DEPARTMENT OF FORESTRY · CANADA ·

Timber Talks

Prepared by V. H. Phelps, Forest Research Laboratory, 506 W. Burnside Road, Victoria, B.C.

HAVE YOU EVALUATED YOUR LAND?

No. 8

It is becoming increasingly evident that the management of basically undeveloped or wildland areas of Canada must give consideration not only to wood production, but to all renewable resources. This comparatively new concept of management of the land and its total renewable resources, rather than management restricted to the forests, emphasizes that for rational land use and management, basic inventory and ecological landscape studies will be a necessity. Different approaches may be used to classify land. Any single method is not equally suitable for all purposes. Foresters concerned with the management of land for wood production and for other purposes should base their selection of criteria on conditions that are common throughout Canada, the present status of forestry and wildland management, and on knowledge already available from research experience.

The extent of undeveloped areas and the extensive rather than intensive forestry practices followed in Canada indicate that a broad classification is the initial requirement for planning the development of the natural resources. Conventional field survey techniques are impractical for early completion of such a classification, and recourse should be given to air-photo interpretation co-ordinated with limited field sampling.

Landforms, defined as the topography of the earth's surface and the parent materials of which it is composed, are features useful for the assessment of land resources that can be mapped in the field and on air photos. They provide a basis for the initial division of the landscape into ecologically significant units. Within such a geomorphic framework, soil and vegetation classifications can be undertaken and the areal extent of relationships between soil and vegetation and the capabilities of the various land-units for selected purposes can be extended over adjacent landscapes. Soil profiles and lesser vegetation cannot be used in the initial mapping on air photos. Knowledge of them is important, however, for refinement of land-units established, checking boundaries, indicators of landscape ecology and history, and for rating productivity.

A practical approach for obtaining an inventory of wildland resources and for mapping expansive areas is to group all land-units that are catenary members of a single soil parent material into associations. Within this framework landforms could be delineated by field examination and air-photo interpretation. Further refinement is accomplished by the identification, description and classification of the catena of soil and vegetation types within the landforms and an estimation of the proportionate occurrence.

REPORT: Wildland Inventory and Mapping. D. S. Lacate, Forest Research Laboratory, Victoria, B. C.