

The Wonderful World Of Foals

A Guide To Breeding Your Mare

It's that time of year when spring is here, trees are budding, birds are tweeting and our minds wander in expectation to seeing all the beautiful foals that are about to arrive. For those of us who get to do this every year it is a time of excitement and anticipation. All the hours spent deciding on who you will breed to who, to the excitement of that positive pregnancy test, the months of caring for your ever expanding mare, to the moment the miracle happens and you hear that first soft nickering as your precious girl first falls in love with her beautiful precious baby. It is truly a wonder to behold that melts your heart.

So much planning and cost goes into breeding a foal so it's paramount that you do everything possible to produce a baby that will have the ability to grow on to fulfil a happy, productive, healthy life. Whatever your chosen breed, always choose parents with excellent conformation and temperaments, it will serve you well later down the line. By being selective you will edge your bets in breeding a foal that will have fewer life struggles than one that has been bred without too much thought and just because you have a mare and know a friend who has not had their colt gelded yet. I cannot emphasise enough the importance of the conformation and health of the mare and stallion that you choose. It is important to breed to improve a breed and doing your homework will certainly pay dividends. Once you have chosen a stallion for your mare you will need to prepare her to attend the stud to be covered. Mares are seasonal breeders, during the winter they will not cycle. Once the spring arrives with the extending daylight hours and warmer weather, you mare will go through a transitional period before she starts her regular cycles. Various factors can influence the mares reproductive cycle but environment, condition, light and temperature are amongst the most important things to consider. Prior to your mare going to the stud to be covered, all conscientious stallion owners will insist that your mare will be required to produce a negative Contagious Equine Metritis (CEM) test. If the stallion owner does not insist on this test prior to covering, it is my advice that you turn right around with your mare and look elsewhere, you have no guarantees that the stallion has not been infected by a mare carrying it. Contagious Equine Metritis is a highly contagious venereal disease in horses in which stallions and infected mares show no outward clinical signs. CEM if caught can seriously damage a horses breeding career.

The reproductive cycle of a mare is approximately 21 days, of which she will be in season for approximately 5 to 7 days. Ovulation happens at the end of the oestrus which is when you should aim to breed your mare by either live cover or AI when your mare is close to ovulation. A Progesterone Baseline blood test can be taken between 14 to 45 days, with 30 days post covering being my go to. It is very difficult and can be dangerous to internally scan a miniature horse so this test is a safe way to determine a possible pregnancy early on.

So your mare has been to stud, she has been confirmed in foal, she has rested all winter and now it's the moment you have been waiting for, "You Are Going To Be A Foal Grandma Or Grandpa". The following guide will help you through the stages of labour and advise you of the things that you should be looking out for.

The Information that follows is purely based upon our own foaling experiences and is in no way to be relied upon.

If you are in any doubt whatsoever, please call for your vet and rely upon the advice that your own veterinary surgeon gives to you. This is purely an insight into the process of birth.

Baby Is Coming

A Guide On A Mares Labour & Your Foals Journey Into The World

When is my mare likely to foal?

Mares can deliver healthy foals from around 320 days of pregnancy, although many miniature horses have been known to survive from as early as 300 days. It is not unknown for a miniature horse mare to hold on for as long as 360-365 days. The average gestation length is 334 to 340 days. There are many factors which affect the length of pregnancy;

For instance, Ponies tend to have shorter pregnancies than Thoroughbreds and colt foals are carried an average of two and a half days longer than fillies. Foals born before 320 days are considered premature. These foals are immature in development and they require very close monitoring and veterinary care and assistance.

Where should my mare foal?

Ideally mares should foal inside so if any complications occur around foaling she can be examined in a safe environment. A large straw box free from draughts where the mare has plenty of room to lie down is ideal. If your mare is going away from home to foal then it is best to move her 4-6 weeks before her expected date to ensure she has built up plenty of protection from infection at her new stable and feels settled and secure in her new surroundings prior to foaling. It is however perfectly fine for you mare to foal in her paddock, mares have been doing this in the wild since the beginning of time. It is just easier for your vet if needed in an emergency if you have access to a bright light in a warm, dry, clean environment.

Signs and stages of foaling.

Up to a few weeks prior to foaling the mare's udder will develop (sometimes referred to as 'bagging up'), although this is not always the case with miniature horses. Within a few days of foaling drips of fluid may form as wax on the tips of the teats. This is called 'waxing-up'.

The ligaments of the hindquarters around the tail head tend to soften closer to foaling and the rump will look shallow as the pelvis prepares for foaling. Some mares show no signs that foaling is imminent, so it is important to monitor them closely around their due date even if they do not look ready to foal. Mares can foal at any time of the day but the most common time is between 11pm at night and 4am

in the morning when everything is quite and calm. This behaviour goes back to horses in the wild where the baby will have the best chance of getting on to its legs and being mobile in order to better its chances against predators. The foaling process is fairly rapid. It is important to make regular checks on mares during the night when they are due to foal even if CCTV or foaling alarms are used. Foaling alarms can be purchased or rented from some suppliers.

Observing the foaling with minimal disturbance to the mare is essential. There are 3 stages of labour:

Stage 1: Preliminary Labour

Stage one of labour can take a variable amount of time prior to the actual active process of giving birth. During this first phase a number of changes are taking place within your mare. Normally the foal is moving into the normal birthing position with its head and front legs positioned at the mares cervix. Pressure on the cervix causes the secretion of a hormone called oxytocin which initiates uterine contractions and begins to cause the cervix to open or dilate. These internal changes are accompanied by numerous behavioural changes. Most mares exhibit some or all of these behaviours during this first phase of labour.

Restlessness

The mare usually paces around the stable more than normal. She may repeatedly look back at her flanks and swish her tail. The mares temperature changes and she may start to sweat. She may pace around, walk in circles and act in a manner that is different to her usual pattern. She will frequently stop pacing and paw the bedding before begging to pace again. Most mares have a number of bowel movements in the hours just prior to foaling which may be soft in consistency, the mare also urinates frequently as the baby presses upon her bladder. Usually as the birth grows nearer the mares will lie down for short periods of time, get up and may frequently roll in an attempt to get the foal into the correct position. She will usually lay flat on her side and may keep looking at her side and her flanks. Rolling a few times is no cause for alarm, however, if it continues it could indicate that the mare is attempting to reposition the foal. It is imperative to observe the amount the mare is rolling carefully and watch the mare to see what happens next, make a note of the time when the rolling started so that you have all information should a vet be required. Mares will repeatedly yawn or show a fleshmen display by curling their upper lip in the hours just preceding foaling.

Contractions Begin

The mare will most likely lay down and begin the rhythmic contractions of labour. Her feet will extend and become rigid in a regular pattern of strong contractions. This is an unmistakable trait as the pulsations caused by the contractions are very strong. The mare may groan at this stage. Usually the mare will lay down and make a number of contractions, get up and pace around the stable few times, lay down and have another series of contractions, then get up and pace again. This can occur several times in a routine foaling but usually around four or five times. If this behaviour persists, ensure that you call your vet for assistance as the baby may be mis-presented. The results of her behaviour will be that the waters will break and you will see a gush of clear fluid expelled from the vagina, this amniotic fluid has a distinct odour. It is important to record the time of the waters breaking as a reference point. If the mare has been rolling and active contractions have been proceeding for 10 minutes without the water breaking, you should be concerned that there may be birthing difficulties. You are well advised to request the immediate assistance of your veterinary surgeon as a precautionary measure if the mare is rolling constantly and the water has not broken within 10 minutes. Your vet may not be close by or there may be a delay in them reaching you so it is advised that you let your vet know when your mare initially goes into labour so that they can be on standby. If your vet is not immediately available, sanitise your hands and arms and using a lot of lubricant palpate the mare's vagina to determine the position of the foal and take appropriate measures.

Stage 2: Active Labour

This is the stage of labour where your foal actually enters this world. The breaking of water is the landmark that usually separates stage 1 from stage 2. Although the mare has already got down to business at the end of the previous stage, this is when the greatest degree of movement of the foal takes place. It is also the time when the greatest number of foaling problems can occur.

1. The mare may rest briefly after the water breaks, she may stand up and walk around the stable or she may lay back down quietly without having contractions.
2. It should take no more than 10 minutes after the water breaks for a foal to be born if all conditions are normal and everything is going to plan, although it has been known to last up to 20 minutes. If it is any longer than this contact your vet immediately.
3. When the mare resumes contractions, a pale white translucent bubble should appear at the mares vulva within a few contractions. The correct presentation is one foot with hoof pointed toward the mare's rear end is shortly followed by another then the foals nose and head, then the remainder of the foal should be expelled from the mare with further contractions. Once the front legs, head and shoulders have passed out of the mare the remainder of the foal should deliver easily with little effort. At this point, it is imperative that the amniotic sac be removed from the head of the foal to facilitate its breathing. We assist with all of our foaling's by routinely tearing the sac away as the foals feet, head and shoulders pass through the vulva of the mare. Many unattended miniature foals are lost because they are born without complications but sadly do not get out of the amniotic sac after their birth and suffocate. For this reason if none other we believe it is critical to be in attendance for all births.

On occasions, a mare may present with what is called a Red Bag delivery. If this happens you must quickly recognise what is happening and intervene immediately. The placental membrane should immediately be cut open with a sharp instrument such as a knife or scissors. This will result in a release of amniotic fluid and a short delay in uterine contractions. You will need to pull the foal out of the mare without delay in order to prevent suffocation. If you feel this is more than you can confidently do, veterinary assistance must be summoned immediately as the foal will need to be delivered as soon as possible, do not delay. It is strongly advised that prior to your mares due date, you research what to do in such circumstances. Many videos are available to view on YouTube.

Stage 3: Breaking Of The Umbilical Cord

The final phase of labour deals with making the final break between mare and foal as well as clearing the uterus of the afterbirth and contracting the womb down to its original size. Once your foal has been delivered, the mare will lay quietly whilst still attached to the foal via the umbilical cord. This is a very important stage as this is the time that antibodies are being transferred between the mare and foal. Let them be quiet, your mare will know when this process is complete.

1. As soon as the foal is born it is advised to place it in a sternal position. This means that the foal is placed so that it is resting on its breast bone with its legs out in front of it. This is done to help expand the rib cage and help with the expansion of the lungs for breathing.
2. It is advised to vigorously rub the foal down with several clean towels. This is done for two reasons, firstly it stimulates circulation in the foal and secondly to assist the foal in drying off. This will help prevent the foal from losing excess heat or energy.
3. Mares vary in their behaviour after foaling. Some lie very quietly and rest for a period of time. Others look back to check on their foals and start assisting with the clean up. Others may immediately jump up to take care of their foal. In any case either the mare or the foal will move and the umbilical cord will usually break. The normal breaking point is about an inch below the foals belly, there is a weak point in the umbilical cord and this is where it will separate. This umbilical stump is an invitation to a serious infection should it become dirty or contaminated with manure or outside contaminants. As soon as the cord breaks immerse the stump in a strong tincture of iodine, alternatively, sprays are available from farm stockists or your vets specifically for this purpose. This is an imperative procedure in order to protect your foal from infection or septicaemia. We always use iodine and have had no adverse effects with strong iodine in many years of foaling.

Stage 4: Passing The Placenta

Normally the mare lies down and has a number of additional contractions within an hour of foaling in order to expel the placenta. The placenta is a sac like structure. It is a reddish purple on the outside with lots of veins on the inside, this is the inner side that was against the foal. The outside is an angry reddish colour that looks like clotted blood, this is the side that actually attached to the uterus. Attached to the placenta you will also notice the umbilical cord and the translucent, whitish amniotic sac that the foal was enclosed in. It is important to determine whether the entire placenta was expelled from the uterus. The way we determine if the entire placenta has come away is by finding the hole in which the foal came out of, place a hose in the hole and fill it with water. If the placenta is intact, there should be no other holes and it should fill up like a balloon. If you lay it out on the floor, you should get a shape similar to your foal. It is not uncommon for mares to be uncomfortable and show signs of mild colic for several hours after foaling. This is due to the uterus contracting down to its normal size. Your vet may administer a dose of Banamine if your mare is struggling through this stage. This is an anti-inflammatory as well as having a mild muscle relaxing property. In most cases it alleviates any colic symptoms that mares may have.

A successful foaling experience is one of the most rewarding and amazing events to behold. We cannot emphasize enough the importance of being well prepared in advance of foaling and vigilant when the foaling event has begun. It is also a reality that malpositions (dystocias) of the foal do occur during the birthing process and these are usually in need of veterinary assistance to get the foal out. There are many positions of different dystocia situations and it is extremely important to realise time is of the essence in a successful foaling outcome in these situations. Anything that inhibits the delivery of the foal in an expedient manner (usually within 10 minutes from the breaking of water) compromises the chances for the survival of the foal and ultimately the mare. Many people who own horses, especially miniature horses are accused of being over protective, in the case of foaling, it is one instance where it is definitely wise to be overly cautious and seek medical assistance early rather than waiting. It could mean the difference between a lively foal bouncing around the paddock or a sad memory of a wonderful mare and the plans that had been dreamt of when you decided to put her in foal.

IMPORTANT THINGS TO LOOK OUT FOR & ADVICE ON BEING PREPARED

The mare

- The afterbirth has been passed within 3 hours. (We recommend you save it in a bucket of water so it can be checked by the vet).
 - The mare is allowing the foal to feed.
 - The mare is eating and drinking, passing urine and faeces.
- There is no obvious bleeding from her back end or tears in her vulva.

The Foal

- The foal has consumed plenty of colostrum within 6-12 hours of birth.
 - The foal is feeding frequently and sleeping in between.
- The first droppings (meconium) have been passed (dark brown in colour). Some foals (especially colts) can become constipated and this may lead to serious infection.
 - Urine has been passed.
- The umbilicus is not leaking fluid.

The Importance Of Colostrum.

Foals are born with an immature immune system as they have been protected from disease whilst in the mare's uterus. It takes 6-8 weeks for their own immune system to develop to protect them from everyday 'bugs'. Colostrum produced by the mare is the first milk, it is full of

antibodies and energy. The foal can only absorb these antibodies across its intestine in the first 12-24 hours of life. Foals which fail to obtain at least 250ml of colostrum in the first 6-12 hours of life are likely to have unsatisfactory immunity leaving them wide open to infection. Many of these foals can die in the first few weeks of life.

The Foal May Not Receive Its Requirement Of Antibodies If:

1. The mare drips colostrum from the udder prior to foaling.
2. The mare fails to produce enough colostrum – more likely in maiden mares.
3. The foal fails to suck quickly or frequently after foaling.

If there is any doubt whatsoever that the foal has received enough colostrum, we recommend a blood sample at around 24 hours old which gives a rapid result to confirm that the foal's level of immunity is satisfactory.

Checklist Prior To Foaling.

- Ensure your mare has received a booster vaccination against tetanus 4-6 weeks before she is due to foal.
- Check what your insurance company will or will not cover in relation to foaling.
- If a Caslick's operation (Stitching of the mare's vulva) has been performed, contact the vet to reverse the procedure prior to foaling.
 - Have your vet contact number ready
 - Have the following ready for use if required:
 - Feeding bottle and teat – lambing teats are the most useful (bottle and teat available from your vet)
 - Umbilical dressing – 0.5% Hibitane or iodine (available from your vet)

If Things Aren't Going To Plan...

Phone the vet if:

- The mare has lost any colostrum/milk from the udder before foaling
 - The foal is born prior to 320 days pregnancy
 - The mare is in Stage 2 labour (Continuous straining) for more than 20 minutes without any sign of a foal
 - Either the mare or the foal cannot stand after foaling
 - There is excessive bleeding from the mare
 - The mare fails to expel the afterbirth (placenta) within 3 hours
 - The foal fails to suck within 90 minutes of birth
 - You are not certain that the foal has received enough colostrum within 6 hours of birth (This is likely to be the case if you do not know what time the foal was born)
 - If you are unsure about anything
- We recommend a check over of all foals within 24 hours of birth to check for any congenital defects such as heart murmur or cleft palate and an examination of the mare to ensure she is not damaged after foaling.

Make Sure That You Have A Comprehensive Foaling Kit Ready.

We suggest the following:

The following is a list of items that we keep in our own foaling kit.

You can either choose to copy this or pick out what you feel you need for your own circumstances.

You may think of other items that may also be of use to you. I always find that a little thought on all eventualities will leave you with the best kit list.

Sterile Gloves:

You can't be too careful about germs when you're dealing with a newborn foal, so use gloves, especially if you're handling any part of the mare or foal which could easily be infected.

Tail Wrap:

Tails get in the way during foaling, especially if you or your vet need to see how things are proceeding, or if the mares tail is or gets dirty, you want to keep all possible infections away from the baby. Practice wrapping up the tail beforehand with an elastic self-adhesive tape, like VetWrap or similar and have a couple of fresh rolls ready to wrap up as soon as your mare shows signs of labour. Be careful not to leave the bandage on the tailbone after foaling.

Mild Soap:

Wash the mares vulva and udders when she starts in labour and prior to giving birth. If you bring in a mud-encrusted mare already in

labour, you will need to clean her up while she's just beginning her contractions. Only use the most mild and pure of soaps, and rinse her thoroughly or you could put your foal off suckling and this is the last thing you want to happen.

Hibi Scrub:

For use in cleaning your hands, the mares vulva etc prior to examination. It is also useful for cleaning buckets or equipment prior to use.

Towels:

Wiping yourself off, wiping the mare off, wiping the foal off – you can never have too many towels.

Scissors:

These always come in handy

Baling twine or string:

If the mare's placenta is taking its time passing, you'll need to tie it up so she can't step on it. A mare can cause serious damage to herself by tearing the placenta away before it's naturally expelled, NEVER EVER PULL ON A PLACENTA!!!!!!!.

Lambing Ropes:

Useful should you need to intervene due to dystocia/misrepresented foal

Buckets:

You can never have too many scrupulously clean buckets.

Human Breast Pump:

Having one of these on hand is really useful if you need to express milk from your mare. **Ensure it is sterile.**

Sterile empty bottles or jars:

If you haven't collected any colostrum and there is milk streaming from your mare's udder while she is still in early stages of labour, this is a good opportunity to collect some. You can either use this if the foal struggles to feed or you can freeze it for future use. You never know when you or someone else might need it. Talk through a replacement colostrum plan with your vet before the foaling date, just in case.

Small Syringe:

For administering colostrum if needed. Please be very careful when doing this and do not rush your baby.

Iodine or another antiseptic:

Dousing the foal's umbilical stump with antiseptic is imperative to prevent infection from entering the foal's system. However, the antiseptic you use might depend on your vet's recommendation. Some use diluted iodine, some use dilute chlorhexidine, commonly sold under the name Nolvasan. Speak to your vet for advice and buy the right antiseptic for your foaling kit well ahead of time.

Plastic container or dish:

This is for holding the antiseptic; you can dip the umbilical stump into the dish to get a thorough covering.

Enema kit:

Consult with your vet on enema kits and how (and when) to use them with a newborn foal. If your foal is struggling to pass his meconium, which is baby's first manure, an enema can get things moving. However, they must be used carefully or more damage could be caused.

This might be a job for your vet, but have the kit on hand just in case.

Bubble Wrap & Foil Blanket:

This is extremely useful if your foal is cold. Place it over your foal to retain heat

Flashlight, battery-powered lantern, or head lamp, with extra batteries:

Sure, it would be best if your mare foals in her tidy, well-lit stall, but you have to be prepared for every eventuality, including a foal in the dead of night in the middle of a pasture, or perhaps during a power cut. Head lamps are a great tool for foaling, offering you hands-free light right where you need it.

Watch and a notepad:

Write down the time of everything of significance: rolling, contractions, water breaking, the first appearance of hooves – and have notes to make sure you're aware to the minute of how long everything should be taking, keep a copy of this information in your foaling box for reference. As we said above, a foaling does not take long. If anything is delayed, your vet should be made aware immediately and having all the information of your labour will assist your vet immensely.

Emergency phone numbers:

Know ahead of time how to reach a vet at any time of any day, and have that contact information in your foaling kit and on your mobile phone. Have your vet on standby as soon as your mare goes into labour. If you don't have a landline, you might want to keep a rapid battery charger for your phone in there, too.

We also keep a foal or calf respiration kit on hand with oxygen canisters but these can be expensive. Fortunately, we have never needed to use it.

Most foalings are straight-forward, but you'll find use for most of the items on this list even if the mare doesn't need any help with her foal. If you have any questions about foaling or foaling kits, consult your veterinarian, you need a good veterinary partner in the business of breeding and producing a healthy foaling!

We at Oakleigh Miniatures wish you a very happy and healthy foaling, follow your dream, it's magical.

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You are welcome to download a PDF copy of this article to keep in your foaling box from www.oakleighminiatures.co.uk. You will find it under Foaling Information.

Disclaimer: The information offered is from our own experiences. We are not veterinary surgeons nor have we undertaken any veterinary education. By using this information you do so at your own risk and we cannot be held responsible for any problems or complications that may arise with your mares foaling.

IF YOU HAVE ANY CONCERNS REGARDING YOUR MARES LABOUR OR FOALS STABILITY FOLLOWING OR DURING THE BIRTH, CONTACT YOUR VETERINARIAN WITHOUT DELAY.