

# Sexual cycle and artificial insemination in Mare

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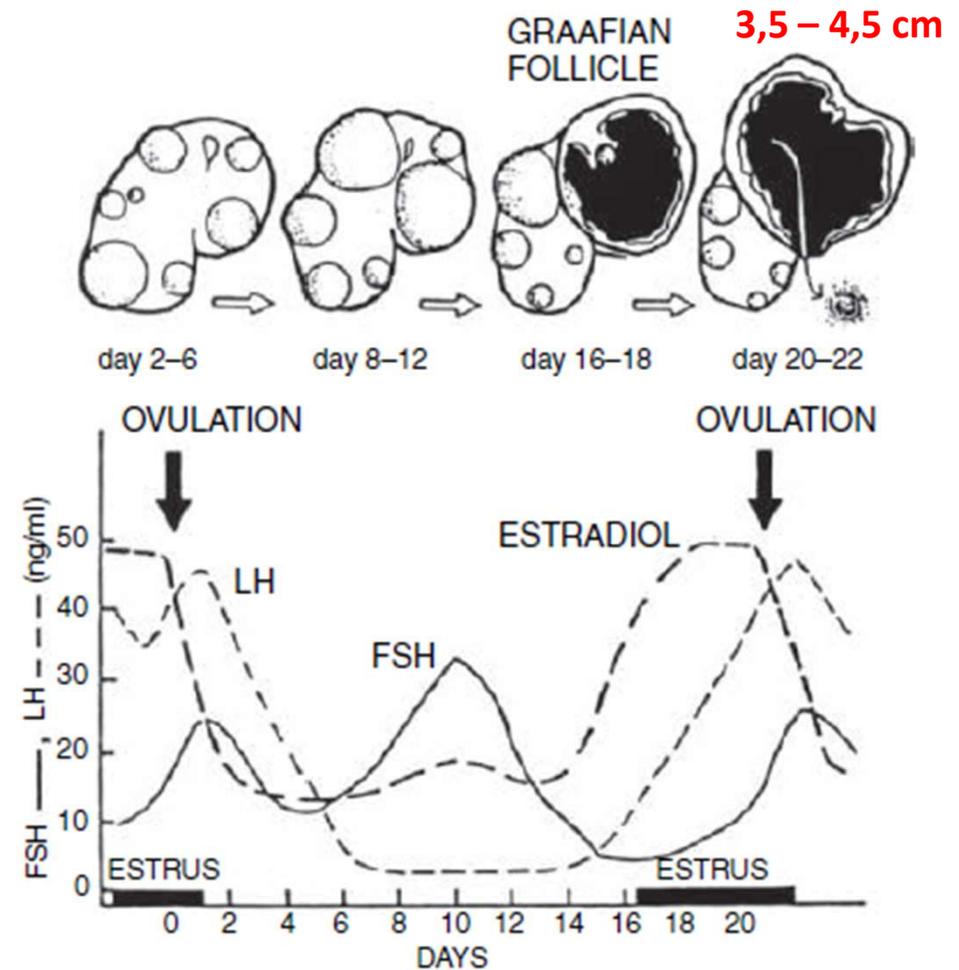
# Mare Sexual Cycle

- Kısırakların **puberta** yaşı **12-24 aydır.**
  - Doğum zamanına göre deęişkenlik gösterir. **250-300 kg (%50-60 ergin C.A.)**
- **Mevsime baęlı poliöstrik** hayvanlardan olan kısıraklarda üreme faaliyetlerinin başlaması **gün ışığı süresiyle** ilişkilidir (**FOTOPERİYOT**)
- **Kısıraklarda reproduktif faaliyetler yıllık olarak**
  - **İlkbahar Geçiş Dönemi (Vernal Transition Period)**
  - **Üreme Mevsimi (Breeding Season)**
  - **Sonbahar Geçiş Dönemi (Autumn Transition Period) ve Anöstrus olarak 3 bölümde incelenir**
- Günlerin uzamaya başlamasıyla ışık alma süresinin artması ile **epifizden** salgılanan **melatonin** miktarındaki düşüş reproduktif aktiviteyi indükler.
- **Aydınlık (uzun) günler → Seksüel aktivite (Nisan - Eylül)**

# Mare Sexual Cycle

Lasts approximately 22 days;

- Proestrus (2 days)
- Estrus (5-7 days)
- Metaestrus (2-3 days)
- Diestrus (13-15 days)
- Anestrus (seasonal)



# Mare Sexual Cycle

## **Proestrus**

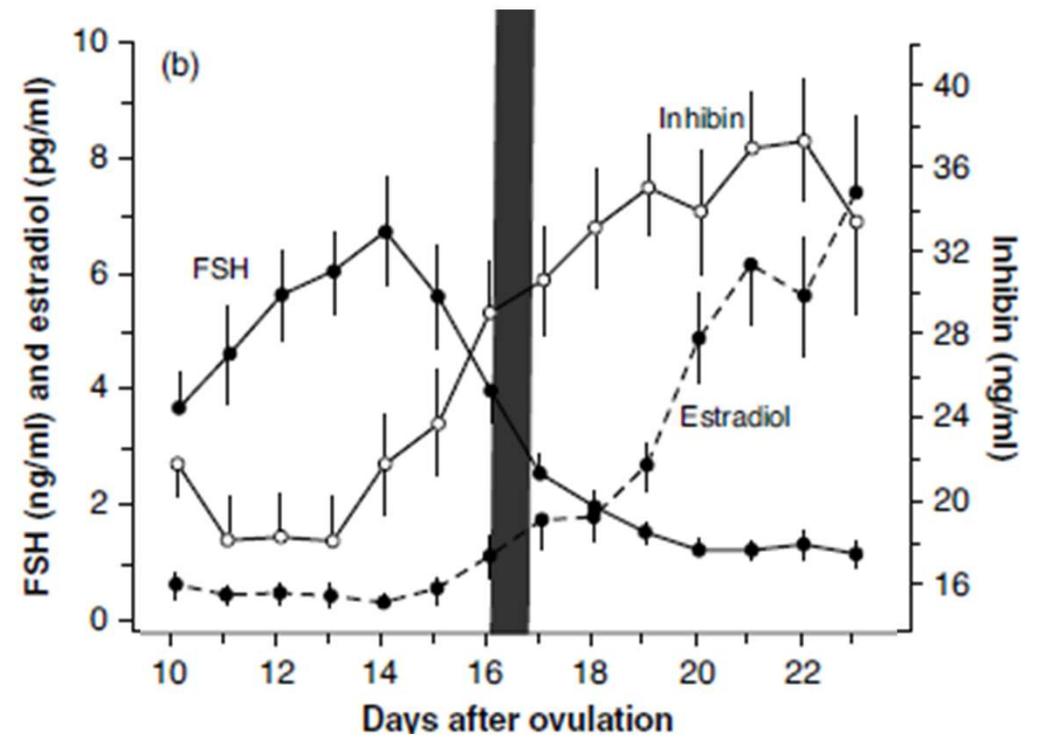
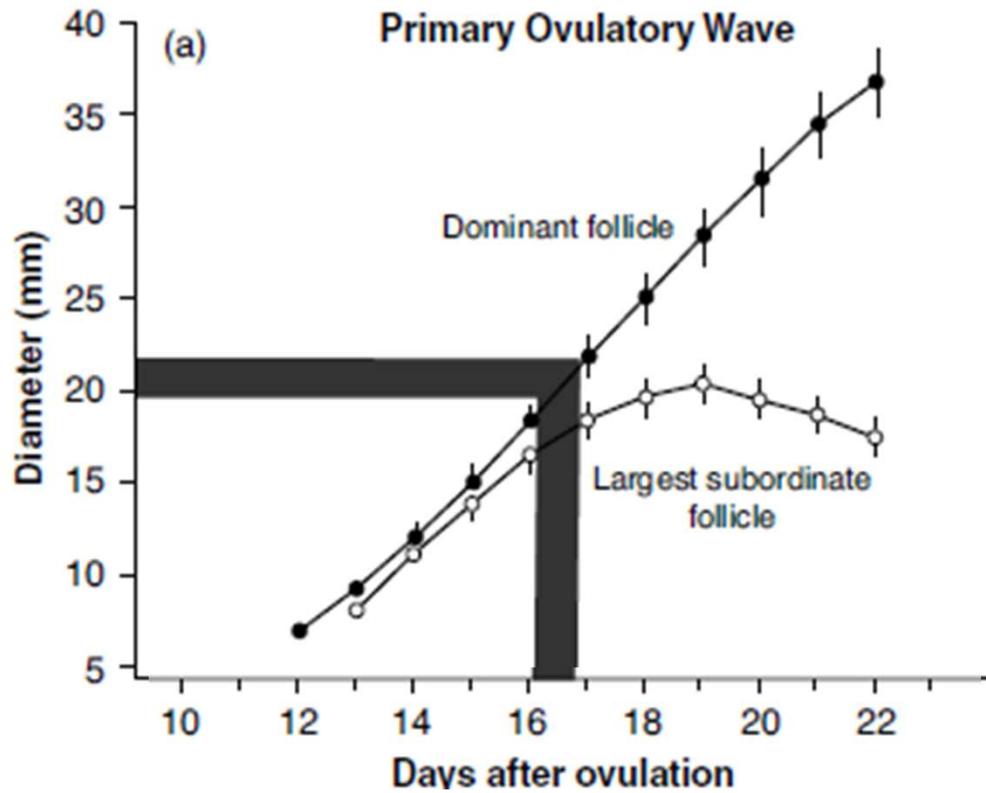
- Lasts 2-3 days
- No clinical signs
- No external or internal differentiations

# Mare Sexual Cycle

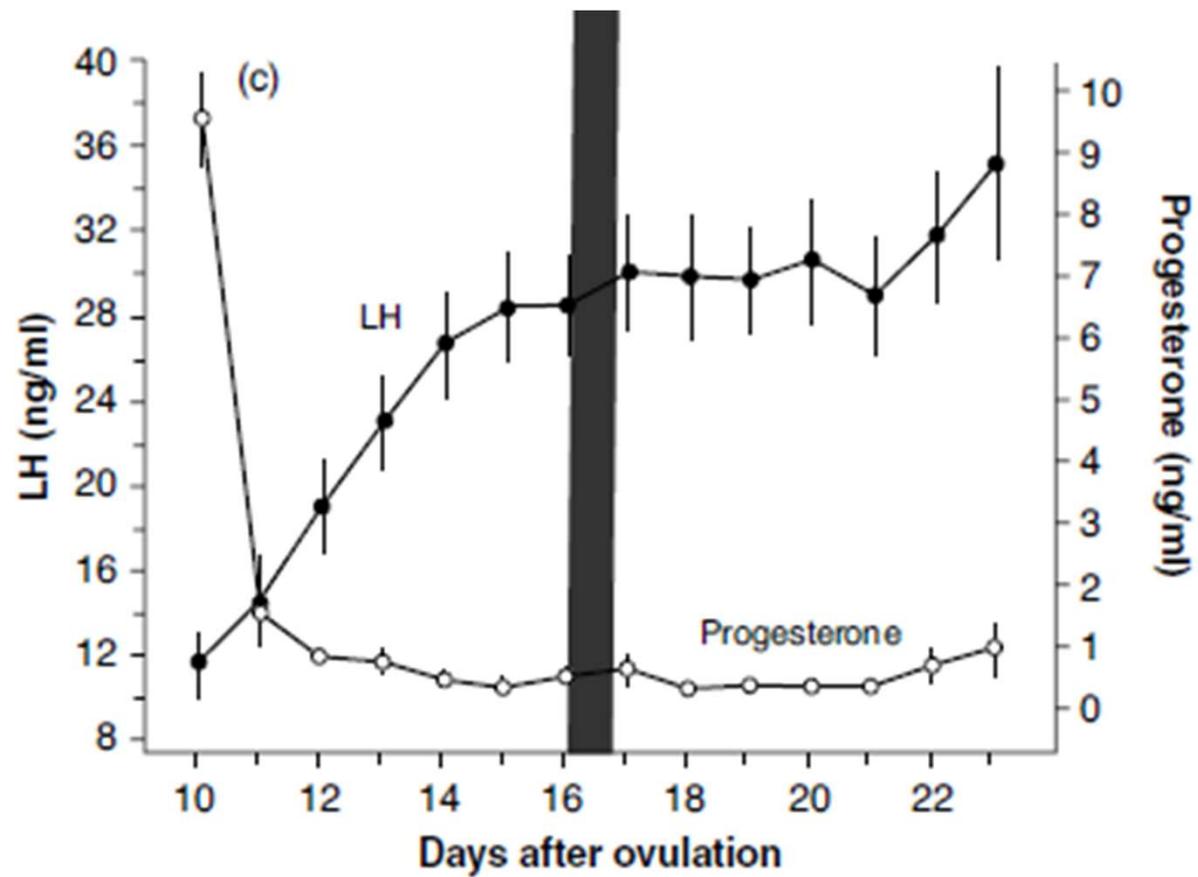
## **Estrus**

- Lasts **5-7 days**
- **Ovulations** occur 24-48 h before end of the estrus (mostly 1 follicle)
- **Moist and wet vaginal mucosa covered with thin and juicy mucus, hyperemic and shiny.**
- Foal heat\*\*

# Mare Sexual Cycle



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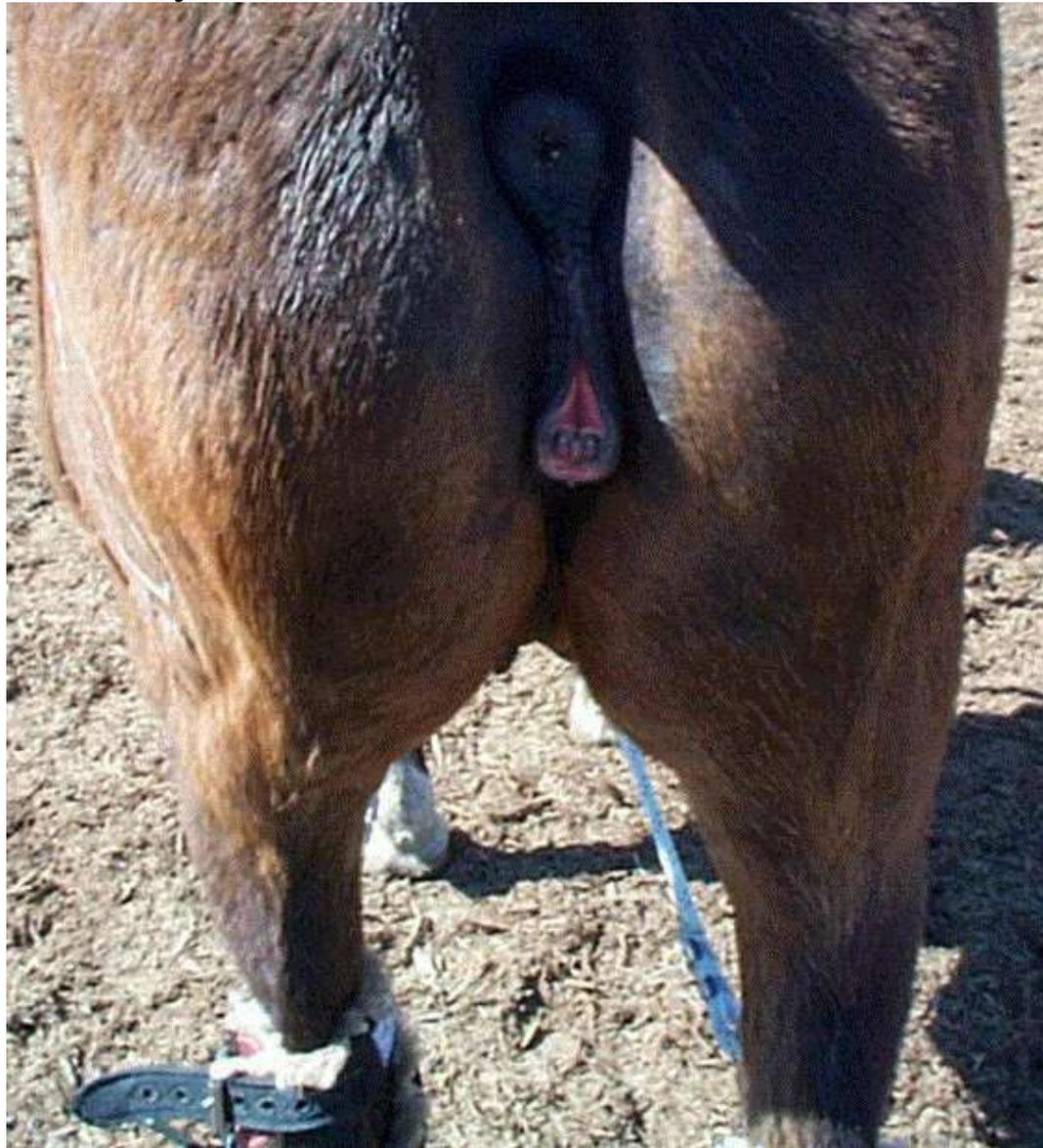
## Teasing stallion

- Vocalization
- Relaxed facial muscles, ears turned to the side
- Lowered head is held in its normal position
- Trying to stand around the stallion
  
- Deviates the tail and exposition of the perineal region
- Rhythmic eversion of the vulvar labias and showing clitoris (**Clitoral winking**)
- Turn her hindquarters to the stallion and show a characteristic posture with lowered pelvis and straddled hind limbs (**Squatting**)
- Frequently voidance of small quantities of urine in front of the stallion

# Mare Sexual Cycle



# Mare Sexual Cycle



# Mare Sexual Cycle

## **Metaestrus**

- Lasts approximately 2-3 days
- Luteal cells originated from granulosa cells, but not thecal cells
- Progesteron secretion begins and rises

# Mare Sexual Cycle

## Diestrus

- Longest period of the cycle, takes **13-15 days**
- There is a compact **Corpus Luteum** that secretes **Progesteron**
- Corpus Luteum begins to regress after 15-17. days of the cycle

