

Lying behaviour of primi- and multiparous cows in early lactation

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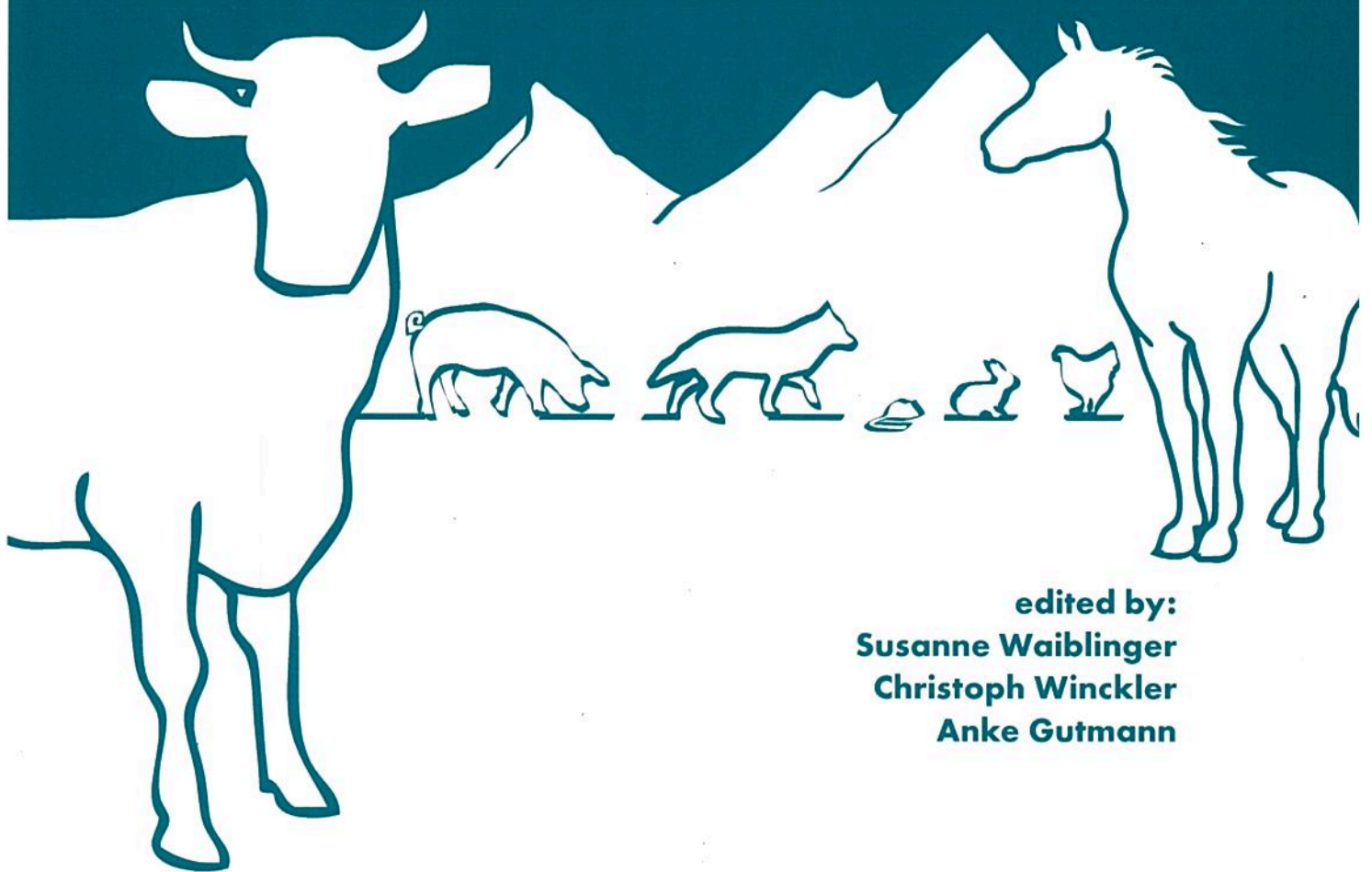
While lying down is an important aspect of recovery after calving, primiparous cows may have problems to do so due to their usually lower social rank. Thus, our aim was to describe the lying behaviour of primiparous (PP) and multiparous (MP) cows during their first three weeks in the milking herd after calving. Data were collected in a 52-cow post-calving group on a 260-cow dairy farm. Stocking density was 0.9-1.2 cows per cubicle. Lying duration and number of bouts were recorded with data loggers attached to a hind leg. The influence of parity and day spent in group (DIG) on lying behaviour was analysed with linear mixed models for repeated observations. N ranged from 50 cows on DIG 1 (20 PP, 30 MP) to 40 cows on DIG 21 (16 PP, 24 MP). Daily lying time increased with DIG for both PP and MP cows. While MP cows lay down longer than PP cows after entering the group (DIG 1: 10.7 vs. 8.4 h/24 h; $P < 0.05$), increase in lying time was higher in PP cows (MP lying time at DIG 7, 14 and 21: 11.0, 11.3 and 11.6 h/24 h; PP: 8.9, 9.5 and 11.1 h/24 h; $P < 0.05$). Number of lying bouts increased from 9.9 (SD 3.5) on DIG 1 to 12.1 bouts per 24 h (SD 6.3) on DIG 21. Parity had no significant effect on daily number of lying bouts, yet this might be due to high variation in PP cow data and will be revised after analysis of the full dataset. In sum, dairy cow lying behaviour changes during the first three weeks after calving. Multiparous cows lie down longer than primiparous cows throughout this period, while primiparous cows are increasing their daily lying time. This indicates that primiparous cows need longer to adapt to early lactation surroundings than multiparous cows.

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