



Sport Horse Breeding News

Volume 5, Issue 4

"Your Foal Is Our Goal"

October 2009

THAWING SEMEN

Debra Ottier, Reproduction Research Associate and frozen semen expert at the Equine Research Centre, Guelph, Ontario, thaws semen by plunging the straws into a 55° C. water bath for five seconds. The straws are then transferred to a 35° C. bath until the temperature stabilizes at somewhere under 37 degrees. Ottier says the 35-degree bath alone can be easier to work with. "It's a little slower . . . but at 35-degrees C. you know the semen isn't going to get too warm. You can leave the straws in the water bath for 10-15 minutes, if necessary, without running the risk of damage."

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World Freestyle Record Shattered at Hickstead

Dressage history was made in Hickstead, England on August 30, 2009. A new world record free-

style score of 90.75% was set at the Alltech FEI European Jumping & Dressage Championships at Windsor Castle.

In a crowd-thrilling ride of a lifetime, Edward Gal and his black wonder horse, Moorlands Totilas by Gribaldi raised the bar in dressage to an astounding new high. In breaking their own previous freestyle record, the dynamic pair is the first ever to break 90%. In a performance that thrilled the



Gribaldi

British audience to a standing ovation at the final halt, Gal and Totilas dominated the competi-

tion. The stunning son of Gribaldi achieved an unbelievable 29 perfect 10 scores for his huge ground covering and elastic paces on his way to the new record. The crowd was wowed by Totilas's extravagant extended trot, elevated piaffe and graceful passage. Said Gal, "It is really strange to even think of doing better but I know, especially as he is only nine, that there are still some things that will improve and that he can do better."

As incredible as this new high score is, what is even more remarkable is that just days before on August 27th, Gal's Dutch team member Adelinde Cornelis earned her first individual gold dressage medal. In doing so, she and her own remarkable partner, Parzival, by Jazz, set their own world record score in the Grand Prix Special. Adelinde



Jazz

and Parzival entered the freestyle with the unenviable task of besting Gal's score, but settled for second place with 87.35%.

Mares on the Gain Produce More Males

A recent study of wild horses in New Zealand showed that broodmares in improving condition have more colts than fillies. There was a striking correlation between a mare's condition and the sex of her foal.

Of the mares that were gaining weight at the time of conception, 80% produced colts, while only 3% that were losing weight at conception had colts. Researchers hypothesize that strong mares produce strong

colts that will then be able to increase the mare's bloodlines more than a filly. It appears that glucose plays a role, but at present the mechanism that might be causing this relationship isn't understood.

From Stallion to Straw

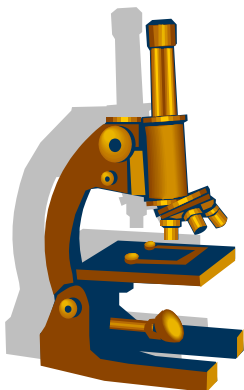
Breeders know it takes good frozen semen to obtain good conception results. The process of producing good frozen semen is not difficult, but it *is* exacting. Great care must be taken to produce a quality product.

Collection

Stallions are collected using a phantom mare with an artificial vagina (AV) inside it. An artificial vagina can also be used without the phantom, but only by skilled handlers. The AV contains a latex liner and the space between it and an inner disposable plastic liner is filled with warm water to provide the correct temperature and fit to encourage ejaculation by the stallion. The inner disposable liner is greased with a non-spermicidal lubricant and inserted into the latex liner, leaving an equal length of liner protruding from each end of the AV. A semen collecting bottle is securely attached to the far end of the inner liner. The bottle contains a filter that separates the gel portion of the ejaculate from the sperm-dense portion. The bottle and liner protruding from the end of the AV are insulated by a drawstring bag to keep the temperature of the collection constant. Sudden temperature changes are detrimental to sperm quality and must be guarded against. Before collection, the penis must be fastidiously washed with mild soap and water, and must be fully dry before the stallion approaches the phantom, because water is highly spermicidal. Once the semen has been collected, most of the warm water is drained from the latex sleeve, so the remaining semen drains into the collecting bottle.

Laboratory

Sudden temperature changes between the collection procedure and the lab are damaging to sperm. It is important to have all lab equipment pre-warmed to about 37 degrees Celsius and to work as fast as possible. The gel filter is quickly removed from the collecting bottle to prevent gel from seeping into the sperm-rich portion of the collection that will be processed. A drop of the



semen sample is tested in the photometer to determine the sperm count. 100 to 180 million sperm per millimeter is average, but can range from 20 to 600 million per ml. A sample containing 60-70% of the sperm alive and moving in a progressive direction (progressive motility) and not spinning in circles, is considered good.

The next step is to centrifuge the sperm into the bottom of a large test tube. About 20% of the sperm-free seminal fluid on top of the tube is left and the rest is siphoned off. The "pellet" of sperm and fluid is mixed and an antibiotic is added to it. Then, an extender is added before packaging the semen into straws.

Extenders act to increase the volume of the semen, provide nutrients to and fertility preservation of the sperm cells and help protect the sperm from the detrimental effects of freezing. Extenders contain various combinations of sugar, lactose, egg yolk, milk, trisodium citrate, glycerol and glycine. Half a ml of semen is vacuum pumped into plastic 0.5 labeled straws with a cotton and collagen plug at one end. A small air bubble is added to each straw to allow for expansion when the semen is frozen and the other end sealed with a small metal or glass ball or polyvinyl powder.

Freezing

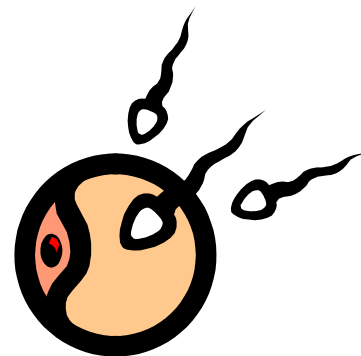
The filled straws are gradually cooled by being placed on a rack supported above a container of liquid nitrogen for about 10 minutes to avoid shock. After they reach about five degrees C., each straw is taken individually and plunged into the liquid nitrogen, where its temperature is instantly lowered to -198 C.

Handling

Time is of the essence when transferring straws of frozen semen. All equipment used to transfer semen should be first chilled. Make sure the straws are exposed to thawing temperatures for three seconds or less. Keep the interior canister you are working from below the neck of the container, and lower the canister back for at least 30 seconds before lifting it again if you don't accomplish your work in three seconds or less.

Thawing

Thawing frozen semen rapidly means fewer ruptured cell membranes. Follow the directions for thawing precisely. Ordinary thermometers are notoriously inaccurate—use a battery-powered thermometer with a clip-on lead and check its accuracy often.



Stallion Spotlight ~ FS Don't Worry

FS Don't Worry is one of Germany's most popular and outstanding pony stallions. He was reserve champion of his riding pony koering in Aachen in 1998, and also won the NRW riding pony championship. He also won his stallion test in Muenster-Handorf. In 1999 he repeated as riding pony champion.

Don't Worry won the Bundeschampionat for riding ponies in 1998 and 1999, receiving a record six perfect 10's. He has multiple wins in dressage in M and S classes, Intermediare I and Prix St. George. Don't Worry won a bronze medal in the Rhein championships and was fifth in the German junior championship under the



ridership of Miriam Licinio. Don't Worry's sire, Dacapo Doro, competes at Intermediare and won at Hickstead, and his grand-sire, Derano Gold, was European champion. Don't Worry's states pre-mium dam, Golden Sunlight, is a two-time Bundeschampion. She has earned the Bundesfamilie title. This is a stallion whose offspring truly are too numerous to mention,

but include: FS Di Caprio, Bundeschampion 2002; FS Dark Magic, Vice Bundeschampion 2002; Don't Forget, Reserve Champion Stallion 2002; FS Dandini, Federal Champion 2003; Dinarion, Bundeschampion 2003; FS Dark Shadow, Champion Mare Performance Test 2003; Don't Forget, Federal Champion 2004; FS Dark Magic, Bundessieger mare 2005; FS Don't Worry, Federal Junior Champion 2006; HB Golden Girl, Federal Champion 2006; Double Desert, champion stallion 2007; FS Daddys Destiny, Siegerhengst 2008; HB Golden Girl, Vice Bundeschampion 2008; Mac Doreen, Federal Vice Champion 2008; FS Daddy Cool, Champion Stallion 2008.

SES Sires with Offspring in the News

Elizabeth Ball rode Selten HW, by **Sandro Hit/Hohenstein** to the USEF National Young Horse 5-Year-Old victory, 8/21-23, at the USEF National Developing Horse Dressage Championship, Lamplight Equestrian Center, Wayne, IL.

Bon Chance, by **Belissimo M/Weltmeyer**, under the ridership of Caroline Roffman, was reserve champion in the 4 year old division at the same venue.

Lauren Samms and Sagacious, by **Sandro Hit**, won the Grand Prix and the Grand Prix Freestyle at the Centerline HITS-on-the-Hudson CDI*** in Saugerties, NY, 8/14-16.



Champion De Luxe Contendion, by **Contendro**, under Regina Agren, won the Great American/USDF Region 6 Championships, held in conjunction with the Northwest Dressage Championships at DevonWood Equestrian

Center, Sherwood, OR. 9/25-27/09.

guided by Caroline Ingalls. Rodin, by **Royal Diamond**, won the third level championship at the CDS North Championship at the California Dressage Society Junior Championships North, 8/6-9, in Rancho Murietta, CA. under the ridership of Alexandra du Cellie Muller.

Cassius Clay, by **Champion De Luxe**, ridden by Dana Rizzo, was the Champion Large Green Pony Hunter of the Hits on the Hudson V*, 7/22-26/09. Cassius Clay is the 2009 USEF Large Green Pony Champion.

Center, Sherwood, OR. 9/25-27/09.

The Best Hunter in the USA for 2008 is Horse of the Year regular working hunter, the Hanoverian Renaissance, by **Rabino**.



Contendro The mare with the best AHS inspection result for 2008 was Rondalet by **Rotspon**.

Courtney-King Dye's mount, Mytilus, by **Olympic Ferro**, was euthanized on 10/12/09, due to colic.

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SES SERVICES

2010 Sale Deadlines

Orders taken any time.

Early Bird Sale 2/01/10

Dutch Sale 2/10/10

Belgian Sale 3/01/10

Spring Breeders 4/10/10

Danish & French pending

Front Page Foal Gallery—Please send foal photos of foals sired by SES sires for possible inclusion on the SES home page. You will receive a link through to your farm or email. Don't miss out on this valuable source of free advertising for your breeding program.

Link Your Farm—SES clients receive a FREE link to their website.

Custom Shipments Anywhere in the World

Organization Notes & News

CONTINENTAL STUDBOOK

The Continental Studbook is launching its bi-monthly free publication for all breeders, owners and sport enthusiasts in the industry. The journal will be covering a number of issues important to North America such as breeding technology and horse health, domestic sport results, discussions with domestic professionals, domestic breeder profiles, etc. The journal is a free publication.

The Continental Studbook has teamed up with ViaGen to register cloned foals produced for North America.

Contact: 541-954-0048

www.continentalstudbook.com

AHS

The American Hanoverian Society has announced a new foal life recording partnership with the United

States Equestrian Federation (USEF). Beginning with the foal crop of 2009, AHS registered foals automatically become USEF life recorded as part of the regular \$185 registration fee. In addition, all AHS American-bred horses will automatically be enrolled in the new American Performance Horse (APH) book of the Performance Horse Registry.

KWPN

For the sixth consecutive year, the KWPN has maintained its position as the World Breeding Federation for Sport Horses leading jumping studbook.

For the first time in over ten years, the KWPN is also the number one dressage studbook.

Recommended Reads & Websites

YouTube

Okay, maybe you've been living under a rock and haven't discovered that this is the most likely place on the web to find video clips related to horse sports. Clips of performance tests, keurings, inspections, horse sales and all types of horse performance events are posted here. If you are looking for videos of a stallion, this is the place to begin your search. Even better, it's a great place to find clips of a stallion's offspring. Just type in a stallion's name and breed and everything on file about him and his get will come up. Go to YouTube to watch the clip of the Gribaldi son, Moorlands Totilas, setting the new world record free-style score.

www.youtube.com

