

Post-oestrus

Duration: 1-2 days

Day 1 (insemination) and 2 of cycle

Behaviour:

Post-oestrus (metoestrus) is not a clearly defined phase. It runs from when the animal no longer allows itself to be mounted until the visible external and internal symptoms of heat begin to subside. This means that, in post-oestrus, an animal which was in heat becomes calm again and no longer stands still when other cows attempt to mount it.

The swelling of the vulva subsides. Some blood may be observed coming from the vagina. This is called metoestral bleeding. The blood comes from the uterus, which had an increased blood supply during oestrus.

Because ovulation takes place around 12 hours after the main phase of oestrus (positive standing reflex, mounting at the head, clear stretchy vaginal mucus), late in the main phase of oestrus and early in post-oestrus is the ideal time to inseminate. The egg is capable of being fertilised for around 12 to 20 hours. This is day 1.

Ovary:

At the start of post-oestrus, the follicle bursts. The egg is collected by the funnel-shaped end of the oviduct. After insemination, the sperms also migrate via the uterus to the oviducts, where they encounter and fertilise the egg. Within 4 to 7 days, the fertilised egg (zygote) passes through the oviduct into the uterus, where it embeds in the mucous membranes (endometrium).

Uterus and vagina:

The muscles of the uterus relax and the cervix slowly closes again. The vaginal mucosae are less moist. The swelling of the vulva subsides. Some blood may be observed coming from the vagina. This is called metoestral bleeding. The blood comes from small blood vessels (capillaries) in the uterine musculature which were torn by the strong contraction (capillary bleeding). Bleeding is a useful indicator and can be recorded on the oestrus calendar (bleeding minus 2 days = oestrus).

Hormones:

After ovulation, luteinising hormone (LH) causes the follicle wall to convert into yellow body tissue. The yellow body (corpus luteum) grows and produces the pregnancy hormone (progesterone) after around 6 days. The level of oestrus hormone (oestrogen) drops again.