

State-of- the-Art Dam Rearing of Calves – a sector-wide assessment of scientific and practical knowledge on dam-rearing systems in The Netherlands

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Among society and farmers the practice of mother-bonded or fostered calf rearing is attracting growing interest. Farmers seek to extend the period in which dams or foster cows can spend time with a calf, providing both an opportunity to perform their natural (maternal) behaviour. This type of dairy farming requires knowledge of the natural behaviour of the animals, and needs an assessment of the essential aspects of, among others, animal husbandry, housing, feeding and human-animal interaction in relation to this natural behaviour, whilst still producing milk.

In the Netherlands around 45 dairy farmers keep cow and calf together ranging from six weeks up to six months of age. Their experience with these dam-rearing systems vary from a year to over 25 years in which each farmer has developed his own method. In the last ten years several surveys and on-farm research projects have been performed on these farms, providing for numerous experience based suggestions of how to implement dam-rearing systems and the necessary requirements for success on, among others, cow-calf bonding and debonding, herd dynamics, milk production, health and welfare of both cow and calf. These studies have been extended with a survey in 2017 in which globally available scientific knowledge and Dutch stakeholder opinions were inventoried.

An overview of the outcomes of these studies will be given with emphasis on the benefits that dam-rearing dairy farmers experience on their farm and in their herd. Wherever possible these experiences will be supported by findings reported in scientific literature. Special emphasis will be put on the state-of-the-art on how to manage dam and calf together the first days after calving regarding housing, feeding, health and welfare, including knowledge gaps that farmers experience. These knowledge gaps will lead to suggestions for future research.