



BREEDING SERVICES FOR STALLIONS

Puget Sound Equine Reproduction Center

BREEDING SOUNDESS EXAM

The staff at Puget Sound Equine Reproductive Center (PSERC) performs examinations to determine if stallions are able to cover mares and to evaluate their conception potential. The examination includes a general history of his health and use as a breeding stallion, and a physical exam with special emphasis on his reproductive organs. If necessary, blood and fecal tests will be done. Cultures will be performed on the urethra, prepuce and semen. If cultures are positive for bacterial growth, antibiotic sensitivity tests will be done.

Semen samples will be taken one hour apart. The samples will be analyzed by a densimeter which automatically provides a sperm count per cc, a total number of spermatozoa per ejaculate, the number of inseminations per ejaculate, and the dilution ratio of semen to extender for artificial insemination with fresh semen or shipped, cooled semen. Also the spermatozoa will be examined for structure(morphology) and viability (motility).

All of the data is entered into software for equine breeding. The data can be analyzed at any time to monitor a stallion's breeding success. Reports can be generated upon an owner's request.

TRAINING YOUR STALLION FOR SEMEN COLLECTION FROM A PHANTOM MARE

If you plan to use your stallion in an artificial insemination program, it is imperative that he be trained for this procedure so it can be done safely for both the stallion and the collector. PSERC has a phantom mare and mares in estrus with which to train the stallion to have his semen successfully collected off the phantom mare into an artificial vagina. This training period varies for each stallion. Many stallions are capable of being trained in 3-5 sessions.

THE COLLECTION, PREPARATION, AND SHIPMENT OF COOLED SEMEN

PSERC provides the necessary procedures, staff, and equipment to safely collect semen from stallions. The semen is properly prepared and packaged in state of the art equipment. If necessary, arrangements can be made to have the semen shipping container delivered to the appropriate airline, or shipped by Federal Express.

Cooled semen has been cooled from body temperature (37 C) down to (5 C), or refrigerator temperature. Most stallion semen can tolerate the cooling process. Cooling semen to five degrees Celsius extends its viability to 48 hours. After semen is collected, it is analyzed, and mixed with extender containing antibiotics. It is then packaged in sterile bags, sealed and placed into another bag which is also sealed. These bags are placed into a specimen container designed to withstand shipment. We use the Equitainer™ system, which has two frozen cans in its base. The amounts of coolant and insulation have been formulated to gradually

cool the semen to five degrees Celsius over ten hours.

There have been several studies comparing per cycle conception rates between breeding by natural cover, Artificial insemination (AI) with fresh semen, and AI with cooled semen. AI with fresh semen was equal to breeding by natural cover. The per cycle pregnancy rates were 65-70% with natural cover and AI with fresh semen. With AI and cooled semen the per cycle pregnancy rate was about 55-65%. There is a small percentage of stallions whose semen will not survive the cooling and shipping. Puget Sound Equine Reproduction Center can do the necessary tests to determine if a stallion's semen can be cooled and shipped.