Adaptations of barren-ground caribou to forest fires and snow

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Abstract: The movement patterns of the Beverly herd of barren-ground caribou (Rangifer tarandus groenlandicus) were monitored on its forested winter range from 1982 through 1988. Caribou distribution was noted in relation to forest age, the general pattern of burns, individual burns of various sizes and ages, and snow characteristics. Caribou did not remain long in forest stands younger than 50 years and they seemed to prefer to feed in forests older than 70 years to those 50-70 years since fire. The main concentrations of wintering caribou were in areas very lightly to moderately burned and were almost exclusive of areas highly burned in the last 50 years. Caribou showed no avoidance of burns of any size. When travelling from one area to another, they passed through burns on a few trails aligned about parallel to one another. The caribou did not remain in areas with snow deeper than 65-70 cm. Their winter movements appeared to be based in part on traditional responses to snow variations across their range.

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