

# Activity patterns of musk ox (*Ovibos moschatus*) housed in different conditions.



By: Sophie Tunros  
Supervisor: Mats Amundin



## Background

The wild musk ox (*Ovibos moschatus*) in Scandinavian has a high level of inbreeding and by using metapopulation management, the genetic variation could increase. A direct reintroduction of captive musk ox to the wild population can cause problems. By improve the body condition, the animals' possibility to survive in a wild habitat can increase.

The aim of the study was to investigate the musk ox activity in relation to the size and shape of the enclosure, as well as if changing of feeding and watering places can increase the activity of the musk ox, and thereby improve their hoof status. These measures could lead to a better reintroduction of musk ox into an established wild population in the future.

## Material and Method

This study was performed at Musk ox centrum in Tännäs and at Kolmårdens Wildlife Park. The musk ox activities were registrated through a Tellus GPS-collar, and the hoof status were estimated by trimming before and after the study period. The feeding regime was changed in Kolmården Wildlife Park to increase the activity of the musk ox.



## Results

The animals in musk ox centrum in Tännäs were more active compared to the one in Kolmården. The hoof statuses in both places were insufficient. There are both negative and positive correlation between the activity and temperature, in the different housing conditions. There were also shown that the animals were moving close to the feeding area.

## Conclusion

The activity of the musk ox is affected both by the size of the enclosure and temperature. The hoof status can be improved in an environment with adapted substrate, as well as improving the condition of the animal. All this could prepare a captive musk ox for a reintroduction into an established wild population in the future.



Musk ox wool "quiviut"

