

# The Healthy Alpaca

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This bulletin provides some information on the clinical parameters of the normal alpaca. Knowing the normal behaviour of individuals and the herd in general, is a prerequisite for ascertaining the well-being of animals by the owner/manager. Only with the knowledge of the normal is it possible to evaluate the abnormal. This bulletin will provide some objective information to allow stock keepers to assess their animals when they suspect disease in them. It is intended as a guide as to when to seek veterinary advice, rather than a guide to when to start treatment.



**Knowledge of the healthy animals enables rapid identification of disease**

## Behavioural changes

Understanding the basics of normal alpaca behaviour is necessary in order to observe and understand altered behaviours that may signal the onset of discomfort or illness. Most disease processes will result in abnormalities in behaviour; such as a reduction in appetite. Other behavioural changes with illness may include:

- Self separation from the herd.
- Normally docile individuals become aggressive.
- Aggressive or dominant animals become submissive.
- Changes in the frequency, posture and productivity at the dung pile.
- Prolonged recumbency.

## Vocalization

Although alpacas are not highly vocal, they do have a repertoire of sounds and hums. Knowledge of the normal range of sounds for each individual becomes important background information and attention should be paid to changes in vocalisation when no apparent social change has taken place. It is also important to evaluate the character of the humming in the context of the existing situation; for example mothers and juveniles will hum excessively immediately after weaning and this is normal.

Groaning is a form of vocalisation and normally indicates some form of pain or discomfort. Although strictly not vocalisation; teeth grinding is a sound indicative of pain or discomfort. Teeth grinding is often seen associated with abdominal discomfort (colic).

## Temperature

A thermometer is an extremely useful and inexpensive piece of equipment for alpaca keepers. The alpaca should be adequately restrained, the thermometer inserted into the anus and pressed up against the mucosa (lining) of the rectum. The normal temperature of alpaca is between 37.5°C and 38.9°C. A temperature above this range may indicate an infectious or inflammatory process.

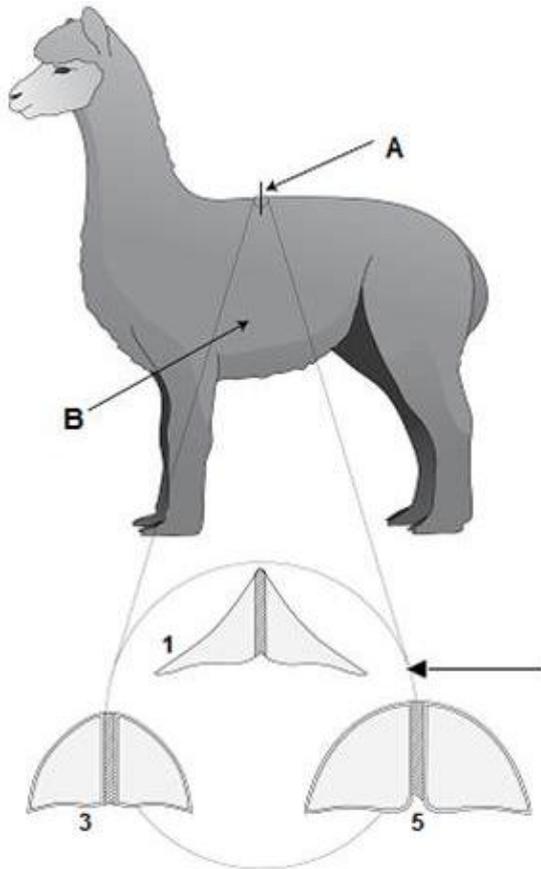
## Body condition scoring

Variations in alpaca body condition directly impact upon the health and reproductive performance of the herd and sudden losses in condition can be an indicator of underlying disease. It is important to regularly check the condition of your herd to ensure that feeding is correct and to avoid potential problems. Body condition scoring involves gauging the level of fat cover over specific areas of the alpaca. It is important to actually touch the animal when you assess the body condition as visual assessment alone is often misleading especially when animals have a full fleece. Body condition score is based on a scale of 1 to 5, with alpacas in very poor condition scoring 1 and obese alpacas scoring 5 (Table 1).

Body Condition Score	Classification and findings on palpation
1	<b>Very Thin</b> – Severely concave between spine and ribs
2	<b>Moderately Thin</b> – Slightly concave between spine and ribs
3	<b>Good Condition</b> – Neither concave or convex
4	<b>Overweight</b> – Convex “roundness” makes muscle area hard to palpate
5	<b>Obese</b> – Top of the back is almost flat, very difficult to palpate between the spine and the ribs

**Table 1: Body condition scoring guidelines.**

Fat coverage can be assessed over the central backbone near the last ribs. Place your fingers on the centre of the back, either side of the vertebrae and feel for muscle coverage. By palpating the area with your fingers and thumb you can make an appraisal of the muscle mass. It should reveal a firm, flat/slightly convex body shape. Bulging indicates fat coverage consistent with the animal being overweight, whilst a concave shape indicates that the animal is underweight condition.



**BCS - Cross sections through the dorsal spinous processes for BCS scores 1, 3 & 5.**

To confirm your estimate you can also palpate the area over the ribs at the point of the elbow (in an animal with BCS 2.5 you will just feel the ribs; an animal with impalpable ribs is very fat) and finally, observe and or palpate the hairless area between the front legs. Do NOT make assessment over the pelvis/hips as this area often feels bony, even with obese alpacas. The target body condition score will depend on the age and reproductive status of the animal, guidelines are provided in table 2.

Alpaca	Body Condition Score
Non-pregnant mature female	2.5 – 3
Mature male	2.5 – 3
Late pregnant female	3 – 3.5
Working male	2.5 – 3
Growing (<15 months)	3

**Table 1: Target body condition scores for different animals.**

**Respiratory system**

The respiratory rate can be assessed by quietly watching the alpaca's chest; count the number of times it moves out on inspiration in 15 seconds and then multiply by 4. If you struggle to count chest movements the respiratory rate can be assessed by watching the flaring of the nostrils. An alpaca's respiratory rate may vary with the ambient temperature and if the alpaca is stressed but the adult alpaca's normal respiratory rate should be between 10 and 30 breaths per minute. An increased respiratory rate can represent stress, or pain, or may be a sign of respiratory disease.



**Respiratory rate can be assessed by observing the flaring of the nostrils**

A small amount of clear nasal discharge may be normal whilst cloudy nasal discharge is usually secondary to infectious disease. Bloody discharge may be due to trauma in the nose or may represent upper or lower respiratory tract disease and if sighted you should contact your veterinary surgeon.

**Recumbency**

Sternal recumbency is the most common position for rest and relaxation of alpacas and they will often "cush" in response to unpleasant situations such as having their toe-nails trimmed. Alpacas will normally sit with their front legs folded beneath their chest, but they are also able to lie with their front limbs extended forwards. Lateral recumbency is also a normal position with animals being seen to lie on their side to sleep or sun themselves. It is important to be able to recognise when an animal is

recumbent because of disease. Healthy animals will respond to stimuli and will be able to stand easily. Abnormal signs to look out for are an unwillingness or inability to stand as well as general depression and holding the head and neck back over their chest.

### Defecation and urination

Prolonged or repeated attempts to defecate or urinate may be a sign of digestive, urinary or reproductive system disorders. Constipated animals may strain to pass faeces or urine, the affected animal may reposition itself or leave the dung pile momentarily, only to return and try again. Animals may also exhibit signs of abdominal pain (colic) such as increased frequency of rolling and kicking at their stomach. Faeces should be pelleted in form similar to sheep droppings, soft/liquid faeces are not normal and if seen you should consult with your veterinary surgeon.

### Mouth and Nose

Alpacas have a split upper lip which is very mobile and sensitive. The split in the upper lip means they are selective eaters which will browse and graze and will tend not to ingest undesirable foreign bodies. Owners should remember alpacas have a cartilaginous rostril nose, which is of particular importance when fitting a halter. Halters are designed for restraint only, and need to be relatively tight-fitting around the head to prevent the nose band from slipping down and obstructing normal breathing. The nose band of the halter should not sit tightly across the soft portion of the nose. A correctly-fitted halter will restrict lateral jaw movement and so the animal will not be able to eat normally if haltered.



***Always ensure halters are fitted correctly***

### Fleece and skin

Patches of fibre loss, reddening and crusting the skin, or excess scurf (dandruff) may be indicative of skin disease. Skin disease may be caused by a nutritional deficiency, bacterial infection, fungal infection or most commonly, external parasites. If you notice any of these signs speak to veterinary surgeon for advice.

### Eyes

The eyes of a healthy alpaca will be clear and bright. Both eyes will usually appear the same except in animals suffering trauma or specific ocular diseases which may only involve one eye. Discharge from the eye is normally noticed as wetness or staining on the cheek below the eye is usually a sign of inflammation within the eye. The eye being closed, particularly when the animal is outside, is a sign of pain in the eye. The conjunctiva (membranes surrounding the eye), should be a pale pink colour; if they are reddened this may be a sign of inflammation. The surface of the eye should be smooth and transparent; any defects in the surface or cloudiness under the surface of the eye need prompt veterinary advice. Note that changes in the eye can be secondary to systemic diseases or due to primary eye disease.



***Injuries to the eye need urgent attention***

### Lameness

Alpacas should walk bearing weight evenly on all four limbs. If an alpaca has a shortened stride on any limb, reduced weight bearing on one limb or is unable to keep up with the rest of the animals, it should be examined.

#### **Please note:**

This document is a guide to basic features of the normal alpaca, not a complete guide to the clinical examination. Alpacas are very good at hiding signs of problems so careful observation is the key to detecting problems early; if you find any abnormalities in any body system mentioned or are at all concerned, you should always contact your veterinary surgeon.

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