



Foals & Foaling

Some useful facts, figures and suggestions

Before foaling

Pregnancy diagnosis - At 6-9 months of pregnancy; by palpation (preferably) or urine/blood test. An earlier test in the first 3 months of pregnancy for example; while at stud the previous season, does not guarantee a foal for the following year! Foetal re-absorption is a common phenomenon in the horse.

Feeding - A good balanced diet is necessary; avoid producing over or underweight mares. Depending on the individual and the time of year/grazing available, some mares may require supplementation in the last third of pregnancy. Add calcium to the mares diet in the last 4 months of pregnancy e.g. limestone flour (1-2 tablespoons daily) plus a vitamin and mineral supplement e.g. Equivite.

Worm regularly and attend to routine dentistry.

Exercise - Keep the mare exercised and fit throughout pregnancy according to her age, shape, condition and the stage of pregnancy. Avoid violent exercise after the sixth month of pregnancy, and avoid turning pregnant mares out with aggressive male horses.

Ensure as high immunity in foal as possible by moving the mare to foaling premises 6 - 8 weeks before foaling, and vaccinating the mare 4 - 6 weeks before foaling. This improves the quality of colostrum.



Select a place for foaling; in or out?

In - Closer supervision but a need for a high standard of hygiene

Out - More natural but difficult to watch the mare

Foaling box - This should be as large as possible and well strowed. Projections from the walls are dangerous; mangers will need to be boarded underneath, and anti-cast devices used.

Foaling paddock - Should have adequate shelter. You should also avoid horsesick pasture, or areas with ponds, streams, etc. Good fencing is important and pasture should not be overcrowded.

Pregnancy Length - An average pregnancy is 340 days, but there is a wide normal range of 320 days (10.5 months) to 366 days (12 months). Some mares may even foal normally outside of these time limits. The normal range for a donkey is 365 - 385 days.

Premature Foals

- Born at less than 300 days will usually not survive
- Born at 300 - 310 days - a few will survive with careful and intensive management
- Born at 310 - 320 days - regarded as immature but many will survive with modern care
- Dysmature foals - these have all the appearance of premature foals, underdevelopment etc. although they have a normal or extended pregnancy period.
- Pregnancy length is therefore very variable in the mare. Foals tend to be born when they are ready and not before. Foetal oversize is not a characteristic of overdue foals when compared with other species
- For these reasons inducing foals is not commonly undertaken as it is impossible to determine their state of readiness or viability.

<u>Sign</u>	<u>Before Birth</u>	<u>Range</u>
Bagging up	10 days	2 - 21 days
Running milk	At birth	Birth - 10 days
Wax on teats	3 days	Birth - 6 days
Vulval lengthening	24 hours	24 - 48 hours
Slackening pelvic ligaments	24 hours	24 - 48 hours
Steaming up	30 minutes	10 mins - 2 days



At foaling

Signs of foaling: not all that dependable!

Other methods:

- A) Milk test; Mares' milk changes in the majority of mares in the last 24hrs before foaling. This is a simple test for change in salt levels. One needs to milk the mare though (not always easy). This test is not however 100% reliable.
- B) Foaling alarms; 3 types:
- Detect temperature rise and steaming up
 - Detect noise and restlessness (typical baby alarm available commercially)
 - Detect passage of foal "FOALALERT"

All of these can be combined with CCTV which may be hired, this reduces human presence and allows observation from a distance.

All systems rely on radio technology and are not fool proof. They are not a substitute for good observation and general management.

RECORD TIMES AS THEY OCCUR

FIRST STAGE OF BIRTH - *Steaming up to breaking of waters*

This lasts from 10 minutes to 2 days, although an average is 30 minutes. Cut stitched mares now (if not already done) - it is preferable to do this at around 300 days of pregnancy. Bandage the tail with a clean bandage.

SECOND STAGE OF BIRTH - *Breaking water to hips through pelvis*

This takes 5-60 minutes, with an average of 30 minutes.

Yellow membrane should appear at the vulva within 10 minutes of the waters breaking. If this does not occur, a red membrane appears or the whole business takes more than 60 minutes; call veterinary assistance as this is an emergency. Second stage is the process of actual birth; the moment of birth is that when the foals hips pass through the mothers pelvis.

THIRD STAGE OF BIRTH - *birth to passing of placental membranes*

This takes 20 minutes - 12 hours, average of 12 hours. If placental membranes are retained, call your veterinary surgeon. Clean membranes from the foal's muzzle, which should breathe almost immediately. Allow mares to rest and leave the cord alone, there is a natural mechanism for rupture.

Birth to breaking the cord takes 5 - 15 minutes. Treat the stump with antibiotic.

Foals should stand in 20 - 100 minutes, and suck in 6 - 120 minutes from birth. If the foal cannot stand or suck in 2 hours, call your veterinary surgeon.

Birth problems - these are thankfully rare with horses.

When they do occur, emergency removal of the mare to a clinic is usually required for correction of the problem under general anaesthesia, requiring either manipulation of caesarean operation.

After foaling

- Foal disease - Temperature of 101.5F or higher indicates fever. The foal is off suck, lethargic, scouring, coughing etc. Foals become ill relatively quickly compared to older horses and often require very prompt treatment.
- Pay particular attention to limbs. Lameness is always significant in young foals and should be checked promptly in case of joint-ill.
- Bent legs of various descriptions may well straighten over the first 2-3 weeks of life. Always consult your veterinary surgeon, as some can require urgent correction by remedial trimming or surgery.
- Worm from 4-6 weeks of age - see Worming Programme for details.
- Vaccinate for tetanus/herpes from 3 months (2 shots)
- Vaccinate influenza from 6 months (2 shots)
- Additional dose of Tetanus Antiserum possible at 6 and 12 weeks
- Increase the mares feed to cope with milking and maintain high calcium level in diet, nutritional requirements peak at approximately 6-12 weeks of lactation
- Commence training at day one. Put foal slip on immediately. Handling the foal extensively at this stage has been shown to dramatically reduce behavioural problems later on. This is known as 'bonding'.
- Trim feet from 4 weeks of age, ensure foot is level and landing straight. Foals with angular limb deformities may need special plastic shoes.
- When turning the mare out for the first time after foaling, allow the mare to exercise herself and calm down before releasing the foal.

Post-foaling check of mare and foal

This should be carried out on day 1 of life by your veterinary surgeon.

- The mare is checked for pelvic and vaginal damage, hemorrhage, etc...
- The foal is checked for absorption of colostrum, antibiotics and/or tetanus antiserum is administered
- The foal is examined for congenital defects and the presence of infectious problems, treating as appropriate. A blood sample is taken and screened for the presence of infection.
- The placenta is checked (please keep this after foaling).

Remember

Prevention is better than a cure

Foals become ill surprisingly quickly.

If in doubt, call us. We are here to help.

