

Normal sheep breeding cycle

- Estrous cycle = length of time between when a ewe comes onto heat (is interested in the ram)
- On average 17 day cycle but varies from 14-19 days for most sheep
- Length of time on heat varies but mostly 18-36 hours (younger ewes often shorter period). Some ewes may have even shorter heats or longer
- Age at puberty – variable but generally 6-9 months
- Weight at first mating about 75% adult weight
- Seasonal breeders, although some breeds of sheep will breed out of season (Merino, Poll Dorset and others), more tropical sheep breeds tend to be less influenced by season



Sheep breeding continued

- During breeding season if not pregnant will come on heat every 17 days
- Ewes seek out the rams so an individual ram may be surrounded by several ewes on heat
- Some breeds are highly seasonal such as the Leicester and texel, however their crosses with Merino e.g. First Cross have increased breeding season
- Over a few cycles >90% of ewes should get in lamb
- Can use a mating harness to watch progress of joining (harness goes on ram)



Normal goat breeding cycle

- On average 21 day cycle but varies either side (longer than sheep)
- Length of time on heat varies but mostly 24 hours
- Age at puberty – variable but generally 5-9 months (40% adult bodyweight)
- Ideally 75% of adult weight at first mating (as per sheep)
- Seasonal breeders, although some breeds of goat will breed out of season such as many meat breed goats
- Avoid stress in goats particularly in early pregnancy or can abort pregnancy ie. Minimise handling through pregnancy where possible



Changing breeding cycle

- Use of teasers (surgical/physical/chemical)
 - Vasectomised
 - Cover abdomen to stop actual mating occurring
 - Testosterone treated wether
- Hormones
- Lights (if stock are in a shed – most commonly used in dairy goat/sheep industries as frequently kept in sheds)



Pregnancy

- For both goats and sheep the duration of pregnancy is around 145-150 days
- Actual length can vary both within and between breeds – easiest way to check is from the date of ram raddling a ewe or date from AI to the actual date of lambing



Pregnancy per year

- For both goats and sheep it is possible to have multiple pregnancies per year given the shorter gestation duration compared to cattle
- It can be challenging to get goats and ewes pregnant during early lactation so if they are going to be put back to the male this may occur from approximately 3 months after parturition
- Where good feed is available year round this can lead to 3 pregnancies every two years, but does require very good nutrition to ensure a medium condition score is maintained



Male to female ratio

- Prime lamb – use 1.5-2% rams
- Merino 1 per 100 plus 1
- Dairy sheep – varies with how much AI is done, need enough ram power to mate ewes on heat
- Meat goats – similar percentage to prime lamb, increased if in pastoral country (feral goats)
- Angora goats – varies but often 2.5%
- Dairy goats – as per sheep, depends on AI rate and synchronisation

