ECONOMIC COMPARISON OF TWO METHODS OF SUPPLEMENTARY FEEDING IN FINNISH REINDEER MANAGEMENT.

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In the response of the decreasing amount of arboreal lichens (caused by extensive forest renovation) different kind of "artificial" winter feeding methods were developed during the 1970's in the southern half of the Finnish reindeer management area. The most common methods are (1) supplementary feeding with dry hay (maximally 50 kg per head a season) on natural ranges in mid and late winter, and (2) corral feeding, where the reindeer are fed in small yard-corrals with hay, green silage, lichen, molasses and commercial reindeer feeds for 3 - 5 months a winter.

A simulation model employing empirical data on feeding costs, reproductive rate, winter mortality, carcass weight and meat price was manipulated in order to compare the economy and herd performance in herds with supplementary and corral feeding.

In less productive but substantially cheaper supplementary feeding the profit per head ranged between 100 and 200 FM, whereas corral feeding appeared to be unprofitable in monetary terms.

Due to "overfeeding" the largest permitted number of reindeer is reached in more than one half of the herding associations. Then each owner is obligated to reduce his herd by the same percent. The actual numbers of the reindeer to be slaughtered are calculated from the reindeer catalogues of the previous year neglecting the fact that in supplementary feeding winter mortality is higher. The simulating model showed that even small differences in winter mortality will favour corralfed herds, which explains the rapid expansion of corral feeding during recent years.