

Breeding Your Mare

Many factors affect a mare's ability to conceive and carry a healthy foal full term; therefore, breeding preparation should begin well in advance of the breeding season to allow time for adjustments to be made if necessary.

Thin or obese mares may not cycle normally or may be unable to maintain a pregnancy; therefore, mares should be physically fit. A regular vaccination and deworming program should be employed.

It can take months to bring a mare to peak condition, to treat an infection or to stabilize an irregular heat cycle. Without proper planning, an entire breeding season may be missed.

A pre-breeding examination by a qualified equine veterinarian should be carried out to determine the mare's reproductive status. In my opinion, the most effective way to accomplish this is by use of an ultrasound. Without a proper diagnosis, problems may go undetected and unnecessary expenses may occur with extended mare care or veterinarian fees, which is why I believe it is an investment well worth it.

Both absence of physical activity and over-exertion can be harmful. Moderate exercise increases the flow of blood to the uterus through the utero-ovarian artery and thereby increases the supply of oxygen and nutrients to the fetus. In addition, a physically fit mare is more likely to foal without complications and recover quickly for the following breed season. Strenuous exercise during the last two months of gestation should be avoided.

NUTRITION:

Nutritional requirements vary with the mare's age, size, physical activity, stage of pregnancy and whether she is lactating. Good quality hay, a grain supplement and free access to a mineral salt block should be included in your nutrition program. Your Veterinarian can assist you in assessing the specific nutritional requirements of your mare. A thin mare may produce a poorly developed foal or may abort. Obese mares tend to produce small foals, as the uterine capacity is decreased due to the compression by fat layers. Therefore, mares should maintain good condition at all times.

Plenty of clean, fresh water should be available and should be prevented from freezing.

PARASITE CONTROL:

Pregnant mares should be kept on a regular deworming program until one month prior to foaling. Manufacturer precautions pertaining to pregnant mares should be carefully noted before administration.

VACCINATIONS:

Vaccination recommendations vary among geographical locations and Veterinarian preferences.

I use the following schedule:

Σ March - West Nile

Σ 5th month of pregnancy – Flu-Rhino.

Σ 7th month of pregnancy – Flu-Rhino.

Σ 9th month of pregnancy – Flu-Rhino.

4 weeks prior to foaling – Encephalomyelitis, Flu, Rhino, Tetanus.

An optional vaccination against strangles may be given, (initial dose, followed by a booster 3-4 weeks later, annually thereafter). Because there is occasional controversy over this, a recommendation by a Veterinarian is advised.

Foal vaccination programs seem to vary even more greatly than mare vaccination programs, therefore, Veterinarian assistance may be applicable once the foal is born.

CAUSES OF ABORTION

Many factors may cause a mare to lose her foal. These include viral, bacterial and fungal infections. A thorough pre-breed check and regular vaccinations are the best defense against these.

Twinning is a common cause of abortion in mares. Early detection by ultrasound, followed by the “snipping” of one embryo, increases the chances of a successful pregnancy, as healthy, full-term twins are uncommon among horses.

Poor nutrition as well as toxic plants or chemicals are known causes of abortion. Mental stress, heavy exertion, breeding during pregnancy, twisted umbilical cord, trauma, certain medications and certain dewormers may also result in abortion.

Hormone imbalances, cervical incompetence and uterine incompetence are believed to be important causes of habitual abortion in mares.

FOALING

Although most births proceed normally without assistance, I recommend attendant to be present for foaling for the following reasons:

To assist the mare or foal if complications should occur. To carry out post foaling procedures. Imprinting of the foal. Witnessing foaling is a wonderful experience.

One or two familiar and quiet attendants is best. Horses prefer to be alone during this time and too much noise and activity may interfere with the bonding process of mare and foal, thus leading to an orphan foal.

Predicting foaling can be a nerve-racking process. My best recommendation is to spend a lot of time observing your mare to better enable you to identify subtle changes in her behavior as well as physiological changes.

A normal length of gestation is between 320 days and 360 days, with most mares foaling at around 11 months of pregnancy.

At least 1 month prior to foaling, the mare should be moved to her foaling area (if different), which will allow her time to adjust, in addition to providing her body

with enough time to develop antibodies which can then be passed to her foal.

The foaling facility should be carefully inspected for hazards. Aside from obvious dangers such as protruding objects or sharp edges, some hazards may be overlooked. It only takes a few inches of water to drown a newborn foal, which means irrigation ditches and common water troughs can be potentially deadly. Inadequate fencing may permit the mare to deliver her foal into a neighboring pasture, or the foals legs may become pinned under a fence or stall partition. The mare may choose an isolated spot out in the rain and mud to deliver, even if she has access to shelter. Foals may be injured or killed accidentally as the dam attempts to protect her foal from other horses. Straw is advised over wood shavings for bedding during foaling to reduce the likelihood of aspiration. If Caslicks suturing is in place, it should be surgically opened and given enough time to heal prior to foaling.

Most mares exhibit at least a few signs of impending foaling, however, there tends to be an inconsistency between mares so the following characteristics can only be used to roughly predict the onset of labor.

During the last month of so of pregnancy, the mare's udder usually enlarges. The udder may fill then become small again in the early stages of this process.



The muscles in the mare's pelvic begin to relax, giving a hollow appearance on either side of the tail to the point to the buttock. If this area is felt each day, the softening of muscle can usually be detected. Within 24 to 48 hours prior to foaling, the mare's vulva becomes swollen and relaxed.

“Waxing” refers to a substance appearing on the end of the teats, which begins as a honey-colored, transparent bead of colostrum, turning to a translucent yellow-white, followed by grayish-white milk. Waxing may occur a week or so before foaling or may fail to appear at all, although most mares will wax 12 to 48 hours prior to giving birth. The appearance of wax is definitely an indicator to watch the mare closely. After the wax drops off, the mare may drip or stream milk. While some mares show no evidence of wax or milk, others may drip milk for several days. Unfortunately, these mares may loose large amounts of colostrum, the vital first milk that contains antibodies for the newborn foal. An observant owner may notice the passing of the cervical plug, which has sealed the opening of the mare's

cervix during pregnancy. This mucous cervical secretion may be streaked with small amounts of blood.

FOALING SUPPLIES

Σ Mare's halter and lead

Σ Tincture of iodine

Σ Small cup

Σ Tail wrap

Σ Towels

Σ Twine or rope

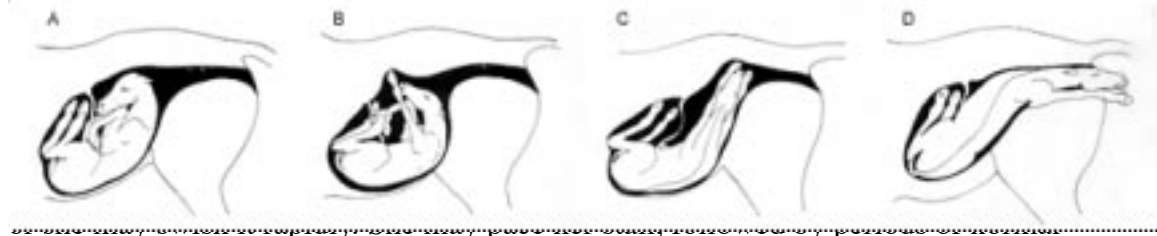
Σ Plastic bag

Σ Enema

Σ Warm water

Once you've determined labor to be eminent, you can utilize the time to prepare the mare for foaling. Her stall should be free of hazards and deeply bedded with clean straw. She should have fresh water and hay available at free choice. Some owners like to make a "bran mash", mixing wheat bran and water with grain and molasses. This has a mild laxative affect plus most mares seem to enjoy it. Her tail should be braided, folded and wrapped with a tail wrap. Her vulva can then be thoroughly washed with a mild soap or dilute iodine in warm

water



behavior. A light sweat may be noted. She may defecate and urinate frequently.

A rust-colored liquid is eliminated when the mare's water breaks. This may occur gradually in a trickling manner or all at once in a sudden gush. After the water breaks, foaling will occur within about 15 minutes, although up to 45 minutes is considered normal. Longer than 60 minutes is call for immediate veterinary assistance.

Foals are normally born front feet first, in a swan dive position. Any deviation from the diver position is abnormal and a veterinarian should be called to assist.

Next, the amniotic sac will appear as a white bubble. Within it should be one front hoof, 4-6 inches behind would be the other hoof. This offsets the foal's shoulders, which reduces the circumference. It is not uncommon for the mare to stand up and walk around before lying down again. The muzzle will be seen as the forelegs appear, followed by the head, neck and shoulders. After the shoulders pass, the rest of the body slides out quickly.

The amniotic sac should have already broken away from the foal's face and can be peeled back off the body. There will be fluid around the nose and mouth which the foal will attempt to blow out. You may assist by towel drying if necessary. At this point, the mare will usually rest for a period. This allows the foal to receive essential blood from the placenta via the umbilical cord and should not be interrupted. The umbilical cord will break at a natural breaking point when the foal struggles or the mare stands. It is important to put iodine on the foals naval to help

prevent infection. A small cup should be placed under the navel to allow good absorption of the iodine. This process should be repeated later.

An enema can be given to the foal without incident shortly after delivery, while the foal is still down. The enema helps to prevent straining due to impacting of meconium (first manure).

The afterbirth should be placed into a sack (a plastic grocery sack is excellent) and tied up (above the hocks) to the umbilical cord which is attached to the placenta. This prevents the mare from stepping on it and pulling on the placenta. The placenta should never be pulled from the mare's reproductive tract, as manual removal can cause irreparable damage. The mare's placenta will be passed as uterine contractions continue. The placenta emerges as a liver-colored, vascular membrane. Upon expulsion, it should be laid out and carefully examined to insure no part of it is missing. Even a small piece of retained afterbirth is a potentially serious condition. One large hole will be noted from which the foal emerged. The placenta is usually passed within one hour. Retained longer than 4 hours is call for veterinary intervention. The foal should be allowed to struggle and stand to nurse within 2 hours. Too much assistance at this point may interfere this natural process although it may become necessary to stand at the head of a maiden mare if she won't stand still to let the foal nurse. It is a good idea to get a post foaling vet check of mare and foal to make sure all is well.