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Forest Fires in Alaska Damage More Than Timber

The interior of Alaska does not have "timber to burn". The forest resources of this great region have suffered very severe and widespread damage from uncontrolled fires during the past half-century. Direct losses of timber, that will surely be needed as population increases, are only part of the injury and damage sustained. Concern is growing as to the effects of widespread fires on big game, fur bearers, erosion and slides along roads and railroads, diminishing streamflow, siltation of streams and on scenic and recreational values.

Preliminary results of a study of the ecological significance of fires in the Alaska interior show that, as a result of repeated fires, areas supporting white spruce and other forest types may be transformed to a treeless condition, with coarse grasses and fireweed taking over the site. On steep slopes this change in vegetation favors snow slides and erosion of the landslide type. It results in poor feed for big game.

It has been contended that fires are favorable for moose because they bring in willows, aspen and birch which furnish browse. There is evidence which tends to support this view but it should be pointed out that burned areas do not always come back to aspen, willows and birch. Not uncommonly the new stand is essentially pure spruce, either black or white. The climax white spruce stands are far from being a "desert" as far as moose are concerned. There is ample evidence that these animals make heavy use of this forest type.

The following table indicates the successional changes that occur in the common vegetation communities, or types, on the Kenai Peninsula as a result of fire of different intensities and frequencies.

VEGETATION TYPE	SINGLE LIGHT FIRE	SINGLE SEVERE FIRE	REPEATED SEVERE FIRES
A. White spruce	B or A	C, D, B, or A	E
B. White spruce-birch; Birch-white spruce	C	C	E
C. Birch-aspen; Aspen-birch; Birch; Aspen; Alder	C	C	E
D. Black spruce	D	D	E
E. Grass-fireweed	E	E	E

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