



Effects of Wet Bedding on Lying Behavior of Dairy Cows

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Background: A well bedded surface is a key factor in promoting cow comfort. Bedding becomes wet with use, but little is known about the effects of wet bedding on lying times in dairy cows. Wet bedding may be especially problematic in winter when temperatures are cold.

Aims: To determine the effects of wet bedding (expressed as % DM) on the lying times of dairy cows tested in winter and summer months.

Methodology:

- Five DM levels of sawdust bedding (Fig. 1) applied to 5 groups of 3 dry Holstein cows in a 5×5 Latin square design for 4 d each.
- This design was tested once in the summer (August – September) and again in the winter (January – February).
- We recorded: lying in the stall, standing in the alley, and feeding.

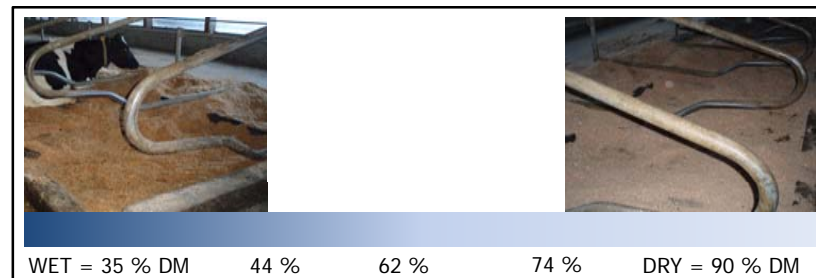
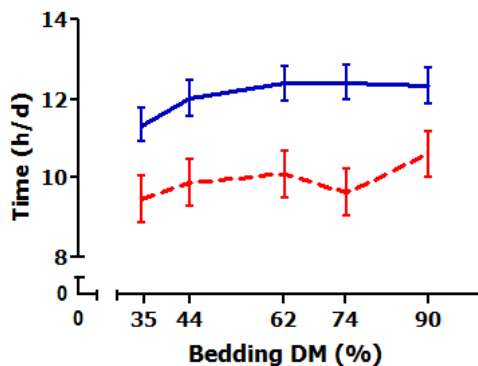


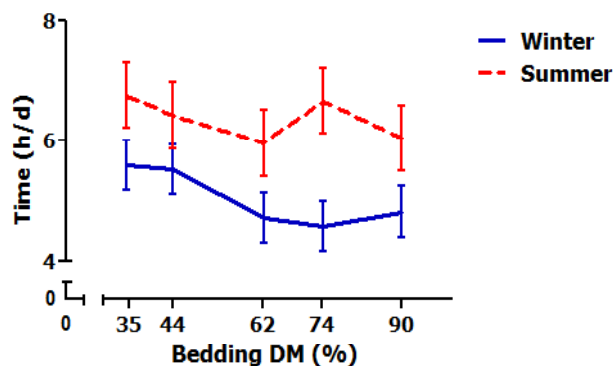
Figure 1. Five bedding DM levels

Lying in Stall



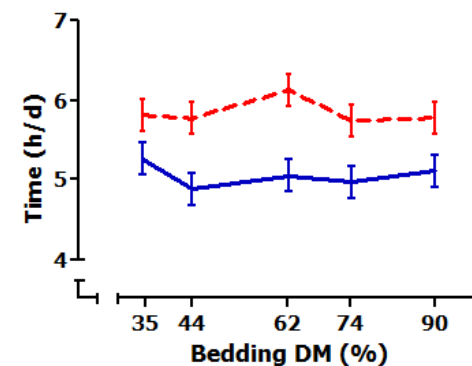
Cows spent less time lying down when bedding in the stall was wet (i.e. as bedding DM declined; $P = 0.011$). Cows also spent less time lying down in the summer ($P < 0.001$).

Standing in Alley



Cows spent more time standing in the alley when bedding in the stall was wet (i.e. as bedding DM declined; $P = 0.015$). Cows also spent less time standing in the alley in the winter ($P < 0.015$).

Feeding



Time cows spent feeding did not vary with bedding DM. However, cows spent less time feeding in the winter ($P < 0.001$).

- Wet bedding decreases lying time and increases the amount of time cows spend standing in the alley
- Cows spent less time lying down in the summer, perhaps in response to increased temperature and day length