

HOOF EVALUATION OF MILKING COWS KEPT UNDER DIFFERENT HOUSING CONDITIONS

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Summary. The diagnosis of hoof diseases in dairy cows is most frequently made during the stable period, when cows are kept free or are tied up. It is supposed that housing condition influences hoof disorders in dairy cows.

The aim of this work was to evaluate and compare hoof condition in dairy cows during the stable period under different housing conditions.

The results of our study showed differences in occurrence of hoof disorders and traumatical limb injuries between cows kept in tie-up stables, free range without bedding and free range on deep litter. Among cows that were tied, 12,3 % were diagnosed with hoof diseases and 13 % showed traumatical limb injuries. In free range stables without bedding material these prevalences were 10,3% and 6,3 %, respectively. Cows kept on deep bedding in boxes showed a 9,3 % prevalence of hoof diseases, while traumatical limb injuries were not detected.

The results of measurement of hoof form and X-ray data showed differences between cows which were kept on deep bedding or in boxes and cows which were tied up.

The evaluation form and measurement of hoofs of cows kept free in boxes showed, that forelimb hoofs are of right line ($55,7 \pm 1,04^\circ$), measurements of osteophytes ($1,40 \pm 0,25$), the hoofs of cows kept free on deep bedding are acute ($45,3 \pm 0,55^\circ$), middle values of binded cows ($50,10 \pm 0,50^\circ$), can be referred like well formed. The statistical difference is significant ($p < 0,001$). Don't understand a word of this!!

During the stable period important factors to avoid lameness and other hoof disorders are persistent care of hoofs and manure tracks (nonslip manure tracks, effective manure removing technology).

Keywords: milking cows, housing, limb diseases, hoof condition.