



Horse husbandry and equine stereotypes

Invited Presentation

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Traditionally riding horses (*Equus caballus*) are kept in box stalls with varying durations of time outside in paddocks with or without grass. There is a trend, especially in Europe, to house horses in groups and in enriched environments. Whether these arrangements are healthier, either physically or behaviorally remains to be seen. The restrictive stall environment seems to predispose horses to stereotypic behaviors. The use to which the horse is put also influences the prevalence of stereotypic behavior. A higher percentage of horses used for dressage exhibit stereotypic behavior than horses used for jumping or endurance. This effect of dressage usage applies even in horses of the same breed housed under the same conditions. There are two types of equine stereotypes - locomotor and oral. The locomotor stereotypes include weaving, stall walking and pawing. Weaving is reduced by provision of visual contact with other horses via windows, mirrors, or even pictures of horses. Pawing can be a displacement behavior, when the horse is prevented from moving freely, an operantly conditioned behavior when food is anticipated, or a functional behavior, if the horse uses the holes dug to redistribute its weight.

Cribbing is the major oral stereotypy and is associated with eating sweet feed, especially in weanlings. Approximately 4% of US horses crib. There is a marked breed difference in prevalence; 13% of Thoroughbreds, but only 3% of Arabians crib. Whether or not cribbing is learned is still controversial. Although only 1% of horses exposed to a crib biting horse begin to crib, being stalled next to a cribber doubles the risk of that horse cribbing; however being stalled next to an aggressive horse increases the risk of cribbing five fold. Horses spend 20% of their time cribbing. Exercise does not reduce cribbing, but certain toys and diets do. Cribbing does not increase salivary production so it does not appear to be a functional behavior. When horses are prevented from cribbing they may have an increase in the stress hormone cortisol, may have

altered gastrointestinal activity, and are more stressed by food frustration than horses that can crib. Horses are very motivated to crib being willing to work as hard when operantly conditioned for the opportunity to crib as for food. they pull with a force of 30 kg with each crib bite.

Key words: stereotypic behavior, cribbing , horses, weaving, housing

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