

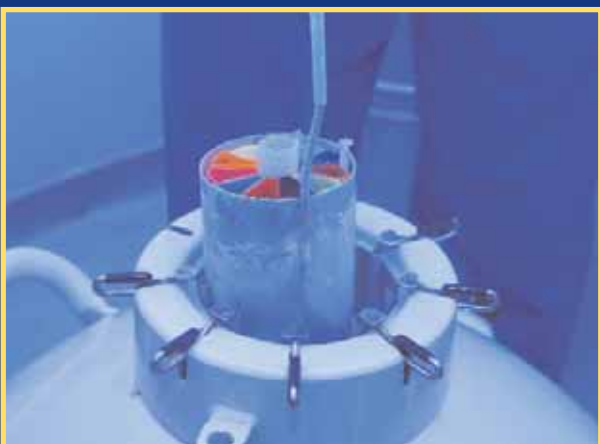
# Did You Know...

❑ A bovine sperm measures approximately 50µm (1µm = 1/1000th of a mm), which is about the same as an average human sperm. We expect an average scrotal circumference of 33cm for a 12-month-old bull, and 39cm as an adult bull.



❑ Size does matter - the more grams of testicle the greater the sperm harvest potential. From a young Holstein bull the expected harvest is 10 billion per week and a adult bull at least 30 billion per week however, this can be as high as 60 billion.

❑ At the Genus ABS Laboratory we freeze over 1.6 million units of semen a year that equates to 2.4million, billion sperm cells. This figure comprises of a mixture of proven Holstein semen, Beef semen, Fertility plus and young sire semen for the Cornerstone Breeding Club. In addition, the Lab uses 10,000 litres of Liquid Nitrogen per annum, which is equal to the volume of a large milk tanker.



❑ At collection the raw semen is weighed, assessed for motility and density (concentration)

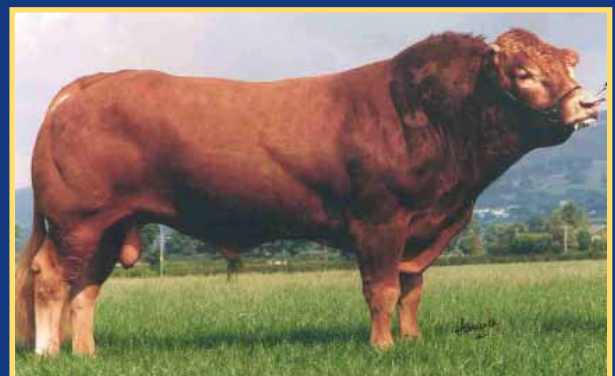
of the semen determined, all the time being kept at 30°C. We collect approximately 7,635 ejaculates per year, however only 5,345 ejaculates make it through this single quality control check.

❑ Raw semen cannot survive alone (less than two hours) without the addition of a solution called extender to keep sperm "happy". The extender includes sugars to give the sperm energy, egg or soya bean to provide a protective role, antibiotics to kill any bacteria and a cryoprotectant to protect the sperm during the freeze/thaw process.



❑ Adding the extender is done at two stages, extender is added at 30°C to create a partially diluted solution then placed in a chilled cabinet for two hours at 5°C. After chilling further the extender is added to complete the dilution ready for filling.

❑ The labs Record for Semen Production is actually held by a Limousin bull, Ronick Hawk who produced more than 850,000 units, if all of those straws were laid out they would reach all the way from Liverpool to Leeds.



Ronick Hawk