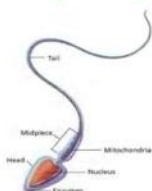


Preparing Your Stallion For Breeding Season Kelsey Kempton



As breeding season approaches, we are all preparing for the most exciting (and exhausting) time of the year. Pregnant mares are coming in to their cozy foaling stalls while we spend long nights watching and waiting for the inevitable foaling. Decisions are made over which stallions to book to which mares for the upcoming year, and open mares are under lights in preparation for the approaching breeding season. Wait, what about the boys? We spend so much time and energy making sure our mares are primed and ready months before breeding season actually starts, but we expect our stallions to be ready to go after sitting out in the pasture for 6 months? Many people don't realize that stallions require preparation for the breeding season as well.

A few weeks before you plan to breed your stallion it is recommended that you or a vet perform a semen evaluation. This is a crucial part of evaluating your stallion's breeding soundness and health. The three aspects of a semen evaluation are volume, concentration, and motility. Volume is simply the gel-free volume of the ejaculate. The average volume is around 70mL but can range from 30-250mL. Concentration is the total number of sperm cells per milliliter (mL) of ejaculate. The average is about 120 million/mL but can range

from 30-600 million/mL. Motility is split into two values. Total motility is the percentage of sperm cells that are actively moving. Progressive motility is the percentage of sperm cells that are actively moving in a normal pattern, more or less, a straight line. Progressive motility over 60% is considered normal. A semen evaluation at the beginning of each breeding season can tell you if your stallion is a candidate for semen shipping or freezing and how many breeding doses you can get from a single collection. It can also alert you to any changes in reproductive health. For example, a decrease in average concentration or motility could indicate a tumor in the testis which could otherwise be very difficult to diagnose.

Before breeding your stallion or collecting for a semen evaluation, it is crucial to do at least one cleanout collection. Stallions continuously produce sperm at a rate of about 3 billion sperm cells per day and while some of the unused sperm is reabsorbed or excreted through urine or masturbation, a lot of the sperm remains stored in the testis past their usable shelf life, which is approximately 6 days. This means that the first ejaculate from a stallion that hasn't been consistently bred or collected over several months is full of dead or damaged sperm. This poses a problem for both semen evaluation and breeding. Your semen evaluation will be a completely inaccurate representation of the stallion's actual semen quality and your pregnancy rates will be much lower than average as well.

But wait, mares have gotten pregnant from the first breeding of the year, so there has to be live sperm and it only takes one live sperm to fertilize an egg right? So why do a cleanout collection?

The mare's uterus has a very effective immune response to any foreign material that gets in, this is crucial since the dark, warm, moist environment of the uterus is ideal for bacteria to grow. Neutrophils, which are a type of white blood cell, capture and destroy bacteria and any other invaders including sperm! Normal sperm cells have a protein coating that acts as a disguise to allow the sperm to get past the neutrophils, but this coating has to be shed in order for the sperm to fertilize the egg. If there is any defect in the coating or if the coating is shed before the sperm gets to the oviduct, the sperm will be captured and destroyed by the neutrophils. The more dead and defective sperm cells, the greater the immune response, and the harder it is for any healthy sperm to reach the egg. While performing a cleanout collection does not guarantee pregnancy, it definitely increases your chances and makes for a much happier uterus for your mare!