

## Freeze for the Future

The days of leading one's mare to the local stallion in the village have all but disappeared with more and more breeders turning to advanced methods to maximize their potential of

- achieving a pregnancy
- producing a foal of choice with high genetic merit

In the past, using frozen semen has been somewhat overlooked by breeders through fear of high veterinary costs linked with lower conception rates in comparison to fresh or chilled semen. Although this still remains to be generally true, in recent years conception rates have improved greatly thanks to advances in freezing, thawing and insemination techniques. For this reason it is now far more likely for breeders to choose frozen semen and therefore it is a more viable option for the stallion owner. However, with this in mind there are many more reasons why it may be beneficial to freeze semen from your stallion, and their appeal is simply magnified by these improved techniques.

It is becoming increasingly popular for the competition stallion to have his semen collected and frozen, enabling him to have a breeding career simultaneously with an uninterrupted competition career. It is almost relatively unheard of for top equine athletes to juggle stud duties with a tough international competition schedule. Having frozen semen stored and distributed means that stallions can still meet their supply and demand requirements without the risk of fatigue or lack of concentration disrupting competition.

One of the greatest opportunities the recent advances in cryo-preservation has offered us is the ability to conserve the gene pools of our rarest equine breeds. The Rare Breeds Survival Trust monitors the female breeding populations of horses and ponies and identifies those breeds most at risk. On behalf of government agencies they provide funding toward the cryo-preservation of selected stallions to ensure the conservation of the breed.

Preserving the genetics of a stallion before castration is also common practice, whether it be an unproven colt or a competition stallion whose career may benefit from a little more

concentration! Often unless a colt has improved sale prospects or potential as a sire, life on the farm is a whole lot easier when these youngsters are castrated. Harvesting sperm from the stallion's testicles (epididymis) post castration is now possible and is a procedure seeing much more interest in recent years. There are new and improved methods for freezing epididymal sperm which should maximise its fertility after thawing.

The export of frozen semen is a rapidly expanding market where often the demand for superior genetics and new bloodlines in certain countries is significantly outweighed by its current supply. Equine frozen semen can be shipped throughout the world safely without altering its quality and there are no costs and stress associated with the movement of animals, therefore increasing revenue streams. However, it is important to understand that with wider distribution comes greater responsibility. We are all familiar with the horrors of disease outbreaks resulting from animal derived products moving across borders. This equally applies to frozen equine semen shipped into and out of the UK. To prevent unwanted sexually transmitted diseases such as CEM, EVA and EIA, it is extremely important that all semen collected and frozen for export adheres completely with the health requirements for the country of destination and is accompanied by original export health papers.

There are many reasons why today's breeder may choose cryo-preservation for their stallion with varying motives from preserving a breed to increasing the revenue or as insurance against injury or death of the stallion. As equine breeders we have a great opportunity to embrace new technology and use it to its full potential. This undoubtedly means that more stallions will be available to a wider market, with better reproductive success. This can only be beneficial as it leads to a healthier gene pool with more choice for all.