

# ***Swiftsure Equine Veterinary Services***

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## **Breeding Your Mare**

A mare's estrous cycle is usually around 21 day's  $\pm$  3 days. In the last week of her cycle, she shows signs of heat, or estrus. On the last day of estrus, she ovulates which marks the end of one cycle and the beginning of another. Typically the mare's behavioural signs of heat become progressively stronger as she approaches ovulation, which quickly terminate around the time the egg is released. It is very helpful to your veterinarian if you can start to track her estrous cycle by marking down the days she is showing signs of heat, and more importantly, when these behaviours stop. This will help in the planning of her Pre-Breeding Exam, and subsequent breeding.

We perform a Pre-Breeding Soundness Exam preferably during the mare's estrus, or heat. During this exam, we evaluate her uterus and ovaries as well as her general state of health for breeding and maintaining a pregnancy. It is best to catch any problems and address them early before a breeding contract is signed and the fees are paid. Once it has been determined the mare is healthy and cycling, we can move forward with scheduling the insemination.

Scheduling and shipping of semen can be a complicated process depending on where the semen is being shipped from, with which transport carrier, whether it is fresh cooled or frozen, if the stallion is away at shows, or if the breeders only collect semen on certain days of the week. It is important to have the questions answered before you enter into a breeding agreement. Most importantly however, one should inquire as to the semen quality, motility, and viability. A reputable breeder should be able to easily answer these questions.

Ultrasound examination at 14 to 16 days post-ovulation or insemination can confirm pregnancy and detect the presence of multiple embryos, twins. Ultrasound and/or palpation have not been shown to harm the developing embryo. However, because of the embryo's fragility during the first 30 days, it may be warranted to reconfirm pregnancy between 45 to 90 days post-ovulation. Stress, illness, uterine infection, hormonal abnormalities, the presence of twins and other factors can cause early embryonic loss.

It is important to keep in mind that even if your mare is confirmed pregnant by ultrasonography, she may not necessarily still have a fetus 11 months later. Good broodmare management is the best aid for helping the mare make it through the critical first 30 to 90 days of pregnancy.

### *General Guidelines for Managing a Broodmare:*

- The mare should go into the breeding season fit and at an appropriate weight
- Avoid stressing the mare as it can cause a drop in the hormone, progesterone, which helps maintain pregnancy
- Monitor for any signs of infection or disease. Illness and/or fever can cause the mare's system to secrete prostaglandins, which may cause abortion
- Transport your mare only if necessary
- Use caution when exposing your mare to other horses. Avoid any undue risk of injury or disease transmission from transient horse populations
- Provide nutritious forage, but don't overfeed. Supplementing with additional vitamins and minerals is unnecessary in mares being fed a balanced diet
- Avoid having your mare graze on endophyte-infected fescue grass or hay as it may cause the mare to abort, to have problems delivering the foal or to have decreased milk production
- Make sure the mare is current on her dental care, vaccines and deworming
- Do not administer hormones or other drugs to your broodmare unless specifically prescribed by your veterinarian
- Moderate riding or exercise is important to maintain a healthy body weight
- Constantly evaluate her body condition to determine her nutritional needs
- Always have clean, fresh water available
- Maintain routine hoof care

### *Vaccinations:*

Prior to breeding, your mare should be up to date on all necessary vaccines and have her teeth checked and potentially floated.

Pregnant mares are especially sensitive to certain strains of rhinopneumonitis that have been shown to cause abortion. Pregnant mares should be vaccinated at 5, 7 and 9 months' gestation to protect them against equine rhinopneumonitis.

In addition, your mare should receive booster vaccines four weeks prior to foaling to increase the antibody level in the mare's colostrum to help protect the newborn foal from disease.

### *Deworming:*

It is especially important to deworm your mare at the time of foaling, because she will be the primary source for infecting her foal with parasites. Manure should always be properly disposed of in an effort to minimize parasite infection. Consult your veterinarian for a recommended deworming protocol and products.

### *Last Four Months of Pregnancy:*

To accommodate the rapidness of foal growth, the mare's energy needs will increase. Good-quality hay and forage should remain the bulk of the expectant mare's diet, but concentrated feeds, such as grains, may be added to the ration to bolster energy

intake without adding excess bulk. Continue to evaluate your mare's body condition to help guide any dietary adjustments.

Exercise during the last four months of the mare's pregnancy should be light to moderate. In fact, a pastured mare will get as much exercise as she needs just grazing. Vigorous exercise is not recommended.

The average length of pregnancy in a mare is 338 to 343 days, but normal gestation can range from 320 to 370 days. If you're concerned or the pregnancy is extending beyond 340 days, call the office to have your broodmare examined.