

of marketing woodlot supplies in Ontario. Organized marketing would stabilize prices for such products and serve as a clearing house for quantities and types of certain material. Almost everything the farmer sells is aided to some extent by a scheme of marketing, and woodlot products should not be an exception.

Good forestry practice is predicated on the assumption that it will produce wood products at a profit. Regardless of this, however, forest areas in themselves have an intangible and beneficial effect on the countryside. They are the natural covering for headwater areas such as swamps and gravel moraines which give rise to many small tributary streams, and are the only crop which can be grown on the extensive rocky areas of the Province. They embrace many of the other factors included in the conservation scheme, such as surface or underground water storage, wildlife management, and recreation.

Surveys

Before a major forestry program is embarked on by a Conservation Authority, the Conservation Branch of the Ontario Department of Commerce and Development carries out a complete forestry survey of the watershed in question. This is to assess the nature and magnitude of the forest conservation problem, as it exists.

To date 12,000 square miles of watersheds organized into Conservation Authorities have been surveyed. This is approximately half the area of Southern Ontario, but includes two Authorities in the Sudbury Basin and one at the Lakehead, all three in Northern Ontario.

From observations made in these surveys, it appears that 15.8 per cent of Southern Ontario is wooded. However, the wooded area of individual watersheds varies from 43.4 per cent close to the Pre-Cambrian Shield to less than 7 per cent on the Thames River, parts of the Grand River watershed and the Metropolitan Toronto and Region area.

During the survey all of the woodlots are classified as to their species content, age, regeneration, forest condition and stocking. Scrublands or those areas producing no useful tree species, and the areas suitable for and requiring reforestation, are also mapped.

When all the survey data are summarized for each watershed, a detailed program for forest improvement is drawn up for each Authority, designed to fit the Authority's individual forestry problem. Where problem areas are too small for large-scale forestry operations, methods of small woodlot improvement or small-scale reforestation are recommended so that the Authority can promote all forms of woodlot improvement among individual property owners.

Where large-scale or block forestry operations are necessary, a Conservation Authority forest program is designed for the watershed. This is a recommendation for the acquisition of an area of existing woodlots and areas requiring reforestation, whose overall management is to be controlled by one governing body.

The Authority Forest

An Authority Forest is an area owned by an Authority consisting of woodland under management, plus areas planted to forest. Most Conservation Authorities have placed their forests under agreement with the Ontario Department of Lands and Forests for management purposes. The primary functions of an Authority Forest are:

- (1) The protection of source water areas
- (2) The control and prevention of erosion
- (3) The improvement of timber production and timber quality in natural woodlots