



## ALPACA FACT SHEET #2

Welfare, Education & Training Reviewed 2018

# Alpaca Mating Behaviour

## Introduction

The male pursues the receptive female, attempting to mount her until she sits in 'cush' position. A male with good libido may chase a female for up to ten minutes. Once the female sits down, the male positions himself immediately behind her, manoeuvres his penis through her vulva into the vagina and cervix. With rhythmic thrusting movements semen is then deposited into the uterus of the female. If the male is properly positioned his back is characteristically arched with his pelvis close to the pelvis of the female. During copulation the male makes a characteristic guttural sound called 'orgling'. Copulation may continue for 5-55 minutes with an average time of 15-20 minutes. During mating other receptive females present may sit down beside the mating pair. Once ovulation has occurred, females are non-receptive and will actively reject the male, i.e. they spit, refuse to sit down and try to run away. Alpacas are non-seasonal breeders and will demonstrate year round sexual activity.

## Pregnancy

Although left and right ovaries are equally active, most pregnancies implant in the left uterine horn. The placenta, which attaches to the developing foetus and the uterus during pregnancy, is similar to that of the mare and does not have raised attachment areas (cotyledons) like the domestic ruminant placenta.

Conception rates of 75-80% with a single mating are not uncommon.

The gestation is generally about 342 days but can range from 320-380 days. A birth within this range is perfectly normal.

## Pregnancy Diagnosis Methods

No pregnancy diagnosis method is 100% reliable. Because early embryonic deaths occur more frequently in alpacas than in other domestic species, all pregnancies should be reconfirmed 45 days post-mating and, if possible, by two methods.

## Ultrasonography

Flank ultrasonography where a transabdominal probe is applied to the body surface near the udder provides a visual sighting of the foetus. Depending on the type of machine used, diagnosis can be made <30 days. The usual method of routine pregnancy diagnosis is to confirm by ultrasound once gestation is >60 days. Pregnancy diagnosis can be performed per rectum but this is NOT recommended as a routine procedure because of the danger of rectal tears.

## Appearance

The initial 'spitting off' (rejection of the advances of a male by the female – they spit off, refuse to sit down, attempt to run away) is a response triggered by an increase in progesterone levels associated with ovulation and is not a confirmation of pregnancy. However, rejection of the male is a good preliminary indication of pregnancy or continued pregnancy, once diagnosis is made by ultrasound. As embryonic loss can occur, exposure to a male at regular intervals (e.g. six weekly) throughout the pregnancy is recommended.

Some alpacas do show changes in body shape but mostly external signs are not apparent even in advanced pregnancy.



## ALPACA FACT SHEET #2

Welfare, Education & Training Reviewed 2018

### Further Reading

Graham Duncanson  
Veterinary Treatment of Llamas and Alpacas  
CABI Publishing; 2012

Fowler, M.E.  
Medicine and Surgery of South American  
Camelids. Iowa State University Press, Iowa,  
U.S.A. 1989

Johnson, L.W.  
The Veterinary Clinics of North America, Volume  
5, No. 1: Llama Medicine.  
W.B. Saunders Co., Philadelphia, U.S.A. 1989

Johnson, L.W.  
The Veterinary Clinics of North America, Volume  
10, No. 2: Update on Llama Medicine. W.B.  
Saunders Co., Philadelphia, U.S.A. 1991

McMillan, E. and Jinks C. & A.  
Alpaca Breeders Reproduction Handbook.  
Alpaca Publications Australia. 1998

Smith, B.B., Timm, K.I. and Long, P.O.  
Llama and Alpaca Neonatal Care. Clay Press.  
1996

Much of this material has been adapted from:  
An introduction to the unique reproductive  
physiology and breeding activity of SACs by Dr.  
Deidre Bourke: Proceedings of the International  
Alpaca Conference, held in Fremantle, WA 1998,  
with significant contributions from Dr. Ewen  
McMillan, Dr. George Jackson, and Carolyn Jinks.

Gina Bromage  
Llamas and Alpacas: A Guide to Management  
The Crowood Press Ltd. 2006

David E Anderson, Meredyth L Jones & Matt D  
Miesner  
Veterinary Techniques for Llamas and Alpacas  
Wiley-Blackwell 2013

Eric Hoffman with contributing authors  
The Complete Alpaca Book 2<sup>nd</sup> Ed revised  
Bonny Doon Press 2006

Cebra, Anderson, Tibary, Van Saun, Johnson  
Llama and Alpaca Care : Medicine, Surgery,  
Reproduction, Nutrition and Herd Health 1<sup>st</sup> Ed  
Elsevier

**Disclaimer: The management practices detailed in this overview do not constitute veterinary advice. Any alpaca appearing to have an adverse condition should be assessed by a veterinarian.**