



Group housing exerts a positive effect on the behaviour of young horses

Søndergaard, E., Christensen, J.W. Danish Institute of Agricultural Sciences,
Research Centre Foulum, P.O. Box 50, DK-8830 Tjele, Denmark.

The full paper of this abstract will be published in an EAAP special issue on horse behaviour and welfare in 2005.

The social environment of young horses is often a matter of being raised alone or with young horses of the same age, which is far from the natural life of young horses where they live in family groups until the age of 2 to 3 years and then in either bachelor groups or mixed sex juvenile groups. The social environment constitutes an important part of the housing environment of young horses but other parts of the housing such as spacing or access to exercise have attracted more focus in scientific studies. This paper gives an overview of the first large study aimed at investigating specific effects of two different social environments on the development of young horses. Forty Danish Warmblood colts were used in two replicates of 20 horses from weaning at an age of 4.3 ($\pm$ 0.5) and 5.0 ($\pm$ 0.5) months of age, respectively. In each replicate, 8 horses were housed singly, and 12 horses were housed in 4 groups of 3 horses during the housing period from September to May. The horses had daily access to paddocks, either singly (singly stabled) or in groups (group stabled). The summer period was spent on pasture in groups. Half of the singly housed horses and half of the group-housed horses were handled for 10 minutes three times per week during each housing period, in total approx. 20 hours of handling. Handling involved leading, tying up, touching, lifting feet etc. Non-handled horses were only handled for monthly weightings, farrier and veterinary treatment.

Singly housed horses showed more interest in contacting humans and were more easily approached by humans in their home environment. Singly housed horses interacted more with a trainer during weekly training sessions than group housed horses. The interaction consisted mainly of non-aggressive biting, indicating that singly housed horses were motivated for physical interaction. However, singly housed horses completed fewer stages in the training program and they also bit and kicked more during training sessions than group housed horses.

Group housed horses exercised more in their paddocks compared to singly housed horses, and it is therefore very likely that group housed horses develop a better co-ordination of movements than singly housed horses. Likewise, observations on social behaviour during the summer season showed that previously group stabled stallions had a higher frequency of displacements and submissive behaviours but fewer direct aggressive interactions compared to previously singly housed stallions, implying that group housed stallions had a more well-developed social language. Although horses are social by nature their social skills still have to be refined and practised. The differences between the treatment groups imply that by housing young horses singly and thus not giving them the opportunity to practice their social skills they may be more prone to the risk of injuries when interacting with other horses as adults. The summer observations also showed that previously group housed colts frequently had a former group mate as their nearest neighbour whereas previously single housed colts did not associate more with their former box neighbours, when they were pastured in groups. This result indicates that physical contact may be necessary in order to establish bonds between animals, and that full physical contact is an important part of the social behaviour. Additionally, previously singly housed horses stayed closer together than group housed horses possibly indicating a higher level of social motivation.

The study concludes that group housing is essential for young horses in relation to their social behaviour and also beneficial in relation to their reactions in training situations.