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BIOØKONOMI

Reindeer husbandry in a changing climate – knowledge gaps

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Commission (MFA)

State of the art and knowledge gaps regarding consequences of climate changes for reindeer husbandry

Methods

Literature reviews and interviews with reindeer herders

Reindeer pastures – knowledge gaps

- Mapping and monitoring reindeer pastures
 - Total grazing resources, local variations, long-time series
 - Remote sensing + field studies
- How different drivers and interactions of these affect quality of reindeer pastures – holistic view
- Climate-related overgrowth of shrubs and trees - effects on biodiversity?
- Grazing value potential in coastal areas
- Extent of climate-related diseases and poor body condition
 - Seen together with pasture quality, accessibility, grazing pressure, changes in husbandry practices a.s.o.



Supplementary feeding – knowledge gaps

- Quality and effects on the digestive system
 - Digestability, nutrient content, tastiness
 - Nutritional needs of female reindeer in late pregnancy?
- Will the ability to forage on natural resources weaken?
- Optimal feeding strategies and feeding systems
 - As little as possible
 - Optimal time for start-up
 - Feeding systems that safeguard the reindeer herder
- Effects of supplementary feeding on the environment
 - Seed dispersal, trample damages, erosion, manure
- Costs-benefits



In a greater view

- **The effects of climate change on reindeer husbandry are determined through a mixture of basic biological research, applied research, traditional knowledge/local knowledge and social science**
- **There must be a focus on a holistic approach to elucidate the effects and connections between different driving forces on reindeer pastures**
- **Large carnivores and land encroachments reinforce the negative consequences of climate changes because all three factors reduce the flexibility of choosing the best grazing grounds**

