



Veterinary Science Information

BODY CONDITION SCORING OF LLAMAS AND ALPACAS

VSE 09-02

Body condition scoring (BCS) is an easy and effective way to determining an animal’s fat stores and long-term energy balance. This document describes the use of a 5-point scoring system with half scores similar to that used in other domestic species.

Body Condition Scoring Methodology

Body condition scoring should be done with a combination of observation and palpation of the bony structures. Key areas to assess are the loin area just behind the ribs and in front of the pelvis. Within this area you want to evaluate fat presence between the bony projections from the vertebrae extending upward (dorsal spinous process) and laterally (transverse process or “short ribs”) from the spinal column (see pictures in figure). In this same area you want to determine how much of a shelf is formed by the transverse processes. This area behind the ribs and below the spine is termed the paralumbar fossa. In thin animals the body wall in this area will be sucked in with the short ribs forming an obvious shelf. In fatter animals, the body wall will project out and the short ribs will be hard to identify. Additionally, one should visualize the degree of fatness in the chest and inguinal areas.

Time points for assessing BCS

Important times to assess body condition score would be during early to mid pregnancy; early to mid lactation and periodically to other animals of the herd to assess energy status.

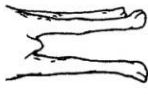
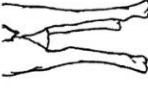









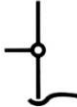



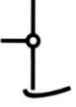


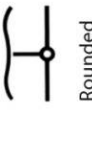

Interpreting BCSs

Body condition scores 2.0 and below or 4.0 and above are considered abnormal and represent extremely thin or fat animals, respectively.

	Physiologic State			
	Growth	Maintenance ¹	Late Pregnancy ²	Lactation
Condition goals	2.5-3.5	2.5-3.5	3.0-3.5	2.5-3.0
Expected condition score change	Should not gain or lose more than 0.25 condition score.	No change is optimal; should stay within +/- 0.25 condition scores. Pregnant animals should not lose condition.	Should not lose any weight or gain more than 0.25 condition scores.	Should not lose more than 0.75 to 1.0 condition scores, but some weight loss is typical.
What to do	<u>Gaining BCS:</u> -Unbalanced energy and protein in diet. Increase forage feeding or reduce grain supplement. <u>Losing BCS:</u> - Increase forage quality and grain feeding.	Increase/decrease grain feeding and/or forage quality until maintaining optimum BCS.	Very important to be close to ideal due to impending lactation. <u>Gaining BCS:</u> -Increase forage in the diet and decrease grain <u>Loosing BCS:</u> - Increase the forage quality or add grain supplement.	Almost impossible to gain BCS during this period. If losing BCS, increase forage quality and consider increasing grain feeding.

¹Includes early pregnancy up to 8 months. ²Includes pregnant animals from 8 months to full term.

Body Condition Scoring Sheet for Camelids

	1	2	3	4	
	Frontal Profile	Rear Profile	Spinous to Transverse Process	Paralumbal Fossa	
Emaciated	<p>No visible or palpable fat or muscle between skin and bones. Ribs, dorsal spinous and transverse processes, and pelvic bones are individually prominent. Extreme loss of muscle mass.</p>	<p>Prominent "V" Keel</p> 	<p>Acutely Inverted "V"</p> 	<p>Deep depression</p> 	<p>Gaunt, tucked-in fossa</p> 
Poor					
Thin					
Borderline	<p>Slight cover over bony structure. Ribs, spinous processes still visible and easily palpated as sharp. Less muscle mass loss.</p>	<p>Gradual Flattening of Sternum</p> 	<p>Gradual Filling of "V"</p> 	<p>Obvious depression</p> 	<p>Prominent shelf</p> 
Moderate					
High Moderate					
Excess	<p>Overall smooth appearance. Slight fat cover over ribs and other bony processes. Ribs and spinous processes can be palpated with slight pressure. No muscle mass loss present.</p>	<p>Moderate fat</p> 	<p>Moderate fat</p> 	<p>Smooth concave curve</p> 	<p>Slight shelf</p> 
Fat					
Grossly Obese					
	<p>Fleshy appearance with visible coverage of fat. Moderate to firm pressure necessary to palpate bony structures under skin.</p>	<p>No shelf</p> 	<p>Nearly flat</p> 	<p>Smooth slope</p> 	<p>No shelf</p> 
	<p>Excessive fat cover over entire body with smooth, rounded appearance. Bony prominences cannot be palpated, even with firm pressure. Bulging fat pads visible around tailhead.</p>	<p>Inguinal Area Bulging in fat</p> 	<p>Rounded</p> 	<p>Edge barely discernible</p> 	<p>Buried in fat</p> 

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