

In the Mood

Estrus is the part of the reproductive cycle when the female is sexually receptive to the male and will stand for mating. It is also called standing heat or being in heat. Estrus typically lasts for 24 to 36 hours in ewes. It is longer in does, 24 to 48 hours. Unless the ewe becomes pregnant, she will return to estrus every ~17 days (range 14-19) during the natural breeding season. For goats, the average length of the estrus cycle is a bit longer, ~21 days (range 18-24). Anestrous is the period of sexual inactivity and is common in spring and summer for most breeds.



The duration of estrus varies from 15 to 45 hours and is affected by species, breed, age, onset of puberty, presence of the male, and season. The optimal time to mate (naturally or artificially) is usually in the first half of estrus. Estrus is shorter and less intense in maiden females. Ovulation usually occurs towards the end of estrus, approximately 24 hours after the start of heat. If the eggs aren't fertilized, the ewe/doe will resume her estrus cycle and return to heat 17 to 21 days later.

Recognizing when females are in heat allows for successful hand mating or artificial insemination (AI). Goats usually show more visible signs of heat than sheep. The signs of heat are more pronounced in the presence of an intact male.

- Frequent urination
- Mounting
- Nuzzling, rubbing
- Restlessness
- Seeking the male
- Standing to be mounted
- Swollen, redder vulva
- Tail wagging/flagging
- Thin mucous discharge
- Vocalization



Teasers are often needed to detect heat in ewes.

Many hormones are involved in regulation of the estrus cycle. Estrogen induces estrus and sexual receptibility, while progesterone prevents the female from returning to estrus if she is pregnant or between estrus cycles. Melatonin is produced in response to decreasing daylight and triggers cycling in ewes/does. Sheep/goats are seasonally polyestrous, meaning they experience multiple estrus cycles when they are "in season."

A teaser ram/buck is often used to detect or stimulate estrus in ewes/does without the risk of pregnancy. Teaser rams/bucks have had their vas deferens surgically severed; thereby, preventing their sperm from being ejaculated into females during mating.



There are numerous advantages to synchronizing estrus or inducing estrus in non-cycling ewes /does. Methods include the Ram/Buck Effect, light manipulation, and hormonal treatments.