SUMMARY

Equine herd behaviour ("Liebenthaler Pferde") and motion scope in a natural environment considering chrono-biological aspects and climatic conditions

Although there is a great horse specific literature, there still is a big deficiency about the behaviour of horses, their capability of acclimatization and their adaptability to the environment. It is independent, whether they are wild horses or domesticated horses.

For the arrangement of a natural horse keeping it is very important to know about the being of horses.

In order to create the best possible relationship to the horses up to the development of their abilities, it is very important to know more about the art specific behavior of them, their feelings and their wishes, so that they have a better quality and comfort of life.

The aim of this work was to show the inside of the habits, day rhythms and the behaviours depending on weather seasons if a herd of horses, which should give new suggestions and greater knowledge in the whole seasons horse keeping on feedlots.

Therefore 100 horses in a herd were under observation for 1 year. Their habits in eating, resting, welfare and moving were observed even though the arrangement and the using of their living area in a natural environment of the Schorfheide in Germany.

The analysis of using the different capabilities of the area showed the specific behaviour connected with the climatic conditions. Telemetric dates from the memory system ETHOSYS were added.

The horses lived on an 80 acres field without being looked after and are used for landscape cultivation. Therefore the aspects of their needs and their wellbeing in the horses' natural environment should be shown and judged.

The eating and resting habits took up most of the 24 hours, but there was a continuously dynamic movement in the horses, which could be seen in the course of the year, month and day. Very clearly a 4 hour rhythm is found with the sunrise as the starting point.

This rhythm continuous through all seasons and starts in this work with the first eating period in the morning.

Although outside climatic influenced such as cold, heat, wetness and wind the Liebenthaler horses deviated only a bit from this continual day rhythm.

Little changes took place with extreme heat, when the horses had their biggest eating activity in the evening hours or with extreme cold, when the horses went to the protected areas to rest for saving energy.

The result of the telemetric measures about the activity of the horses confirm with the observation. The graph of the activity measure showed that in a year rhythm the high period of eating was in the sun rise and before sun down.

The analysis of the living areas showed that big heat affected the horses' rhythm less than the high insect pestering.

Wetness without wind had not bothered the horses, but rain combined with wind made them look for protected areas. Especially cold at night time made the horses go to wind protected areas and at sun rise they came back to the free areas.

It is more important for the horses to be protected against the wind, than to be protected against the wetness. It would be better to protect them from both.

