

# CANYON PROTOCOL FOR SHIPPED COOLED AND FROZEN SEMEN

Each breed registry has its own rules and regulations regarding the use of shipped semen and the subsequent registration of offspring from such breedings. We are here to work through the advantages and disadvantages of using shipped semen for your next breeding season and walk you through a typical breeding session.

## ADVANTAGES

1. Eliminates stress and expense of shipping the mare and possibly newborn foal over long distances to the breeding farm. Semen from a stallion in New York can be sent directly to us for artificial insemination (AI).
2. Eliminates risks of natural breeding such as bite or kick trauma by an over aggressive animal.
3. Greatly reduced risk of uterine infection with use of AI.
  - a. First in part is because we add antibiotics to the seminal extender minimize venereal transmission of bacterial disease to the mares by a stallion who serves as a carrier of infectious bacteria. Extenders also contain supportive and protective factors that can improve pregnancy rates of certain sub-fertile stallions.
  - b. Secondly, breeding artificially by an experienced veterinarian is a much cleaner and sterile process.
4. Broader genetic pool to pick from when not limited to just local stallions.

## DISADVANTAGES

1. There are usually additional costs of semen collection and shipping to the owner.
2. Stallions may only be collected on certain days of the week.
3. Catching the mare in heat and timing the insemination is put into the hands of the mare owner or the veterinarian. If no tease stallion is available, hormones can easily be used to time the onset of heat (see our article on “Bringing Mares into Heat for Artificial Insemination”) with a series of rectal ultrasound exams to help determine the day of ovulation and therefore best time the insemination.

## THE PROCESS

Through a rectal palpation by your veterinarian at Canyon, the ideal breeding time is predicted and the stallion owner is contacted to have semen collected and shipped at the appropriate time. Depending on the quality of the semen, it can be divided into a number of insemination doses and then placed in a specialized container, an Equitainer, for overnight shipments. The Equitainer is specially designed to cool the semen down at a specified rate and then keep it at about 4 degrees C. Semen at this state can maintain good quality and normal fertility for a period of 48-72 hours, although, the best fertility is realized if the semen is used within 24 hours of collection.

When it arrives we check the semen for good quality and motility. If good quality semen is used in a normal mare, a conception rate similar to natural cover should be expected at ~75%. In problem mares, a slightly better conception rate can be expected over natural cover due to the decreased contamination that occurs during artificial insemination.