

Canine reproduction

The canine oestrous cycle

The canine reproductive (oestrous) cycle is quite unique compared to other species. Dogs are in season (on heat) every 8 months on average, however this varies greatly between individuals. This 'in season' period lasts for around 3 weeks on average and consists of two components; pro oestrus and oestrus.

Pro-oestrus is the stage where you will begin to notice changes in the bitch including:

- Bloody vaginal discharge
- Vulval swelling
- Interest from the male but the female is not interested

Oestrus is where you may notice

- Vaginal discharge becoming less bloody
- The vulva becomes floppy
- The female will become interested in the male

It is the oestrus period where dogs are fertile and ready to mate during this time. The fertile period lasts only about 4 days and hence it is critical to correctly time natural mating or artificial insemination.

How can we predict the fertile period?

In cases where the bitch and dog are in close contact during the entire 3-week heat, it is less critical to determine when the fertile period occurs. However, if natural mating is restricted or artificial insemination is utilised, it is important to be able to predict this 4-day breeding window.

This can be achieved through in house techniques outlined below, most effective when used in combination.

Progesterone assays

Progesterone is a hormone released from the ovaries that starts to increase 2-3 days prior to ovulation. By tracking progesterone levels through a simple in house blood test, we can predict when the fertile period will begin and hence the most appropriate timing for insemination. It is important to monitor *changes* in progesterone and hence it is often necessary to take multiple blood samples over several days to ensure we don't miss her fertile window.

Vaginal cytology

The cells of the canine reproductive tract also change significantly according to the stage of the bitch's cycle. Vaginal smears can be prepared and examined in house to assess the progression of the oestrous cycle.

Artificial insemination (AI)

There are a number of options available for insemination including fresh, chilled and frozen semen. Currently at the Wangaratta Vet Clinic, we offer fresh semen collection, assessment and insemination. This can be used in cases where natural mating is unable to occur. As we collect and inseminate immediately, it does require both your bitch and dog to visit us together. In the future we hope to expand out AI services to include chilled and frozen semen preservation and insemination.

For more information regarding our canine reproduction services, please contact the clinic on (03) 57214000.