Bachelor Thesis

Research Report

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Usage of forest by horses
pastured on grassland with woods

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**Summary**

The present research has been conducted to make a first step towards bringing the wildlife research on free roaming horses and the research on domesticated horses closer together. Housing systems for horses should be arranged in a way, so that the animals are least constrained in their natural development and behavior (Kownacki et al. 1978). Nevertheless least housing systems in Germany reflect the findings of wildlife research on how the horses interact with their environment and which environmental aspects are used by horses. Therefore this research aimed to figure out if and how horses do use a forest, when it is offered to them on their pasture.

Therefore 4 herds throughout Germany were observed, all pastured 24/7 on pastures with woodland of different type and size. In total 135 hours of direct observations were collected showing the behavior of the 36 horses. The behavior types which were recorded are feeding, resting, travelling and activity. Further the location of the horses was recorded during the 3 observation periods each day, revealing the fact how often the horses spent an observation period in the forest and how often they spent an observation period on the pasture. The data was only collected during daytime, in three periods over the day. Since this research is a Bachelor Thesis, there was a given timeframe from February until July.

The results of this research reveal, that all horses used the forest in between 20 and 38 % of the time observed and that most of this time was spent resting and feeding natural resources. Weather circumstances like temperature and sunshine or rainfall also had an influence on the choice for habitat of the researched horses. Irrespective of the size of the forest and the pastures no big browsing damages could be found in the forests. And regardless of their breed, gender or age all horses did make use of the forest and therefore this research affirms the claim that a forest on pastures should be allowed ((Gerken et al., 2008) also for private horse owners.

Due to the relatively small sample and the huge differences in between the groups and the research areas, there is a need to affirm these research results with further research about this topic. Nonetheless the indications are clear and it is most likely that further research will be able to affirm or even strengthen the present findings.