



# **Livestock Production**

## **Animal Anatomy, Physiology and**

## **Animal Health**

### **Handout 2**

### **Condition Scoring Of Cattle And**

### **Sheep**

# Body Condition Scoring

Tyanne Roland, Extension Educator

## Goal (learning objective)

Youth will learn what a body condition score is and how to determine what score an animal should receive.

## Supplies

- Body Condition Score Handouts (make enough copies for the group)
- Videos about body condition scoring (see resources)
- Pictures of animals of various body condition scores (see resources)
- 9 Hula Hoops, labeled 1 through 9
- Computer with internet connection
- An outdoor area or large room where youth can move
- Table

## Pre-lesson preparation

- Read and review the lesson and resources
- Make photocopies of the Body Condition Score Handouts
- Watch the YouTube videos (see resources)

## Lesson directions and outline

Each species of animals can be scored on a number system based on their appearance to determine a body condition score.

A body condition score is determined by the amount of body fat or lack of body fat and is expressed numerically.

- Pigs, sheep, goats and dairy cows are based on a 1-5 scale with one being very thin and five being overly fat.

- Beef cattle and horses are on a 1-9 scale with one being emaciated (very thin) and nine being very obese (fat).

As you discuss the numbers of body condition score, share the handouts and take time to watch the videos with the youth.

An animal's body condition score can vary throughout the year. The body condition is typically dependent on the environment and amount of feed the animal has access to. It should be measured a couple times a year to ensure good health. By assessing the animal and assigning a body condition score, the producer has the ability change their nutritional and management strategies to meet the needs of the animal. This will help keep the animal in the optimal condition and not waste the producers feed resources. It is important that animals being ready to breed are not too fat or too thin. This could cause a reduced pregnancy rate or affect milk production after the animal gives birth.

## Conducting the activity (DO)

1. Review the numerical body condition scores for each species with the youth.
2. Place the labeled hula hoops around the room.
3. Display pictures of animals one at a time. Have youth move to the numbered hula hoop that they think matches the body condition score of the animal displayed.
4. Allow youth time to transition to the hula hoop. Once they have selected their hoop, ask the group to share why they chose that score
5. Once all images have been gone through, gather the images together and have the group arrange the images in order from thinnest animal to fat-test. Have youth discuss the differences that they see.

### What did we learn? (REFLECT)

- Ask: What areas of the animal do you look at to determine body condition score?
- Ask: Is it easy to tell apart an animal with a body condition score of 1 compared to a 5 in pig, sheep or goat? Or a 1 to a 9 in beef?
- Ask: Is it easy to compare a 1 to a 3 in pig, sheep or goat?

### Why is that important?

- Ask: What is the benefit of having your animal score at least an average body condition score?
- Ask: What body condition score would you want people to see when looking at the animals that are in your care?

### Resources

Iowa State University. Center for Food Security and Public Health. (2011) NVAP Module 21: Animals' Fitness to Travel. Body Condition Score - Swine. Retrieved from: <https://research.unc.edu/files/2012/11/Body-Condition-Scoring-Swine.pdf>

Ockert, Katie. (2015). Body Condition Scoring in Goats. Michigan State University. Retrieved from [https://www.canr.msu.edu/news/body\\_condition\\_scoring\\_in\\_goats](https://www.canr.msu.edu/news/body_condition_scoring_in_goats)

Kott, Dr. Rodney and Surber, Dr. Lisa. (2013). Body Condition Scoring in Sheep. Montana State University. Retrieved from: <https://articles.extension.org/pages/66823/what-is-body-condition-scoring-in-sheep>.

Ohio State University Extension. (2011). Nutrition and Feeding. *Beef resource handbook* (pages 7-19 through 7-22).

Ohio State University Extension. (2008). Caring for Animals. *Goat resource handbook* (pages 159-164).

Ohio State University Extension. (2011). Caring for Animals. *Sheep resource handbook for market and breeding projects* (pages 135-139).

Ohio State University Extension. (2000). Nutrition. *Swine resource handbook for market and breeding projects* (pages 8-5 through 8-14).

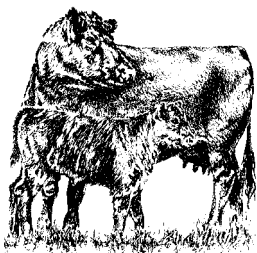
Western Beef Resource Committee. (2016). Cattle Producer's Handbook Management Section. *Condition Scoring of Beef Cattle*.

### YouTube Videos:

Oklahoma State University. (2014). Body Condition Scoring for Meat Goats. Retrieved from: <https://www.youtube.com/watch?v=rnxwwGP7sqA>

Purdue University Extension. (2007). Body Condition Scoring Beef Cattle. Retrieved from: <https://www.youtube.com/watch?v=ObjekWP1rHs>

Purdue University Extension. (2018). Body Condition Scoring Ewes. Retrieved from: <https://www.youtube.com/watch?v=iKgtWy8gf6M>



# Cattle Producer's Handbook

Management Section

720

## Condition Scoring of Beef Cattle

*Patrick A. Momont, Extension Beef Specialist, University of Idaho**Richard J. Pruitt, Associate Professor  
South Dakota State University*

The nutritional requirements of the animal must be met to attain high levels of cow performance and efficient use of feed resources. Precise feeding of beef cows is complicated, however, under diverse range and pasture environments. Monitoring body condition during the production cycle is an effective means of evaluating the cow herd's nutritional program.

### Body Condition Scoring

Cow body condition scoring is a method of categorizing breeding animals by their degree of body reserves. Numerical values, derived through subjective visual appraisal and (or) manual palpation, are assigned to each cow according to apparent external fat cover, muscle appearance, and apparent skeletal features.

While several numbering systems for assessing condition scores are in use, they all are based on the

same range of cow body condition, and all serve the same function. A system using the relative rankings of 1 through 9, which is commonly used throughout the United States, is described in Table 1. Key anatomical reference points for evaluating cow body condition are shown in Fig. 7.

Researchers have reported strong positive correlations between condition scores and the percent body fat of cows. In fact, condition scores are more indicative of an animal's relative body fatness than other objective linear measurements such as weight to height ratios and backfat probes. Research shows visual appraisal alone can accurately evaluate body condition, which is beneficial considering that palpating all cows may not be practical under certain circumstances. A simplified reference guide containing key points and backfat estimates for each condition score is shown in Table 2.

**Table 1. Body condition scoring system for beef cows.**

Score	Condition	Description
1	Severely emaciated	Individual spinous processes, shoulder, rib, and hip bones are obvious. No apparent fat cover. Shoulder, loin, and rear quarter muscle has marked atrophied appearance. Physically weak (Fig. 1).
2	Extremely thin	Same as 1 but not weakened (Fig. 2).
3	Very thin	Individual spinous processes, shoulder, rib, and hip bones are obvious. No apparent fat cover. Only slight muscle atrophy (Fig. 3).
4	Slightly thin	Individual spinous processes no longer apparent. Rear ribs, hip, and pin bones evident. Slight fat cover over shoulder and foreribs only. No visible muscle atrophy (Fig. 4).
5	Moderate	Last two ribs noticeable. Small amount of fat over shoulder, foreribs, and loin. Slight or no fat on brisket or over hip and pin bones (Fig. 5).
6	Slightly fleshy	Individual ribs are not evident. Moderate fat covering over shoulder, loin, and foreribs. Some fat in brisket and over last ribs and hip bones (Fig. 6).
7	Fleshy	Very smooth profile due to fat deposits. Considerable fat covering over shoulder, rib, loin, and hip. Fat fills out brisket, flanks, and tailhead.
8	Obese	When viewed from behind, back and hips have square appearance, and tailhead is full due to excessive fat deposits. Flanks appear deep, and brisket is full and distended with fat.
9	Very obese	Excessive fat deposits cause a rippled appearance over loin, hip, and tailhead. Neck appears short due to fullness of brisket. Heavy deposition of udder fat noticeable in dry cows.

**Table 2. Key points for condition scoring beef cows.**

Reference point	1	2	3	4	5	6	7	8	9
Physically weak	yes	no	no	no	no	no	no	no	no
Muscle atrophy <sup>1</sup>	yes	yes	slight	no	no	no	no	no	no
Outline of spine visible	yes	yes	yes	slight	no	no	no	no	no
Outline of ribs visible	all	all	all	3 to 5	1 to 2	0	0	0	0
Fat in brisket and flanks	no	no	no	no	no	some	full	full	extreme
Outline of hip and pin bones visible	yes	yes	yes	yes	yes	yes	slight	no	no
Fat udder and patchy fat around tailhead	no	no	no	no	no	no	no	slight	yes
Backfat estimate, inches	0	0	.05	.11	.19	.29	.41	.54	.68

<sup>1</sup>Muscles of loin, rump, and hindquarter are concave, indicating loss of muscle tissue.



**Fig. 1. Condition score 1—severely emaciated.**



**Fig. 4. Condition score 4—slightly thin.**



**Fig. 2. Condition score 2—extremely thin.**



**Fig. 5. Condition score 5—moderate.**



**Fig. 3. Condition score 3—very thin.**



**Fig. 6. Condition score 6—slightly fleshy.**

## Condition Scores and Cow Performance

### Reproductive Performance

Condition scores can be used to manage the cow herd toward a desired level of reproductive performance. Cows of higher body condition at calving and during early lactation are more likely to cycle and become pregnant early in the breeding season.

Results from a 3-year study in western South Dakota indicate that the likelihood of estrus by the beginning of the breeding season increases with higher cow body condition scores (Table 3). The probability of cows conceiving early and becoming pregnant during a 60-day breeding season is also greater as condition score increases (Table 4).

**Table 3. Cow body condition and probability of cycling by the beginning of breeding season.**

Condition score	Probability based on pre-calving condition score	Probability based on pre-breeding condition score
2	—	.05
3	.09	.12
4	.19	.28
5	.35	.52
6	.55	.74
7	.74	.89
8	.86	—

**Table 4. Cow body condition and reproductive performance.**

Condition score	Probability of pregnancy during a 60-day breeding season		Probability of conceiving in the first 21 days of the breeding season	
	Early calvers	Late calvers	Early calvers	Late calvers
Based on condition score at calving:				
3	.88	—	.51	—
4	.93	.88	.58	.41
5	.96	.93	.65	.56
6	.98	.96	.72	.70
7	.99	.97	.77	.81
8	.99	.99	.82	.89
Based on condition score at the beginning of breeding season:				
2	.81	.60	.29	.23
3	.91	.80	.44	.36
4	.96	.91	.60	.50
5	.98	.97	.75	.65
6	.99	.99	.85	.77
7	1.00	.99	.92	.86

Late-calving cows that are thin (condition score 3 or less) have the poorest chances of cycling and becoming pregnant. Cows that calve early could be one condition score less at the beginning of the breeding season than late calvers and still have the same probability of conceiving. Higher levels of nutrition for late-calving cows and early calving of heifers will ensure that a majority of the cow herd cycles early in the breeding season.

Several studies indicate that average body condition or cows with condition scores of 5 at calving and at the beginning of the breeding season will have relatively high levels of reproductive performance. Many management factors in addition to nutrition and body condition will affect reproductive performance of the beef cow herd. What is considered ideal body condition may vary with location, breed, month of the breeding season, and management system. The optimum body condition at various times of the year will also depend on what level of reproductive performance is expected.

To obtain relatively high reproductive performance and still avoid excessive feed costs, nutritional programs should match cow body condition with an expected level of performance. For the scoring system described, a change in one condition score is equivalent to a 60- to 80-pound change in weight. A cow with a condition score of 7 could stand to lose 140 pounds of body weight if condition score 5 is the goal. A condition score 3 cow would need to gain 140 pounds. These weight changes do not include weight gain of the fetus and fluids associated with pregnancy.

### Calf Performance

Lactating cows use their body fat as an energy source for milk production. In general, heavier milking cows lose more body condition during lactation than average milkers when both groups are provided a similar level of nutrition. As a result, the heaviest calves may often be suckling the thinnest cows.

Several university studies have shown that weaning weights of calves are not related to cow body condition scores. Changes in management and feeding programs from spring to summer and fall may have allowed for compensatory growth of calves that were previously undernourished in these studies. Only under severe nutritional restriction of the cow (loss of two or more condition scores) has it been determined that weaning weights of calves are depressed (Table 5).

**Table 5. Effects of cow condition score change from March until May calf performance.**

	Condition score change, March to May		
	Maintained	Lost one	Lost two or more
205-day adjusted weight, lb	607	606	586

- **Cows should be at least a condition score of 5 at calving and the beginning of the breeding season for high levels of reproductive performance.** Late-calving cows require higher condition scores than early calvers for the same level of reproductive performance.

- **Breed heifers to calve 20 to 30 days before the mature cows.** In the future, this practice will increase the likelihood that thin, young cows will cycle and conceive during a fixed breeding season.
- **Avoid using condition scores as a primary selection tool for culling cows in the fall.** Milking ability and cow body condition can be related. The thin cows may be weaning heavier calves.

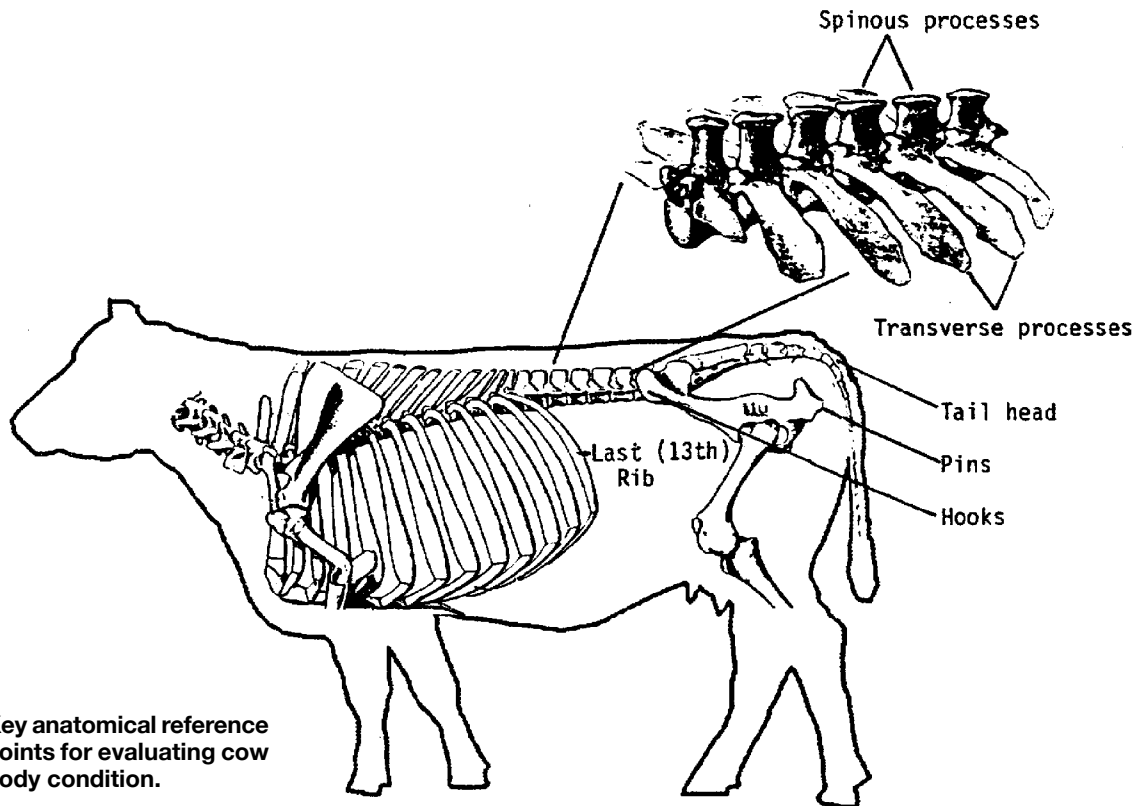


Fig. 7. Key anatomical reference points for evaluating cow body condition.



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# Body condition scoring of sheep

J. Thompson and H. Meyer

Throughout the production cycle, sheep producers must know whether or not their sheep are in condition (too thin, too fat, or just right) for the stage of production: breeding, late pregnancy, and lactation.

Weight at a given stage of production is the best indicator, but as there is a wide variation in mature size between individuals and breeds, it is extremely difficult to use weight to determine proper condition. Body condition scoring describes the condition of a sheep, is convenient, and is much more accurate than a simple eye appraisal.

A body condition score estimates condition of muscling and fat development. Scoring is based on feeling the level of muscling and fat deposition over and around the vertebrae in the loin region (Figures 1–3). In addition to the central spinal column, loin vertebrae have a vertical bone protrusion (spinous process) and a short horizontal protrusion on each side (transverse

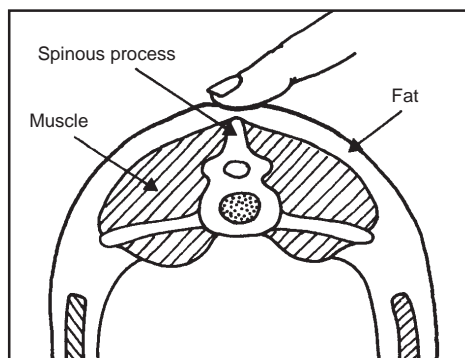


Figure 1.—Feel for the spine in the center of the sheep's back, behind its last rib and in front of its hip bone.

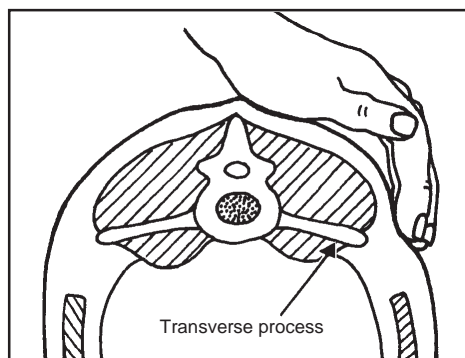


Figure 2.—Feel for the tips of the transverse processes.

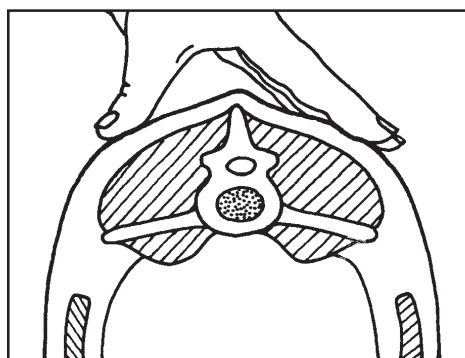


Figure 3.—Feel for fullness of muscle and fat cover.

James M. Thompson, *Extension sheep specialist*, and Howard H. Meyer, *associate professor of animal sciences*; Oregon State University.





process). Both of these protrusions are felt and used to assess an individual body condition score.

The system used most widely in the United States is based on a scale of 1 to 5. The five scores (Figures 4–8) are:

**Condition 1 (Emaciated)**

Spinous processes are sharp and prominent. Loin eye muscle is shallow with no fat cover. Transverse processes are sharp; one can pass fingers under ends. It is possible to feel between each process.

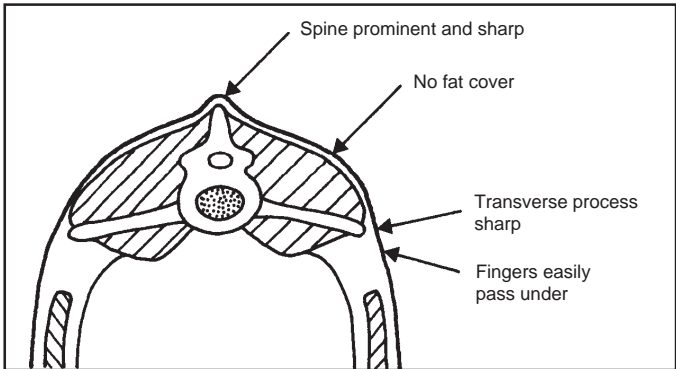


Figure 4.—Condition 1

**Condition 2 (Thin)**

Spinous processes are sharp and prominent. Loin eye muscle has little fat cover but is full. Transverse processes are smooth and slightly rounded. It is possible to pass fingers under the ends of the transverse processes with a little pressure.

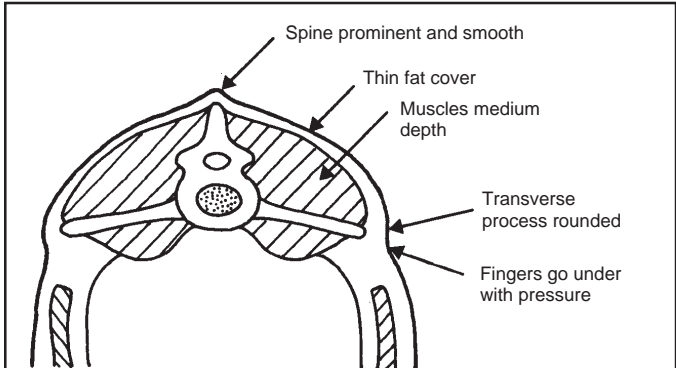


Figure 5.—Condition 2

**Condition 3 (Average)**

Spinous processes are smooth and rounded and one can feel individual processes only with pressure. Transverse processes are smooth and well covered, and firm pressure is needed to feel over the ends. Loin eye muscle is full with some fat cover.

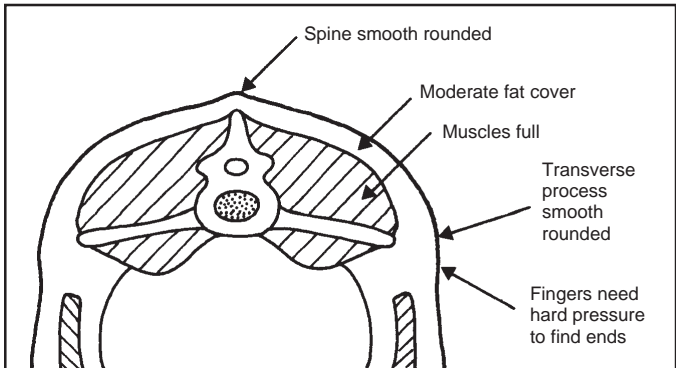


Figure 6.—Condition 3

**Condition 4 (Fat)**

Spinous processes can be detected only with pressure as a hard line. Transverse processes cannot be felt. Loin eye muscle is full with a thick fat cover.

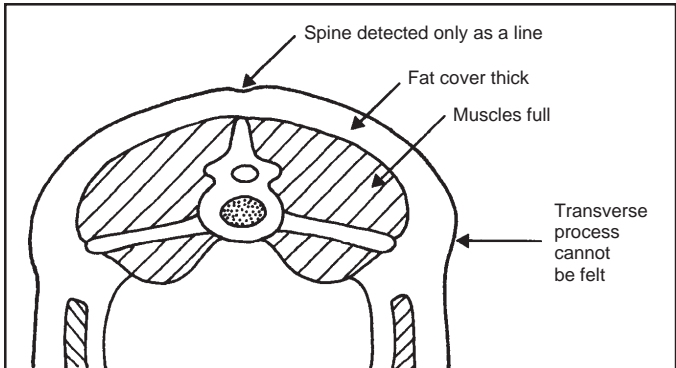


Figure 7.—Condition 4

### Condition 5 (Obese)

Spinous processes cannot be detected. There is a depression between fat where spine would normally be felt. Transverse processes cannot be detected. Loin eye muscle is very full with a very thick fat cover.

The system contains everything from emaciated sheep to those that are grossly obese due to overfeeding or being nonproductive. In most typical sheep flocks, over 90 percent of the sheep should have a body condition score of 2, 3, or 4. It is recommended that half scores be used between 2 and 4, giving the following scores: 1, 2, 2.5, 3, 3.5, 4, and 5.

The intermediate half scores are helpful when an animal's condition is not clear. Keep in mind that placing an exact score is not as important as being able to assign a relative score. A body condition score of 3 versus a 3.5 is not such a big deal, but the relative difference between a 2.5 and 4 certainly is of concern.

Other than practical experience, there is little available research comparing condition scores with performance. The majority of the research reported has dealt with the relationship of body condition score at breeding to ovulation rate and subsequent lambing percentage. Generally, the better the body condition score at mating, the higher the ovulation rate and therefore the higher the potential lambing percentage. However, ewes with a condition score greater than 4 at breeding tend to have a higher incidence of barrenness. Ewes with a condition score less

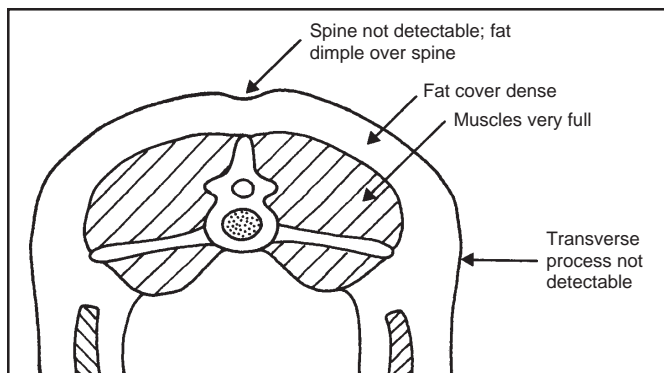


Figure 8.—Condition 5

than 3 at breeding will be more responsive to the effects of flushing than those with condition scores at 3.0–3.5 at mating.

Two research trials conducted by Oregon State University found that ewe body condition score at lambing had an effect on total pounds of lamb weaned per ewe. Ewes with a body condition score of 3 to 4 at lambing lost fewer offspring and weaned more pounds of lamb than those with a condition score of 2.5 or less.

In one study, ewes with a body condition score of 4 at lambing had a total weight of lamb weaned per ewe that was 82 percent greater than ewes with a body condition score of 2.5. The total weight weaned was 113 pounds versus 62 pounds per ewe. The increase in total weaning weight was due to improved lamb survival and heavier weaning weights.

In the other study, there was a 33 percent difference in total weight of lamb weaned (64 versus 85 pounds per ewe) between ewes with pre-lambing body condition scores of 2.5 to 3.5. This increase in pounds of lamb weaned was primarily due to improved lamb survival for offspring from the

ewes with the higher body condition score.

Some suggested (optimum) condition score values for the various stages of the production cycle are:

Production stage	Optimum score
Breeding	3–4
Early–Mid Gestation	2.5–4
Lambing (singles)	3.0–3.5
(twins)	3.5–4
Weaning	2 or higher

The scores suggested above should allow for optimum productivity in highly prolific ewes. On average, a difference of one unit of condition score is equivalent to about 13 percent of the live weight of a ewe at a moderate (3–3.5) body condition score. Thus, a ewe with a maintenance weight of 150 pounds would need to gain approximately 20 pounds to go from a body condition score of 2.5 to 3.5.

Body condition scoring is a subjective way to evaluate the status of a sheep flock—a potential tool for producers to increase production efficiency in their flocks.

### For further reading

Khan, K., H.H. Meyer and J.M. Thompson. 1992. Effect of pre-lambing supplementation and ewe body condition score on lamb survival and total weight of lamb weaned. Proceedings Western Section American Society of Animal Science 43:175.

Russel, A. 1991. Body condition scoring of sheep. In: E. Boden (Ed.) Sheep and Goat Practice. p 3. Bailliere Tindall, Philadelphia.



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Extension Service, Oregon State University, Corvallis, O.E. Smith, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties.

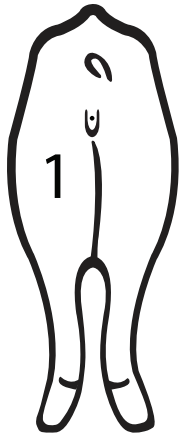
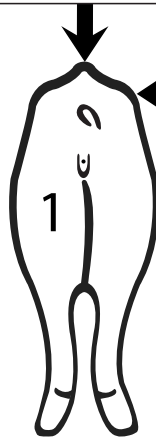
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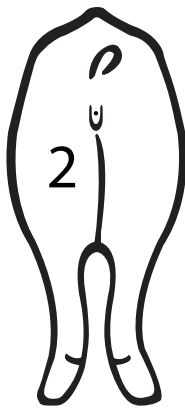
# Body Condition Score- Swine

Spinous processes

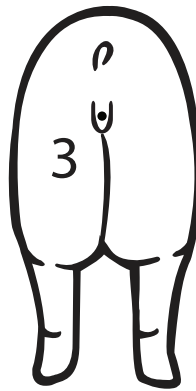
Hook bones



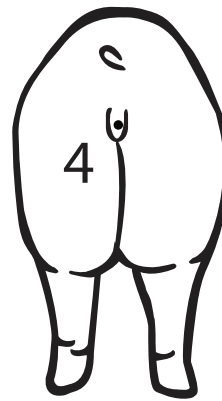
**1. Emaciated**  
Landmark bones are prominent even without palpation. Considered unfit to travel.



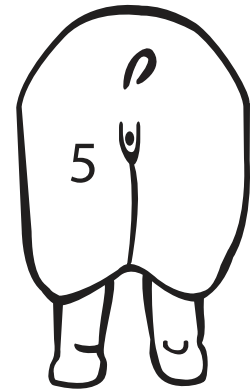
**2. Thin**  
Bones can be easily felt with slight pressure.



**3. Ideal**  
The pig's bones are barely felt when palpating with firm pressure.



**4. Fat**  
Bones of the pig are undetectable with palpation.



**5. Overly Fat**  
A body score of 5 has the same palpation characteristics as a body score of 4. However, this animal is excessively overweight.

## Body condition scoring in goats

Body condition scoring is a great way to evaluate the nutritional status of your goats.

Katie Ockert, Michigan State University Extension - November 3, 2015

Body condition scoring is a management tool that can be used to evaluate the nutritional status of animals. Body condition, or fat cover, is an indication of the energy reserves in an animal. Body condition scoring for goats uses a range from 1.0 to 5.0, with 0.5 increments. Healthy goats should have a body condition scoring between 2.5 to 4.0. Goats with a body condition scoring of 1.0, 1.5 or 2.0 indicate a management or health problem. A body condition scoring of 4.5 or 5 indicate an excessive amount of condition that could be detrimental to the goat's health; these scores are very rarely observed in goat herds under a standard management system.

Michigan State University Extension advises that it's important to note that body condition scoring cannot be assigned by simply visually evaluating an animal. The animal must be touched and felt in three specific areas of the body. The first is the lumbar area, which is the area of the back behind the ribs containing the loin. The second is the sternum, or breast bone, and the third is the ribs and intercostal (between the rib) spaces.

When palpating the lumbar area, you will be able to feel the lumbar vertebrae, which have a vertical protrusion called the spinous processes, and two horizontal protrusions called the transverse process. By running your hand over this area, try to gently grasp the processes with your fingertips and hand. Moving to the sternum and the rib cage, you must feel the amount of fat cover in each of the areas.

### Body condition score (BCS) ratings

BCS 1.0 = The goat is visually emaciated and weak. The backbone is highly visible and forms a continuous ridge. The flank is hollow and ribs are clearly visible. There is no fat cover and fingers can easily penetrate into the intercostal spaces.

BCS 2.0 = The goat's backbone is still visible with a continuous ridge. Some ribs can be seen and there is a small amount of fat cover. Ribs are still felt and intercostal spaces are smooth, but can still be penetrated.

BCS 3.0 = The backbone is not prominent, ribs are barely discernible and an even layer of fat covers the ribs. Intercostal spaces are felt using pressure.

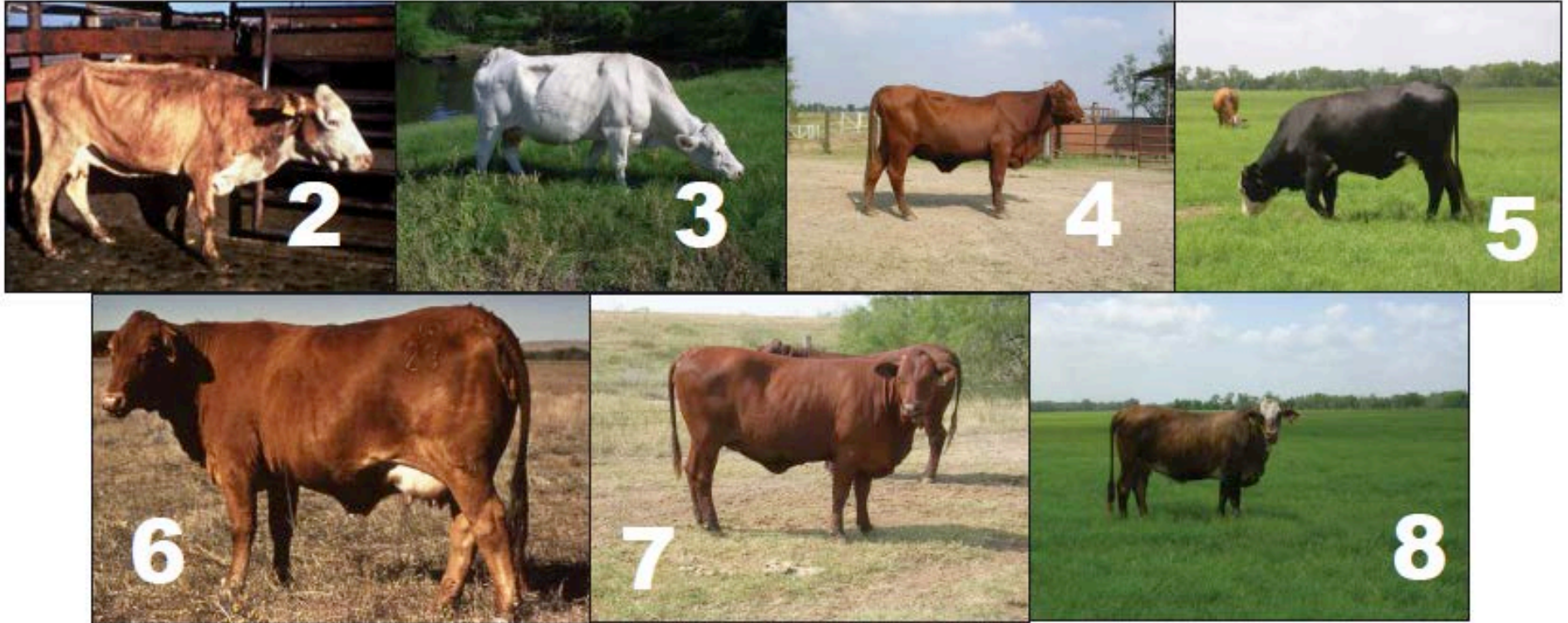
BCS 4.0 = The backbone and ribs cannot be seen. The side of the animal is sleek in appearance.

BCS 5.0 = The backbone is buried in fat and the ribs are not visible. The rib cage is covered with excessive fat.

For more detailed descriptions for how to determine body condition scores, visit Langston University's publication, "Body Condition Scores in Goats."

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# Beef Body Condition Scores



# Swine Body Condition Scores

## Scoring Sow Body Condition

One of the keys to sow lifetime productivity is ensuring that the breeding female is in ideal body condition. To effectively assign a subjective body condition score, sow herd managers must be able to determine the amount of muscle and fat a sow has down her back. Several tools are available to help assess sow body condition. These tools, reviewed below, will help sow managers use reference points to more consistently assign sow body condition scores (BCS) from 1 to 3. In the simplest

terms, a BCS of 1 means the sow is too thin and her daily feed allowance should be increased. A BCS of 3 means the sow is too fat and her daily feed allowance should be reduced. Emaciated sows with less condition than BCS 1 or obese sows with more condition than BCS 3 are not good candidates to remain in the sow herd. Fat sows often have lower feed intake in lactation, which may impair subsequent reproductive performance. A BCS of 2 is "ideal" and her daily feed allocation should remain the same.



**Last Rib Palpation**  
A common reference point for sow body condition training aids is a sow's last rib, therefore it is important to be able to accurately identify this location. To find the last rib, press your fingers into the sow's side just forward of the flank. When you feel the curvature of the last rib, follow it upward to the backbone.



**Ultrasound Backfat Depth**  
Palpate the last rib and follow it up to the sow's backbone, then move 2 1/2 inches off the midline to position the ultrasound transducer to measure backfat depth. It is important to use a consistent location when measuring sow backfat. Check the ultrasound manufacturer's recommendations.

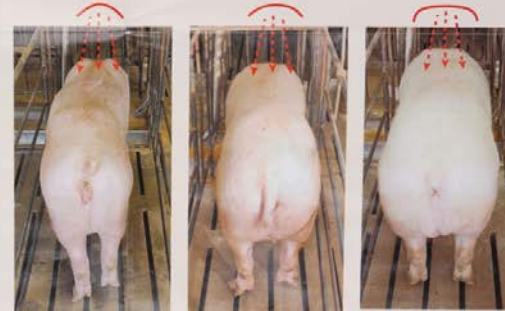


**Flank-to-Flank Weight Estimator**  
A flank tape can be used to estimate sow weight by measuring it from flank-to-flank. Use the equation: Sow weight (lb.) = (26.85 x Flank measurement in inches) - 633. Sow weight and backfat measurements can be used to estimate daily feed intake requirements. Flank tapes are available from Kansas State University. <http://www.zoo.ksu.edu/ncp/7666f-000>



**Sow Body Condition Caliper**  
The sow body condition caliper is a new training tool to evaluate sow body condition. The caliper measures the angularity of the back at the last rib. As a sow gains weight, fat and muscle, her back will become visible and more of a curve. Be sure the arms of the caliper are not pressed into the sow's skin. Contact Mark Knauser, North Carolina State University, for more information about the sow caliper at [mknauser1@gmail.com](mailto:mknauser1@gmail.com).

**Body Condition Scores 1, 2 and 3**  
When evaluating body condition, stand behind the sow and view the shape down her back and to her shoulders, paying close attention to the edges of her back. As a sow gains muscle and fat, her back becomes wider and more flat. The red diagrams below will help you visualize the angularity of a sow's back with a score of 1, 2 or 3.



**BCS 1 - Thin**  
Ribs, hip bones and backbone curve palpated with slight pressure. These sows are too thin and their daily feed allowance should be increased.

Last rib backfat 0.40 - 0.60 in. (10 - 15 mm)<sup>1</sup>  
Caliper reading: 8 to 11

**BCS 2 - Ideal**  
Ribs, hip bones and backbone can be palpated with firm pressure but cannot be observed visually. The daily feed allowance for these sows is correct.

Last rib backfat 0.60 - 0.80 in. (15 - 22 mm)<sup>2</sup>  
Caliper reading: 12 to 13

**BCS 3 - Fat**  
Ribs, hip bones and backbone cannot be palpated. Reduce daily feed allowance to bring these sows to a more ideal body condition.

Last rib backfat 0.81 - 1.3 in. (22 - 31 mm)<sup>3</sup>  
Caliper reading: 18 to 21



**BCS 1 - Thin**

**BCS 2 - Ideal**

**BCS 3 - Fat**

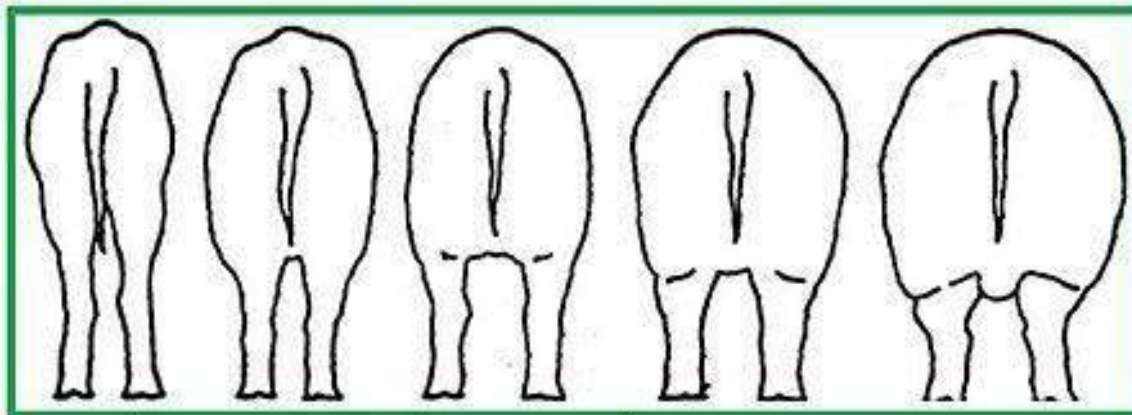
Sows for each body condition score were identified using the Knauser sow body condition caliper.



• Poster copy by Dale Miller and Mark Knauser  
• Photos by Donna Vahl  
• Translation by Angela DiMinjin, IMV Technologies USA



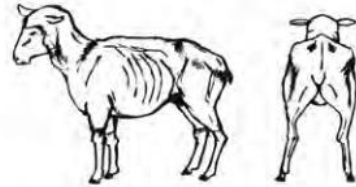
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Score	Last rib backfat depth (mm)	Condition	Body Shape
1	<15	Emaciated	Hips, spine prominent to the eye
2	15 - 18	Thin	Hips, spine easily felt without pressure
3	18 - 20	Ideal	Hips, spine felt only with firm pressure
4	20 - 23	Fat	Hips, spine cannot be felt
5	>23	Overfat	Hips, spine heavily covered

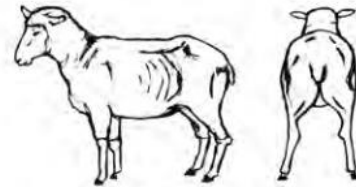


# Sheep Body Condition Scores



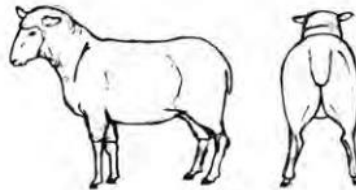
## Condition score 1

Appearance angular and narrow  
Backbone raised and sharp  
Hollow behind ribs  
Tail feels bony  
Neck bones prominent



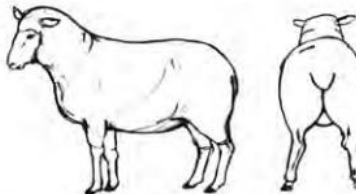
## Condition score 2

Backbone raised but smooth  
Ribs are easily felt  
Tail bone easily detectable  
Thin neck



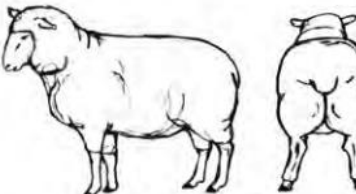
## Condition score 3

Backbone slightly raised  
Ribs smooth, can just be felt  
Tail bones barely detectable



## Condition score 4

Appearance well rounded  
Backbone can just be felt  
Ribs are covered  
Tail firm and rounded



## Condition score 5

Appearance very well rounded  
Backbone barely detectable  
Ribs cannot be felt  
Tail fat and broad

# Body Condition Scoring Goats

	Score	Spineous process	Rib cage	Loin eye
<b>1</b>	<b>Very thin</b>	Easy to see and feel, sharp	Easy to feel and can feel under	No fat covering
<b>2</b>	<b>Thin</b>	Easy to feel, but smooth	Smooth, slightly rounded, need to use slight pressure to feel	Smooth, even fat cover
<b>3</b>	<b>Good condition</b>	Smooth and rounded	Smooth, even feel	Smooth, even fat cover
<b>4</b>	<b>Fat</b>	Can feel with firm pressure, no points can be felt	Individual ribs cannot be felt, but can still feel indent between ribs	Thick fat
<b>5</b>	<b>Obese</b>	Smooth, no individual vertebra can be felt	Individual ribs cannot be felt. No separation of ribs felt.	Thick fat covering, may be lumpy and "jiggly"

Source: [www.smallstock.info](http://www.smallstock.info)