



Department of
**Agriculture,
Food and the Marine**
An Roinn
**Talmhaíochta,
Bia agus Mara**



ITBA “A Practical Approach to Foal Sale Preparation” Seminar 14th September 2017 Seminar Notes

Cathy Grassick, consignor, breeder and purchaser:

Foals are very different to yearlings and planning goes right back to mating the mare. Fashion is a huge factor and makes selling as foals more difficult, but you do have a second chance to go to the yearling sales. Most industries work on the basis of supply and demand, but our industry is very different, we just supply and hope the demand will be there. So planning is important and should begin with looking at the mare's pedigree and which sire works well, but you should also be thinking about which sale you plan to go to. Lots of good racehorses are late foals, Northern Dancer was born 28th May, but the birth date is really important for the sales and you need an early foal, there's no point mating late.

Look at the stallion and does he get the type of foal that goes down well at the sales? If you are aiming to breed a middle-distance horse then it's probably best to sell as a yearling, as they tend to be late maturing. Look at what's selling well, what's performing well on the track and what suits the mare; you shouldn't over-mate her by sending her to an expensive stallion who doesn't match her value. The Return of Mares is very useful; you can see the number of foals on the ground and consider what is likely to be performing by the time your foal goes to the sales. If a first season sire had 170 foals in his first year and only 30 the next year, his success rate will plummet by the percentage, so there's no point going to him on the back of that first season success. Check the percentage of high-rated winners to runners for a stallion, as it's the high-rated winners that keep sires going. Do your homework and don't just blindly follow fashion.

Decide where to sell your foal. It's important to be guided by some extent to what the sales company is saying; they know the market and what your foal will be in competition with on the day it is selling. Look at prices for that day and make sure your foal is what people are looking for. If the foal is not up to the sale, then wait, as it can be of advantage to take it to a February or yearling sale instead. You don't have to go, you can always wait. Pedigree counts. Foal buyers don't know what the foal looks like, they pick out a list based on pedigree first and then they go to view. The sales company will know if a pedigree will look good and shine out or get over-looked, so while it is good to take their advice, it is also okay to back your own judgement or that of your advisors. The pedigree is an advertisement. Make sure all the information is on there. The sales page is really important and you should study the proof carefully. When the proof comes, get the passport out and check it matches. If the colour has changed, get it corrected in the passport. If a yearling has sold very well, put that on the page. If the sire has a particularly good runner that year, put that on. Make sure prize money is beside the winners and edit carefully. If taking out a winner, take out the lower prize winners. If a horse has won in a country that isn't recognised for high quality racing, use "abroad" rather than naming the country. You can look at the two pages of two full-sisters and one will look good, the other won't. Edit and make it look as good as you can. You don't want too many dams on the page, but you don't want blank space at the bottom. If it's a NH foal, you can take out any sprinters and if it's an early two-year-old type take out the NH winners, except the blacktype. Leave on any blacktype winners as any good horse is good to have on the page.

Preparing the foal begins at birth. Start monitoring the foal with the vet and the farrier almost from birth. Within two months you should be assessing the foal with your vet and farrier. Obviously you have to allow the foal to correct itself in the first two weeks of rapid growth, but continuously assess them. Every month go out and walk the foal up and down. If you haven't seen a foal for a week you'll see any change very quickly. Take the advice of your vet and farrier very seriously. It's important to listen to the advice you're getting. Good nutrition is essential. Don't treat every foal the same. If the mare is very greedy, tie her up and let the foal feed first. Others can share happily. Pay attention to bodyweight. Weaning time is important. Your vet might advise to wean early, if the foal is a bit heavy topped. It's important the weaning process is as free of stress as possible.

We find it best to wean out in the field and take one or two mares away at a time until there are none left, which is less stressful for the foals. We vaccinate for Lawsonia, before and after weaning, as it is a disease that can be activated due to the stress of weaning, and according to veterinary advice it is becoming more prevalent. As it is a disease that if contracted can greatly affect the body condition of the foal, we feel it is important to do this as a precaution.

Start hand walking gradually, five to six weeks before the sale, in an enclosed area, for ten minutes a day if the foal is handling it, and then increment it up slowly each week, up to half an hour a day in the end. Watch the foal. If it's getting light, ease off, balance it. The same with the feed watch how the body condition is. I hate fat foals, it's so difficult to get rid of and it can damage conformation and make them hard to get fit as yearlings. Make sure the foal is fit for the sale. You've got to have its feet properly conditioned and have it fit enough to cope with the long days showing at the sales. If you're worried about it during prep, then it will definitely fall apart at the sale and you'll do more damage then and have a problem at the yearling sale later. If a foal isn't standing up to prep, it won't stand up to a sale. Have the confidence to say no and wait. Pinhookers are fussy and if they don't want to buy, they won't. They're under pressure and have lots to look at. Ensure there is always someone there from daylight to dark. Have someone there to backup for bathroom breaks and food breaks. Don't leave a sign saying "back in ten minutes" because the viewer won't come back. Have staff there who are polite, know the pedigree and can answer the questions.

Make sure the foal is well bridled and used to the bit. We play music at home and recordings of the sales and auctioneers so they get used to it. If a foal won't go into its box, just stand it to one side and wait, don't argue with it in front of the viewer. Use a bucket of grass or feed to tempt it in. They're babies and not used to going in and out so often. If the foal is tired after 60 or 70 shows, don't leave the foal, but stay there and don't be afraid to say no, he's left in and come back in the morning. Agents will keep going all night unless you stop them! Scoping and X-raying is prevalent, so it's much better to get it done at home where the foal is relaxed and have it available at the sale. If the foal is valuable, people will ask for it. Personally I don't agree with a foal being scoped numerous times in a stressful environment. Get a vet in who is experienced in video scopes and provide one yourself. Be organised. Be the best you can be and compete with the big professional consignors

Liam O'Donovan, Master Farrier, breeder and vendor:

The feet must be prepared, from birth. I look at foals from 10-12 days old, it's important. He must be well handled; he must walk as straight as possible for me to evaluate him. Their growth plates are like concrete setting – the earlier you shove it around the easier it is, leave it too long and it starts to set. As soon as he needs trimming, get it done. If he's born with long feet, shorten them up as quickly as you can, even if he's two days old.

Walking the foal is very important, in a straight line up and back or the farrier can't evaluate him properly. It's a good habit to get in. If you walk a foal with his head in a straight line, he'll walk in a straight line. If you pull his head left or right he won't walk straight and a farrier can't evaluate him and an agent at the sales can't evaluate him. The single factor at the sales is to have him going in a straight line. He might be crooked, but it won't show up so much if he walks straight.

Problems such as toeing in can be easily corrected with dressing every two weeks. Extensions can be used to correct some issues. A foal needs constant monitoring, it's important to deal with any change as quick as you can. Correction works so quickly, within two weeks, so it must be watched carefully and stopped as soon as necessary or it could start to go in the other direction. Any foal with poor conformation, keep the weight off him, it will make him worse. Take it easy with his prep; bring him along gradually as he won't stand up to it. The surface you walk him on is massively important. Take him to a field and walk in the field, not on a hard surface. Pick out his feet every night when you bring him in and make sure the feet are kept clean. Two weeks before the sale is when I'll do the final dressing, all the work is done beforehand.

Use Keratex three or four times a week and paste it on the sole of the foot, don't worry about getting it on the frog. The sales complex will wear his feet; the surface is hard and demanding. His feet will be like fire. Bring a bucket of ice and stick his feet in it. Bring a wire brush and a hoof pick to the sales and keeps his feet clean. His feet will be sore anyway, but if a little stone gets in there it will make it much worse and he won't walk well. If I advise, but you don't do what I suggest, it won't happen.

Cathal Beale, CEO Irish National Stud:

We assess conformation to evaluate athleticism, soundness, speed, valuation and future sales price. When the horse is in a standing position we can assess feet, HPA (hoof pastern access), pastern joints, knees, stifles, hocks, head and eye, upper body and balance. Looking at the horse from the front, we can see whether it is toed in/out from the fetlock, if it has offset/straight knees, is it straight/rotation from the shoulder, or tracks up straight. From the rear view we can see whether it's toed in/out from fetlock, cow hocked or bowed, or tracks up straight. We then need to see the horse walking, watching it walk straight towards us and away again. We're looking for signs of a good walk, which are tail swing, over-stride and economy of movement (listen to the step – does he glide over the ground or hit the ground heavy). We're looking at the mechanical make-up, the shoulder angle, hip angle and pastern length. If the angles are nice and wide he'll have a longer stride. Long pasterns lead to a longer stride, but less soundness. When valuing our foal, the past is usually the best guide to the future. We need to consider the foal's date of birth and sex; the dam's purchase price and current value; the previous sales results of the mare's progeny and those of the second dam; pedigree updates and any runners to come? The age of the mare; the sire's averages/median for foals and yearlings; the sire's nomination fee history – is it on an upward or downward curve? Is the sire first season, second season, unproven or proven? The only indisputable facts are the soundness assessments of conformation, everything else is personal opinion.

Cormac Feeney, vet, Troytown Abbey Greyabbey Hospital:

There is no actual vaccination requirement for the foal sales, but protecting your herd and stud is really important and the most important animal is the mare. Foal health starts in utero. So the most important thing is to protect the mare from incoming threats, and incoming stock is the biggest threat. You should therefore keep vaccinations up to date and isolate incoming stock for a minimum of three weeks before introducing to the herd.

Equine Herpes Virus

Equine Herpes Virus is an abortion and respiratory disease. There is a vaccine available and is a very important part of brood mare management but protection is not 100%. It reduces the financial losses due to clinical signs, risk of foetal death and the number of animals affected, but it won't prevent infection.

Avoiding contracting it is the most important protection. Vaccination against equine Herpes Virus is a requirement for broodmares at the sales and three vaccinations should be given at the end of the pregnancy, at the fifth, seventh and ninth month of pregnancy. The virus can lie dormant, but becomes active when the immune system is low or the animal is stressed.

Rotavirus

Rotavirus is a viral diarrhoea, which is easily spread and can be fatal. Vaccination greatly reduces both the spread of the virus and fatalities. Vaccination is more cost effective than the cost of treating a population of foals and should be given in the eighth, ninth and tenth month of pregnancy.

Rhodococcus Equi

Rhodococcus Equi is a bacterial infection that does kill foals and can leave scarring and long-term effects on the lungs. The bacteria is present in the environment and a high concentration will infect an animal, the more bacteria present, the greater the hold it takes on a farm. Faecal, soil and dust contamination is an important factor in establishing infection. If it becomes resident on a farm, management is essential. Power hosing and disinfecting in stabling is important, as well as maintaining grass cover and increasing the height of the topper. Fence off dusty areas and avoid using heavily stocked faecally contaminated ground. Disease monitoring and taking serial bloods (CBC, Fibrinogen) and ultrasound examinations will help to manage it.

Tetanus

The foal is protected for the first five to six months from maternal antibodies, but immunity is likely to be waning at foal sale time, so vaccination is recommended from six months of age. If not vaccinated, vaccinate! Clinical cases have only been seen in non-vaccinated animals.

Equine Influenza

Equine Flu is a disease of international significance. It is not a requirement to vaccinate for Flu at foal sales, but it's advisable to vaccinate from six months of age. There is no real benefit in vaccinating earlier if the mare's vaccinations up to date. Combination vaccinations cover Flu and Tetanus, follow the Turf Club schedule.

Parasites

Endoparasites (worms) are always present, but overburden becomes a problem. Worm new animals on arrival and isolate from the herd for a week to ten days. Do an egg count on arrival and again ten days post worming prior to joining the herd.

Remove droppings at least twice weekly. Also cover for Tape Worms in the treatment regime. Ensure you check the recommended age before worming, e.g. Equest Pramox is for horses over 6.5 months. Try to follow a regime using the minimum amount of drugs. 20% of horses produce 80% of parasites, so carry out egg counts, see which animals are producing and treat only those. It's cheaper to do egg counts than to worm and is more effective. The worming regime is farm dependent and monitoring through egg counts will help. Using cattle to graze off land is a good practise, as they Hoover up larvae and eggs and there are no cross-species parasites. Egg counts are recommended four to six times during the grazing season.

Ring Worm

Trychophyton and Microsporum species of Fungus that can be present weeks before clinical signs appear. If possible, keep new stock isolated for a month. Young horses are the most likely to be infected. Infection produces immunity, but reinfection can occur and infection can last up to 15 weeks. Some types can be passed to humans. It is difficult to remove from buildings and isolation is the best prevention.

Lawsonia

Lawsonia Intracellularis was first identified in horses in 1982, coming to the fore in the late 1980s, and has become a significant threat to our equine population, with its prevalence increasing in the last five years in our catchment area. It has become a disease of world wide importance and has been shown to survive in the environment for up to two weeks. The obligate intracellular bacteria live in the intestine cells and are passed in faeces. It originated in pigs, but changed its makeup and is now a horse disease. Rabbits and deer don't get sick, but will maintain it in the environment and spread it, so biosecurity is essential and prevent wildlife from contaminating feed.

60-70% of horses don't get sick and only 5% of those affected will succumb severely. It causes the animal to lose protein and its system eats its own muscle mass in order to retain protein, causing the animal to lose condition, so it's important to vaccinate. If it isn't present on the farm, it isn't important to vaccinate, but a minimum isolation period of three weeks is important to prevent its introduction. Vaccination is the only way of managing it once it becomes a problem and is very effective. There have been no fatalities and no hospitalised patients since vaccination initiated, and no vaccinated animals have been treated for Lawsonia.

Biosecurity

Protect your broodmares by always isolating new stock and any stock returning from the sales or other farms. Separation is required for a minimum of three weeks to a month and disinfect well, seeing to them last to avoid spreading disease via implements or handlers. Faecal management helps and environmental cleaning. Treat and monitor infected animals and vaccinate the herd.

Lorraine Fradl, nutritional expert, Connolly Red Mills:

Many consider sales prep to begin in the autumn, but in terms of nutrition sales prep begins at conception! A healthy foal starts with the mare. A young Thoroughbred's diet is critical to development, disease prevention and future performance. All horses need six essential nutrients but the quantities of each will differ depending on the life stage. From conception to the racetrack there is a fine balance needed of calories (usually in the form of sugars, starch, fibre and fat), protein – essential for growth, development and repair – as well as trace vitamins and minerals.

Gestation

Over or under nutrition of the broodmare can lead to reduced colostrum quality, poor growth rates and an increased risk of developmental orthopaedic diseases. Previously it was believed that nutritional requirements didn't increase until late pregnancy, but we now recognise an increased need for additional protein and calories from five months gestation. While most calorie and protein requirements are met by the grass in early to mid-gestation, trace elements including essential vitamins and minerals should be supplemented from 7 months onwards. Copper, for example, is naturally deficient in Irish soils and should be supplemented with the correct balance of zinc throughout late gestation and early lactation. In late pregnancy (9-11 months) foetal development increases rapidly. Nutrient requirements increase significantly. Calcium and phosphorus needs double to set down the skeletal structure. Copper, zinc, manganese and iron will be transferred from the mare to the foetus to be stored in the liver for use at birth as the mare's milk is naturally low in these elements. During this nutritionally demanding time the mare's appetite will naturally decrease by up to 20% as the foetus grows and puts physical pressure on the digestive system.

At this stage it is important to feed small meals of highly digestible feed and a good quality forage. The loss of body weight during the last trimester has not been seen to decrease the foal's body weight in young healthy mares but it can potentially have a negative effect on colostrum quality. The nutrient intake of maiden mares and older mares should be monitored closely. Protein requirements will increase by over 40% in late gestation and early lactation. These needs cannot be met by hay alone. Choose a feed containing quality protein sources, paying particular attention to the lysine content, the horse's limiting amino acid. Soya is considered a superior protein source due to the high lysine content and attractive amino acid profile. Remember that the percentage of protein on the bag indicates grams of protein per kilo fed. Therefore, the difference between an 18% cube or mix and a 20% cube or mix is only 20g of protein per kilo.

Birth and Early Lactation

Foals are born with no immunity, so it must be obtained via absorption of good quality colostrum, rich in immunoglobins. The foal's gut is only permeable to the immunoglobulins 12-24 hours after birth. Supplementing high levels of Vitamin E in late gestation has been shown to improve IgG and IgM levels in the colostrum. A good quality stud feed will provide recommended daily intake of vitamin E but additional supplementation could be considered to aid older mares, maiden mares or mares that consistently produce poor quality colostrum year on year. For the first two months of a foal's life mare's milk should meet its energy and protein nutrient requirements. Mare's milk will not provide optimal levels of all minerals, but the foal will alleviate deficiencies by pulling from its mineral stores accumulated in the liver in utero. The small intestine will develop between birth to four weeks, allowing for efficient grain digestion. The hindgut is slower to develop, between 2-6 months, and therefore forage is not efficiently digested at a young age.

Foals will begin picking at their dam's feed when only a few days old but creep will become nutritionally important when the mare's milk begins to decrease approximately eight weeks after foaling. Creep feeding should be put in place to maintain daily weight gains but exceed growth rates or over conditioning foals should never be the goal! Creep feeding can begin earlier than eight weeks if the mare's milk production is poor. Feeding concentrates should be restricted to 0.5kg per 100kg of body weight and can be increased to 1kg per 100kg body weight by weaning time.

Weaning

Weaning time is an enormous stress on a young foal and it is not uncommon for a foal to drop condition. This period also carries a high risk of foals developing stereotypical behaviours such as wood chewing and crib-biting. Ensuring the foal is eating well at least two to three weeks before weaning is essential to reduce the associated risks. Breeders must aim to avoid 'growth spurts' in young foals as this puts them at risk of a range of developmental orthopaedic diseases (DODs). Growth surges commonly occur following a period of slowed or reduced growth due to a period of stress (weaning), illness or shipping. To avoid a sharp drop-off at weaning, then a sudden spike back-up, avoid as much stress for the foal as possible during weaning. With reduced feed intake and growth rate there is an increased risk of compensatory growth.

Along with balanced young stock feed and good quality forage, the digestive system can be supported with additional supplements during this period. Yeast increases feed digestion efficiency and stabilises the healthy hindgut flora. MOS stimulates the immune system and can bind pathogen such as E Coli and Salmonella. Antioxidants such as vitamin E and selenium will reduce oxidative cell damage caused by stress. Once the foal is weaned it is important to continue to monitor growth and consider individual requirements. A strong, early born foal on good grazing may only need a balancer feed. Stud balancers are concentrated in vitamins, minerals and protein and suited to those that do not require additional calories or weight gain. Late born, weak foals or those on poor grazing should be fed a good quality foal/yearling cubes or mix.

Dietary risk factors for DODs

There are several risk factors associated with DODs including genetics, trauma, exercise and nutrition. A recent study even suggests that the negative effect of restricted exercise or stall confinement on bone strength and integrity could be than the negative effects of an uneven plane of nutrition. As previously mentioned, growth spurts and reduced mineral intake can increase the risks, in particular copper, calcium, vitamin A and vitamin D. Large, cereal-based meals can affect growth hormones which has a knock-on effect on cartilage formation. A tendency for rapid growth may be an inherited trait and should be monitored closely. However, excessive conditioning due to overfeeding (calories not protein), has proven to increase the risk of DODs.

A USA study in growth rate and OCDs showed 32% OCD on a farm where body weights were 15% greater than average, but 0% on a farm where body weights were 3% less than the average. A Dutch study also showed higher OCD occurrence in foals with higher than average daily weight gains three months post-weaning.

Sales prep check list

- Feed only high quality, early cut hay to avoid 'pot-bellied' appearance. This is associated with mature hay with high lignin content.
- Ensure worming is up to date. Faecal samples can be taken and counts tested by the Irish Equine Centre.
- Manage meal size and try to split feeding between at least three meals a day.
- Avoid starch overload. Feed small, highly digestible meals to reduce the risk of hindgut acidosis, ulcers and colic.

Sales prep hoof and coat care

- Ensure adequate quality protein is provided; hair and hoof are made mainly from keratin.
- Weanlings with poor feet can be supplemented with biotin prior to sales prepping to support hoof wall strength.
- Horses not grazing fresh grass can be deficient in omega 3 fatty acids. Supplementing with omega 3 rich oils such as linseed can improve coat quality. Emulsified linseed oils are easier utilised.

Remember that you are building the foundations for the future!

- ✓ Ensure a balanced diet from conception onwards
- ✓ Ensure a steady growth curve from birth to sales
- ✓ Never allow the foal to get too heavy