



# BOWRAL VETERINARY HOSPITAL

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## **INTRODUCTION TO BREEDING SERVICES**

Bowral Veterinary Hospital offers a variety of breeding management services. One of our veterinary surgeons is always available to discuss your individual needs and help you to choose the optimal method of insemination for your bitch.

### **GENERAL INFORMATION ON THE OVARIAN CYCLE**

Most bitches cycle every 6-7 months. Individual variations occur, for example some bitches regularly come into season every 4 months and others every 10 months. In general, the interval between seasons needs to be at least 4 months, or the bitch will most likely be infertile.

Stage one of the cycle is called proestrus, when vaginal swelling and bleeding occurs. This stage can last as many as 25 days or as few as 2-3 days. The average time is 6-11 days.

The next stage is estrus, or standing heat, with an average time of 5-9 days. This is when the bitch will generally allow mating and is the fertile time of her season. Again, individual variations often occur, with some bitches having an extremely short standing heat of 1-2 days, and others may accept mating for up to 18-20 days.

Diestrus begins with the cessation of standing heat and lasts on average 50-60 days.

All of these parts of the cycle are characterized by changing hormone [progesterone and oestrogen] levels, changes in behaviour and reproductive tract appearance.

Due to the tremendous individual variation seen, it is important to regularly check progesterone levels, starting from early proestrus, to help plan breeding timing. In many cases the performance of regular vaginoscopy can help to determine the fertile period with greater accuracy.



## **INSEMINATION TECHNIQUES**

### **1) Vaginal Insemination**

Vaginal insemination involves depositing the semen directly into the posterior vagina of the bitch. This is a useful method if for instance the bitch will not allow mating, or if the dog is inexperienced. If the dog lives an inconvenient distance away, semen can be collected from him, chilled in a special nutrient medium and inseminated in this way.

### **2) Trans-Cervical Insemination**

This procedure involves the use of a specialized fibre optic scope which is passed into the vagina up to the level of the cervix. A catheter is then passed through the cervix into the uterus, thus enabling the semen to be deposited directly into the uterus. Frozen, fresh or chilled semen can be used with this method. Benefits include increased numbers of live sperm and increased life span of sperm within the uterus compared to semen deposited within the vagina. Also, no anaesthetic or surgery is required which means that multiple inseminations may be performed within the one heat. There are various situations where this technique will be recommended: contact one of our veterinary surgeons for advice.

### **3) Surgical Insemination**

There are some situations where it is advisable to perform surgical insemination. The bitch is anaesthetized and a small incision is made into her abdomen. A catheter is placed directly into the uterus and the semen is inserted.

This method is generally preferred when the semen to be used is of poor quality, such as some frozen semen, or where there are anatomical problems with the bitch which make vaginal insemination or natural mating difficult or in some cases impossible. Again, our veterinary surgeons can advise on when this method is most appropriate.

Each of these methods has different indications, advantages and disadvantages.

Our aim is to help you to decide the best breeding method for your valuable bitch, so feel free to call us to discuss your individual needs.