

Preparing your mare for the breeding season

Presented by
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Managing a stallion station, I know that ensuring my stallions are healthy and fit for breeding season is of high importance. I have a background of working in the veterinary industry and studied biomedical sciences at University as well as having many years of standing stallions at public stud.

Optimum nutrition and health is vital for the breeding stallion so that he is able to keep up with the extra energy required to physically collect, for the body to generate more semen and for optimum fertility. It is incredibly important that the mare is also prepared for breeding by ensuring that she is in top health and ready for the breeding season, as this can save a lot of money and avoid the heartache of repeat breeding's.

With the experience of many clients who have previously discussed their mares breeding issues, I have taken the opportunity to present some guidelines that may help you with your mare. I am always happy to talk to mare owners and give them the peace of mind that I will help guide them through the process and achieve their goal of having their mare conceive and produce their dream foal.

SELECT AN EXPERIENCED BREEDING VET

Firstly, select an experienced breeding vet. There is a huge benefit in having access to a veterinarian with many years of breeding experience behind them when it comes to dealing with chilled or frozen semen. If your mare needs to stay at a veterinary hospital for breeding, select a vet with good facilities and a relaxed environment and set up to minimise stress.

SELECTING A STALLION – ITS ALL ABOUT FINDING THE RIGHT MATCH

Take the time to select a stallion that will compliment your mare. I think one of the biggest mistakes that breeders make is choosing their favourite stallion and breeding him to their mare even if the match is not so great. It is important to look at your mare's weaknesses and then find a stallion that will compliment her to improve these weakness in what he stamps. Sure, we all have favourite dream stallions but find the right mare for him to create your ultimate foal. Most stallion owners will be happy to discuss what traits their stallions pass on to their progeny. Consider the conformation, movement and temperament of your mare. If you have a mare that is very hot and sensitive, I would not choose to breed with a stallion who is also very hot and sensitive as temperament is a highly heritable trait. Mix the hot with the cold!

If you are choosing to use chilled semen, ask the stallion owner about his fertility and motility. If chilled semen has to be transported, ask about the progressive fertility and motility of the semen. Responsible stallion owners will have had the progressive fertility and motility tested by their veterinarian to ensure its suitability for transport before offering him at public stud. In the case of frozen semen, ask the dealer what the post thaw fertility and motility is. Discuss these factors with your breeding vet to make sure they are happy with these statistics before signing a contract to purchase anything.

Make sure you prepare your proposed breeding by booking in to your chosen stallion as some stallion owners will limit the number of mares that are on a stallion's book each year for chilled semen. If you are opting to use Frozen semen, purchase the doses in advance so it can be transported to your chosen veterinary hospital in time for when your mare is ready to breed. Having the frozen semen on hand well in advance of your mare cycling eliminates the risk of missing a cycle when you have already invested money and time on follicle testing her. There can sometimes be delays in transport with the dry shippers during the busy breeding season.

THE BODY SCORE

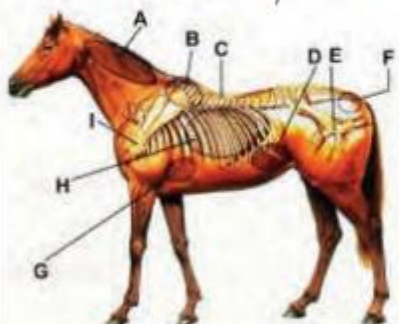
Sometimes, mares may have been spending time in the pasture or not in work for the lead up to breeding season and can be overweight. Lunging the overweight empty mare, increasing her fitness and decreasing her body weight will increase her chances conceiving on the first insemination.

The optimal body score for a mare is between 5 and 7 to ensure good fertility. If an overweight mare fails to conceive on the first insemination, there is more chance that they will hold onto the Corpus Luteum (CL) for a longer period. The intervals between cycles become longer and can end up costing the mare owner more money and time. Preparing your mare to be an optimal bodyweight will increase the chances of her achieving a pregnancy. Of course, mares in poor condition with a body score under 4 or even thinner with also struggle to conceive. As in nature, the rule of survival of the fittest applies where the mares that are in optimal condition and health will achieve a pregnancy.

BODY CONDITION SCORING CHART



Body Condition Scoring (BCS) is an objective system of evaluating a horse's level of body condition (amount of stored fat) and assessing a numeric score to facilitate comparisons between horses. Many owners fail to recognize significant variations in the weight of horses or variations due to age and breed types. This often results in overfeeding or underfeeding.



Areas of Emphasis for Body Condition Scoring

- | | |
|--------------------------------|---------------------------------|
| A. Thickening of the neck | F. Fat deposits around tailhead |
| B. Fat covering the withers | G. Fat deposit behind shoulder |
| C. Fat deposits along backbone | H. Fat covering ribs |
| D. Fat deposit on flanks | I. Shoulder blends into neck |
| E. Fat deposits on inner thigh | |

1 POOR

Animal extremely emaciated; spinous processes, ribs, tailhead, tuber coxae, and tuber ischii projecting prominently; bone structure of withers, shoulders, and neck easily noticeable; no fatty tissue can be felt.

2 VERY THIN

Animal emaciated; slightly fat covering over base of spinous processes; traverse processes of lumbar vertebrae feel rounded; spinous processes, ribs, tailhead, tuber coxae, and tuber ischii prominent; withers, shoulders, and neck structure faintly discernable.



3 THIN

Fat buildup about halfway on spinous processes; traverse processes cannot be felt; slight fat cover over ribs; spinous processes and ribs easily discernable; tailhead prominent but individual vertebrae cannot be identified visually; tuber coxae appear rounded but easily discernable; tuber ischii not distinguishable; withers, shoulders and neck accentuated.



4 MODERATELY THIN

Slight ridge along back; faint outline of ribs discernable; tailhead prominence depends on conformation, fat can be felt around it; tuber coxae not discernable; withers, shoulders, and neck not obviously thin.



5 MODERATE

Back is flat (no crease or ridge); ribs not visually distinguishable but easily felt; fat around tailhead beginning to feel spongy; withers appear rounded over spinous processes; shoulders and neck blend smoothly into body.



6 MODERATELY FLESHY

May have slight crease down back; fat over ribs fleshy/spongy; fat around tailhead soft; fat beginning to be deposited along sides of withers, behind shoulders, and along sides of neck.



7 FLESHY

May have crease down back; individual ribs can be felt, but noticeable filling between ribs with fat; fat around tailhead soft; fat deposited along withers, behind shoulders, and along neck.



8 FAT

Crease down back; difficult to feel ribs; fat around tailhead very soft; area along withers filled with fat; area behind shoulder filled with fat; noticeable thickening of neck; fat deposited along inner thighs.



9 EXTREMELY FAT

Obvious crease down back; patchy fat appearing.

RISING PLANE OF NUTRITION

In the wild it is natural that horses breed in the spring time when there is a fresh flush of pasture. Mare owners should not only have their mares in a reasonably fit condition, they should also provide the correct nutrition to increase her fertility and chances of conception. A mare should be on a rising plane of nutrition in the weeks leading up to being bred.

At Dynamik Stallions, we use Hygain Balanced to ensure that the nutritional requirements are being met for our maiden and empty mares when preparing them for breeding.

Our young maiden mares are broken to saddle around 2-3 months prior to being bred. This is a great system as they will usually experience some weight loss after coming out of the spelling paddock and being at the breaker. We can then follow up with an increasing plane of nutrition around three weeks before we start to follicle test them ready to be bred.



Omega 3 fatty acids increase the chances of fertility and therefore conception. Omega 3 fatty acids are not only beneficial for foetal development during pregnancy but are scientifically proven to improve the mare's reproductive efficiency. They improve follicular growth and positively influence hormone concentrations. We feed our broodmares HYGAIN RBO Equine Performance Oil.



WORMING

A healthy mare has more chance of achieving a pregnancy upon first insemination. I highly recommend that mare owners organise having a Faecal Egg Count done for their mares in the months leading up to Spring. The FEC can measure the concentration of worm eggs present and is a useful tool to ensure that you use the correct de-wormer to tackle the type of worm burden that is present. If a mare has a very high worm burden with a resistance issue, this will also affect the mare's ability to conceive.

DIFFICULT BREEDERS AND THINKING OUTSIDE THE SQUARE

If you have a mare that has failed to achieve a pregnancy in the previous breeding seasons, despite having your breeding vet work up and treat any possible causes for not being able to achieve a pregnancy, I would recommend to consider a veterinary acupuncturist. As with people, Acupuncture can be a very useful tool in helping deal with fertility issues or any other underlying causes. Many of my clients have had success turning to Western Medicine using acupuncture during the off season to then follow up with a successful breeding season.

PRE BREEDING SCANS

When mares reach the age of 3 to 4 years old they will usually start to cycle regularly and produce good follicles. Older maiden mares can be more difficult to bred. My advice is to start preparing a mare in early Spring by taking her to your breeding vet to have a pre breeding ultrasound check to ensure that the uterus looks healthy and that there are no abnormalities. I strongly recommend having a uterine swab to rule out any underlying infections. If there are infections present, your vet can treat the mare's uterus to ensure that is clean and ready for the breeding season. It is very disappointing for mare owners to discover that there is an underlying infection after going through the process of ordering a collection, transporting semen and the veterinary costs of the first insemination being performed. Spend the money on a swab for peace of mind and to save money.

INCREASED DAYLIGHT HOURS

Mares are naturally programmed to become reproductively active in the Spring. In the wild mares breed in the Spring when there is an abundance of pasture with the temperatures milder and less stressful for both conception and for the resulting foal in the following Spring. Following nature will also increase the chances of your mare conceiving.

Mares are seasonally polyestrous breeders, meaning that in nature the mares come into season during Spring and Summer when the hours of daylight increase. Longer hours of daylight stimulate the mare's cycle to transition into active estrous. The first cycle of Spring is not always the best cycle to start breeding and I tend to wait past this cycle as the mares are still transitioning into their regular cycle which is about every 21 days.

We believe the optimal months for breeding here in Australia are between October and February.

Even the Dynamik Stallions know when the daylight hours are increasing and their seasonal work is about to commence! Whilst we can breed artificially, it is natural for mares to start shutting down their cycles once the daylight hours decrease and the stallions also start to lose interest.

If you are rugging your mare or keeping her stabled under artificial lightening in the lead up to breeding, it is a good idea to keep this routine consistent so as not to interfere with her cycle.

KEEP THINGS STRESS FREE

Another important factor to achieving a pregnancy is to keep your mare free of stress. Try to keep her in a normal routine that she is happy with. If the mare is paddocked with other mares, ensure it is a herd that she is happy and relaxed with. If you are taking your mare to a breeding facility, ensure you choose one that has a set up in which she will feel content. You know your mare the best and will know if she will be more comfortable in a facility where she can be in a paddock, yard or stabled.

In Australia, our Summers can be very hot and there are many studies that indicate that heat stress can impair reproductive function in mares. Heat stress should also be considered in terms of management and timing of breeding.

TIME TO BREED

When you are ready to commence breeding your mare, it is a good idea to inform the stallion owner so they know that a potential collection is on the cards. Your vet will perform a scan to follicle test your mare and to check what stage she is at in her cycle. Your vet will then advise you when the next scan is required and can often give you an idea as to when your mare will likely to ready to breed from this point. This is the most important time to give the stallion owner a heads up as to where your mare is at in her cycle and it is particularly important for larger stallion stations that have many stallions to manage to ensure that they are available to do a collection for your mare, which is often at fairly short notice.

Once the semen is organised, the vet will give your mare an ovulating agent to ensure that she ovulates at the planned time.

Your vet will scan your mare the day after she has been inseminated to ensure that she has ovulated and to check that she has not accumulated too much fluid in her uterus. She will then be scanned at 15 days after insemination for a pregnancy test and to ensure that she is not pregnant with twins as a multiple pregnancy can be easily managed at this stage.

Another scan is performed at approximately 28 days to check for a heartbeat. The final scan will be at 45 days to ensure that the endometrial cups have formed and that pregnancy is progressing normally.