DEEP CREEK VETERINARY SERVICES LTD.
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BREEDING MARES WITH FROZEN SEMEN

Relative to fresh-cooled semen, the use of frozen semen in mares has both advantages and disadvantages. The advantages of frozen semen are that stallions from all over the world can be used and the semen can be purchased and stored for years. Unlike fresh-cooled semen, which can have logistical nightmares in co-ordinating stallions, couriers and airlines, frozen semen is very convenient. It can be purchased in advance and stored at your veterinary clinic. When your mare needs to be bred the semen is present, not delayed or held in an airport or at customs. The disadvantages include slightly lower conception rates and the need for more frequent veterinary examinations of the mare during each heat cycle.

Frozen semen is sold in 'breeding doses'. A breeding dose contains a fixed number of sperm (the number needed to achieve conception). The semen is stored in plastic straws that are either 0.5ml or 5 ml in size. Because the concentration of sperm varies from stallion to stallion, the number of straws per breeding dose will vary. This is why when you purchase a single breeding dose of frozen semen, you may receive anywhere from 1 to 15 straws. Most stallions that offer frozen semen do not offer a live foal guarantee; you purchase the semen and hope to get as many foals as you can.

When using frozen semen, the timing of the insemination must be more precise than when using fresh-cooled semen. For best conception rates, the mare must be bred between 12 hours prior to ovulation and no later than 6 hours post ovulation. If only one breeding dose is available then breeding post-ovulation is most reliable. This means the mare must be examined every 6 hours as she approaches ovulation. This requires that the mare be at a veterinary facility. To more accurately predict when ovulation will occur, drugs that induce ovulation can be used. The drugs that we most commonly use are Ovuplant or Apl (Hcg). These drugs can be administered to the mare once she has a follicle greater than 35mm in size. Ovulation usually occurs 36 to 48 hours later.

Because more frequent examinations can be stressful on the mare and time consuming and impractical for the veterinarian, we would like to encourage stallion owners to adopt breeding contracts that provide ample doses of frozen semen to employ a new simpler insemination scheme. This new protocol allows veterinarians to manage mares for insemination with frozen semen using a protocol similar to that used for cooled semen. The protocol involves single daily examinations, use of the ovulation – inducing agents Apl or Ovuplant, and 2 inseminations timed to occur at specific time intervals from administration of the ovulatory agent. This protocol has been tested in both clinical and laboratory fertility trials and has proven to be as effective as the other more time consuming protocols.

Breeding with frozen semen has become a reliable way for mare owner's to breed to proven stallions from around the world. Please contact us if you have any questions regarding breeding your mare.