## **Ask A Vet: Broodmare Management Goals**

Sunday, March 12, 2017

Dear Dr. Weldy's,

My best mare gets pregnant a little later each year. Do you have any advice on how I can get her to settle on her foal heat or 30 day heat?

Dear Reader,

What a timely question! Our recent article on foaling pointed out how to get a healthy foal and the importance of making sure the mare passes her placenta within a few hours of foaling. That is step one in getting the mare ready to breed. Of all the domestic animals the mare is the most amazing reproductively as the horses gestation period is over 11 months. A normal mare can foal anywhere from 11 - 12 months and two full sisters bred to the same stallion can foal a month apart. They usually are true to themselves, if they gestate 11 months and 10 days one year they usually are pretty close to that each year. The mare comes into a foal heat 9 days after the birth of the foal and many times conceive during this estrus. That is an amazing feat when you consider that they can get ready to carry another pregnancy that soon. If they don't become pregnant during the foal heat the next estrus is 30 days after the foal is born. That heat usually lasts around a week and the mare is normally bred starting two days after the beginning of the heat and every other day until she goes out of estrus. It is important to try to get your mare settled (in foal) during one of there two heats as subsequent heats are much more erratic. Even though they are supposed to cycle every 21 days remember what the old timers say, the only thing predictable about a mare is that they are unpredictable.

Mares can be live covered (bred with a stallion) or artificially inseminated (AI). I have been successfully artificially inseminating mares for 43 years and the conception rates are comparable to live cover. Thoroughbreds are the only breed that is not allowed to be artificially inseminated as the stallion owners in the Jockey Club maintain strict control over breedings. With AI a champion stallion can sire hundreds of foals a year and the semen can be shipped to the mare overnight. Using palpation, ultrasound, and hormone therapy enables accurate prediction of ovulation and thus only one shipment is needed. Putting a mare under lights around December 1st will fool her into cycling much sooner than normal if she is not in foal.. Mother Nature dictates most conceptions when there is green grass available to produce milk for the foal at birth. The pineal gland in the mare's hypothalamus of her brain measures the length of daylight and thus the 21st of June is the longest day, thus the most fertile. Racing and show horse owners that sell weanlings and yearlings like their mares to breed much earlier. This is easily done by putting a light over the stall at night making the mare come into heat much earlier than April and May. A mare that foals a little later each year often looses a year and can be put under lights to get her back to an early breeding the next season.

Advances in hormone therapy in recent years also help us to shorten cycles and stimulate ovulation. These can be valuable tools in helping the mare produce a foal each year. Using ultrasound to pregnancy check mares 12 - 19 days after breeding will enable us to not lose a cycle if the mare did not conceive on the previous breeding. Uterine cultures can determine if

there is any residual infection in the mares reproductive tract. Uterine biopsy is a valuable tool in discovering pathology that may make carrying a pregnancy to term difficult.

As you can see equine reproduction is a complex science. Getting that mare to produce a foal every year demands good management and attention to detail. Contact your veterinarian for help in maintaining a profitable and satisfying equine reproduction program.

-Dr. Jerry Sellon