

Artificial Insemination & cooled semen

There are several reasons why mare owners consider artificially inseminating their mare with chilled or frozen semen. The top three reasons are: mares don't have to travel great distances to be bred, valuable stallions can be used from around the world, stallions that are no longer alive can still be used (frozen semen). Artificial insemination also reduces the risk of injury to the mare or the stallion that can sometimes occur with natural cover.

Fresh cooled semen
The conception rates with fresh cooled semen are generally higher than with frozen semen and there is usually a live foal guarantee when using fresh cooled semen.

When you buy a breeding to a stallion it is important to ask the stallion owner if there is a live foal guarantee. This means that if your mare conceives but she later aborts or the foal dies in the first 48 hours of life you will still be able to rebreed your mare to that stallion at no additional costs (other than shipping and possibly semen collection fees). When buying frozen semen you often do not get a live foal guarantee. You buy the semen by the dose and if your mare does not conceive you have to buy another dose – no guarantees.

When using fresh cooled semen, the mare must be inseminated at exactly the right time because the semen is only fertile for 48 hours after it has been collected from the stallion. The semen, once collected, is cooled down, mixed with extender and then stored in a temperature controlled cooler for shipping. We often use FedEx for overnight shipment of the semen. The mares therefore must be checked daily through their heat cycle to determine the optimal time for breeding. Once she is in heat we will check her every 24 – 48 hours with the ultrasound machine. When she is getting close to ovulation we will contact the stallion owner and order the semen. Some stallions are collected whenever you need them but some are on a strict schedule of only Monday Wednesday Friday collections or only Tuesday Thursday etc depending on their individual situation. Stallions that are being shown heavily can often be very difficult to synchronize with your mare's heat cycle. Also, stallion fertility can be quite variable and some semen can be cooled and shipped without losing fertility or quality while other semen does not ship well. If a stallion is already of marginal fertility (low sperm numbers and viability) then cooling and shipping diminishes the quality of that semen even further so that by the time it gets to your mare, it may be of very poor quality. Always question the stallion owner as to the quality of the semen and their success rates with shipped semen. These are all important details to consider when choosing a stallion for AI.

When the semen arrives for your mare, we always check it for motility and concentration. To improve the odds of conception we often give the mares a hormone that makes them ovulate at the time of insemination. There are two products we may use, one is hcg, apl, or chorulon, the other is called ovuplant. Another common hormone we may use to facilitate breeding your mare is a hormone called prostaglandin (lutalyse or estrumate). This hormone is used to bring your mare into heat. If we need your mare to cycle at a certain time to facilitate the stallions schedule or your schedule, we may use this product to bring them into heat.

The use of Prostaglandins to bring the mare into heat does not diminish her fertility. Fourteen days after ovulation the mare can have her first pregnancy ultrasound. If she is pregnant and has twins we can "pinch" one of them at this time more easily than when the vesicle gets larger.

We always recommend a second pregnancy ultrasound at 20 days post ovulation to look for a twin that may have been too small to see on the 14th day ultrasound. After these two ultrasounds the mares need no further tests until around 2-3 months when we do one final rectal palpation to ensure the pregnancy is still present.

The Broodmare protocol article will inform you of the vaccine and worming regime we recommend for pregnant mares.

for any further questions or more details please call us at 250-833-8585