

supported by specialists in timber management, fire, land use, construction and communications. These forests are further subdivided into ranger districts under a district forest officer responsible to the superintendent.

The timber management branch is responsible for the timber quota system, management and annual operating plans for leased and licensed Crown lands, forest management plans and disposal of Crown timber. The branch carries on silvicultural programs, processes applications, takes inventories of forest resources, inspects cutting areas to ensure proper logging practices and collects dues and fees.

The forest protection branch is in charge of all phases of protection including prevention, detection and suppression of fires. This branch includes specialists such as a meteorologist and a telecommunications officer; an aircraft dispatch section assists in the overall protection program.

The forest land use branch is responsible for planning and supervising land-use practices in the forested area including grazing, recreation and watershed management, particularly on the east slopes of the Rocky Mountains containing the headwaters of the North and South Saskatchewan rivers. The reforestation and reclamation branch plans and carries out reforestation and reclamation projects on provincial forest lands and operates the new Pine Ridge Forest Nursery, which will produce 20 million tree seedlings a year beginning in 1981 for use by industry and government in restocking cutover and burned over lands in Alberta.

Basic research in the forestry program is generally carried out by the federal forestry service, largely through a federal research laboratory in Edmonton.

British Columbia. Over 544 920 km² or 60% of British Columbia's area, is classified as forest land. This includes over 7.82 million m³ of mature merchantable timber, most of it coniferous species. Of this, 95% is publicly owned and managed by the British Columbia forest service. For management purposes, the province is divided into six forest districts with headquarters at Vancouver, Kamloops, Nelson, Williams Lake, Prince Rupert and Prince George. Further decentralization of authority is effected by subdivision into 99 ranger districts, each managed by a forest ranger who supervises harvesting, reforestation, silviculture and environmental protection. Fourteen directional, servicing or policy-forming divisions constitute the head office of the forest service at Victoria.

Efforts continue to bring the province's forest resources under sustained-yield management even though with an annual cut (1976) of 69.5 million m³ the total inventory would appear sufficient to support current needs in perpetuity. Sustained-yield administration has resulted in a greater proportion of the annual forest harvest coming from the interior of the province; in 1976 the wet belt forests on the coast accounted for about 46.3% of the total forest cut and the interior for 53.7%. Almost all interior forest is publicly owned, with most of the privately owned, leased or licensed forests on the coast. There are several systems of timber disposal. The tree farm licence is a contract between the government and a company or individual whereby the latter manages an area of forest land, including any privately held forest land, on a sustained-yield basis. Tree farm licences are subject to re-examination for renewal every 21 years. Public sustained-yield units are areas within which the forest service manages the Crown timber on a sustained-yield basis. Within the public sustained-yield units, recognized established logging operators can apply for timber sale licences or timber sale harvesting licences which entitle them to log at a given rate per year.

Forest fire prevention and suppression are vital aspects of planned sustained-yield management. Contracted air tankers, fire-spotter aircraft and helicopters are employed during the fire season in order to achieve early discovery and attack on forest fires.

Close liaison with the federal forestry service provides detailed information on insect and fungal enemies of the forest and on fire research.

To achieve an efficient administration of multiple use of Crown forest lands, the forest service, in conjunction with other government ministries, has developed the integrated use concept. The forest service recognizes that inevitably some forest lands will be withdrawn from timber production to accommodate other users. These losses must be offset by increased production on remaining areas.