STALLION SEMEN COLLECTION USING A PHANTOM MARE

The stallion shown here is actually in the process of being "phantom trained". This was the first time that he had been collected using an artificial vagina ("AV"). The model of AV seen here is the "Lane model Colorado". There is a description and discussion of the types of AV's we use available at this location, and more discussion about "phantom training" is available by clicking here.

The "phantom mare", or "breeding mount" seen here is one of a simple design, and cheap to produce. Although it is not fancy, we have built a number of them and found them to be very serviceable. It consists of three sections of power pole, two of which have been set into the ground for about three feet, one protruding about a foot further than the other. The third section of pole is secured over the top of the other two, with an overhang of about three feet at the lower end. This top section is then padded using something such as an old foam mattress, ensuring the end is well covered. The whole padded section is then covered with a durable non man-made material, such as canvas. (Man-made materials will tend to burn the horse's legs due to friction, and may be more slippery). Some people also like to cover the phantom with an old section of carpet, and some stallions really seem to like the longer pile rugs or carpets. The final height of the phantom should be considered during its construction. Generally the "rear" end (the lower end) should be slightly lower than the average height of the rump of any mare the stallion would normally breed "live cover". Details for construction of this homemade mount are given in our article on building a breeding mount.

Here the stallion is being introduced to the phantom mare. The approach is the same as for immediately prior to mounting in a "live cover" situation - slightly to the left of the rear of the mount. The collection bottle can be seen clearly attached to the disposable liner at the end of the AV nearest the camera. In colder weather we would use a warmed insulated cover over the bottle to protect the collected semen from cold shock. Note that the mare, although not visible in this image, is actually not yet present. A few stallions will mount the phantom without a stimulus mare present right from the start, so the initial collection attempt should be made without a mare present (after having suitably teased up the stallion elsewhere) in case he proves to be one of these stallions. Remember - it's easier to add a mare later if needed than to take the mare away and achieve the same result of a collection!

In this case, after several attempts, it was clear that the stallion required more stimulus. Consequently ahead of the phantom, and facing the stallion and the phantom is a mare in estrus. Many stallions will eventually reach the point where there is no need to have such a mare present, as the concept of ejaculation becomes associated with the phantom itself rather than an estrus mare. The mare is kept facing the situation initially, as the stallion may not wish to mount the phantom if he is presented with the posterior of an estrus mare. Occasionally during the training process does become necessary to reverse the mare so she presents her rear, but this is usually done after many failed attempts with the mare facing, or sometimes after the stallion has mounted the phantom in order to stimulate him to the point of ejaculation.
As the stallion mounts the phantom, his erect penis should be deflected manually to one side of the phantom (if one is not using a phantom with a built-in AV). In North America, most usually it is deflected to the left, as this is the side where the handlers are usually located. Here the look of panic and determination on the AV handler’s face is as a result of the stallion’s penis having deflected itself to the right of the phantom. It must be retrieved rapidly before the stallion moves up on the phantom and makes an easy retrieval impossible.

The stallion’s penis is diverted into the AV, and he is allowed to breed the AV. The penis should not be forced into the AV if the stallion is not willing, and the amount of "working" of the AV by the handler permitted will vary from stallion to stallion. Some stallions will thrust into the AV just as they would a mare, whereas other stallions will need the handler to move the AV to create the stimulation; that action on the other hand may be strongly resented by other stallions. It requires experience on the part of the AV handler to establish the correct protocol for an individual stallion. It is important that the penis be thrust well into the AV at the time of ejaculation, and depending upon the type of AV being used, out through the other end, as if the sperm come into contact with the heated liner, heat shock will probably occur, which is most commonly typified by many "curly tails" on circling sperm when microscopically examined.

The stallion will hopefully ejaculate, and this is often indicated by "flagging" of the tail (as with live cover situations, and which has already occurred just prior to this photo being taken), by the presence of semen in the collection bottle, and also can be felt by the AV handler by placing his hand on the underside of the penis above the AV where urethral pulses may be identified during ejaculation. Once ejaculation is determined, the angle of the AV should be altered, as seen here, to allow the ejaculate to drain into the collection bottle, and to keep it away from the heated inner liner of the AV to avoid sperm heat shocking.

The stallion should not be rushed to dismount once he has ejaculated, but should be allowed to dismount of his own accord. The AV is removed in the upright position shown, and the water is drained, allowing any semen trapped within the liner to drain into the collection bottle. Note: Supervisory assistance from the local Terrier population is not recommended!

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