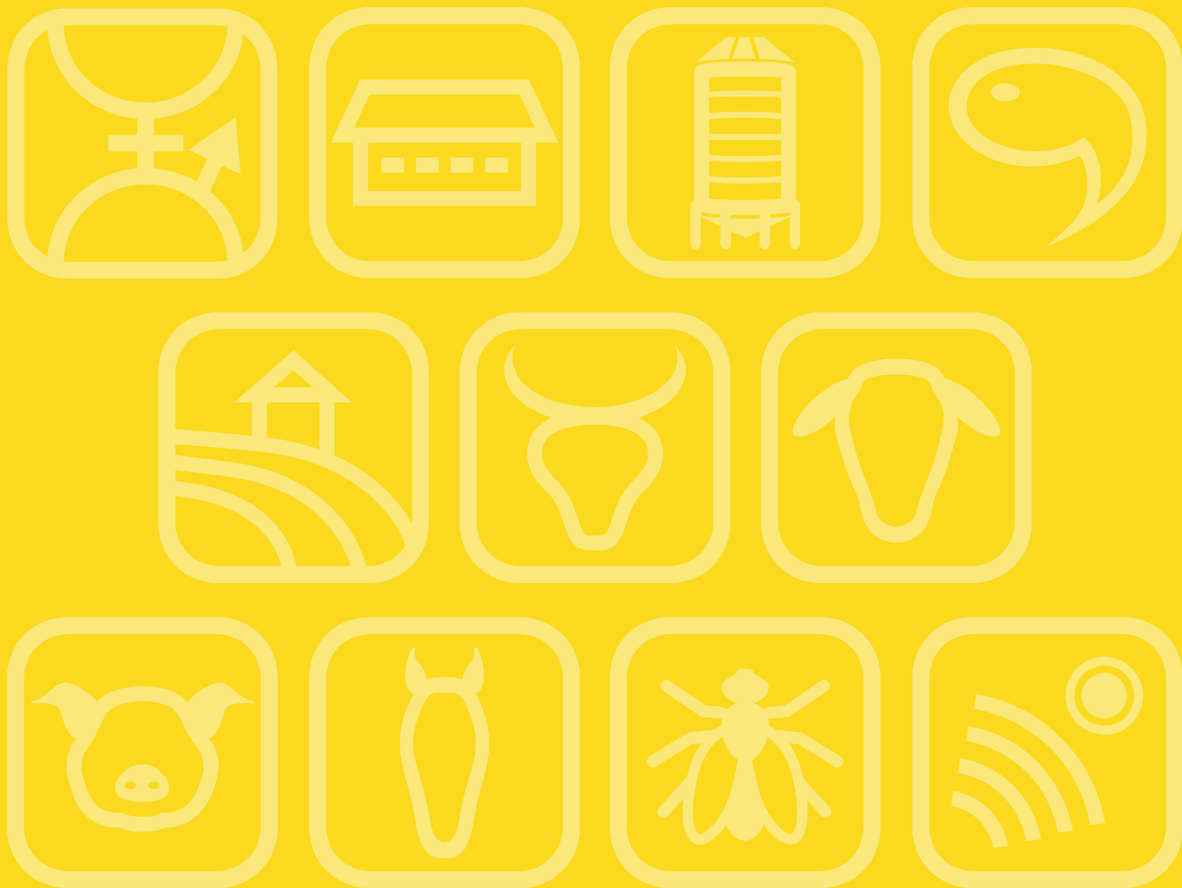


Book of Abstracts of the 74th Annual Meeting of the European Federation of Animal Science



Book of abstracts No. 29 (2023)
Lyon, France
26 August – 1 September, 2023

Towards a socially sustainable dairy sector with cow-calf contact systems*H.W. Neave, M. Bertelsen, E.H. Jensen and M.B. Jensen**Aarhus University, Department of Animal and Veterinary Science, Blichers Alle 20, 8830 Tjele, Denmark; heather.neave@anivet.au.dk*

The intensification of the dairy sector has led to social sustainability challenges. To address concerns around animal welfare and societal values, alternative systems that provide cow-calf contact have been proposed. Such systems have been shown to increase work satisfaction for farmers, which also relates to social sustainability. However, cow-calf contact systems also present challenges with reduced saleable milk and high animal stress during later separation. Some proposed solutions include reducing daily contact duration and novel weaning methods. We conducted two studies (48 and 56 cow-calf pairs each) providing either full-time (23 h/d) or part-time (10 h/d during daytime) cow-calf contact for 8 wk. We used three methods to wean off milk and separate calves from their dams (using a fence-line): two-step (milk and dam removal separated by a week) or gradual (time with the dam reduced to 50% then 25%, over 2 wk), compared to simultaneous (milk and dam removal occurred together). Our findings suggest that cow and calf behaviour in part-time contact systems also foster strong bonds between cows and calves. However, calves become hungry during daily separation periods, and the vocal response to separation is not reduced, compared to full-time contact systems. A two-step (vs simultaneous) weaning process reduced behavioural and vocal responses of calves to separation, but both cows and calves were similarly vocal during gradual weaning (vs simultaneous). Thus, dividing the weaning and separation process into two steps may be one strategy to reduce the negative behavioural responses of calves at weaning. Further scientific exploration is needed to address welfare, economic and staff labour concerns regarding cow-calf contact systems. In doing so, there can be transformative, proactive development of alternative management systems that support social sustainability and thereby a more resilient dairy sector.