

As a deterrent to wasteful procedures, Crown lands are no longer leased for timber cutting over long periods; instead, harvesting rights on approved areas are sold by tender and restrictions placed on cutting at that time. Provincial roads are being built into these areas making them accessible for management, harvesting and fire protection.

Fire fighting costs and damage to forests have in recent years averaged \$150,000 annually. In an effort to reduce this damage, the Province operates 17 fire ranger towers; five are operated by private companies and two by the Federal Government. An aerial patrol supplements these tower stations and three stand-by fire fighting crews are maintained in addition to regular fire ranger establishments in each county of the Province. Fire fighters are well equipped with portable tools, jeeps, trucks and bulldozers. Radio contact between ground, aircraft and automobile stations provides efficient relay during the fire season.

Forest research in Nova Scotia is conducted by services of the Federal Government and the Nova Scotia Research Foundation. Investigations are being made with a view to improving stand conditions and methods of cutting and processing so as to yield a better product and better returns. Efforts are being made to hasten the development of more valuable species on land now covered with poor quality hardwood and on developing better quality softwoods. A study of production costs is expected to reveal, and eventually reduce, the hidden costs of the industry. Other projects include research on regeneration, tree diseases, insects and tree physiology.

The greatest field of endeavour in forest preservation is to educate the public to appreciate the value of forest wealth. Each of the 14 district offices promotes this ideal by means of speeches to organized bodies, motion pictures, exhibits, bulletins and leaflets.

New Brunswick.—More than 80 p.c. of the area of New Brunswick is classed as productive forest of which the Crown, in right of the Province, owns about half. About 2 p.c. is owned by the Federal Government and the remainder is privately owned. A provincial inventory, part of the national forest inventory, was begun in 1951 and the results, to be published in 1958, will indicate the nature and extent of the forests of the Province. The New Brunswick Forest Development Commission, which has been studying methods of forest administration, will present its report late in 1957.

Protection from forest fires, the first requirement for forest conservation, is mainly the responsibility of the Forest Service which also carries out duties in connection with game protection, colonization and the administration of provincial Crown lands. A large-scale aerial spraying program to protect balsam fir and spruce from the spruce budworm has been carried on since 1952 by a Crown company sponsored by the Federal and Provincial Governments and representatives of the forest products industries.

Timber licences issued by the Province authorize operators to cut and remove forest products in accordance with forest management plans and cutting permits. Stumpage dues are paid to the Province when products are cut by the licensees.

New Brunswick does not maintain a provincial forest research organization. There is, however, extensive co-operation between the Province and the Federal Forestry Branch in conducting forest research. The University of New Brunswick also has undertaken a small number of forest research projects in co-operation with the National Research Council, the Provincial Government, and other interested institutions.

Quebec.—The commercial forests of the Province of Quebec cover an area of 220,772 sq. miles extending from its southern borders to latitude 52° north, between the frontier of Labrador in the east, and the Eastmain River Basin in the west. Of this total 25,704 sq. miles are privately owned, 296 sq. miles are federal Crown forests and the remainder is provincial Crown land. Approximately 134,000 sq. miles of the latter are vacant lands. Of the 1,000,000,000 cu. feet cut in the forests of Quebec in 1955-56, privately owned forests accounted for about two-fifths.