

The committee on Education, formerly called "Home and School" actively promotes the work of the schools. Material assistance has been given. Improved school buildings, and grounds, and equipment, and better sanitation have been some achievements. School lunches have been maintained, school libraries established, play-ground equipment provided. Cooperation between parents, teachers and educational authorities is promoted. In every way possible the Women's Institutes aim to assist the teachers and educational authorities in their duties and much has been accomplished.

It is of note that the Women's Institutes were instrumental in having the school law amended so that the wives of rate payers should have equal voting privileges with their husbands in matters of school administration.

The Agricultural committee encourages the improvement of home and public grounds, assists in Boys' and Girls' Club work and local agricultural activities. Home gardening as a means of promoting the health and well being of the family is a major activity.

The Legislation Committee exists to promote the study of existing laws and to teach respect for law and order. The laws affecting the home and women and children are of special interest, such as school law, public health laws, dower

laws, property laws, and social legislation. A better understanding of existing laws means better home and community life.

Canadian Industries aims to acquaint our women with the resources of our own Province, Dominion and Empire. It aims to encourage the use of local products whenever possible, and to encourage the establishment of local activities.

While Women's Institutes are not money raising organizations, they have always carried on a great deal of charitable and benevolent work. Food, clothing and financial assistance have been given to individuals and welfare institutions, milk, medical supplies and nursing care provided needy cases, glasses supplied to poor children. A number of unfortunate children have been looked after and placed in suitable institutions.

Community activities have received generous help from Women's Institutes. Such activities as providing street lights, building side walks, community halls, memorials, cemetery improvement, and general community improvement have had the assistance of Women's Institutes in many centres.

Family welfare, educational progress, friendly helpfulness and community cooperation are Women's Institute ideals. The motto of the organization and the initials give inspiration and encouragement.

"For Home and Country, W.I.N.S."

Forest Conservation in Nova Scotia

By G. W. I. CREIGHTON

FOREST conservation, to most persons, means fire protection or reforestation or both. While fire protection, unfortunately, remains the most pressing of our forest conservation measures, there are a number of other problems which are becoming increasingly important.

In all countries richly endowed with timber resources, little or no thought has

ever been given to future timber supplies until present supplies have become scarce. Until comparatively recent years the common lumbering practice in Nova Scotia was to remove only the trees of large size, leaving standing a great number of the smaller trees which, in a comparatively few added years, produced a new crop. As long as lumbering proceeded in this manner there was little danger of supplies becoming exhausted, although

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there was a gradual deterioration of quality, since the trees of more valuable form and species were cut, leaving the less valuable trees in possession of the ground.

During the last twenty years lumbering methods have changed, and it is now common custom to cut clean, removing practically the last vestige of tree growth and leaving behind a heavy accumulation of logging slash.

The cutting of smaller sized trees means that a very long period must elapse before a new timber crop may be harvested, and the residual logging slash retards natural seeding and presents one of our greatest fire hazards.

To any one at all familiar with lumbering in Nova Scotia, it must appear evident that some improvement in logging methods is necessary if the lumber industry is to continue.

Forest conservation does not mean discontinuance of lumbering operations, but demands that timber be permitted to reach maturity and then be cut in such a manner that a new crop may be produced in the shortest possible time.

When market conditions permit, a certain amount of small material should be removed in thinning and cleaning operations during the period of timber growth. While such operations may not always pay for themselves, the increased growth rate in the main stand will repay amply for the extra work involved.

To produce the best results a definite plan of woodland management should be developed, which need not be followed rigidly but which may be modified from time to time to suit changing conditions. The main object of any forest management plan should be to place the forest land on a sustained yield basis, so that a regular cut of lumber may be produced, cutting each year an amount which does not exceed the annual growth.

Many persons unfamiliar with Nova Scotian conditions advocate large scale forest planting to fill the gaps caused by fire and unregulated cutting. While planting on certain restricted areas is desirable, there are other measures more needed at the present time.

Planting under the most favourable conditions is expensive, and on many severely burned areas where planting appears necessary the excessive heat has sterilized the soil, destroying all vegetable matter together with the minute animal and fungous life which is just as necessary for tree growth as for agricultural crops. On such areas planting would prove useless. In time, however, nature will repair the ravages of fire, the ground being gradually occupied by certain of the less exacting plants and shrubs. These, in turn, are followed by the birches and poplars, which return fertility to the soil, making it again possible for the more exacting and valuable tree species to thrive.

On cut over areas it would be necessary to remove logging slash before planting operations could proceed. If this slash were removed, however, regeneration would take place naturally and planting would be unnecessary. When it is remembered that logging slash presents one of our greatest fire hazards, and also is a breeding ground for many injurious insects and wood destroying fungi, it should be evident that its removal is one of our most pressing needs.

In some sections of Canada slash disposal has been tried, and is now compulsory. It has been found that broadcast burning of slash in dry periods is dangerous, and that piling and attempting to burn at a later date is impractical. The only satisfactory means of destroying logging slash is to burn in the winter months during actual logging operations. A fire is started and brush and tops piled on the fire as felling operations proceed.

On pulpwood operations it has been found that brush burning costs from twenty-five to fifty cents per cord, but that absence of brush after burning frequently reduces handling and hauling costs an equal amount.

While not so spectacular nor so apparent as fire, forest insects and fungous diseases, working separately and together, probably cause even greater losses. The majority of our forest pests are present in small numbers all the time, but are kept in check by feeding conditions or by

their natural enemies. Most insects show a decided preference for one tree species or for a narrow group of trees. Mixed stands, therefore, are less liable to insect attack than pure stands of one tree species where feeding conditions are favourable for their rapid increase and spread. Where pure stands spring up after fire or cutting operations, insect damage may be expected sooner or later, and one of the aims of forest management, therefore, should be to maintain a healthy mixture.

Many of our most injurious insects have been introduced from foreign countries. Frequently these foreign insects find climatic and feeding conditions favourable and also find that their natural enemies are absent. Insects in this class are the Larch Sawfly and the Spruce Sawfly, both being natives of Europe and both having caused extensive damage in Eastern Canada.

The most practical means of controlling such insects is to find and liberate their natural enemies. These enemies usually are other insects which feed on a particular insect or a narrow group of insects.

During the past two years approximately one million insect parasites have been liberated in Nova Scotia in an attempt to check the outbreak of the Spruce Sawfly, which gradually has been working into the Province from New Brunswick and Quebec.

While fire, insect and tree disease control will remain in the forefront of forest protective measures, it is probable that, as woodland management improves, they will recede gradually and change their order of importance.

Today, in many fields of endeavour, there appears a distinct tendency to attempt to reclaim what is practically worthless and to let anything of value look after itself. This tendency has been evident in forest protection. While

reclamation work frequently becomes necessary to prevent increasing losses, more attention should be paid to our productive land which is capable of reacting readily to wise management and which will produce larger returns for a small outlay.

When intelligently used, the axe remains the most efficient tool for improving our forests, and, while forest planting will continue on a small scale in certain areas, it probably will not play a very prominent part in the production of our timber crops.

At the present time, very little thought is given in Nova Scotia to recreational or municipal forests. This is a very fertile field which presents many opportunities, and there are extensive areas in the Province which lend themselves admirably to this scheme.

In many European countries, town and municipal forests yield large revenues, offer work to many persons and afford recreational areas for the urban population.

Everyone in Nova Scotia is familiar with the waste areas surrounding nearly all our towns and with the large areas in nearly every county on which no taxes are paid and which have no apparent owners. If these areas were taken over by the towns and municipalities, many persons now on direct relief might be employed on improvement work. Paths could be laid out, underbrush could be removed and for park purposes a reasonable amount of planting could be carried on. In this way money spent on relief would yield a return, the recipients of relief would be gainfully employed, the general appearance of the Province would be improved and future supplies of lumber would be increased, which in turn would give added wealth and employment.