html and http://bedford.extension.psu.edu/agriculture/goat/Body%20Condition%20Scoring.htm for goats and at http://www.smallstock.info/tools/condscor/cs-sheep.htm and http://ir.library.oregonstate.edu/jspui/bitstream/1957/14303/1/ec1433.pdf for sheep.

Sudden changes in body condition scores allow you to detect health problems in an individual animal or your herd or flock. If an animal is sick and quits eating, the body condition score can change dramatically in less than a week. For example, if a doe develops severe diarrhea after kidding, the body condition score can drop from 4.0 to 2.0 in less than a week if she quits eating and is still producing reasonable quantities of milk. This example would be the extreme in using body condition scores to indicate health problems in the herd. Other examples might include low scores in animals that have a heavy parasite load. These animals will generally not put on flesh like animals that are in good health. Also, animals that have a low grade respiratory infection will not be maintaining or increasing body condition scores like healthy animals.

In conclusion, BCS can be a useful management tool to improve the bottom lines of your small ruminant enterprise through increased and more efficient growth and milk production, better reproductive performance and improved herd health.

Upcoming Sheep & Goat Meetings

Saturday, November 6      Sheep and Goat Initiative Meeting, SW Missouri Research Center, Mt. Vernon
Missouri's Purple Paint Statute: Protect Your Property From Trespassers
By John Hobbs

Landowners can use "No Trespassing" signs, however the Purple Paint Statute allows landowners to mark trees or posts with purple paint as a warning to would-be trespassers. Just like a "No Trespassing" sign or actual communication to individuals that no trespassing is allowed, the purple paint marks are considered to be adequate notice to the public that no trespassing is allowed on the property.

Missouri's law is similar to one that has been used in Arkansas since 1989. These statutes were enacted to provide landowners with an economical and easy way to keep out unwanted trespassers. The law does not require that property marked with the purple paint also be fenced, thus it is an economical alternative for landowners who do not otherwise need to fence their property. Additionally, it prevents a problem encountered when using "No Trespassing" signs -- purple paint marks can't be taken down, destroyed, or stolen! All land marked with purple paint in the manner proscribed by the statute is considered to be adequate notice to the public. It fulfills the same function as a "No Trespassing" sign, a fence, or telling someone not to come onto your property.

Under Missouri's law:
- Any owner or lessee of real property can post property with the purple paint marks.
- Purple paint marks must be placed on either trees or posts (the statute does not specifically allow the option of placing paint marks on buildings).
- Vertical paint lines must be at least 8 inches long (the statute does not mention a maximum length).
- The bottom edge of each paint mark must be between 3 feet and 5 feet off the ground.
- Paint marks must be readily visible to any person approaching the property.

Purple paint marks cannot be more than 100 ft. apart.

The statute provides that any person trespassing onto property marked by purple paint can be found guilty of a first-degree trespassing charge. Any unauthorized entry onto property marked with the purple paint marks is considered a trespass. First-degree trespassing is a Class B Misdemeanor, with potential punishment of a maximum $500 fine and/or a maximum of 6 months in jail.

Other violations which would subject a trespasser to first-degree trespass are: (1) entering a property posted with "No Trespassing" signs; (2) refusing to leave property once told to do so; and (3) coming onto land fenced against intruders.

Landowners can purchase the purple boundary posting paint at hardware stores across the state. Several paint companies have formulated a latex semi-paste product for the specific purpose of marking property. The paint can be applied in its semi-paste form or sprayed once thinned.