

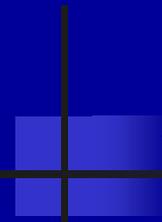
Effects of Locoweeds on Reproduction

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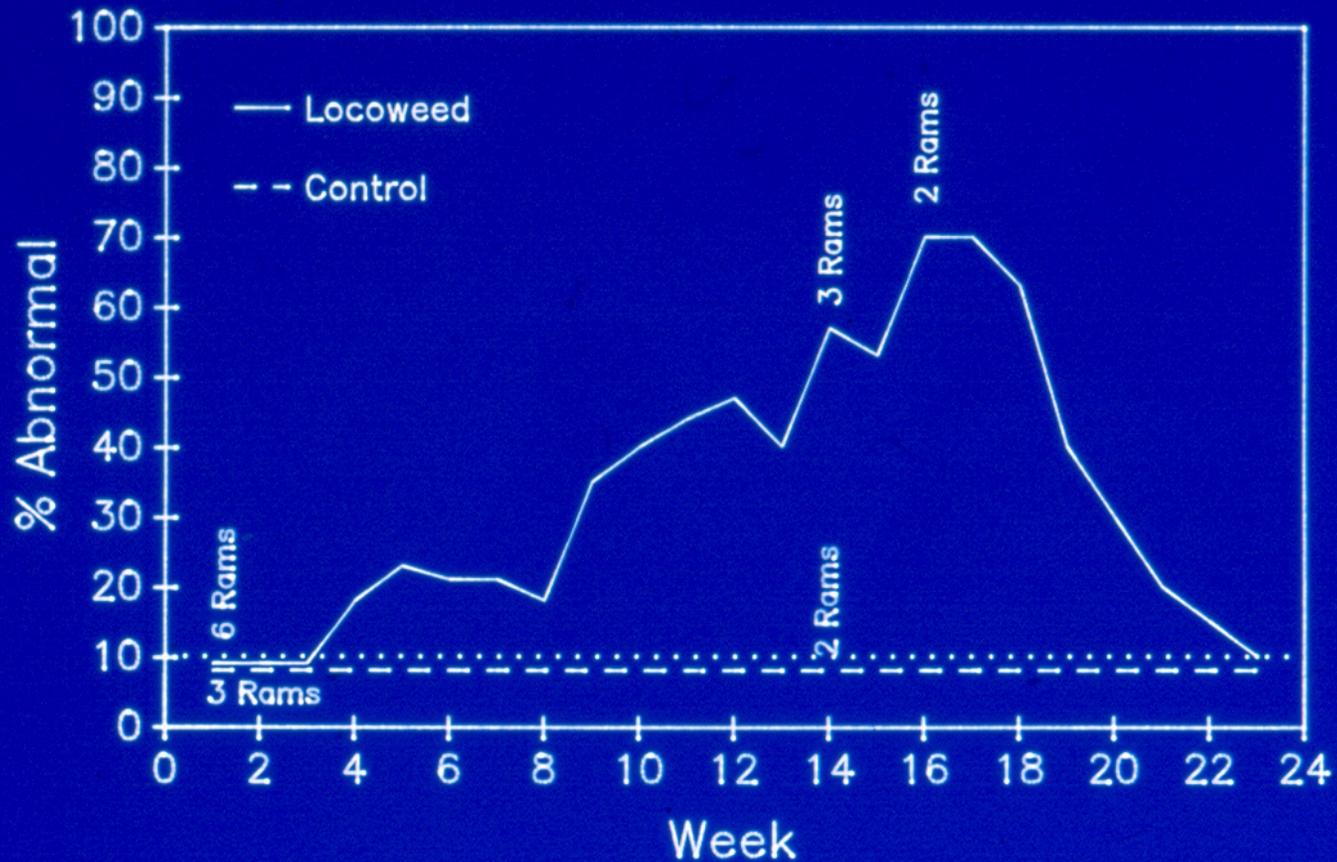
Effects on male reproduction

- Breeding behavior, libido
- Breeding stamina
- Semen quality
- Recovery

Locoed ram



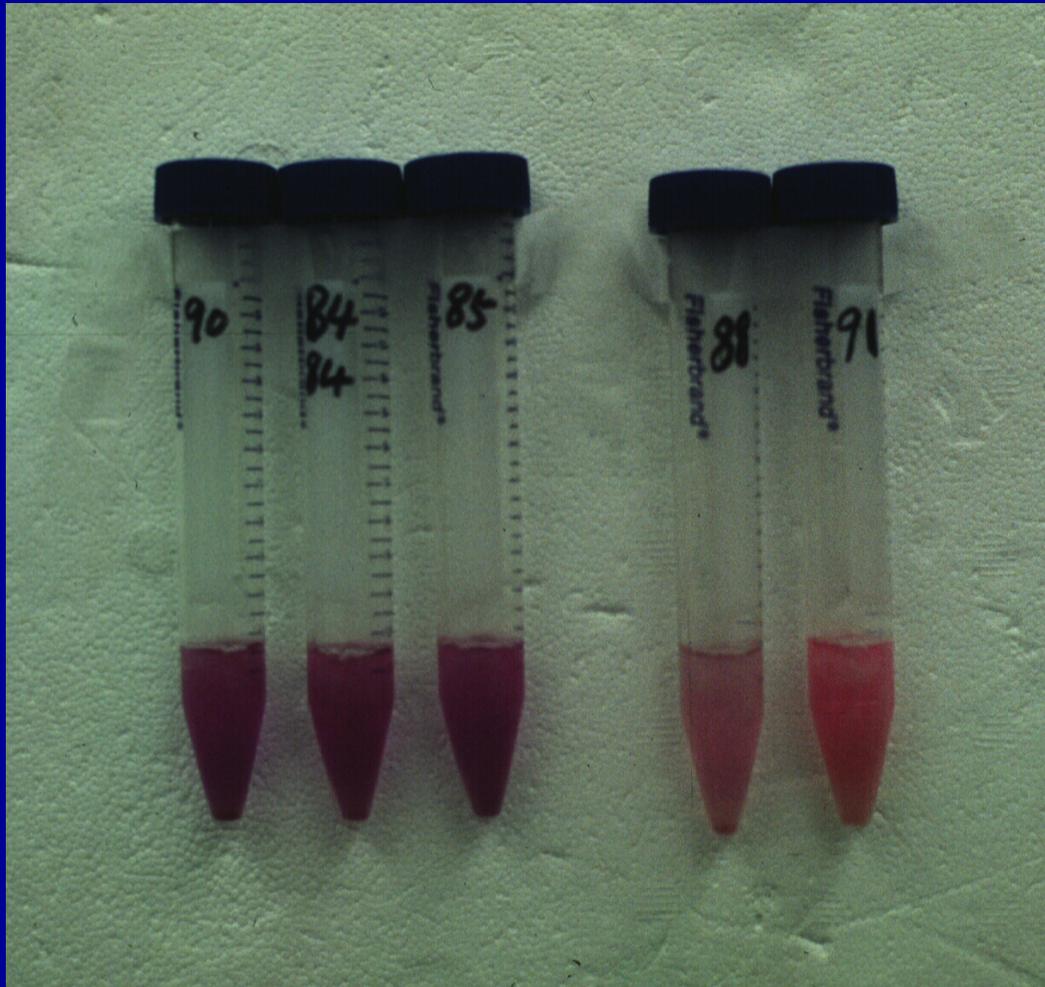
Abnormal sperm



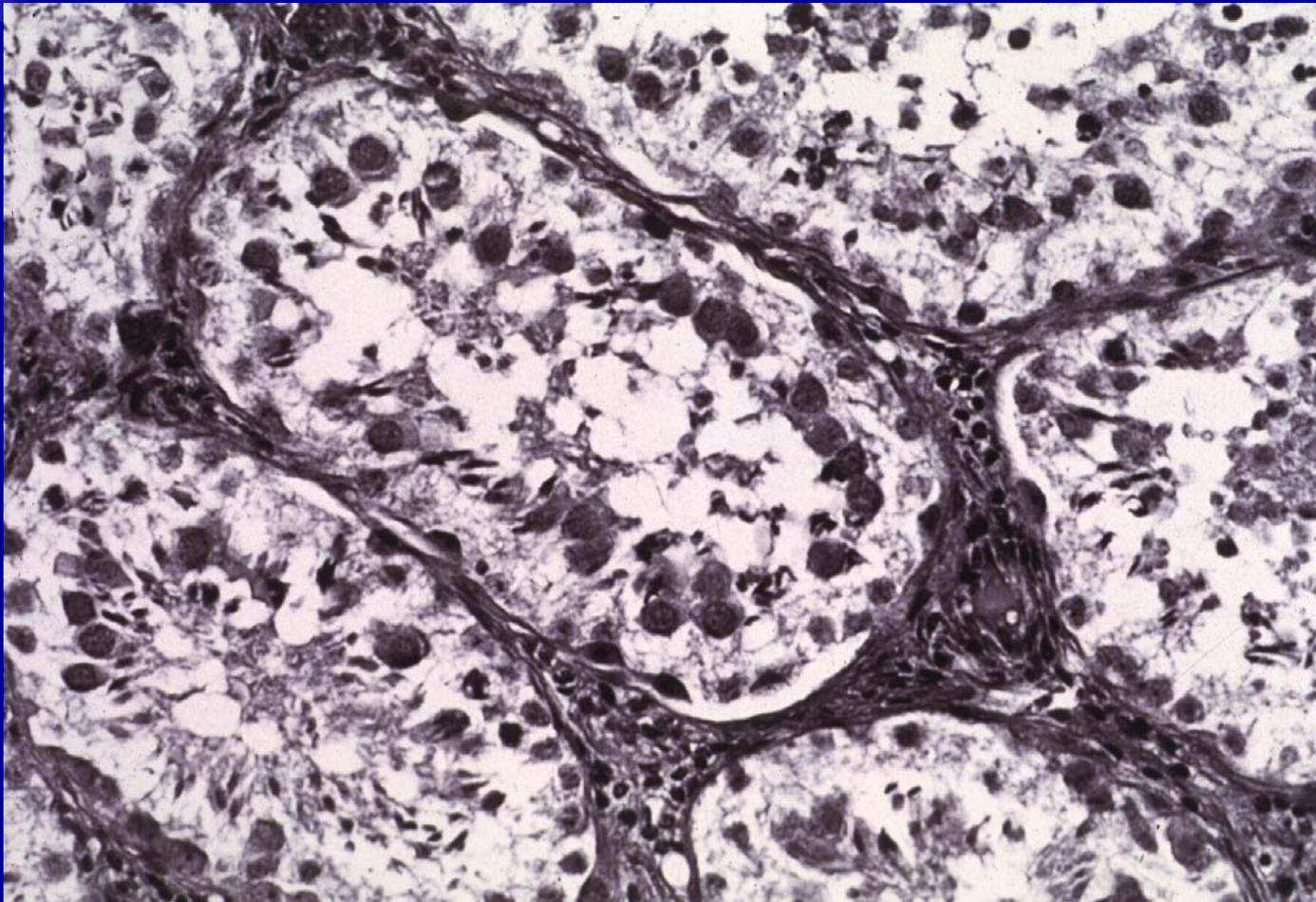
Sperm cells

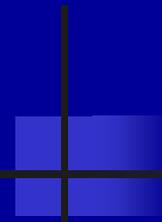


Reazurin red dye reduction



Pathology of the seminiferous tubules





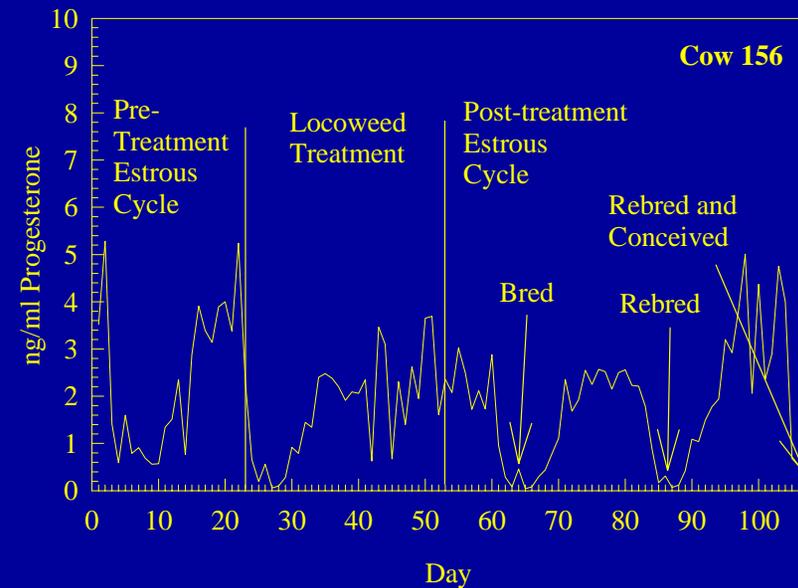
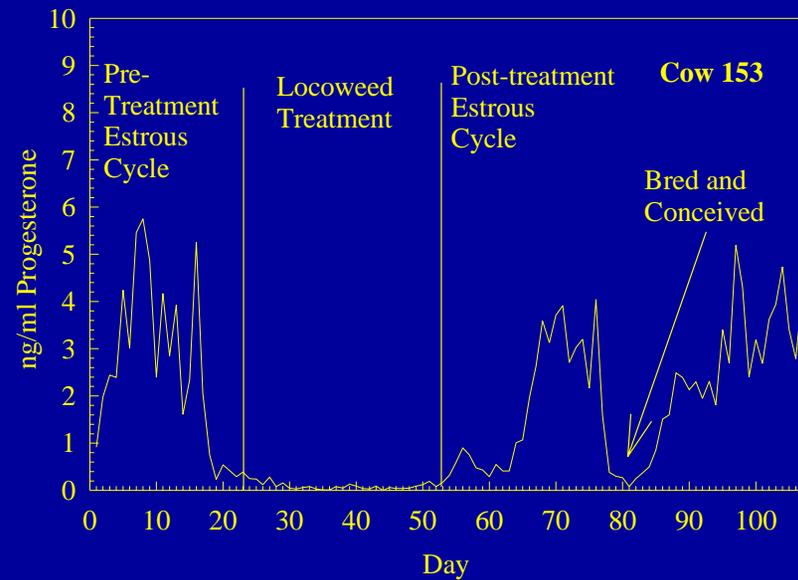
Effects on female reproduction

- Puberty, reproductive development
- Estrus, estrous cycle, oocyte/embryo
- Breeding behavior, conception

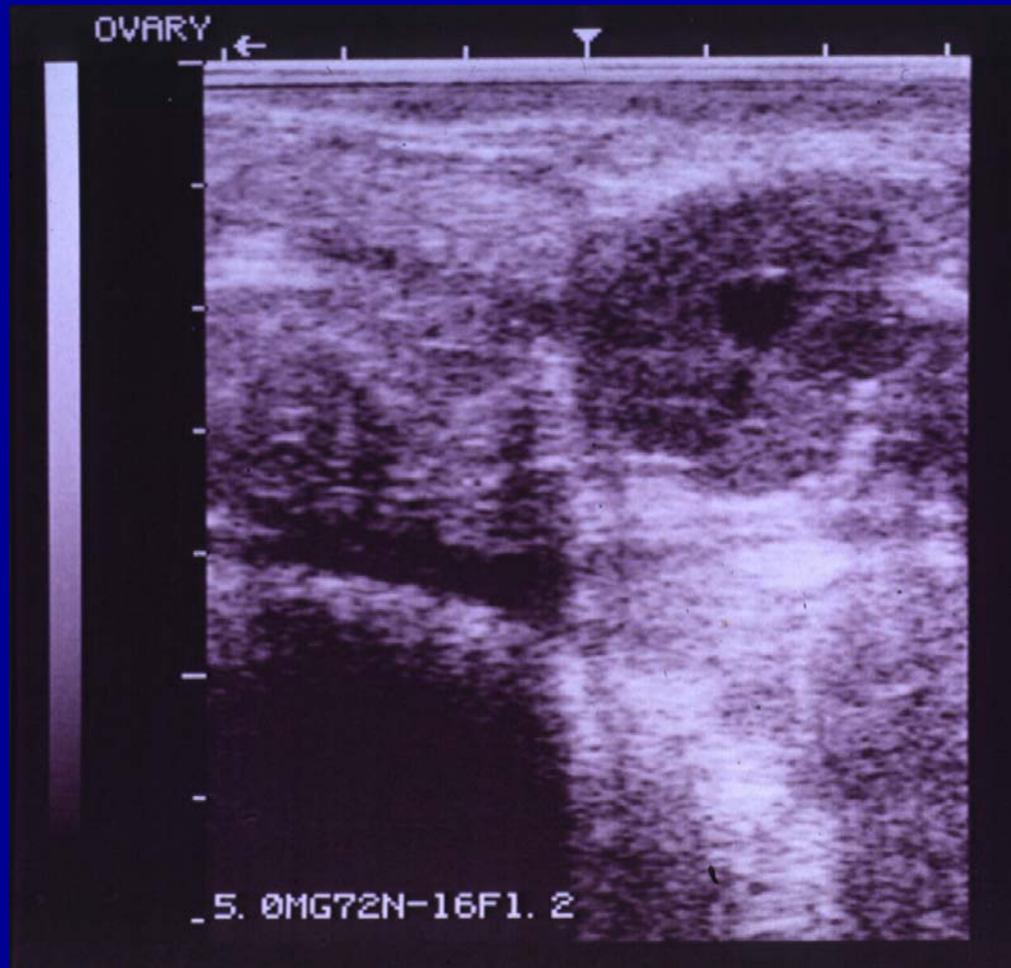
Pig uterus comparison



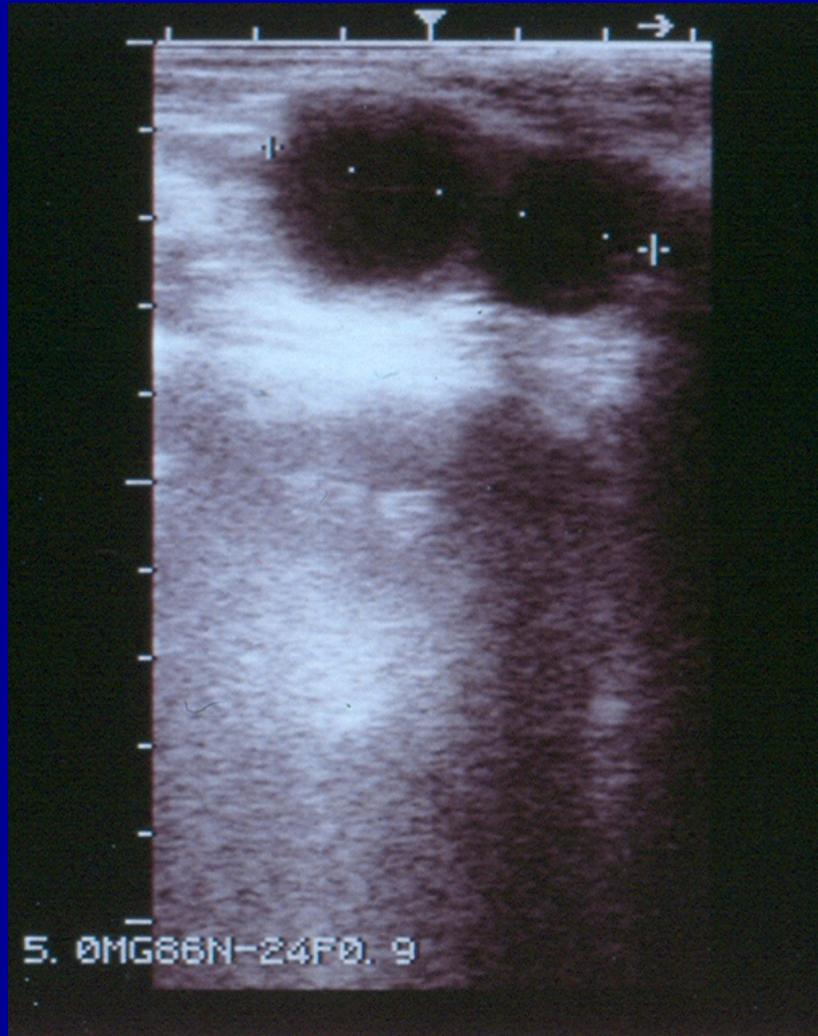
Estrous cycle of locoed cows



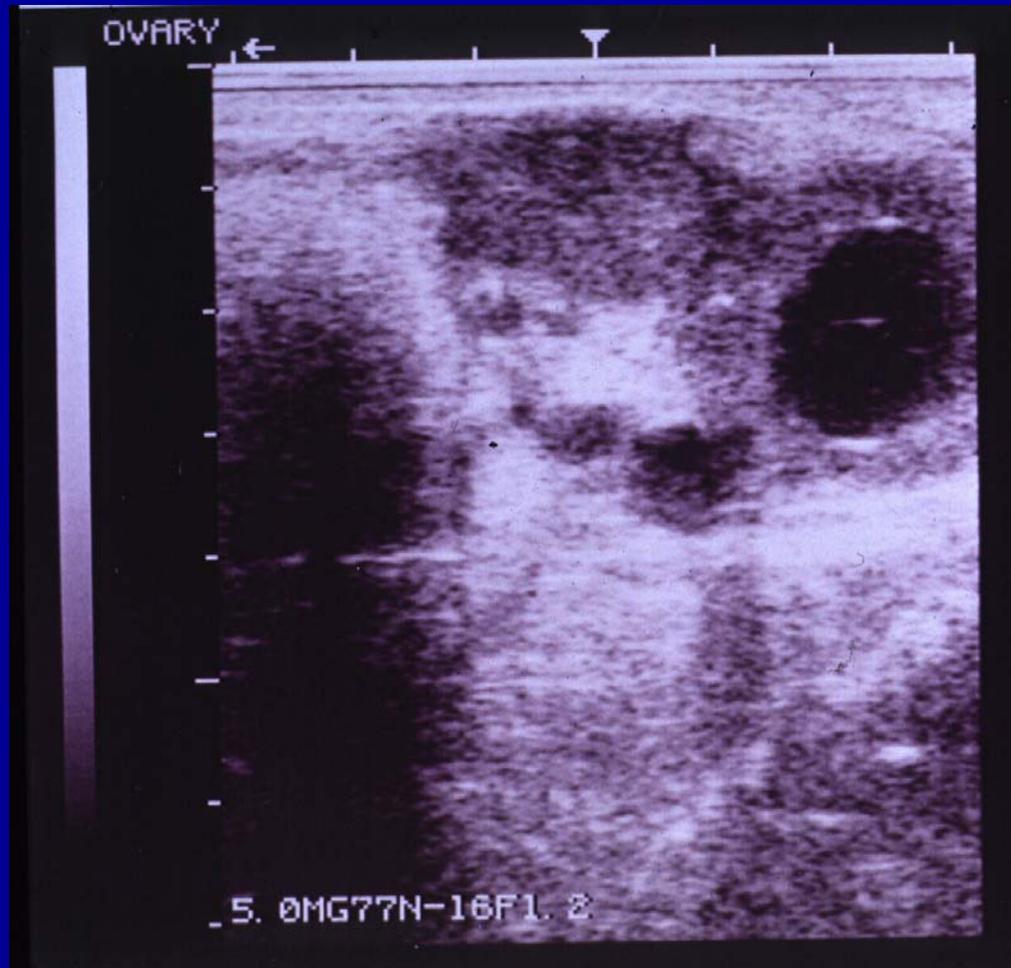
Ultrasound—control ovary



Ultrasound—low dose locoweed ovary



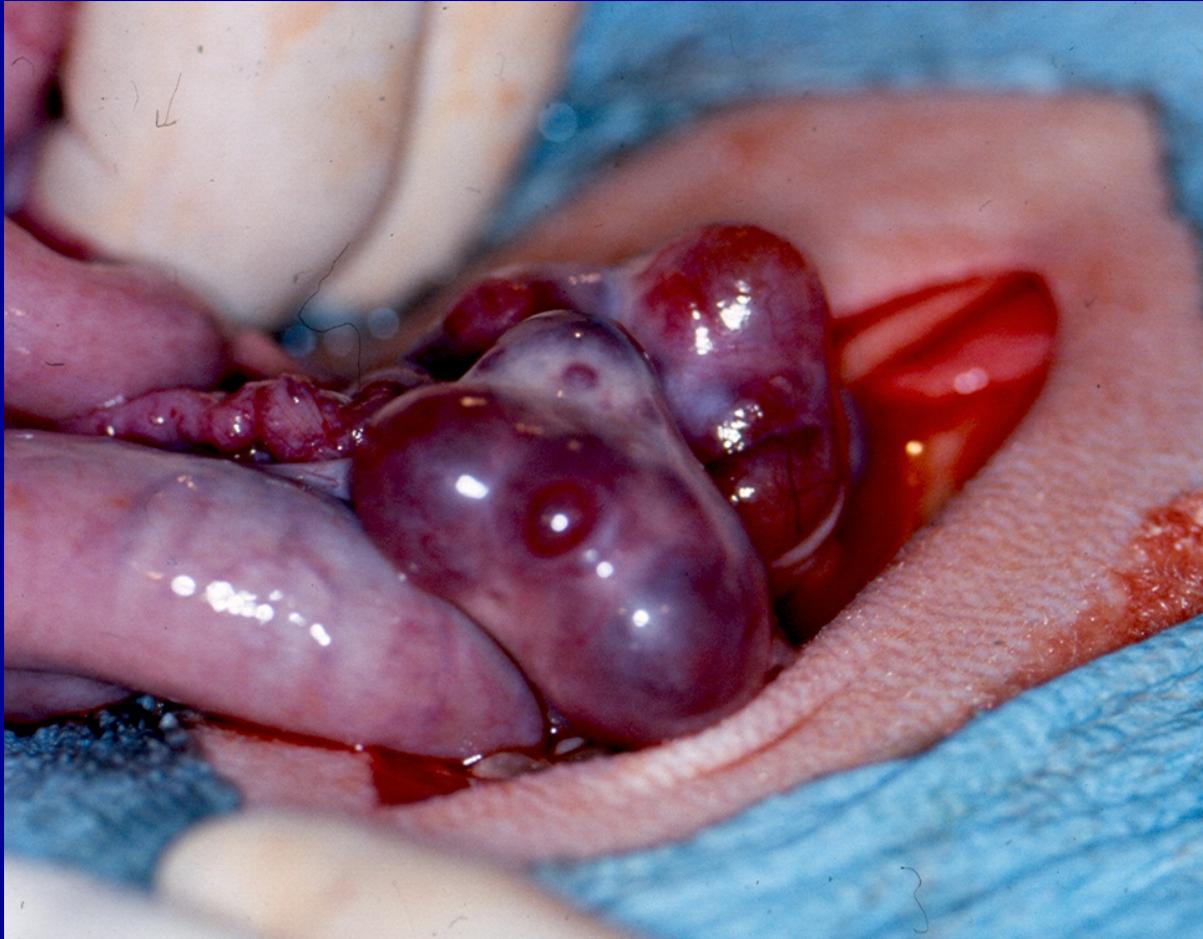
Ultrasound—high dose locoweed ovary

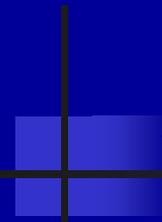


Sheep ovary—control



Sheep ovary—locoweed, 14 days





Loco eaters

Fed locoweed for 30 days at 20% of the diet
(1.2 mg/kg/day swainsonine)

- 179 Bred 7 days; conceived
- 153 Bred 25 days; conceived
- 178 Bred 13 days; rebred 18 days; conceived
- 156 Bred 11 days; 20 days; 21 days; conceived

Loco eaters

Fed locoweed for 30 days at 20% of the diet (1.2 mg/kg/day swainsonine) starting at 7 months gestation

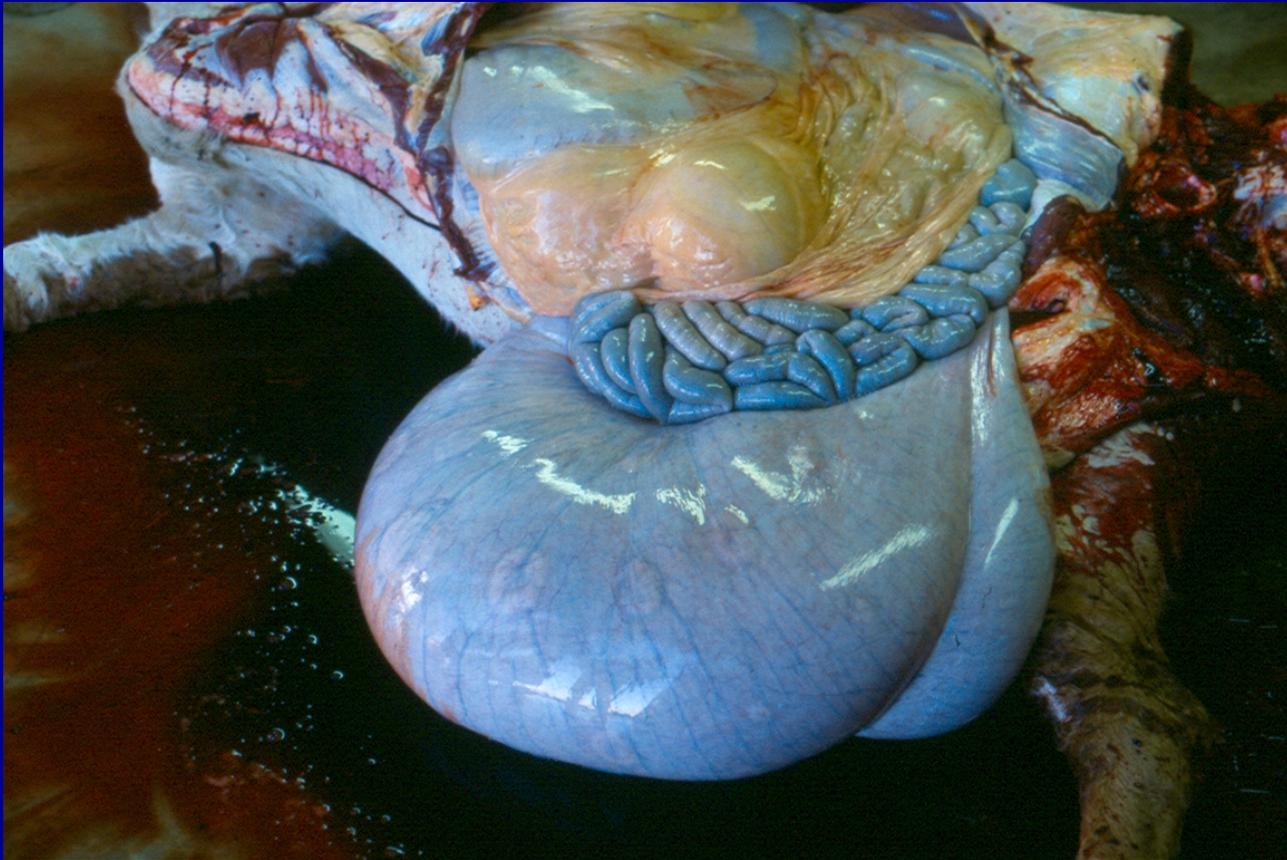
179	Control	80 lb calf, 32 lb fluid/placenta
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178	Control	58 lb calf, 75 lb fluid/placenta
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156	Loco	65 lb calf, 101 lb fluid/placenta
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153	Loco	43 lb calf, 121 lb fluid/placenta; aborted
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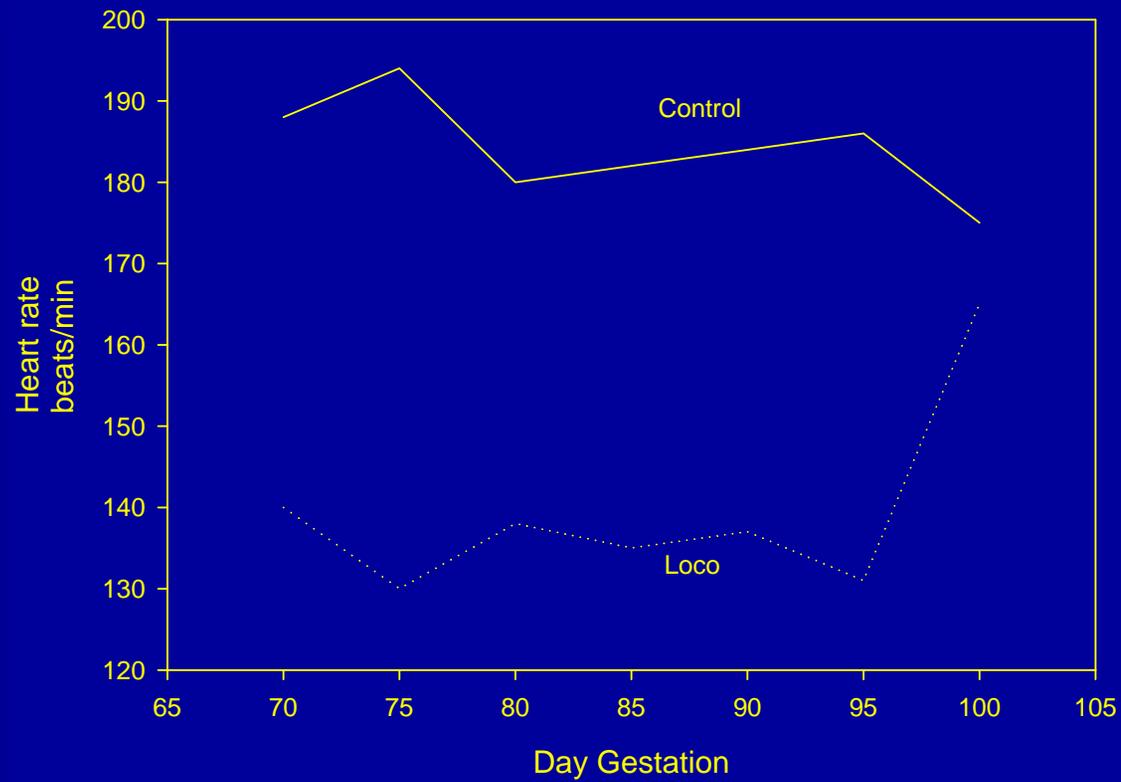
Hydrops uterus

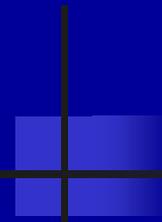


Hydrops calf in uterus



Fetal heart rate





Questions to answer:

- Reproductive life of cows and sheep
- Dose response
- Breed differences (goats, hair sheep, wool sheep; Angus, Hereford, Brahman)
- Stage of pregnancy (early vs. late gestation)
- Male reproduction (bulls vs. rams vs. bucks)
- Others