Equine Reproduction

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Overview

- **Responsible Horse Breeding**
- Reproductive Anatomy & Physiology of the Mare
- Estrus Detection & Estrous Cycle Manipulation
- **Artificial Insemination & Advanced Reproductive Techniques**
- Broodmare Management
- **The Foaling Process**
- Anatomy & Physiology of the Stallion
Responsible Horse Breeding

• Consider alternatives
  • Adopt from a non-profit organization
  • Purchasing a horse that meets your specifications

• Calculate and compare costs
  • Breeding costs (stud fees, veterinary expenses, mare care, etc.)
  • Insurance
  • Yearly maintenance costs (foal to 3 yrs)
    • Feed, housing, farrier, veterinary, etc.

• Careful evaluation of the mare and stallion
  • Conformation and temperament
  • Genetic testing
Options for Breeding Your Mare

- Live Cover
- Artificial Insemination
- Embryo Transfer
Gestation Length
Average: 340 days
Range: 320-355 days
Broodmare Management

• Vaccinations
  • Annual core vaccines
    • WEE/EEE/WNV/Tetanus/Rabies
  • Recommended risk-based vaccines
  • EHV at 5, 7, & 9 months of gestation
  • Pre-foaling vaccines at 300d of gestation

• Deworming

• Nutrition
  • Increased nutrient requirements in late gestation
Caution When Feeding Fescue

- Concern for late gestation mares
- Causes decrease in prolactin, estrogen and progesterone
  - Prolonged gestation
  - Thickened placenta
  - Dystocia
  - Agalactia
  - Weak/dead foals
  - Retained placenta
  - Decreased conception
3 Stages of Parturition (Foaling)

- Stage 1: Preparation
- Stage 2: Birth of the Foal
- Stage 3: Passage of the Placenta
Stage 1: Preparation

- Possible changes in behavior
- Uterine contractions
- Dilation of the cervix
- Rotation of foal into normal delivery position
Stage 2: Birth of the Foal

Begins with rupture of the chorioallantoic membranes, commonly known as “breaking of the water”.

![Images of horse and foal during birth process]
Red Bag Delivery

- Premature placental detachment
- Red & velvety appearance
- Membranes do not break
- Lack of oxygen to foal
Stage 3: Passage of the Placenta

- Usually expelled within 1 hour
- Considered ‘retained’ if not expelled within 3 hours (Call the vet!)
- Uterine contractions
- Examine for holes, color & weight
The 1st 24 hours are crucial!
The fun is just beginning!