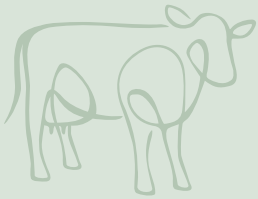




Best practice farms achieve excellent reproductive outcomes for dairy cows by selecting for positive reproductive traits, careful observation & monitoring at each stage of the cycle, timely and effective interventions when needed and promoting natural reproductive behaviours.



Why is this important?

The correct management of reproductive health is crucial to optimise reproductive performance and ensure the welfare of both cows and their calves. Reproductive problems are some of the main reasons for economic losses on the farm, resulting in slaughter and requirement for replacement stock.

Nutrition



Good practice



Best practice

Optimal nutrition and body condition are essential for good reproductive functioning.

See the  **Cow Nutrition factsheet** for more information

Environment



Good practice



Best practice

Optimal environment is essential for cow comfort and oestrus detection.

See the  **Cow Environment factsheet** for more information



Good practice

- ✓ Signs of oestrus should be monitored and recorded for all cows in the herd.
- ✓ To improve health and reproductive performance, strategic record keeping should be performed. This will include twin calving, assisted calving, stillborn calves, retained foetal membranes, vaginal discharge, lameness, mastitis, bovine viral diarrhoea, animals with unusual cycles and any other health problems.
- ✓ Cows experiencing the effects of disease, pain or stress are less likely to conceive, carry a healthy pregnancy to term, calve naturally or provide adequate care for their calves. To optimise reproductive performance any underlying health problems must be addressed first. This will include conditions relating to the reproductive tract (such as vaginal discharges) but also other body systems (such as lameness).
- ✓ In order to optimise fertility rates, correct semen management is crucial. Where bulls are used for natural mounting, their semen should be assessed at least once per year. Where artificial insemination is used, the semen should be correctly stored to maintain the cold chain and thawing should be at the indicated temperature for at least 30 seconds. Artificial insemination should be carried out by trained professionals.
- ✓ Bulls should be selected that have been shown to produce easy calving, optimal leg health and low mastitis, preferably using multi-trait selection. These programs include fertility and health traits, the goal of which is to increase both the herd's productivity and welfare.
- ✓ Farms should be proactive in avoiding mis-mating scenarios which compromise animal welfare and farm economics. Breeding is carefully planned, accurate fertility records kept (oestrus, conception, gestation, expected calving dates etc.), pregnancy diagnoses confirmed and the slaughtering of cows in the third trimester avoided.



Best practice

- ★ **Best practice** farms have a comprehensive reproductive and health plan developed in collaboration with veterinary and allied professional advisors. Criteria for consideration includes the number of cows requiring assisted calving, incidence of post-calving complications (e.g. retained placenta or uterine infections), incidence of last trimester abortions. This plan should be reviewed and updated each year based on farm data from the previous 12 month period.
- ★ **Best practice** farms carry out diagnostic tests (e.g. ultrasound) and record data on the expected date calving for each cow. This allows grouping, food adjustment and ensures pregnant animals are not slaughtered in their third trimester.
- ★ **Best practice** farms use strategic planning to avoid lack of genetic variation (inbreeding) due to artificial insemination e.g. by using semen from different bulls.
- ★ **Best practice** farms follow veterinary advice to vaccinate breeding cows for the most common pathogens that affect fertility, mortality and production losses in compliance with the national legal requirements.
- ★ **Best practice** farms consider progesterone or pregnancy associated glycoprotein (PAG) testing of milk samples to improve oestrus and pregnancy detection. This reduces the frequency of more invasive and stressful diagnostic tests such as rectal palpation and ultrasound.



Good practice

- ✓ Cows should be managed to optimise easy observation of oestrus behaviours (clear mucous discharges, red swollen vulva, mounting other cows, agitation and dirty flanks) and records kept to identify those expected to be in heat. Moving animals may make oestrus behaviours easier to observe. 21 day records should be available for all cycling cows.
- ✓ Staff with responsibilities for heat detection and insemination should be trained to perform these tasks.

See the  **Cow Behaviour and Human-Animal interactions factsheet** for more information



Best practice

- ★ **Best practice** farms may use automated activity monitoring systems (i.e. precision livestock farming) to improve reproductive performance.

See the  **Cow Behaviour and Human-Animal interactions factsheet** for more information



Summary

Reproductive problems result in significant economic loss on farm, resulting in slaughter and requirement for replacement stock. Managing reproductive health to optimise both performance and the welfare of the cows makes financial sense and protects the welfare of the animals involved.



Farm

Optimised reproductive care for cows results in better performance and the associated financial benefits. Investment in housing and new technologies requires initial expenditure but can ultimately reduce workload and improve efficiency and performance on the farm.



Cows

Good reproductive health relies on good welfare in cows. This is best achieved by encouraging expression of a range of natural behaviours, feeding a balanced diet in the appropriate quantity and ensuring adequate prophylactic and responsive healthcare.



Handler

Appropriate training, provision of expert advice and use of technology to augment and support the day to day care of the cows, will assist in making animal care safer, more efficient and enjoyable for staff on the farm.

Take pride in all of your farm's good and best practices towards animal welfare!

Additional resources



Care4Dairy.eu