

## NOTES FROM THE BREEDING SHED

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### **Some Factors to Consider when Assessing your Barren Mare**

Dollars and cents: Does the increased cost, and decreased chance of obtaining a live foal, still warrant breeding that old, barren mare? To produce a pregnancy at 14 days gestation, you have to put 2-4x the time/effort/money into breeding an older mare ( $\geq 15$  years) than the average mare (age 6 to 14). Once an older mare is pregnant, she is still 2-3x more likely to lose her pregnancy before October, than a younger mare. Barren mares, of all ages, are also 2x less likely to become pregnant, and 7x more likely to have a pregnancy loss before October, than foaling and maiden mares.

Cycling/Lights: The average mare not placed under lights, does not begin cycling until the first week of April. Older mares usually do not begin cycling until 3 weeks later (the end of April). The first transitional estrous period usually has the same 14 day pregnancy rate, but a 3x higher early pregnancy loss rate (between 14 and 40 days) than later cycles. Therefore the use of lights from mid November is critical to many mares, to be confident that they will be ready for breeding in February. However, if you are late, it is still beneficial to start lighting as late as mid January. It normally takes 40 to 60 days under lights to start the average mare cycling. It then takes a further 30 to 60 days to complete the transitional period. The mare should be allowed to go through her first long estrous, and not be bred until her second estrous, to avoid the high early pregnancy loss rates associated with long transitional estruses. The traditional lighting system used 16 hours of daylight + artificial light. But since 1980 it has been recognized that only 2.5 hours after sunset, is necessary (mares kept in should be lighted all day). Alternately, a 1-hour pulse given between 9.5 and 10.5 hours after sunset is also equally effective. (Lights: one 150 watt bulb or one fluorescent bulb / 12' x 12' stall (SLR camera with Styrofoam cup over lens set at 400 ASA/0.25sec/f5.6).

Uterine Cultures and Cytology: It is important to determine that your mare is not harboring a bacterial/fungal uterine infection during the fall and winter. These infections produce inflammation that does permanent damage to the endometrium (lining of the uterus). The scarring makes it significantly more difficult for a mare to carry a foal to term. All mares should have a clean swab at the end of the breeding season, or during the early fall, to insure that long term, persistent infections are prevented.

Vulvar Conformation: Poor vulvar conformation leading to pneumovagina (wind sucking) is a common problem in mares. The aspiration of air inflames the uterus and carries forward bacteria from the vulva to the uterus. This leads to infections and/or persistent inflammation of the uterus, and permanent damage to the endometrium over time. Mild to moderate problems can be corrected by suturing the vulva (a Caslick's procedure). Severe problems require a perineal reconstruction operation.

Uterine Biopsy: Used to assess the status of the endometrium, and determine its ability to carry a foal to term. It is an excellent way to determine whether age, multiple foalings, wind sucking or old infections have actually done any significant damage to the uterine lining. A uterine biopsy is recommended for all barren mares regardless of age, or breeding history.

**Recommendations:** Make that appointment with a veterinarian who has the experience and expertise to help you make sure your barren mare has the best chance of becoming pregnant next year. If you have any further questions, please don't hesitate to call.