Spring is almost here and with the change of seasons comes foaling time for equine breeders. The mule producer's horse mares waddle around the barnyard and those of us with donkeys view hairy versions of the "Goodyear Blimp" trailing out to the hay feeders. During the last quarter of pregnancy we all play this annual waiting game.

Throughout pregnancy the jennets have maintained a quiet lifestyle with regular exercise, but no hard or fast work, up until the last quarter of pregnancy (3 months). The last quarter should involve some exercise at liberty, but no riding or driving. A programme of regular hoof care (every 6-8 weeks) and deworming have prepared the jennet to be in good condition for foaling. However, it is wise to check with the vet before any deworming medication is given during the last quarter of gestation.

Changes in feed are usually not required until the last quarter of gestation when the fetus makes the greatest growth. Excessive feed early in pregnancy can create obesity and potential foaling problems. Increased feed for the jennet should be maintained from the final quarter of pregnancy throughout the first three months of foaling. The latter is the period of maximum milk production. This is the time when protein, vitamin and mineral levels such as Calcium and Phosphorus need to be increased to accommodate the great physical drain on the jennet during this six months of hard work. It is wise to seek an advice from an equine nutritionist or veterinarian regards the important dietary changes during this period.

Having the previous year's breeding date on the jennet greatly assists in establishing a foaling date for this year. Therefore it is crucial to know every jennet in the herd well, and keep good records for the signs shown with each foaling. We attend every foaling it is rare that a jennet sneaks a foal out by herself at Windy Ridge Farm. That being said, in our almost thirty years experience as donkey breeders, we have found that the average donkey gestation period lasts twelve months plus/or minus one week. Then there are those jennets who choose to foal anywhere from 11 months to 14 months all within the normal range of gestation for donkeys! And the same jennet is rarely consistent in the length of gestation time from one pregnancy to the next!

Jennets are also rarely consistent in showing the same signs of impending birth from one pregnancy to the next. However, generally a jennet will show some or all of the following signs:
- Gradual enlargement of the udder from about 30 days prior to birth. As the birth date approaches the udder becomes enlarged and remains enlarged.
- Enlargement of the teats to the very trip occurs several days prior to birth.
A waxy secretion that forms a cap over the end of each teat may form up to 48 hours prior to birth. Some jennets actually drip milk in the last 24-48 hours. Under no circumstances milk the jennet at this stage.

- Softening of the pelvic ligaments creates a groove along either side of the spinal column in the loin area towards the tail head. This sign may go unnoticed in a maiden jennet or one with a thick winter coat.

- Vulva becomes very soft and loose during the last week or two, and gradually elongates as birth approaches. Birth is usually in a matter of hours when the lips of the vulva are swollen out to be flush with the hindquarters.

- Jennet may show an unfriendly attitude towards other animals and prefer to stand by herself. This attitude is usually prevalent during the last two weeks prior to foaling.

- The jennet will show restlessness as the foal turns and prepares to move into the birth passage. At this stage she may look thinner, walk around the stall and get up and down a number of times. Sometimes birth occurs immediately after the foal has turned, or sometimes the jennet will wait for another day or so.

- Just prior to birth the jennet's tail will be carried out away from the body, lifted and usually kinked to one side. She may frequently pass small amounts of soft manure, or urinate.

Jennets not only show various combinations of signs prior to foaling, but unlike horse mares, they can and do foal at any time of the day or night, so close observation is important. In general we have found that if the jennet shows no signs of foaling by midnight, then she will often wait until the four to six am time frame. But she may also choose to foal at noon, suppertime or while you are doing morning chores! A clean, safely fenced corral or special large clean box stall are ideal for foaling. Foaling out where barbed wire fences surround the pasture, near streams or sloughs or among the rest of the herd can invite disaster.

Where the foal programme has the jennet foal out in a large foaling box stall, it is preferable to get the jennet in to her foaling box at night starting a week or two before her due date. The foaling box should have been thoroughly cleaned, disinfected and deeply bedded with oat or barley straw prior to her being allowed access. Such stalls should receive thorough daily cleaning and be thoroughly disinfected between one jennet and the next.

The jennet will sometimes go "off her feed" a few days prior to foaling. This often causes great stress for the owner who assumes she should be eating heartily in order to keep her strength up for the great event. The jennet however, instinctively knows it is time to clean out the whole digestive system prior to foaling, and by this stage there really isn't too much room in there for food anyway!

When the jennet does finally get down to the business of producing the long awaited foal, she will usually show signs of restlessness, pace the box stall or corral, and repeatedly lay down and get up again. When the cervix is fully dilated, the 'water bag' protrudes into
the vagina and ruptures releasing amniotic fluid which lubricates the passageway for the foal.

The jennet will now start to strain hard and soon a pair of tiny forefeet will appear. Normally the feed point downward as in a diving position, and as more of the front legs emerge the foal's nose will be seen resting on the front legs. This is the normal birth position. Do not hurry the jennet and do not pull on the foal's feet. Unless there is a problem in the presentation of the foal, the jennet will handle the birth herself, without interference, in 15 to 30 minutes. As the birth process proceeds the jennet will often show the licking reflex long before foaling is complete.

If the jennet has been straining hard for 15 to 20 minutes and no foal appears, or the front feet appear but no nose, only one foot shows, the soles of the small feet face upward or the dark red of the placental mass appears prior to the birth of the foal, then call the vet without delay. These signs of malpresentation show the jennet will need expert assistance if both she and the foal are to come through the birth process alive and well.

As the neck is born, the head may start to move and break the membrane that encloses the foal. If it does not, tear the membrane open and wipe the foal's nostrils clear of mucus to help it breathe. Many a foal has died of asphyxiation due to lack of assistance at birth to remove tough fetal membranes. The nostrils of a live foal will often flare as he takes his first few breaths, and he may show a sucking reflex at this time even tough birth is not yet completed.

Once birth is completed, do not cut the navel cord - the jennet will break the cord when she gets up, or it will snap as the foal struggles to his feet. This is the time when the owner with a good relationship with the jennet can go through the steps of imprinting the foal. This procedure is another whole other story in itself which is described step by step in Dr. Robert Miller's excellent book "Imprint Training of the Newborn Foal".

Once the jennet has risen to her feet, she will then lick her foal dry. This licking action is very important, especially with maiden jennets, for it stimulates the motherhood instinct of the jennet, consequent milk production and prevents chilling of the newborn. The jennet will usually rise, and within half an hour expel the afterbirth (placenta). If the afterbirth has not been expelled within 6-8 hours call for veterinary assistance. Complications from the retained placenta can involve infection and or laminitis (founder).

Once the umbilical cord has broken, dip the foal's navel stump in a five percent iodine solution or Hibitane teat dip to prevent umbilical infection. We dip the navel at birth and daily for the next 4-5 consecutive days as a precaution. The jennet and foal should be watched to make sure the foal stands and nurses. It is vital to the foal's health that he drinks the colostrum, or first milk which is rich in antibodies. If the foal is the jennet's first, she may not want him to nurse and it may be necessary to hold or tie the jennet while helping the foal to nurse for the first few times.
Watch for the foal to pass the meconium or first manure. These hard pellets are often passed as the foal is struggling to get to his feet prior to nursing. However, should he not pass the meconium during the first 12-24 hours, and show signs of raising his tail and straining without results, then the vet should be called to administer an enema or mineral oil to stimulate the intestinal tract.

If the land in the area is selenium deficient, then an equine selenium injection given to the foal by the vet during the first 24 hours of life will prevent white muscle disease. An additional injection at two weeks of age is an added precaution. Some breeders utilize a variety of injections, including antibiotics at birth, but we prefer to use the least invasive methods possible in raising our foals.

The donkey has a thick, fluffy coat which gives the appearance of warmth and hardiness compared to the horse foal, but such is not the case. Donkey foals are not very hardy and require suitable shelter especially for the first two to four weeks of life. If a foal becomes soaked with rain he may easily become chilled only to contract bronchitis or pneumonia which are often fatal. A preventative measure would be to bring the wet foal and jennet into the barn, rub him down well with towels and leave him inside until thoroughly dry.

Between the age of two weeks to a month, the foal will start nibbling at the jennet's feed. At that time he can be fed separately in a foal creep - a small pen especially constructed with an opening only large enough for foals to enter. There he can be fed a 17% - 18% commercial foal ration in order to develop his maximum potential growth. Within two to four weeks foals readily learn to use a creep feeder. We have found the quality, rate of growth and development increase dramatically when foals are creep fed.

Diarrhea may be seen in foals at the age of nine to ten days when the jennet starts the "foal heat". Within a few days the condition usually disappears, and the foal is unaffected. However, if the condition persists or the foal is obviously not feeling well or nursing normally then the veterinarian should be called.

Weaning of donkey foals can occur at four to six months of age, especially if they have been creep fed. Weaning at three months or earlier is not recommended unless in an emergency. Such young foals will require extra attention and care to survive, and often develop both physical and psychological problems.

While the jennet will return in heat nine to ten days after foaling, it is not recommended to breed on this first heat. The rate of conception at this time is usually low and the reproductive tract may not have returned to normal in such a short interval of time. The jennet is usually far more concerned about her young foal at this early stage, and is more likely to be upset by the presence of the jack. On the second or third heat after foaling the jennet is more relaxed and receptive to the jack, the foal can be kept in a pen or box.
stall close by the breeding area with few problems, and conception is more likely to occur.

The time lapse involved in rebreeding, combined with the length of the jennet’s gestation, means that breeders will be unlikely to achieve the production of one foal per year. These factors make it more logical to plan for two foals in a three year period. Considering both the jennet’s welfare and the donkey life span of 30-50 years, breeding every second year is a viable alternative that allows for foals to always be born early in the spring - May-June - when they can best benefit from the excellent spring grass.

With proper care and appropriate facilities for donkeys, the waiting game of that last quarter of gestation can be an exciting time that culminates with the achievement of every breeders heart's desire - a lively, healthy, strong foal who will be a joy to handle and an asset to the herd.

References:
- Berry C. & Kokas J., Donkey Business II, Published by Berry & Kokas, Sheaves Park Donkey Stud, Duns Creek, Maitland, 2320, N.S.W. Australia
- Hutchins, Paul & Betsy, The Definitive Donkey, Hee Haw Book Service, American Donkey & Mule Society, 2901 N. Elm St., Denton, Texas 76201
- Lose, M. Phyllis, V.M.D., Blessed are the Foals, Macmillian Publishing Company, New York
- Lose, M. Phyllis, V.M.D., Blessed are the Mares, Macmillian Publishing Company, New York

Carl and Sybil Sewell have bred and raised donkeys for almost thirty years. Windy Ridge Farm, is located near Leslieville, Alberta.