

Ch. 11 Goat Reproduction (p.71)

11-1 sexual maturity

- A. Puberty of goats (production of germ cells)
- B. Issues with goats breeding at too young an age
 - when to start mating? 60% of matured body weight
 - body maturity: no more huge fluctuations in body weight
- C. Puberty of sheep
- D. Factors influencing puberty
 1. age?
 2. body weight (\approx organ development)
 3. climatic condition: temperate vs. tropic
 4. breeds
 5. nutrition
 6. heterosis
 7. season (photoperiod)

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11-2 Breeding season (p.72)

- A. Not much in bucks, but can affect semen quality
 - B. For does: mostly in the Fall and some in the early Spring (\approx short photo period)
 - C. Late Fall mating vs. late Spring mating for milk market sale
 - D. Breed differences: related to geographical origin (by Equator)
- 11-3 Estrous (p.73): changes in appearance and behavior before and after ovulation
- 11-3.1 Time of estrous (heat)
1. Starting age & interval
 2. Period of the year
 3. Duration of estrous:
 - season effect? social impact?
 4. Effect of nursing kids by suckling: anestrous for 4-10 wks
 5. Resumption of estrous after kidding? (p.74)
 - First estrous=ovulation?
 - Early (January) vs. late (March, daylight \uparrow) kidding



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11-3.2 Signs of estrous (p.74)

1. Important timing basis for mating
 - arrangement for natural mating
 - artificial insemination
2. Appearance
 - clear mucous discharge, swollen vulva
3. Behavior
 - wagging tail
 - restless, walk more
 - reduction in feed intake and milk production
 - mounting activity



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11-4 Mating (p.74)

- Daily frequency by buck: non-seasonal, semen quality...
- 11-4.1 multiple does with one buck (p.75)
- A. Kids born of known parents
 - B. Buck economy
 - C. Mating frequency not known
 - D. Buck may be over-exhausted



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11-4.2 multiple does with multiple bucks (p.75)

- A. Enhance herd conception rate
- B. Kids genealogy not certain
- C. No mating record
- D. Dominant bucks could be over-mating
- E. Common practice in meat goat herd

11-4.3 single doe with single buck (p.75)

- A. Monitored estrus and mating by arrangement
- B. Can register all records for management
- C. Much more time- and labor- consuming
- D. Suitable for dairy operation

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-comparison of the three mating methods? (p.75)

1. Which methods are good only for breeding purpose?
2. Methods appropriate for meat goats?
3. Better off for dairy goats?

- Increasing conception rate by?

1. Strict selection of competent bucks: strong body with high libido
2. Flushing just before mating season: with high protein and beta-carotene feeds; avoid high lipid feeds
3. Adequate exercise to stay away fatty body
4. Make good use of breeding season
5. Not to over-exhaust bucks

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