GrazyDaiSy – Practice Abstract

Nurse cow dairy system to promote calf health and welfare

Problem

The organic principles strongly encourage more natural rearing conditions for dairy cows, including access to outdoors and young-adult contact, and this is also what citizens expect.

Solution

Implementing calf-nurse cow rearing systems. Nurse cows are coming from the dairy herd, and dedicated to rear 2-3 calves. Calves-nurse cows herd is on pasture during a long grazing period.

Impact

Improve calves' welfare and health
Improve farmer's working conditions: less arduous tasks, and more pleasure
Economically efficient for autonomous grazing system: no investment, little or no feed purchase

Applicability box

Theme

Grazy dairy system, animal welfare

Keywords

Calf rearing, nurse cow, calf-cow contact

Geographical coverage

Temperate climate region

Application time

Whole production cycle

Required time

Additional workload for fostering monitoring, but sparing of daily care time

Period of impact

Calves from birth until 9 months of age

Equipment

Grazing area, individual calving pen

Practical recommendation

The rearing of calves involves several successive phases (see figure 1 below):

1. **Dam-calf contact**: after birth, calves can stay with their mother from 1 to 8 days
2. **Optional phase of artificial milk feeding**: lasting from 1 to 2 weeks
3. **Fostering phase**: 2 or 3 calves are put together in a small fostering pen with a nurse cow. After a couple of days, all nurse cows and calves are gathered in a single herd. Fostering phase needs close monitoring from farmer, until adoption succeeded.
4. **Grazing phase**: Herd turn out on pasture as soon as the weather allow. Housing occurs during the autumn, according to soil and climate conditions.
5. **Weaning and separation phase**: they can be done simultaneously or separately, around the time of housing. Calves are between 4 and 10 months of age, depending the calving period and grazing system implemented on the farm. Separation has to be done gradually to minimize calves and nurse cows' stress.

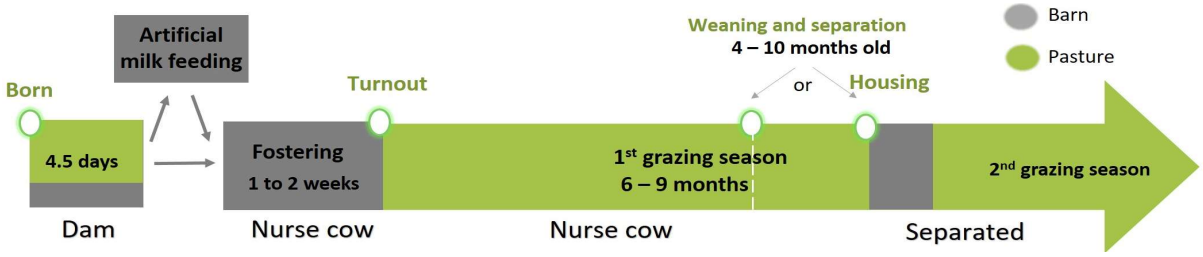

Figure 1: Time line of the nurse cow rearing system.

This system is easier to manage when there are spring grouped calvings: calves are at the same age, and can go on pasture at 1 month until 8 to 10 months of age (depending on region climate). Moreover, benefits on calves' health are higher, especially for parasite diseases, when certain practices are implemented:

- **Neonate diarrhoea and *Cryptosporidium infection* (during first days of life)**: less risks when (i) no artificial milk feeding phase; (ii) separation of diarrheic calves and (ii) early turn out on pasture,
- **Gastrointestinal nematodes infection (on pasture)**: seasonal calving from February to April allowed a long and protective first grazing season with nurse cows and the development of immunity at the end of this season.

Picture 1: Nurse cow with its calves on pasture

Picture 2: A fostering pen

Further information

Video

- Check the following video for further instructions (French with English subtitles): <https://www.youtube.com/watch?v=ErFTEYQd2LE&list=PLJGHaoiN0RENIdTNypZcnTz-Pqfw9DVLD>

Further readings

- CORE Organic Newsletters: https://projects.au.dk/coreorganiccofund/news-and-events/show/artikel/rearing-calves-with-adult-dairy-cows-advantages-and-constraints/
- Rearing calves with nurse cows: experiences of French organic dairy farmers : https://orgprints.org/id/eprint/34000/
- Suckling dairy calves/nurse cows system and risk of gastrointestinal nematodes infection during the first grazing season in organic farms : https://orgprints.org/id/eprint/42122/

About this practice abstract and GrazyDaiSy

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GrazyDaiSy website: https://projects.au.dk/coreorganiccofund/core-organic-cofund-projects/grazydaisy/

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