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## AIRPHOTOS FOR FOREST MANAGEMENT

No. 14

Sound forest management implies the profitable harvesting of maximum and continuous supplies of desirable products from the forest. To obtain this ideal, the productivity of each acre should be commensurate with the potential of the site; burned and cut-over areas should be re-stocked to ensure complete and continuous utilization of the site with desirable species; and the harvesting of merchantable stands based on accepted economic principles.

Techniques for classifying forest land and evaluating its potential for different phases of management have been developed in the Niskonlith Provincial Forest, Kanloops District, B. C. The classification is based on features of land-form, soil and vegetation that can be interpreted from airphotos. Application of the classification may require details of local conditions that are not recognizable on the photographs but which can be obtained by a limited ground examination. The land was assessed as to its productivity, suitability for road building and scarification, hazard from wind-throw and the probability of erosion and slump.

Characteristics of physiographic location, parent soil material, soil profile and vegetation were combined and used to delineate eleven "land-units". Composition of the mapping units is determined by the complexity of the configuration of the landscape, and by the scale of mapping. Mapping at a scale of 1:15,000 is most suitable for very intense management; 1:30,000 for the management normally practised on larger areas; and 1:60,000 for regional resource surveys and inventories.

Productivity ratings of land-units and forest types are based on height/age relationships of dominant and co-dominant trees. Permanent features such as slope, soil drainage, soil texture and incidence and depth to bed-rock are used to rate land for road building and ease of scarification. Wind-throw hazard is related to exposure and depth of soil; probability of erosion to soil permeability, texture, stoniness and slope of the area; and incidence of slump to soil texture, stoniness, drainage and depth to impermeable layer.

