



# Stall Surface Affects Hock Lesions

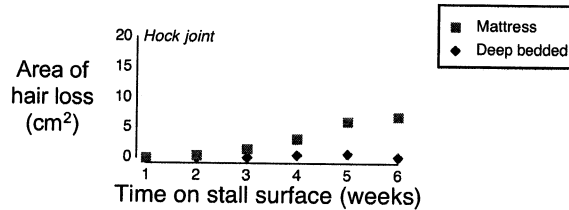
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## Introduction

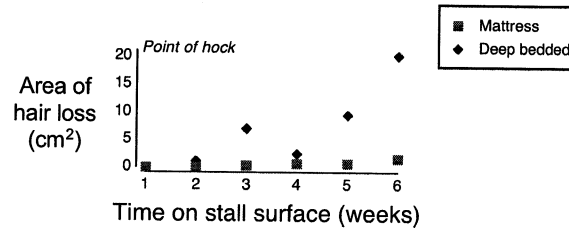
Mattresses are popular surfaces for free stalls, but are known to cause hock injuries. In two experiments, each lasting six weeks, we assessed the effects of free-stall surface on the development of hock lesions. In the first, we examined how lesions develop on cows housed in stalls with either deep-bedded sand or mattresses. In the second experiment, we tested if recessing mattresses below the curb reduces lesions.

## Lesion development in stalls with deep-bedded sand and mattresses

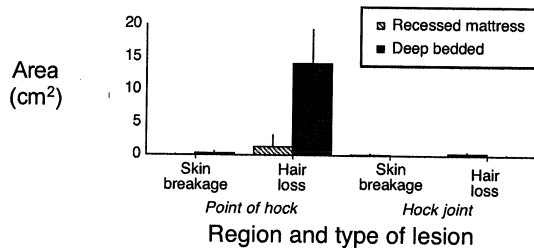
In the first experiment, we compared cows housed on mattresses and deep-bedded sand. Lesions developed rapidly on the hock joint when cows used stalls with mattresses.



However, cows using deep-bedded stalls were more likely to develop lesions on the point of the hock. The results shown are for hair loss, but a similar pattern was observed for area of skin breakage.



## Recessed mattresses versus deep-bedded sand



In the second experiment, we installed mattresses several centimeters below the curb to allow the use of more sand bedding. We compared these recessed mattresses with deep-bedded sand stalls. Cows using the recessed mattresses did not develop lesions on the hock joint. Also, these cows had fewer lesions on the point of the hock than cows using deep-bedded sand.

## Summary

Lesions on the point of the hock are most common when dairy cattle are housed in deep-bedded stalls, perhaps because of contact with the curb.



Lesions on the hock joint are most common when dairy cattle are housed in stalls with mattresses. Deep-bedded systems and recessed mattresses reduce these injuries.

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