The inventory of reindeer pastures in Kaamanen Research Station and in Muotkatunturi co-operative in northern Finland

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Abstract: A project was founded in April 1987 to develop new and easily repeated methods to evaluate vast reindeer pastures. The study area is located in Muotkatunturi co-operative in the Forest and the Fell Lapland vegetation zones. The pine forest limit runs trough the area. In Muotkatunturi co-operative the density of reindeer is average 4.8 reindeer/km^2. Comparison of reindeer pastures was made between Kaamanen research station (75 km^2), on average 150 reindeer, and its surroundings (124 km^2). The training areas (24) were selected by using the areal photographs and the topographic maps. Most of the training areas (17) were in the pasture of the research station. Tree stand and undervegetation was inventoried by 20 quadrats. In Kaamanen 7 sample areas were very dry sites, 11 dry sites, 5 subdry sites and 1 sample was almost bare mountain region. Eleven training areas were subalpine birch forests and 12 Scotch pine forests. In the training areas the older, mature stands (38%) and young thinning stands (17%) were dominated. Dwarf shrubs was dominated in field layer *(Empetrum nigrum* ssp., *Vaccinium myrtillus, V. vitis-idaea).* The bottom layer was dominated by mosses *(Dicranum* sp., *Polytrichum* sp.) and hornlichens and *Cladina stellaris, C. mitis,* and *C. rangiferina.*