Breeding for Excellence

Five Things to Consider Before Breeding Your Mare

With Manning Equine Veterinary Services

The decision to breed your mare is an exciting one that should be given a lot of care and consideration. Here are the top five things to consider prior to breeding your mare, from a veterinary perspective.

1. Your mare's health & wellness report card

Your mare's overall health and wellness picture should factor in when determining breeding suitability. This includes:

General condition

Your mare should be in good overall health and body condition prior to breeding. Growing a fetus requires a lot of energy and will only compound any existing health issues, such as being underweight.

If your mare has any respiratory issues these can also become challenged as pregnancy progresses and the fetus takes up more room, placing more demand on your mare's system.

Soundness

While many mares are retired to broodmare life after career-ending injuries or chronic soundness issues, do keep in mind that your mare should be able to comfortably ambulate the pasture prior to breeding. She will eventually be required to carry an extra two hundred pounds or so as the fetus grows, and the stresses that this may put on any existing soundness issues should be taken into consideration.

How old is too old?

The age up to when you can (successfully) breed your mare depends on the mare as well as health and foaling history. Seasoned broodmares may foal successfully up to 20 to 23 years of age. It is not typically recommended to breed a maiden mare over the age of 18.

It should be noted that, as your mare ages, carrying a foal can be more taxing on their body and recovery post-foaling can take longer. Should there be any foaling complications these can also be riskier for an older mare. Each mare is an individual – listen to yours, and when in doubt, talk to your vet!

Personality plus

Not all mares are meant to be broodmares. If your mare already has a challenging temperament, this is often exacerbated once the foal is born due to protective maternal instincts. This can make managing mare and foal difficult (or dangerous), and the foal can pick up on these characteristics through learned behaviour.

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2. Breeding soundness

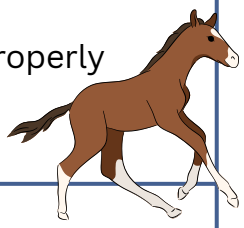
Whether your mare has foaled out successfully before or not, a veterinary breeding soundness assessment prior to breeding is a good idea. This exam takes into consideration your mare's previous health and breeding history and checks for any abnormalities that would contraindicate breeding. It will typically include:

- *A reproductive ultrasound* – The veterinarian will assess your mare's uterus, ovaries, and cervix, as well as the size and location of any cysts or fluid.
- *A uterine culture* – A positive culture indicates an infection that will need to be treated prior to breeding.
- *A uterine / endometrial biopsy* – The sample will be assessed for fibrin and inflammation and a grade will be assigned offering a prognosis for successful reproductive potential.

3. Genetics

The goal of any good breeding program is to pass along positive traits and reduce or eliminate the possibility of promoting poor genetic traits. Your mare's history and predisposition to certain diseases and conditions should factor into your decision on whether to breed. Common testable equine genetic diseases include:

PSSM1 *(Type 1 Polysaccharide Storage Myopathy)*	A glycogen storage disease that causes muscle pain, weakness and reluctance to move.
HYPP *(Hyperkalemic Periodic Paralysis)*	Mostly seen in Quarter Horses and those with Quarter Horse lineage. HYPP results in muscle twitching, tremors, weakness and potential paralysis and/or collapse due to an excess of potassium in the blood.
HERDA *(Hereditary Equine Regional Dermal Asthenia)*	Mostly seen in Quarter Horses and those with Quarter Horse lineage. HERDA results in severe skin lesions along the neck and back and associated complications.
FFS *(Fragile Foal Syndrome Type 1)*	An inherited connective tissue disorder resulting in lax and hyperextensible joints, as well as abnormally thin, fragile skin and mucous membranes. This is a fatal condition.
GBED *(Glycogen Branching Enzyme Deficiency)*	A fatal disorder resulting from the inability to properly store glycogen in several organs.
MH *(Malignant Hyperthermia)*	An inherited disease where affected horses can react to certain anesthetic drugs, stress or excitement, resulting in a hyper metabolic state leading to muscle contracture, elevated temperature, and an irregular heart rhythm.
MYHM *(Myosin Heavy Chain Myopathy)*	A disease of Quarter Horses and similar breeds. Two distinct presentations include immune-mediated myositis and non-exertional rhabdomyolysis, both of which involve muscle loss or damage.



Predisposition to **OCD** *(Osteochondrosis Dissecans)* lesions has been seen in some breeds, most notably Standardbreds, Thoroughbreds, and Warmbloods. These may be inherited in addition to being influenced by environmental factors and growth rate.

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4. Breeding strategy

When you breed your mare will depend on a few factors. Generally, mares stop cycling in the Fall and fertility decreases. It is best to start the breeding process early (we like April) and give yourself more time. The average gestation time is around 340 days, so you also want to avoid breeding too early or too late in the year unless you want a winter foal!

Whether you are breeding with fresh or frozen, be mindful of where you are ordering semen from. Ordering from the US or overseas can increase wait times and require more advanced preparation in terms of import permits, customs brokers, couriers and shipping timeframes. If you are breeding with frozen and your veterinarian can store frozen semen at their clinic it is a great idea to have the semen shipped in well before you start the breeding process. Breeding rarely goes perfectly to plan, so the more prepared you can be the better.

5. Investment planning

There is no straightforward answer to what the investment will be to breed your mare. Each mare is an individual, and they may catch on the first try or take numerous tries to catch (or not at all). The cost for breeding with fresh or frozen semen, embryo transfers, ICSI, or live cover varies. Stallion fees can differ widely from stallion to stallion and how many doses are required.

The investment will extend well beyond breeding as well – this may include (but is not limited to) mare care, pre-foaling vaccines and pregnancy checks, foaling out, neonatal exams, and foal care. Overall, breeding can be quite an expensive endeavour.

If you are thinking of breeding your mare this season, reach out to your veterinarian to get started – they will be well positioned to guide you through the planning process!

Manning Equine Veterinary Services offers a wide range of reproductive services to take the guesswork out of breeding and optimize the chances of a successful pregnancy and foaling. www.manningequinevet.com 519-855-9983