

## **Breeding your mare with frozen semen - frequently asked questions**

### **What is the success rate when using frozen semen?**

The average conception rate per cycle when using frozen semen of excellent quality is 30-50%. This means that it usually takes 2-3 cycles to get your mare in foal.

### **Why are conception rates so low?**

The freezing process causes irreversible damage to sperm. This causes two problems, a) these damaged sperm are less able to fertilise the egg, and b) frozen/thawed sperm can only survive in the mare's uterus for 12-24 hours. The degree of sperm damage varies from stallion to stallion and with the expertise of the person freezing the semen. About 30% of stallions produce semen that does not freeze well at all, their conception rates are close to zero. Unfortunately there are also many poorly-trained, inexperienced people freezing semen and therefore the quality of the semen is very poor.

### **What is involved in managing mares AI'd with frozen semen?**

On arrival, your mare is scanned to determine at what stage of her cycle she is at. If she is not in heat we will give her an injection of prostaglandin (PG) which will bring her into heat in about 3-5 days. She is then "teased" daily to detect when she is in heat. Given that frozen/thawed sperm only survive in the mare's uterus for 12-24 hours it is vital that the mare is inseminated as close to ovulation as possible. This means that we scan the mare every 6 hours as she approaches ovulation and inseminate her when we are sure that she is going to ovulate within the next 12 hours. We then pregnancy test the mare 14 days after insemination.

### **Which mares are most fertile?**

Young, maiden mares (less than 8 years old) and mares with a foal at foot are the most fertile. Old maiden mares (more than 9 years old) or mares that have not had a foal for longer than 2 years have the lowest conception rate.

### **What should I do if my mare does not conceive after 3 inseminations?**

Either try frozen semen from a different stallion or use fresh semen. It is important to remember that the most important factor when using frozen semen is the quality of the semen itself. Often a mare that fails to conceive to frozen semen will get in foal first time when you use fresh semen.

### **Which stallion should I use?**

It is best to use a stallion with a track record of producing foals from frozen semen. Try to avoid using stallions which have not yet produced pregnancies from frozen semen. Just because a stallion has normal fertility when he is used for fresh semen AI or natural service does not mean that he will have good fertility when his semen is frozen. Also, just because semen looks OK under the microscope when it is thawed does not mean that it will be fertile.

### **How is frozen semen sold?**

Usually frozen semen is sold in batches of 3 doses with no guarantees that it will be fertile. The number of straws per dose will vary for each stallion (range 3-8 straws per dose). Some stallion owners now provide a “live foal guarantee” where you only pay for the semen if you get a foal. This is excellent because it puts the onus back on the stallion owner and the person freezing the semen to produce semen of the best quality.

**Further questions?**

Please call Dr. Dave Hanlon at the clinic on 07 888 8193