Management of Friesian Mares for Frozen Semen Insemination

Original made by Select Breeders. For related information, video guides and research results: www.selectbreeders.com

Prior to Insemination

- Verify that the mare is a suitable candidate for AI with frozen semen by performing a routine reproductive exam that may include culture, cytology and biopsy when indicated. Data suggests that aged (> 15 years) or repeatedly barren mares may have a reduced pregnancy rate and are not the best candidates for AI with frozen semen.
- Once the mare comes into estrus, palpate and/or scan daily to monitor follicular activity.
- Upon detection of a large (about 45 mm) pre-ovulatory follicle, administer hCG or deslorelin.

If only one dose of semen is available for insemination.

- 1. Examine the mare via ultrasound at 6 hour intervals starting 12-24 hours after hCG or deslorelin administration.
- 2. Inseminate the single dose of frozen semen as soon as ovulation is detected.

It is extremely important that mares being inseminated post-ovulation are inseminated within 6 hours of ovulation. A significant reduction in fertility will occur if mares are inseminated more than 6 hours post ovulation.

If more than one dose of semen is available during a given heat cycle.

- Continue to examine the mare via ultrasound once daily and inseminate a single dose of frozen semen approximately 32 and 44 hours after hCG or deslorelin administration.
- 2. Examine the mare approximately 6 hours after last insemination to confirm ovulation.
- 3. If mare has not ovulated yet, insemination of a third dose may be required, probably 12 hours after last insemination, depending on the follicle

A general goal for Friesian mares inseminated with frozen semen is to inseminate within 6 hours prior to and/or within 6 hours after ovulation. This protocol ensures that viable sperm are in the oviduct during that interval for any mare ovulating within a period of 26 to 50 hours following administration of hCG or deslorelin.

Suggested schedule for insemination of mares when more than one dose is available:

Daily examinations during estrus (any time)

- Day 0 Day of about 45 mm follicle detection

 Administer hCG or deslorelin at approximately 10:00 AM
- Day 1 Inseminate a single dose of frozen semen at 6:00 PM (32 hrs post-injection).
- Day 2 Inseminate a second dose of frozen semen at 6:00 AM (44 hours post-injection).
- Day 2 Examine to confirm ovulation at 12:00 AM
 Or inseminate a third dose around 6:00 PM if the mare has not ovulated yet.

