

2-6 Heat detection

AIM: Accurate and thorough detection of cows on heat - essential for the successful use of artificial breeding.

The time when a cow is on heat (in oestrus) is defined as the period during which a cow will stand to be ridden by her herd mates or a bull. It occurs every 18-24 days in non-pregnant cows and lasts on average 14-15 hours. This time can vary from 2-30 hours.

Symptoms

Cows coming into heat (duration 6-10 hours):

- Will not stand to be ridden
- Smell other cows
- Attempt to ride other cows
- Display a moist, red, and slightly swollen vulva
- Are restless and bellow

Cows in heat (duration 2-30 hours - average 15 hours):

- *Stand to be ridden* - hair and skin rubbed of crest of tail
- Are nervous, excitable, and restless
- May ride other cows
- May stand with back arched and tail in air
- Spend less time than usual grazing
- Display moist, red vulva
- Clear mucus discharge from vulva
- May hold milk
- Frequently change from their usual order coming into the shed - often lead the herd from the paddock or lag behind

Cows after heat:

- Will not stand to be ridden
- Smell other cows
- Clear mucus discharge from vulva

Detection

No substitute for observation:

- Between milkings (about 2 hours after the milking is over - this is the most important time; and at first light in the morning)
- Before and after milkings in the paddock
- In the race before milking starts

Insemination

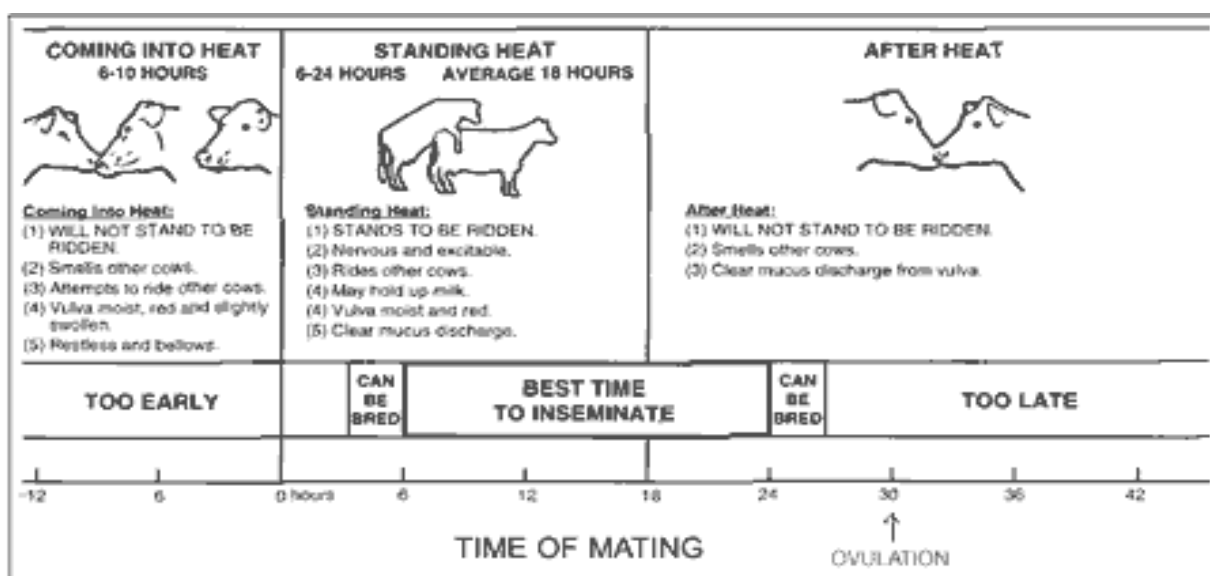
Cows should be inseminated at the first opportunity after they have been seen in standing heat. Cows seen in heat at the evening milking should be inseminated the following morning. Cows seen in heat at the morning milking should be inseminated that morning.

There is no advantage in inseminating on a particular farm more than once per day.

When to inseminate cows

Key points

- Cows are in standing heat for 18 hours on average (range 6 - 24 hours)
- Ovulation occurs 14 hours on average AFTER the end of standing heat
- Good quality semen has an effective life of about 28 hours in the reproductive tract of the cow
- The ovum remains fertile for probably not more than 6 hours



Practical rules

- Cows first seen in season at the evening milking should be inseminated the following day
- Cows first seen in season at the morning milking should be inseminated that day
- Cows that are just starting to stand but have been in season for at least 3 hours should be inseminated the following day