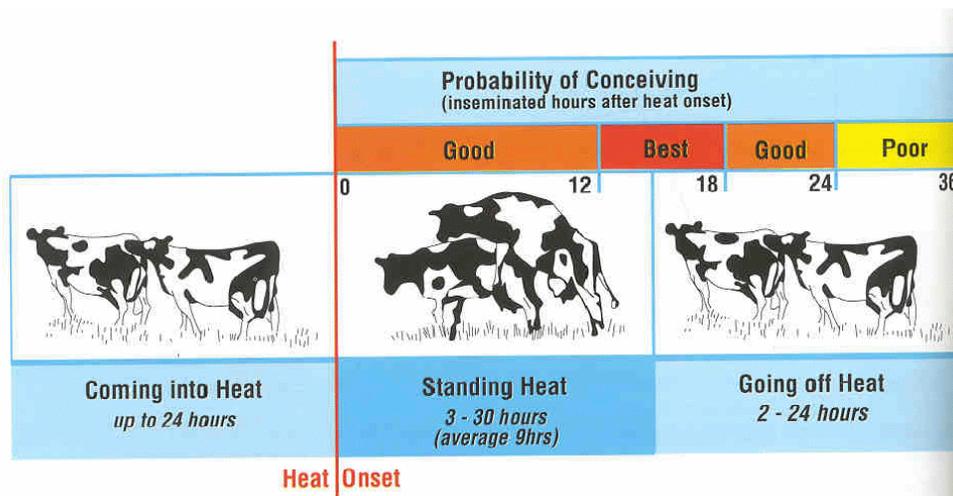


# WHEN TO BREED YOUR COWS

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## SIGNS THAT A COW IS IN HEAT AND SHOULD BE BRED

- A cow in heat looks agitated or interested in the bull or looks at you “friendly”
- If multiple cows are in a herd, a cow in heat is standing with other sexually active cows or on its own
- A cow in heat will be observed mounting other cattle, and "standing" to be mounted (sign of true heat)
- A cow in heat sometimes shows a decline in milk yield or will not let down her milk.
- A cow in heat usually has mucous discharge from her vulva and rub marks on the tail head and pin bones, from other cows rubbing her (this can be detected easier when tail paint/chalk is rubbed off)



## TIMING OF INSEMINATION

Ideally, breeding is late in the heat (12 to 18 hrs after the onset of standing heat). Cows can be repeat inseminated if still in standing heat the next morning

If a cow is in heat **late** in the day, breed her the **next day**.  
If a cow is in heat **early** in the day, breed her **late that day**.

## **STEPS TO FOLLOW TO IMPROVE REPRODUCTION IN DAIRY COWS**

- Keep good records of dates and reproductive events for each cow (calvings, heats, breedings, pregnancy test result, abortions, abnormal events (eg. pus, mucus or blood on vulva or tail)).
- Watch and record all heats to determine patterns and when to expect heats. If you have a record of a previous heat (mucous, blood), you have an idea of when to look for heat signs (on average, heats occur every 21 days, but can be 18 to 24 days later).
- If abnormal discharges are coming from the uterus (placenta, pus), seek veterinary treatment.
- At 70 to 90 days post-calving, begin breeding on observed heats.
- If no heats are seen, seek veterinary examination and treatment.
- If a cow is bred, seek veterinary examination for pregnancy diagnosis at 45 days post-breeding.
- Ensure good nutrition from the month prior to calving until positive pregnancy diagnosis
- If a cow aborts, observe for heats and abnormal discharge and rebreed if in heat after 25 days
- Two medicines can be used to help bring a cow into heat, PG and GnRH. Your vet can instruct you on how to use them best for your cows, depending on what is found in each cow.
- Use natural breeding by a bull (multiple breedings for the heat period) for cows that continue to not become pregnant using AI .

## **WHY SHOULD YOU TRY TO IMPROVE REPRODUCTION?**

1. Healthy cows produce the most milk around  60 days after calving, and after that, continue to reduce in milk production, no matter what you do. This is how God made them because a calf relies less on milk after this and more on grass and grain. More days with good milk production means more money for the owner. Therefore, most dairy farmers try to make sure that their cows calve for the first time at 24 to 28 months and have a calf every 12 to 14 months.
2. Based on the information obtained from surveys of dairy farms in Mukurwe-ini in February 2004, there is a need for improving reproduction. The average interval between calvings was over 17 months. Some cows were milking for more than two years without having another calf. Average age at first calving was also quite old, at 33 months, meaning that the heifers were consuming many resources for nearly three years before they started producing any milk and making any money for the farmer.

3. With a pregnancy taking about 9 months, it is important to breed cows starting 3 months after calving. A cow is more likely to become pregnant if she is starting to gain weight after calving, and less likely to become pregnant if she is too thin or fat. At 3 months, cows are eating to their maximum potential and they are no longer at peak milk production so they should be starting to gain weight again.
4. Breed heifers starting at 16 months (but only if heifers are big enough to breed to avoid calving problems (250kg) - if not, you need to improve nutrition to help the calf grow faster).

#### **BREEDING OPTIONS: NATURAL INSEMINATION VERSUS ARTIFICIAL INSEMINATION**

The main advantage of artificial insemination (AI) is that farmers obtain the outbreeding and good quality genetic gain for milk production without having to invest in purchasing bulls. The main disadvantage of AI is that the conception rate is somewhat lower due to the smaller volume of semen used with AI, and the necessity to be precisely accurate with respect to heat detection and timing of breeding. The advantages of AI usually outweigh the disadvantages and therefore, use good and frequent observation for accurate heat detection.

#### **REMEMBER, FOR BETTER FERTILITY IN COWS:**

- Good nutrition from one month before calving to pregnancy diagnosis.
- Good and frequent observation and records for accurate heat detection.
- Use veterinary exams to check problem cows and confirm pregnancy. Most cows that are of improved breeding will produce more milk if they are fed better. If cows give more milk then more profit can be made. To get high production from milk cows, many things must be considered.

#### **FOR MORE INFORMATION:**

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January 2005

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