How to start a stallion in an AI programme

What health tests, training and semen assessments are necessary when enrolling a stallion in an AI programme for the first time?

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With the start of the 2018 breeding season approaching, stallion owners are making plans for standing their horses at stud. With the notable exception of Weatherbys (which registers Thoroughbred racehorses), the vast majority of British and international equine stud books now allow the use of artificial insemination (AI).

The advantages of using AI are many; it allows shipment of semen to distant destinations and removes the need to transport stallions or mares and foals for breeding purposes. Use of freshly-collected semen appropriately inseminated using a minimum contamination technique also provides the optimal method of achieving a pregnancy in many sub-fertile mares.

From the stallion owner’s point of view, making the stallion available via shipped chilled or frozen semen opens up national and international markets. Training the stallion to use a dummy mare for semen collection also significantly reduces the risk of injury to the stallion associated with covering live mares or having semen collected using a ‘teaser’ mare. Being able to collect and freeze semen for future use means stallions do not have to combine stud duties with competition during spring and summer.

Biosecurity
All the venereal diseases which can be spread by ‘natural cover’ can also be transmitted in semen, and the fact that ejaculates are often split between multiple mares and destinations means that AI is a fantastic way of spreading disease. It is therefore crucial that all stallions being used in an AI programme are tested annually in line with the HBLB Codes of Practice, which specify which diseases stallions should be tested for after 1st January each year, and how the tests should be undertaken.

As specified in the ‘AI’ section of the HBLB Codes, all semen collections should be undertaken using appropriate biosecurity measures, and shipments of semen should be accompanied by the appropriate paperwork certifying freedom from disease. Teaser mares with which the stallion will come into contact must also be tested free of venereal disease, as specified in the HBLB Codes.

Semen collection methods
A physical examination should be carried out to assess any abnormalities (including those of the reproductive tract) which might affect the stallion’s fertility (Varner, 2016). Semen can be collected from stallions for use in AI using a real mare, a ‘dummy’ mare, or ‘ground collection’. If a real mare is being used, she should either be in behavioural oestrus, or be ovariectomised.

Ovariectomised mares have historically been treated with oestrogen to make them display signs of oestrus. There is no oestrogen currently licensed for use in horses in the UK. The use of a real mare exposes both stallion and mare to injury from kicking or biting, and the person collecting the semen is of necessity situated between the two horses.

Collection of semen using ‘ground collection’ (i.e. when the stallion mounts neither a real mare nor a dummy, but is collected while standing on the ground) is useful in some cases of orthopaedic or neurological disease which prevent the stallion from mounting and ejaculating. However, it is not well-tolerated by all stallions and is always relatively...