

## ABSTRACT

Crowding of cows in the cow's loose housing barn is poorly understood .the causes might be related to the microclimate in the stall. The effect of crowding is an irregular wetting of the bedding that can result in an increased risk of mastitis and a higher level of somatic cell counts.

The aim of this study is to find if small climatic changes inside the barn affect the way that cows spread themselves in the barn.

The study will be done by using six small weather-monitoring systems that will be positioned in different points in the stall. The monitors will collect data over a period of time and the correlation between the cow's behavior and the climate data will be analyzed.

In a preliminary measurement that was done in the fall of 2008 we found no climatic (temp. and humidity) differences in the barn and an even spreading of the cows throughout the barn, our plan for 2009 is to do a continuant data collection in seasons of an un stable whether when we usually see the crowding behavior, we will try to establish a correlation between the way that cows behave and small microclimate differences in the barn.