

Breeding of sheep and goat

Reproductive characteristics of Sheep:

Reproductive rate is defined as the number of live lambs born per ewe exposed for breeding. Optimal reproductive rates are essential to profitable sheep production. Optimal reproductive rate varies by farm, production system, and geographic area.

Puberty (sexual maturity):

Puberty is when a ewe reaches sexual maturity and exhibits estrus (heat) for the first time.

The age of puberty is influenced by breed, genetic selection, body size, nutrition, and season of birth. Most ewe lambs reach puberty between 5 and 12 months of age.

The estrus (or heat) cycle:

Estrus is the period of time when the ewe is receptive to the ram and will stand for mating. In sheep, the length of the estrus cycle ranges from 13 to 19 days and averages 17 days. It lasts approximately 24 to 36 hours. Estrous cycles are usually affected by the seasons. The number of hours daily that light enters the eye of the animal affects the brain, which governs the release of certain precursors and hormones.

Most sheep are seasonally poly-estrus and short-day breeders. They will begin to exhibit estrus when length of day begins decreasing.

They will come into heat every 16 to 17 days until they are bred or return to anestrus.

Signs of estrus in sheep:

Signs of estrus in the ewe are much less pronounced than in the cow or doe and can usually not be detected unless a ram is present.

-The ewe will seek out a ram

-She will sniff him and chase after him

- She will crouch and urinate when a ram sniffs her side or genital area
- She will fan her tail when the ram sniffs her
- When the ram is preparing to mount, she will turn her head to look at him
- Ewes do not mount other ewes as in cattle

Characteristic	Average	Range
Age at puberty,	5 to 12 months	
Length of estrus cycle, days	17	13-19
Duration of estrus, hours	30	18-48
Timing of ovulation	20-30 hours after start of estrus	
Gestation, days	146-147	138-149

Gestation (pregnancy):

The average gestation length in sheep varies from 138 to 149 days. The average is 147 days.

The period of early gestation most critical to success during the lambing season is the first 30 days after fertilization. The first 21 to 30 days after breeding is when embryonic implantation occurs.

Ultrasonic pregnancy scanning can be done on ewes from 35 to 60 days after breeding, depending on equipment used and operator skill.

Parturition (lambing):

There are three stages to parturition (lambing):

- 1-dilation of the cervix
- 2-expulsion of the fetus (es)
- 3-expulsion of the placenta

Stage one usually takes 3 to 4 hours.

The birth of a lamb usually occurs within an hour or less from the rupture of the first water bag. A ewe lambing for the first time or with multiple births may take longer. The placenta is passed 2 to 3 hours after delivery is finished.

Signs of parturition:

You will know when the goat or sheep is about to give birth as:

- The animal keeps away from others.
- The vulva is swollen and the skin is loose.
- The animal becomes restless and does not eat well.
- A discharge from the vulva will start a few days before parturition.
- The sheep will lie down and stretch the neck back to look at the sky (star gazing) and lick its lips.
- The sheep will strain to push out the lamb.

Care of the newborn:

1-Checking the navel cord

-Ideally the navel cord of the newborn animal should be dressed with tincture of iodine, gentian violet or Dettol immediately after birth.

2-Checking for extra teats

- Some female ruminants are born with one or more extra teats

Fostering

-Fostering of the young animal will be necessary if the natural mother has died or fails to produce enough milk for her young. The sheep or goat can only properly feed two young so any other young must be fostered. Fostering can be done by:

-Remove the skin of the foster mother's dead young and ties it around the orphan after several days remove the skin.

-Rub the orphan with the afterbirth and fluids or under the tail of a mother who has just given birth.

-The foster mother can be tied up by the head in a small pen or shed and the orphan left with her.

-Place the orphan and the foster mother in a small shed or pen and tie or leave a dog with them. The female will protect the orphan from the dog and will then allow it to suckle.

Feeding lambs and kids:

-Lambs and kids will suckle from the mother until they are 4 months old, but they will start to show an interest in green plants from 3 weeks of age.

-Remember that most newborn animals die because of lack of food.

-Cold and wet conditions are very bad for the newborn and can cause lung diseases which may kill the animal.