

# Comparing the use of “straw mattresses” to “rubber mats with straw pellets” in paddock boxes

## RESEARCH

**original situation:**  
conventional long straw

**new flooring system:**  
rubber mat BELMONDO® Trend + straw pellets

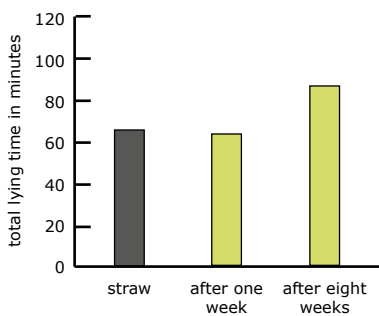


- ▶ To what extent do horses change their lying behaviour because of the flooring system?
- ▶ How much deformation and littering height do both systems have?

## RESULTS

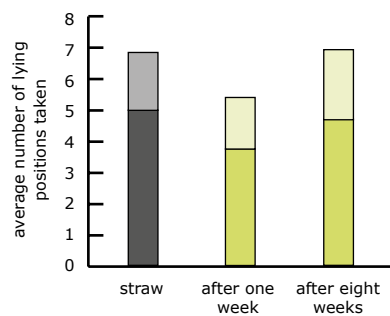
### ▶ Total lying time at night after installing BELMONDO® Trend

■ straw ■ rubber



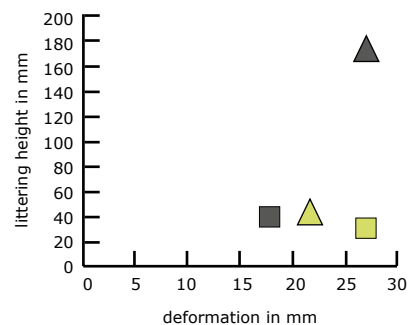
### ▶ Lying positions during the test

■ lateral position on straw ■ lateral position on rubber  
■ prone position on straw ■ prone position on rubber



### ▶ Deformation and littering height

■ straw before manure removal ■ rubber mat before manure removal  
▲ straw freshly littered ▲ rubber mat freshly littered



At the end of the test the horses lie slightly **longer on rubber mats with straw pellets than on straw** and display **confident lying behaviour**

**Rubber mat + straw pellets: consistently high deformation**

- Horses react sensitively to new floors and substrates
- After only a brief period they resume their usual lying positions → confident lying behaviour
- Littering height does not determine the deformability of the flooring system
- In nature, horses select their lying places more for their dryness and less for their softness. Heat insulation and slip resistance are also important factors.

Source: Project report Prof. Dr. B. Benz et al. (2014): Comparing the use of “straw mattresses” to “rubber mats with straw pellets” on the experimental farm Jungborn