

Alpaca Advice

Reproduction and mating

Males achieve reproductive maturity at around 1.5-3 years of age. Young females usually reach sexual maturity at about 12-15 months of age and when they are 45-50kg. This gives the female adequate time to mature and reduces the risk of problems during parturition. Potentially, adult female alpacas can remain productive up to 13-15 years of age

Mating

- When breeding females are receptive to mating they will accept the advances of a male and sit in the cush (kush) position for mating and the male mounts her from behind.
- If the male is properly positioned his back is characteristically arched with his pelvis close to the pelvis of the female.
- Once ovulation has occurred, females are non-receptive and will actively reject the male, i.e. they may spit, refuse to sit down or try to run away.
- Alpacas are non-seasonal breeders and will demonstrate year-round sexual activity.

There are two ways to undertake mating:

- **Individual supervised mating** of selected male and female. This has the advantage that the breeder knows exactly when the mating occurred, but it is more time consuming. Conception rates of 75-80% with a single mating are not uncommon.
- **Paddock mating** where a selected male is run with a group of females for several weeks, allowing him to mate them at any time.

Pregnancy testing

- The most commonly used method for pregnancy testing is known as a 'spit off'.
- A pregnant female will actively reject the advances of a male by attempting to run away, refusing to sit or maybe spitting at him.
- This initial 'spitting off' (rejection of the advances of a male by the female) is a response triggered by an increase in progesterone levels associated with ovulation and is not a confirmation of pregnancy.
- As embryonic loss can occur, exposure to a male at regular intervals (e.g. six weekly) throughout the pregnancy is recommended.
- A positive 7 day spit off indicates the female has ovulated and a positive result at 14 days or more indicates pregnancy is likely.
- The usual method of routine pregnancy diagnosis is to confirm by ultrasound once gestation is >60 days.

Gestation

- Alpaca gestation can range from 315-370 days, with the average being around 342 days (11.5 months).
- In deciding when to mate alpacas, the breeder needs to consider when the cria will be born, with the ideal months varying in different geographical regions in Australia.
- In general, birthing should be timed to occur so that the best green pasture is available during lactation, and to avoid extremes of heat and cold.

Disclaimer: This advice is of a general nature. Seek veterinary or expert advice for your circumstances.

Male Reproductive Anatomy

The male has two testicles in a non-pendulous scrotum situated below the anus. The function of the scrotum is to maintain the testicles, which are the source of sperm, at a slightly lower temperature than the rest of the body. The prepuce is the sac holding the penis. This normally points backwards during urination, but when the male is sexually aroused the prepuce points forward and the penis is extruded for mating. The tip of the penis has a slightly clockwise curvature. In young males the penis is adherent to the prepuce and they are usually unable to extrude the penis sufficiently for mating until they are about 2.5-3 years old. Eruption of fighting teeth appears to correlate with approximate time of sexual maturity. Alpacas are dribble ejaculators excreting approximately 2ml of semen during mating. Joining time will range from 5 to 50 minutes (average 20 minutes) and mating is accompanied by an 'orgling' sound from the male.

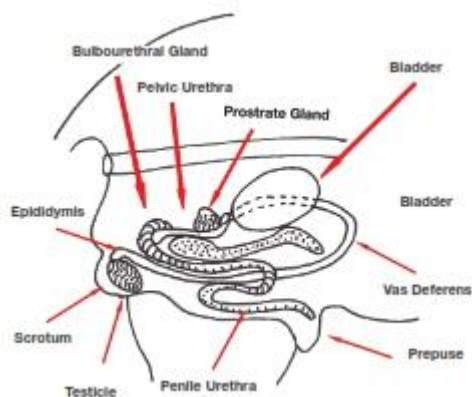


Figure 1: Reproductive anatomy of a male alpaca

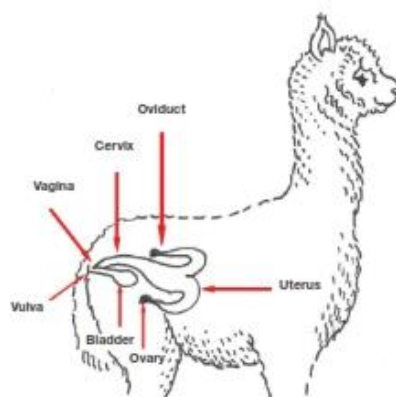


Figure 2: Reproductive anatomy of a female alpaca

Female Reproductive Anatomy

Figure 2 shows the birth canal and the cervix which is the opening into the uterus. The uterus consists of a body and two uterine horns. During mating, the male deposits sperm directly into the uterus of the female. The oviduct carries the egg from the ovary to the uterus and is also the site of fertilization of the egg by sperm. In alpacas most pregnancies occur in the left horn. During mating other receptive females present may sit down beside the mating pair. Alpacas are 'induced ovulators' where the mating itself triggers ovulation to occur.



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