BREEDING SOUNDNESS EXAMINATION OF MARES

A Breeding Soundness Examination is carried out to confirm the absence of detectable reproductive abnormalities prior to breeding or to investigate fertility problems following unsuccessful breeding. The examination preferably should be performed just before or early in the breeding season to allow time for treatment if necessary. A number of procedures including perineal exam, rectal palpation, ultrasonography, vaginoscopy and manual vaginal and cervical examination are performed. Additional procedures such as uterine culture and cytology, endometrial biopsy and hysteroscopy may be required depending on history and results of the initial examination.

HISTORY: The mares age, work history, and especially breeding history are all noted and allow your veterinarian to identify potential reproductive problems and select appropriate diagnostic procedures. Accurate breeding records are a great help and keeping a written account of heats, number and date of services and the result is an excellent idea even if you only breed one mare.

BODY CONDITION: General health and body condition is always assessed briefly as poor body condition will interfere with breeding potential. Parasite control, vaccination history and the condition of the mares feet will also be noted.

PERINEAL EXAMINATION: The vulva and perineum is assessed for discharge and urine scalding that may indicate infection, urinary incontinence or urine pooling. Normal vulval conformation includes vertical vulval lips with good tone and close apposition. Sloping forward of the vulva, loss of tone and apposition allow air, urine and faeces to enter the vagina increasing the risk of irritant material and bacteria entering the cervix and uterus with resulting inflammation and reduced fertility. A Caslicks procedure may be recommended to close the vulval lips and minimise contamination.

RECTAL PALPATION AND ULTRASONOGRAPHY: The mares cervix, uterus and ovaries are palpated to assess size, tone, the presence of abnormal masses if present, and the number size and tone of ovarian follicles. Usually the uterus is examined first to

check if the mare is pregnant or not. Pregnancy is the most common cause of failure to cycle! If the mare isn't pregnant uterus and ovaries are checked to see if the mare is cycling. Mares are seasonally polyoestrus which means they cycle and come on heat in summer and generally stop cycling in winter. In the tropics many mares will cycle through winter as we are close to the equator and day length which controls reproductive cycling has less seasonal variation.

The uterus is also assessed for presence of fluid which may indicate inflammation, air and endometrial cysts. Cysts are fluid filled structures which if small and discrete generally cause no problem however large cysts may interfere with embryo mobility and maternal recognition of pregnancy.

Ovarian follicles, their number, size and tone and the presence or absence of a corpus luteum along with uterine tone allow assessment of the stage of the cycle – oestrus/heat or dioestrus. The size and tone of follicles and the presence of endometrial folds are used to estimate time till ovulation. Any detectable ovarian abnormalities are noted at this time.

EXAMINATION OF VAGINA AND CERVIX: These are examined both manually, to detect masses and defects, and with a speculum to allow us to see the lining of the vagina and the external opening or os of the cervix. Abnormalities such as persistent hymen, a membrane across the vagina, urine pooling, inflammatory fluid, varicose veins and cervical defects may be detected.

Samples for uterine culture to detect bacterial or fungal infection and cytology to assess presence of cells that indicate inflammation can be collected at this time.

ENDOMETRIAL BIOPSY AND HYSTEROSCOPY: These procedures are not part of a routine examination but are carried out if indicated by suspicious history or preliminary examination.

An endometrial biopsy involves using a specially designed instrument to collect a small portion of the uterine lining or endometrium which is examined by a veterinary

pathologist. Assessment of fibrosis or scarring, inflammatory cells and glandular abnormalities aid in predicting the chances of a mare carrying a foal to term and differentiating long term structural changes and acute inflammation.

Hysteroscopy allows us to see inside the uterus via a flexible endoscope. Adhesions, masses and abnormalities of the opening of the oviduct may be identified.

During a Breeding Soundness Examination a large amount of useful information can be collected. If the mare is normal and cycling she may be ready to breed. For mares with reproductive problems recommendations can be made on appropriate treatment and management of breeding.

Treatments may range from a caslicks procedure and medication to ensure clearance of fluid from the uterus to uterine culture and cytology and infusion of medication into the uterus over a number of days.

Examining mares early in the breeding season, identifying reproductive problems and planning treatment and breeding management will reduce delays and cost in getting your mare pregnant.