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> J. W. ANDRESEN and J. SWAIGEN

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THE GREAT LAKES FOREST RESEARCH CENTRE

The Great Lakes Forest Research Centre is one of six regional establishments located across the country and operated by the Canadian Forestry Service. These Centres help provincial and industrial forest managers solve important forestry problems in their regions, participate in environmental and forestry programs within the department, and provide support and advice on forestry issues to other federal government agencies.

The program conducted from the Great Lakes Forest Research Centre and its various field stations and research areas is aimed primarily at overcoming the major difficulties of forest management in Ontario. These problems are continually assessed by the Canada—Ontario Joint Forestry Research Committee, made up primarily of senior members of the Centre and the Ontario Ministry of Natural Resources. This committee ensures that the research resources of both agencies are deployed in a coordinated, cooperative manner in improving forest production and protection, environmental quality and urban forestry.

A close working relationship is also maintained by the Centre with universities and technological institutes specializing in forestry and the biological sciences, and with other forestry organizations within the province.

In carrying out its research role in the province, the Centre recognizes that forested land must be managed in the best public interest, not only for the wood production essential to our economy, but also for the recreational purposes that are so important to our social well-being. This must be achieved in a manner that will improve our forest environment and preserve it for generations to come.

URBAN TREE AND FOREST LEGISLATION IN ONTARIO

J. W. ANDRESEN¹ AND J. SWAIGEN²

GREAT LAKES FOREST RESEARCH CENTRE SAULT STE. MARIE, ONTARIO

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CANADIAN FORESTRY SERVICE

DEPARTMENT OF THE ENVIRONMENT

AUGUST 1978

- ¹ Director, Urban Forestry Studies Programme Faculty of Forestry and Landscape Architecture University of Toronto
- ² Counsel Canadian Environmental Law Association Toronto, Ontario

Copies of this report may be obtained from:

Information Office,
Great Lakes Forest Research Centre,
Canadian Forestry Service,
Department of the Environment
Box 490,
Sault Ste. Marie, Ontario
P6A 5M7

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FOREWORD

Trees and forests make a positive contribution to the quality of urban life. They play a major role in the amelioration of the urban environment and thus constitute an important component of a desirable urban landscape. Trees also provide the urban dweller with a measure of stability in an environment that exhibits continual changes in its physical structure. In addition, trees and forests provide continuity to man's endeavors to change and improve his habitat, for they span many generations of human life.

The preservation and perpetuation of trees in an urban environment require the development and implementation of suitable urban greenspace management processes. In the long term this can be accomplished only through the accumulation of adequate baseline data, not only on the physical and biological requirements for tree survival and growth under urban environmental conditions, but also on the legal status of trees and forests within our urban society. It is imperative for the managers of urban forests to understand the extent to which existing legislation provides protection for trees from other competitors for urban space.

The information contained in this report is a portion of the study commissioned by the Great Lakes Forest Research Centre to provide the baseline data required on the existing legislation, in the province of Ontario, that relates to urban trees and forests. The study also had as its function the demonstration of the limitations of current legislation and the provision of proposals for legislative reform.

The results of this study should provide a further impetus to sound urban greenspace management, by supplying the necessary background information on the legal status of the urban forest. In addition, it is hoped that this document will serve as a catalyst for further study, discussion and legislative reform, with the ultimate goal of promoting the optimum protection of trees and forests within the urban landscape.

While the report is published by the Great Lakes Forest Research Centre, the findings and recommendations remain the responsibility of the authors.

J.H. Cayford Director Great Lakes Forest Research Centre Canadian Forestry Service Department of the Environment

PREFACE

The future of the greenspace so vital to the well-being of our Canadian municipalities lies in the hands of a concerned and educated public represented by its elected officials. As processes of urbanization place additional pressures on trees and forests already under environmental stress, and municipalities and landowners lack the necessary funds to provide proper care for their trees, current management practices must be improved and upgraded to accommodate future municipal obligations. Linking the demands of our urbanites with the conservation and protection of trees and forests being utilized to meet their civic requirements is a corpus of legislation (existing and proposed) that could provide legal order and substance to the management of one of our prime renewable natural resources—a resource that unfortunately is showing signs of decline and decay.

It is criminal to abuse our natural forest heritage and press it to a point of deterioration, but there still is a tendency to exploit trees and forests primarily for production values, and this tendency is reflected in national and provincial forest policies. To gain monetary advantage, other benefits and values are often ignored or neglected. Amenity, environmental, recreational and social values have been secondary considerations until recent years.

Government, unless prodded and pressured to undertake review and reform, is reluctant to move boldly or quickly to correct abuses where the issues have low political profiles. The gradual decline in both quantity and quality of trees, shrubs and associated vegetation along our streets and in our parks and wildlands is difficult to assess and measure. Consequently, few individuals or groups speak for trees, and even fewer are heard.

There are, however, some encouraging signs. Municipal governments are calling for advice and assistance from central government and professional organizations. It is to be hoped that our federal and provincial leaders will read and interpret these signs accurately and will act accordingly.

To provide all levels of government with concepts, data, and recommended means of action, the following text analyzes tree management and protection legislation in Britain and the United States as well as in Canada, and offers suggestions for legislative reform.

John W. Andresen, Director Urban Forestry Studies Programme Faculty of Forestry and Landscape Architecture University of Toronto

and

John Swaigen Counsel Canadian Environmental Law Association Toronto, Ontario

ABSTRACT

A historical overview of the development of the legislative framework for the management of urban trees and forests is presented. A description is given of a) the division of powers between the federal and provincial governments and their statutory creations, the municipalities, and b) some of the historical policy considerations behind the creation of legislation. The limitations to the state's power to restrict the destruction of trees on private property are also discussed. Existing Ontario legislation governing trees on private land and public land, and the provisions relevant to protection of trees, are discussed. Included are several examples of British and American legislation, related to urban trees.

The limitations of existing legislation to protect trees are discussed and recommendations for law reform are presented. Recommended reforms include financial and other incentives to private owners to maintain land in its natural state and conserve trees. Mechanisms such as wider availability of subsidies and professional services through management agreements, and increased powers of public bodies to restrict use of land through freezes, conservation easements, and tree protection orders, are discussed. Legislative schemes in other jurisdictions and precedents within Ontario in other areas of law which might be adapted to tree protection are considered.

RÉSUMÉ

Les auteurs dressent l'historique du développement de la charpente législative concernant l'aménagement des arbres et forêts urbains. Ils décrivent a) la division des pouvoirs entre les gouvernements fédéral et provinciaux et leurs lois, les municipalités, et b) quelques considérations de politiques historiques sous-jacentes à la création de la législation. Ils discutent les limites du pouvoir législatif sur la destruction des arbres sis sur les propriétés privées. Ils traitent aussi de la législation ontarienne gouvernant les arbres sur les terres publiques et privées, incluant les articles sur la protection des arbres. La législation britannique et américaine est aussi touchée.

Les auteurs s'intéressent aux limites des lois actuelles de protection des arbres et ils recommandent des réformes incluant des primes, etc., aux propriétaires privés pour maintenir leurs terres à l'état naturel et conserver les arbres. Ils discutent des possibilités de mécanismes tels que des subsides et services professionnels plus largement disponibles, des pouvoirs élargis des gouvernements de restreindre l'utilisation des terres au moyen de gels, de servitudes dites de conservation, et d'édits protégeant certains arbres. Ils considèrent la législation existante ailleurs et les précédents ontariens dans quelques autres domaines législatifs susceptibles d'être adaptés à la protection des arbres.

ACKNOWLEDGMENTS -

As our report was prepared, we drew upon the resources of Canadian municipal governments and the government of Ontario for data and comment. Two organizations that are interwoven within the municipal fabric and that were helpful in providing us with suggestions and reviews were the Association of Municipalities of Ontario and the Ontario Shade Tree Council. Members of the Ontario Forestry Association also provided advice and assistance.

Many individuals contributed to our study as well, and all are gratefully acknowledged. In particular, Ms. Kriss Boggild prepared the first draft for the chapter on Canadian tree legislation in historical perspective, and Dr. John Ladell and Mr. Peter Lyons assembled the background materials for the proposals for Ontario legislative reform.

The Law Foundation of Ontario contributed to legal research on tree-related issues.

Most of all we are grateful to the Canadian Forestry Service and its Great Lakes Forest Research Centre not only for fiscal support of the study but also for the recognition of the legislative function as a prime component of successful management systems to enhance and protect the trees and forests of Canada's human settlements.

This project was funded primarily through CFS Contract No. KL-012-6-3028, as administered by the Ontario Shade Tree Council, Mr. G. D. Huntley, Forestry Officer, Great Lakes Forest Research Centre, served as scientific authority for the project and advised on the content of this report.

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INTRODUCTION

1.1 Problem Statement

An inventory and interpretation of pertinent laws and legislation are fundamental to the development of effective urban forestry management programs in all provinces. Urban trees and forests that are exposed to maximum environmental stress are, in most instances, publicly owned. Consequently, shade trees along streets, roads and highways, as well as municipal forests and those within transportation and utility corridors, are usually regulated by legislation embodied within a series of provincial statutes.

Unfortunately many community and municipal leaders, especially in the small to medium-sized centres with populations of 1,000 to 50,000, either are unaware of the legal standing of trees or fail to enforce existing legislation. Furthermore, most legislation is punitive in intent and action and does little to encourage incentive programs to protect trees for amenity and related values.

On the other hand, many municipal officials at the urging of conservation and local ratepayer groups are currently aware of the environmental values of urban woody vegetation. However, these leaders require assistance in formulating legislative policies to enhance the habitat of their municipalities.

The present study was undertaken in response to this need for assistance. It documents a number of successful legislative approaches to enhancing municipal tree growth. The report has special relevance to current and future projects within the Great Lakes Forest Research Centre Environmental Forestry Program and its studies concerned with the management of amenity trees and plantations in the Great Lakes Region,

1.2 Definitions and Scope

For the purposes of this study and the major concepts of the work, the following definitions apply:

Bylaw: A law made by the council of a particular municipality and applicable only to the inhabitants over which the municipal corporation has jurisdiction.

Municipality: A locality or area, the inhabitants of which are incorporated by provincial legislation for the purposes of regulating and administering the local and internal affairs of the community. In Ontario, local government is organized in a variety of ways. Some areas have a municipal organization (cities, towns, villages, regional municipalities, townships and counties) and others are unincorporated (districts, improvement districts, and police villages). In this study, "municipality" refers to those forms of local government which are incorporated.

Statute or Act: A law made by the federal parliament or provincial legislature, including enabling legislation, which consists of acts or statutes authorizing municipal councils and other subordinate public authorities such as Conservation Authorities to pass bylaws, make resolutions, and take other actions within their jurisdiction.

In this study we will concentrate on Ontario provincial and municipal statutes and bylaws, and will draw upon several other provincial legislative examples. In addition, where relevant, we will cite examples of American and British shade tree legislation and amenity or urban forestry legislation.

The subject matter will, in most instances, relate to the regulation of practices applied to publicly owned trees. However, we will also review the needs for protection and regulation of privately owned trees and forests within and adjacent to Canada's human settlements.

2. A HISTORY OF URBAN TREE LEGISLATION IN ONTARIO1 *

Urbanization in the twentieth century has made it imperative to protect urban trees. But modern legislation does not yet reflect this urgent need the way historic legislation reflected the needs of the rural communities it served.

2.1 Pre-Confederation Statutes

Prior to Confederation, tree legislation in Upper Canada was concerned primarily with the protection of timber for construction of roads and ships, and for other commercial pruposes. A secondary concern of legislation, that of empowering district councils to cut trees away from road allowances, reflected both the obvious necessity in a pioneering country of making communities accessible to each other by road, and the abundance of trees and forests in Upper Canada at that time. Other early legislation required the owner of a tree that was cut or that fell across a public highway to remove it within 24 hours or face fines of 10 shillings for every day the tree remained across the highway.²

The first statutory recognition of the need to protect trees for purposes other than that of preserving their value as timber appears to be in an 1810 statute providing for the "laying out, amending, and keeping in repair" of public highways in the province of Canada. This statute empowered Justices of the Peace to order highways or roads to be altered or opened on the basis of a surveyor's report which had been confirmed by a jury of "twelve disinterested men". The Act stipulated,

^{*} Superscript numerals refer to citations and footnotes to be found at the end of each chapter.

however, that it was unlawful to lay out or alter any public highway or road "so as to lead the same through any orchard or garden" without the consent of the owner. 3 Subsequently, the amenity value of trees, as opposed to their timber or other commercial value, began to be recognized increasingly in statutes and court cases. An 1841 statute dealing with malicious injuries to property made it a misdemeanor punishable by a fine of up to one pound to injure maliciously any tree, sapling or shrub growing in any park, pleasure-ground, garden, orchard, or avenue, or in any ground adjoining or belonging to any dwelling house.4 It was also made an offence to injure trees, saplings or shrubs "growing elsewhere than in any of the situations hereinbefore mentioned". By 1849, a forerunner of the present Municipal Act which empowered municipalities to pass bylaws to open road allowances and to cut down the timber for a distance of up to 25 ft (7.5 m) on each side of the highway, contained a proviso that trees which formed part of an orchard or shrubbery or were planted expressly for ornament or shelter were not to be cut down. 5 The same act authorized municipal councils to pass bylaws for the protection and preservation of any timber growing along a road allowance or public road, 6 and to pass bylaws "for preventing the injuring or destroying of trees planted or growing for shade or ornament" in cities, towns, and villages.

An 1859 statute conferring powers on municipal institutions of Upper Canada contained similar provisions authorizing municipal—ities to pass bylaws for preventing the injury or destruction of trees "planted or preserved" for shade or ornament and for preserving or selling timber trees on a road allowance. This act contained an additional provision compelling the owners of land adjacent to a highway to cut down all trees within 25 ft (7.5 m) of a highway passing through a wood, on the grounds that these trees would obstruct the highway. Again, an exception was made for trees planted expressly for ornament or shelter, and trees forming part of an orchard or a shrubbery. Identical provisions were incorporated into the Consolidating Act of 1866, entitled the Municipal Institutions of Upper Canada Act. 10

These early protective measures may have been indicative of the growing concerns by the government with what was apparently a common practice: the stripping of Crown timber by farmers, squatters, and timbermen. The imposition of duties on Crown timber, although begun much earlier, did not effectively prevent this problem.

2.2 Post-Confederation Statutes

In 1867, the British Parliament passed the *British North*America Act, which established Canada, then composed of four provinces:
Ontario, Quebec, New Brunswick and Nova Scotia. A federal parliament

and provincial legislatures were set up and the division of legislative powers was delineated in the act. This division of powers reflected to some degree the authority which each province possessed prior to Confederation. This is certainly the case with trees and timber, over which each province had previously claimed and exercised jurisdiction. Section 92 (paragraphs 5 and 13) of the British North America Act states:

- 92. In each province, the Legislature may exclusively make laws in relation to matters coming within the classes of subjects next hereinafter enumerated; that is to say,
 - (5) The Management and Sale of the Public Lands belonging to the Province and of the Timber and Wood thereon.
 - (13) Property and Civil Rights in the Province.

Paragraph 15 of the same section states that the province may impose "punishment by Fine, Penalty, or Imprisonment for enforcing any Law of the Province made in relation to any matter coming within any of the Classes of Subjects enumerated". Thus, the government of Ontario was authorized to deal with the trees and forests and also to establish penalties for the destruction or injury of trees. It did so promptly.

In 1871, the Ontario Legislature passed "an Act to encourage the planting of trees upon the highways in this Province and to give a right of property in such trees to the owners of the soil adjacent to such highways". 11 This forerunner of the present Trees Act and section 473 of the Municipal Act form the basis of existing law on the subject. By this act, shade trees, shrubs and saplings growing beside the highway were deemed to be the property of the owner of the land adjacent to the highway. 12 This measure reflected the fabric of a society based on private ownership. It is to be assumed that the Legislature felt that by vesting property ownership of the trees in individuals, there would be greater impetus for them to protect and preserve those trees. (Or perhaps the Legislature hoped to shift some of the responsibility for, and cost of, maintenance from the public purse to the private landowner.) Preservation of trees was explicitly provided for in the act by the imposition of a penalty of up to \$25 or 30 days' imprisonment in default of payment for injuring or destroying roadside trees. Private prosecutions were encouraged, If a prosecution for injuring a tree was successful, half the fine was to go to the person swearing the information. 13

Municipal councils were given power to expend money to plant shade and ornamental trees or to make money grants to individuals or associations for the purpose of planting such trees along roads or highways* within the municipality. 14 Councils were given the right to remove trees growing between the highway and the adjacent land where necessary, but only after giving the adjacent owner one month's notice and compensation for his trouble in planting and protecting the trees. The act provided that anyone owning land adjacent to a highway who did plant trees between the highway and his land must plant them in such a manner that they would not become a nuisance or obstruct the use of the highway. 15 The vesting of ownership of trees then growing by the highway in the owner of adjacent land and the right of the owner of adjacent land to plant trees between his property and the highway were not to apply to incorporated cities, towns and villages, unless the council were to pass a bylaw making the provisions applicable. 16

In 1873, sections 3 and 5 of the 1871 Tree Planting Act were transferred to the Municipal Institutions Act. 17 (These sections provided for the removal of highway trees subject to notice and compensation to adjacent landowners, prohibited the adjacent owner from cutting down the trees without the consent of the municipal council, and authorized municipal councils to spend money to plant and preserve shade and ornamental trees along highways and also to grant money to any person or association for the same purposes.)

In 1877, the provisions of the *Tree Planting Act* were consolidated, but in 1883 they were repealed, and some were reenacted, together with new provisions, in a more comprehensive *Ontario Tree Planting Act*. ¹⁸ This act vested ownership of trees growing along the highway in the owner of the land adjacent to the highway, whether the trees were already growing or planted by him. ¹⁹ It empowered the adjacent owner to plant trees on the land between his property and any highway, place or square, provided that the tree did not become a nuisance or obstruct the use of a highway. ²⁰ The owner of any farm or lot of land was empowered to plant trees on the boundary line with the consent of the owners of the land on either side of the boundary. ²¹ However, none of these provisions was to apply to any incorporated city, town or village, unless the council passed a bylaw to that effect. ²²

The act also provided for the payment out of municipal and provincial funds of a bonus for tree planting. The council of any municipality could pass a bylaw for paying out of municipal funds a bonus not exceeding 25¢ for each tree of a number of specified species planted on the side of the highway and within 6 ft (2 m) of it or on or within 6 ft of any boundary line between farms. A provincial fund of \$50,000 was set aside for the purpose of reimbursing municipalities for one half of their costs in granting bonuses. The municipality could claim from the fund only if, after 3 years, the trees planted had

[&]quot;Highway" was defined to include "any public highway, street, road, lane, alley, or other communication, as well as any public place or square".

remained "alive, healthy and of good form", and were planted at least 30 ft (10 m) apart. To be reimbursed by the province, the municipality had to appoint an inspector of trees who was charged with certifying the health and spacial distribution of the trees to the municipality and to the treasurer of the province. An inspector was to protect these trees from injury or removal by anyone, including the owner, except where the person had authority from the council, by special resolution, to injure or remove the tree. 27

According to a 1957 report of the Ontario Department of Lands and Forests, the provincial fund remained in force until 1897, when it was repealed as a result of an investigation made by the Bureau of Forestry as to its operation.

The act specifically prohibited anyone from injuring a tree "planted and growing upon any road or highway, or upon any public street, lane, alley, place or square in this Province (or upon any boundary line of farms, if any such bonus or premium as aforesaid has been paid therefor)" without first obtaining permission in the form of a special resolution by the municipal council. The penalty was again set at a maximum fine of \$25, or 30 days in default of payment and the provision awarding half the fine to the private prosecution was retained. 28

The act empowered the council of every municipality to pass bylaws:

- "(1) To regulate the planting of trees on the public highway;
- (2) To prohibit the planting upon the public highways of any species of trees which they may deem unsuited for that purpose;
- (3) To provide for the removal of trees which may be planted on the public highway contrary to the provisions of any such bylaw."29

An 1884 Act to Amend the Ontario Tree planting Act, 1883 clarified the provisions of the 1883 act with respect to vesting of ownership in trees which were already growing beside the highway. It stated that "every growing tree, shrub, or sapling whatsoever planted or left standing on either side of the highway" would be deemed to be the property of the nearest adjacent landowner. This act also imposed the same penalty for injury or destruction of trees on boundary lines without the consent of the owner(s) as was imposed for injury or destruction of these trees without the municipality's consent by the 1883 act. 31

In 1887, the Revised Statutes of Ontario, containing a consolidation of the 1883 Act and the 1884 amendment, were issued. There were no further amendments between 1884 and 1887.

The 1890 Act to Amend the Ontario Tree Planting Act consisted of one section which changed the requirement that trees be planted at least 30 ft (10 m) apart in order that a bonus might be granted.³³ The new provision read:

"Provided that in no case shall the council be liable to pay a larger sum in respect of trees planted under this Act than would be payable if the same had been planted at a distance of thirty feet apart, and in no case shall a bonus be granted where the trees are less than fifteen feet apart."

Also in 1890, the ${\it Municipal\ Act}$ was amended to give councils the power to pass bylaws.

"For regulating the planting of trees, shrubs or saplings upon or near the boundary lines between the lands of different owners or occupants, and the distance from said boundary lines at which trees, shrubs or saplings may without the consent of the owner or occupant of the adjoining land be planted." 34

In 1891, that section of the *Municipal Act* providing for the removal of trees along highways or other public land where deemed necessary for any purpose of public improvement was amended. The 30 days notice required to be given to the adjoining landowner was reduced to 10 days notice. However, the landowner continued to be entitled to compensation for any time and trouble expended in planting or protecting the tree. 35

The 1892 Consolidated Municipal Act contained a provision authorizing municipalities to provide bonuses of not less than 25¢ for every tree planted to "any person who plants fruit trees, or trees, shrubs, or saplings suitable for affording shade on any highway within the municipality". This appears somewhat duplicative, as at this time the Ontario Tree Planting Act provided for a similar bonus for planting trees of specified species. One difference is that under the Ontario Tree Planting Act, 25¢ was the maximum bonus, whereas, under the Municipal Act, this was the minimum bonus.

An 1896 Ontario Tree Planting Act repealed and replaced the earlier acts. It retained the principle of private ownership of trees growing along highways and the penalty of up to \$25 for the injury or destruction of trees along the highways or on boundary lines. 37

The main difference between this act and previous acts was the lack of a provincial bonus. The municipalities were authorized, at their own volition and cost, to grant bonuses for the planting of trees along the highways or streets, provided that such trees were not, or did not become, nuisances. Similarly, bonuses could be granted by the municipalities for trees planted along farm or lot boundaries. But the provincial fund for bonuses was discontinued.³⁸

According to one report:

"It was found that very few of the municipalities of the Province had availed themselves of its provisions, so that after it had been for nine years in full operation, only \$4,303.78, or less than one-tenth of the fund appropriated had been expended, and that for various reasons it had failed to commend itself to the public in most of the localities where a trial had been made. This shortcoming combined with the fact that under any circumstances, the planting of trees in isolated lines, while contributing to the beauty of the landscape, secures none of those practical advantages attained by their growth in masses as in the original forest induced the Legislature to effect another change in the law." 39

At the same time, the Legislature amended the *Municipal Act* to provide that nothing in the new *Tree Planting Act* would render the municipality liable to the adjoining landowner for any greater compensation for the cutting, trimming or removal of trees beside his property than that allowed by section 479(2) of the *Consolidated Municipal Act*, 1892, on condition that the cutting, trimming or removal was done under the authority of a properly enacted bylaw. That is, the adjoining landowner was to be restricted to compensation for his trouble in planting and protecting the tree. Neither loss of amenity value nor reduction in the resale value of his property was to be compensated. Presumably, if no valid bylaw were passed authorizing the activity, "punitive" damages might be available to the adjoining owner, for the loss of roadside trees.

This amendment would appear to be a direct legislative response to case law. Some of the judges had granted what might now be called "punitive" damages to individuals who took municipalities to court over the removal of trees. Clearly, municipalities lobbied the Legislature to prevent this from happening again. 41

The following year a new subsection was added to section 479 to permit the council to pass bylaws:

"For authorizing the park commissioner, or other officer appointed by the council so to do, to plant trees upon the streets of any municipality having a population of 40,000 or more, and to trim all trees in such sites, the branches of which extend over the streets thereof, and such municipality shall not be liable for injury to trees occasioned thereby when reasonable care, skill and judgement have been exercised in such trimming."⁴²

In 1903, consolidation of the *Municipal Act* was substantially the same as the 1892 consolidation as amended by the 1896 and 1897 provisions. However, additional power was granted to the parks commissioner appointed by the municipality. He could now cut down any dead tree or any live tree within 20 ft (6.6 m) of another tree on 48 hours' notice to adjoining landowners. The commissioner was also specifically exempted from liability to the owner of a tree of an adjoining land when the tree was on a highway allowance if, in the course of his duties, he damaged the tree or had to undertake any actions detrimental to the tree. 43

The year 1914 was the last in which a Tree Planting Act was passed in the same format as previous acts. The purview of this act was substantially similar to that of the 1896 act, apart from some minor changes to improve the wording. The only substantial addition to the act was that police villages were given the same power to pass bylaws providing for the payment of bonuses for planting trees and appointing an inspector of trees to protect them against injury, on condition that 30 municipal electors petitioned the council of the township for such a bylaw. There were minor changes to clarify the earlier act. Provisions for planting and protecting trees on the boundary lines of "farms and lots" were changed to cover boundary lines of any "lands". The 1914 act also provided that any boundary tree planted by one owner with the consent of the owner of adjoining land would be the common property of both owners. The same planting and protecting trees on the planted by one owner with the consent of the owner of adjoining land would be the common property of both owners.

The 1927 Tree Planting Act was skeletal. 48 It dealt only with trees on boundary lines. Like the earlier act, it stipulated that an owner of land could plant trees on the boundary with the consent of the adjoining owner, and provided for common ownership of such trees. 49 It also provided for a fine of up to \$25 for injuring or destroying a tree growing for the purposes of shade or ornament on a boundary line, for fastening an animal to a tree, or for permitting an animal to injure or destroy such a tree without the consent of the owners. 50

In 1946, the *Trees Conservation Act* was passed.⁵¹ This act stipulated that, subject to the approval of the Minister of Lands and Forests, rural councils (county or township) could pass bylaws restricting or regulating the cutting of trees and appointing enforcement

officers.⁵² Bylaws passed under this act were not to interfere with the right of an occupant to cut trees on the land for his own use, or with the powers conferred on a municipality by the *Municipal Act*, or with the powers of the Hydro Electric Power Commission of Ontario or any other government agency. The bylaws were not to apply to trees growing on the highway, or to those growing in a woodlot having an area of 2 acres (0.8 ha) or less.⁵³ Section 3 of the act established a penalty for violation of any bylaws passed pursuant to the act: a \$500 fine or imprisonment for up to 3 months. The rather sizeable disparity between the allowable fines in an urban municipality (that is, for damage to trees with purely shade-giving or ornamental value) and that imposed in the rural milieu (that is, for cutting of trees which might be used for timber) reflects the relative lack of importance attached by legislators to trees in an urban setting.

In 1947, the act was made more stringent by providing that where an appropriate bylaw had been passed, no one could cut trees, even for his own use, unless he had been the registered owner of the land for 2 years.^{54}

By 1950, the provisions of the 1914 Tree Planting Act, of the 1946 Trees Conservation Act, and of the 1945 Municipal Reforestation Act, as amended, were incorporated into the Trees Act. 55 The municipal reforestation provisions of the new Trees Act permitted counties and townships to institute municipal reforestation programs, and to purchase or to lease land for that purpose. 56 The approval of the Minister of Lands and Forests was required for any bylaws passed to promote reforestation programs, as well as for any conditions in reforestation agreements between the township council and any landowner in the township. 57

The provisions of the 1950 Trees Act remain substantially the same to this day. The amendments are concerned primarily with municipal reorganization. The only substantive amendments relate to the use of the words "forestry purposes". Whereas the councils had previously been empowered to buy or lease land for "reforestation purposes", in 1960 they became empowered to acquire land for "forestry purposes". "Forestry purposes" were defined as: "primarily production of wood and wood products and includes such secondary purposes as proper environmental conditions for wildlife, protection against floods and erosion, recreation and the protection and production of water supplies", 58 This redefinition would appear to have widened the land acquisition powers of county or township councils, and those of the newly organized regional councils. In 1970, "forestry purposes" were redefined to remove the distinction between primary and secondary purposes. 59 Under the new definition, production of wood and wood products was, in theory, given no greater emphasis than provision of proper environmental conditions for wildlife, protection against floods and erosion, recreation, or protection and production of water supplies. On paper, this gave

municipalities even broader powers. In practice, however, the administration of the act continued to be concerned primarily with reforestation for production of wood and wood products.

- For additional information about the history of forestry legislation in Ontario, see Kennedy. See also "A History of Crown Timber Regulations from the date of the French Occupation to the Year 1899", Ontario Department of Lands and Forests, 1957; "An Historical Chronology of Highway Legislation in Ontario, 1/74-1961", i.e., Pattison, Ontario Department of Highways, 1964.
 See, for example, Statutes of Upper Canada, 1810, 50 Geo. III, c. 1, s. XXI.
 Ibid., s. III.
 4 and 5 Vic., c. 26, ss. XIX and XX.
 1849, 12 Vic., c. 81, s. XXXI.
- 6. Ibid., s. XXXVII.
- 7. Ibid., s. XL.
- 8. 1859, 22 Vic., c. 54, s. 266, para. 13, s. 331, para. 5.
- 9. Ibid., s. 342, para. 4.
- 10. 1866, 29-30 Vic. c. 51, s. 269, para. 13, s. 344, para. 5.
- 11. S.O. 1871, 34 Vic., c. 34.
- 12. Ibid., s. 1.
- 13. S. 4.
- 14. S. 5.
- 15. SS. 2 and 3.
- 16. S. 6.
- 17. S.O. 1873, 36 Vic., c. 48, s. 454, para. 7.
- 18. S.O. 1883, 46 Vic., c. 26.
- 19. Ibid., s. 4(4).
- 20. S. 4(1).
- 21. S. 4(2).
- 22. S. 3.
- 23. S. 5.
- 24. S. 8.
- 25. S. 6.
- 26. S. 5(2).
- 27. S. 5(2), s. 9.
- 28. S. 9.
- 29. S. 10.
- 30. S.O. 1884, 47 Vic., c. 36, s. 1.
- 31. Ibid., s. 2.
- 32. R.S.O. 1887, c. 201.
- 33. S.O. 1890, 53 Vic., c. 60.
- 34. S.O. 1890, 53 Vic., c. 50, s. 16 amended, s. 479 by adding a new subsection, 5. 479(20a).

- 35. S.O. 54 Vic., c. 42, s. 15 replaced s. 479(20).
- 36. S.O. 1872, 55 Vic., c. 42.
- 37. S.O. 1896, 59 Vic., c. 60, ss. 2(3), 6, 7.
- 38. Ibid., s. 3.
- 39. "A History of Crown Timber regulations", op. cit. footnote 1, at p. 280.
- 40. S.O. 1892, 59 Vic., c. 51, s. 36.
- 41. See in particular, Hodgins vs. City of Toronto et al. (1893) 19 O.A.R. 537.
- 42. S.O. 1897, 60 Vic., c. 45, s. 12, adding a new subsection 20(b) to s. 479.
- 43. S.O. 1903, 3 Edw. VII, c. 19, s. 574(5).
- 44. S.O. 1914, 3-4 Geo. V, c. 53.
- 45. S. 4.
- 46. SS. 2 and 3.
- 47. S. 2(3).
- 48. S.O. 1929, 17 Geo. V, c. 69.
- 49. S. 2.
- 50. S. 3.
- 51. S.O. 1946, c. 102.
- 52. S. 1.
- 53. S. 2.
- 54. S.O. 1947, c. 101, s. 18.
- 55. R.S.O. 1950, c. 399.
- 56. SS. 6 and 7.
- 57. S. 8(3), s. 9.
- 58. S.O. 1960, c. 125, s. 1.
- 59. S.O. 1970, c. 115, s. 1.

Note: The abbreviations used in these footnotes are used in legal citation systems and have the following meanings:

- S. Section, referring to a section of a statute or bylaw. (Similarly, ss. means sections.)
- S.O. Statutes of Ontario, referring to the yearly compilation of statutes passed during that year; e.g., S.O. 1970 is the 1970 volume of statutes.
- R.S.O. Revised Statutes of Ontario, referring to the consolidation of statutes published every 10 years, incorporating all changes made during that decade. (Similarly, S.C. Statutes of Canada, R.S.C. Revised Statutes of Canada.)

Vic. - 4 Vic. refers to a statute passed in the fourth year of the reign of Queen Victoria. Similarly, 50 Geo. III refers to the fiftieth year of the reign of King George the Third, 3 Edw. VI refers to the third year of the reign of King Edward the Sixth.

Kennedy, H. 1947. Report of the Ontario Royal Commission on Forestry.

CURRENT ONTARIO LEGISLATION

3.1 General Attitudes

Current legislation and policies in Ontario still reflect yesterday's vision of Canada as the hewer of wood for the rest of the world. Since the 1600s in what is now Quebec and the 1700s in what is now Ontario, forested Crown lands were set aside for the use of the French and the British Navies, respectively. This was the origin of our concept of trees as an exploitable product rather than an amenity. During the period of clearing and settlement of land for agriculture in the 1800s, trees were considered to have a negative value in the sense that they had to be cleared for farming. This view of trees as a commercial commodity or a nuisance to be removed for agriculture is central to the development of professional forestry and government policy throughout Canada.

Such an attitude is understandable as pulp and paper and lumbering continued to be central to the Canadian economy. However, the emphasis on trees as a commercial crop, and on forestry as the tending of this crop, does not take into account the shift in Canada's population in recent years from primarily rural agronomy to urban-industrial. Because the vast majority of Ontario's residents and much of the population of the rest of Canada now live in cities and in adjacent urban areas, trees in these areas have taken on a new value that has been recognized by the prices commanded for treed residential lots, by the valuation procedures of the Ontario Shade Tree Council and by tribunals, e.g., the Land Compensation Board in Ontario.* But institutional change has not kept pace with the change in attitudes towards trees in urban and near-urban areas, where individual roadside trees have a value beyond their commercial fibre value. Nor have institutional arrangements been modified to take into account the need for establishing forestry specifications, guidelines, standards and practices related to these trees and to woodlots in urban areas, that are different from those applicable to cash crops.

^{*} See, for example, Andela vs. County of Wellington, decision of the Ontario Land Compensation Board, November 24, 1972.

Studies of forestry needs in Ontario have ignored almost completely the field of urban forestry. Though paying lip service to the amenity value of forests, Royal Commissions over the years have made few recommendations for protection of urban trees and forests, studies have been preoccupied almost exclusively, as have the personnel of the Ministry of Natural Resources and before it the Department of Lands and Forests, with the long-term protection of trees as a cash The 1947 Kennedy Report dealt primarily with the protection of the large commercially viable forests of northern Ontario. The closest the report came to dealing with urban forestry was in making recommendations on protection of farm woodlots and forested private lands in southern Ontario. Even here, however, the emphasis of the report was on protection for ultimate commercial harvesting. Although many of the criticisms Kennedy had were of forestry practices on farm woodlots, no attempt was made to stress the need to develop an adequate urban forestry program. Similarly, in the condensation of the report of the Forestry Study Unit in 1967 (Brodie), there is no mention of individual roadside trees in urban areas or along highways, nor is there any mention of trees in public parks. Although the report supported an extension of forest management planning on private lands through the Woodlands Improvement Act, and recommended that due consideration always be given to the objectives of the owner as well as to provincial goals in planning for multiple-use management, it is clear that priority was to be given to management for the production of valuable heavy hardwoods for the purpose of producing veneer logs and saw logs for forest-based enterprises such as the furniture industry. There is virtually no discussion of the amenity value of trees or of principles of sound urban forestry.

3.2 An Overview of the Urban Forestry Powers of Public Authorities in Ontario

The powers to regulate the planting, maintenance, management, treatment and destruction of trees on public and private land within and in the vicinity of Ontario's human settlements are scattered throughout a variety of statutes. The following is a summary of the powers provided by these statutes. The application of these statutes will be discussed in further detail below.

3.2.1 The power to plant trees on public lands: For the purposes of this discussion, public land includes lands owned by the federal or provincial Crown, Crown agencies and Crown corporations, municipalities, and local boards of municipalities and other authorities which would generally be considered public rather than private, such as a Conservation Authority.

The $\mathit{Municipal}\ \mathit{Act}^1$ provides the council of every municipality and the trustees of every police village* with the power to pass bylaws authorizing and regulating the planting of shade or ornamental trees on highways. The Municipal Act also empowers anyone to plant trees on a highway with the approval of his municipal council expressed by a resolution. The Trees Act^4 empowers the council of any county or township with a population of 10,000 or more to purchase or lease land for forestry purposes or to declare land owned by the municipality to be required for forestry purposes. 5 These councils may plant trees on any land that has been acquired for or declared to be required for "forestry purposes". 6 Under the Conservation Authorities Act', Conservation Authorities may plant trees on Crown lands with the consent of the Minister of Natural Resources.⁸ Pursuant to section 27 of the Public Transportation and Highway Improvement Act9, the Minister of Transportation and Communications may plant trees upon the King's Highway, that is the major routes between municipalities, and absorb the cost as part of the cost of maintaining the highways, Pursuant to s. 98, a municipality or suburban roads commission may plant trees on its roads and absorb the planting costs as part of the cost of maintaining the road.

Pursuant to the Forestry Act^{10} and Woodlands Improvement Act^{11} , the Ministry of Natural Resources may also establish a number of programs for planting and maintenance of trees on public lands.

Of course, any owner of land, public or private, has an unerestricted right, subject to the common law requirement, to plant trees on his own property, provided that this does not create a nuisance to his neighbors use of their lands. For example, even though it is not clearly stated in the *Public Parks Act* ¹², discussed below, that a board of park management may plant trees in municipal parks, in squares, or on avenues, boulevards and drives, this power would be incidental to its other powers to regulate and enhance these areas.

Finally, the *Local Improvement Act* 13 empowers municipalities to plant trees, shrubs and plants on municipal streets, to improve a park square or public drive, to widen the pavement of a street, to construct roadways or subways and to do other work incidental to such works at the expense of the abutting landowners. 14

3.2.2 The power to plant trees on private lands: Although the opinion is perennially expressed that the financial subsidization by public authorities of trees on private lands is morally wrong or politically suicidal, the planting and maintenance of private trees by public authorities is a well established tradition in Ontario.

^{*} Since 1965, police villages are no longer created. There are about 80 police villages still left in Ontario.

The Municipal Act authorizes the council of every municipality and the trustees of every police village to pass bylaws authorizing and regulating the planting of trees on private lands within 8 ft (2.4 m) of any highway at the expense of the municipality, with the consent of the owner. 15 Under the Trees Act, the council of any township may also reforest or plant trees on private land within the township pursuant to an agreement with the owner. 16 Also pursuant to this act, a private owner may plant trees on the boundaries of his land with the consent of the owner of the adjoining land, and the trees will be the common property of both landowners. 17 Pursuant to the Conservation Authorities Act, these authorities may plant trees on private lands with the consent of the owner. 18 The Public Transportation and Highway Improvement Act permits the Ministry of Transportation to pay the owners of lands adjoining the King's Highways a bonus of up to 75¢ for each elm, maple or other tree of a species approved by the Ministry which the owner plants on land adjoining the highway. 19 Under the Forestry Act and the Woodlands Improvement Act, the Ministry of Natural Resources may plant trees on private lands subject to management agreements. 20 Under the Forestry Act, the Ministry may also establish nurseries and furnish nursery stock to private owners for educational or scientific purposes²¹, and pursuant to the regulations, the Ministry may furnish nursery stock at minimal prices to private owners of land at least 2 acres (0.8 ha) in area that is unoccupied by structures. 22 The Ministry of Government Services has similar powers pursuant to the Game and Fish Act^{23} to enter into management agreements with private owners for the purposes of management, perpetuation, and rehabilitation of wildlife resources. 24

3.2.3 Prohibitions and penalties for injuring trees: Although landowners have virtually unlimited rights to injure or destroy trees on their own land (subject to a very few exceptions), it is generally illegal for anyone to injure or destroy trees on someone else's lands. The fines for the injury or destruction of trees range from statutes providing for a maximum fine of \$20²⁵ to a general provision of fines up to \$1,000 for breaches of any municipal bylaw. In some cases, where the private owner has a management agreement with the Ministry of Natural Resources, the management agreement may be terminated and the Ministry's costs recovered. 27

The *Municipal Act* gives municipalities the power to pass bylaws prohibiting anyone from attaching any object or thing to a tree located on any highway or public place without the consent of municipal officials, even if such attachment would not injure or destroy the tree. 28 The act also permits municipalities to pass bylaws for prohibiting the injury or destruction of trees. 29 In addition to any bylaws passed pursuant to the act, the act itself stipulates that anyone who injures a tree growing on a highway is liable to a fine of up to \$25. 30

The Trees Act has a similar provision making it an offence to fasten any animal to a tree or to injure a tree on a boundary line without the consent of the landowners on either side. 31 Under the Public Transportation and Highway Improvement Act, anyone, including a municipality or a local board of a municipality, who injures, or even scars or prunes, any tree within the limits of the King's Highway without the consent in writing of the Ministry of Transportation is liable to a fine ranging from a minimum of \$10 per tree to a maximum of \$100 per tree. The person is also liable for any damage occasioned by the injury, destruction, cutting or pruning of the tree. 32

The *Public Parks Act* makes it an offence to "wilfully or maliciously injure, hurt, deface, tear, or destroy any ornamental or shade tree or shrub or plant...in any street, park, avenue, drive, or other public place under the control of the board (of Park Management) or...wilfully, negligently, or carelessly suffer or permit any horse or other animal...to break down, destroy or injure any tree, shrub or plant therein."³³

Apart from these provisions, traditional legal principles prohibit anyone from cutting or removing trees from another's property without the owner's consent. Where this is done, the owner may be able to sue for trespass or negligence or prosecute the malefactor for theft under the *Criminal Code*. This prohibition also applies to tenants or others in possession of land owned by a third party, who commit "waste" if they cut down the trees without the owner's consent.*

A few statutory provisions limit the private owner's right to injure trees on his own land. Pursuant to the Forestry Act, the owner of lands that have been designated as a private forestry reserve shall not cut or remove any trees without the consent of the Minister of Natural Resources. 34 Similarly, where a conservation authority or municipality enters into a management agreement with the Ministry of Natural Resources under the Forestry Act, the authority or municipality may not use any lands subject to the agreement for any purpose that is inconsistent with forestry purposes during the life of the agreement or at any time after the agreement terminates without approval of the Cabinet. 35 Therefore, if trees are injured or destroyed

^{*} The law is more exactly stated by Professor Salmond as follows: "Injuries to reversionary interests are of two kinds, according as they are committed (1) by the tenant or other person in possession of the land, or (2) by a stranger. Injuries of the first kind may be included under the generic title of waste, which may be defined as unlawful damage done or permitted by the occupier of land as against those having reversionary interests in it." Salmond on Torts, 14th edition, p. 171.

without Cabinet approval, the province might require the authority or municipality to repay all grants if it considers that the trees were cut for a purpose inconsistent with forestry purposes. An owner who enters into an agreement under the Woodlands Improvement Act is prohibited from cutting or removing any trees from the land except in accordance with the management program provided for under the agreement. If the landowner cuts trees contrary to the agreement, the Ministry may terminate the agreement and may recover from the owner the cost of planting the nursery stock or improving the woodlands at a rate fixed by the regulations. According to Ministry officials, costs have been recovered from landowners where trees have been destroyed or the use of the land has been changed contrary to the agreement. However, as of June 1977, no regulations had been made fixing a rate. Therefore, it is arguable that if a landowner were to challenge the Ministry's powers under this provision, the provision would be found to be unenforceable.

However, a private owner who infringes a management agreement under the Forestry Act, appears to be subject only to the common law right of the Ministry to terminate the contract and to any terms in the contract itself, as the Forestry Act, unlike the Woodlands Improvement Act, does not provide a penalty for cutting trees contrary to an agreement.

The *Trees Act* also permits the Council of any county, and certain other levels of municipal government, to pass bylaws restricting and regulating the destruction of trees by the owner or anyone else on woodlots of 2 acres (0.8 ha) or more. Thowever, this provision has little application to the urban setting because it does not apply to smaller woodlots, to anyone who has been the registered owner for 2 years and cuts trees on his own land for his own use, or to trees injured or removed by the municipality pursuant to its rights under the *Municipal Act*, or to Ontario Hydro or other boards or commissions acting on behalf of the Ontario government. 38

In addition, three municipalities have recently, because of a growing concern about developers destroying trees in natural areas owned by them, sought and received from the provincial government special powers to restrict this destruction. Section 2 of the City of Toronto Act, 1971³⁹, provides that "subject to the Weed Control Act, the council...may pass by-laws regulating the destruction of such trees or other vegetation...without the consent of the Corporation (of the City)."40 The Borough of York⁴¹ obtained similar legislation. The Town of Oakville⁴² also successfully applied for special legislation giving it limited power to pass bylaws to prohibit the destruction of trees on private property within the municipality, provided that the municipality does not withhold its consent to cut trees where this would deny the owner the right to use his land for any structure for which he had obtained all requisite government approvals.

3.2.4 Maintenance of trees: (a) The power to prune and trim:

The landowner, whether public or private, is generally responsible for the maintenance, including pruning and trimming, or treatment of disease or decay of trees on his land. Generally, the owner is expected to bear the costs of such maintenance, apart from the assistance available from various public authorities under the Woodlands Improvement Act, the Forestry Act, the Conservation Authorities Act, and the Game and Fish Act. Although potentially available to urban woodlots, the management agreements and maintenance assistance provided for under these acts are seldom used in urban settings, and are never used for maintenance of individual highway trees.

Generally, it would also be illegal for anyone other than the owner to trim or prune trees without the consent of the owner. However, there are some exceptions. The owner of land with a tree growing on it has no obligation to lop or top a tree at the boundary no matter how much the neighbor objects to branches or roots extending onto his property, and the neighbor may not remove any part of the tree not on his land; but he may cut off any branch which overhangs his land or any part of the root which overhangs his land or any part of the root which encroaches on his land, provided he does not go onto the owner's land to do it. (Pollard)

Even this right to cut overhanging boughs and encroaching branches may have been curtailed to some extent by sections 2 and 3 of the *Trees Act* which provide for common ownership of boundary trees and make it an offence for *anyone* to injure any boundary tree without the consent of *both* owners. Although this interpretation of the sections has not been tested in the courts, it is arguable that the sections limit the right of one neighbor to cut overhanging branches or encroaching roots even on his own land without the consent of the other.

Various public authorities have the power to trim trees or remove branches that may interfere with the use of the highway or public utilities or may become dangerous to persons or property. The Municipal Act authorizes municipal councils and trustees of police villages to pass bylaws for preserving trees. They may pass bylaws authorizing their personnel to trim trees planted on a highway or to trim trees planted on private property where the branches extend over a highway. The council may also make an agreement with the owner of land adjacent to an intersection of a highway under its jurisdiction or the intersection of a highway under its jurisdiction with a railway or rapid transit right-of-way for "altering" any tree, shrub, bush or hedge that might obstruct the view of drivers of vehicles or pedestrians on the highway when approaching the intersection.

The Public Transportation and Highway Improvement Act permits the Ministry of Transportation and Communications to enter any land and "alter" any natural or artificial feature of the land for the purpose of constructing, maintaining, or repairing a highway, or for the construction or maintenance of any other works necessary for the purposes of the Ministry. How is a move branches. Where anyone has placed a tree, shrub or hedge within the distance from a highway prohibited by section 31 without a permit, the Ministry may order him to "alter" it, and may do the work itself if the person does not comply with the order within 30 days of receipt of the notice. How is the section of the notice.

The Power Corporation Act 48 gives Ontario Hydro the right to enter privately owned land on either side of a right-of-way for hydro lines or works and remove any branches that the Commission feels it is necessary to remove, subject, in some cases, to payment of compensation.

(b) Treatment of disease, infestation or decay: The goal of existing legislation appears to be to compel landowners to treat or destroy trees at their own expense where the disease, infestation, or decay may create a public nuisance by endangering passersby because of structural weakness or by spreading disease to other plants. There is little in the legislation that promotes the care and treatment of trees by giving owners assistance or financial incentives to maintain trees in good form or to treat weakness or disease rather than destroy the trees.

The *Plant Diseases Act* ⁵⁰ enables the provincial cabinet to make regulations and municipal councils to pass bylaws designating diseases or injuries of plants caused by insects, viruses, fungi, bacteria or other organisms as "plant diseases". ⁵¹ By virtue of the definition of "plant" that includes trees, this act enables municipal inspectors to take measures to control or eradicate tree diseases within the municipality. An inspector who finds a plant disease may order the owner or the person in charge of the premises to disinfect the trees or treat them. ⁵² The act is designed primarily to control the spread of diseases which damage root crops and fruit trees, and has had little use in controlling urban shade and ornamental tree pests and disease, apart from some Dutch elm disease bylaws passed under it.

The Forest Tree Protection Act^{53} authorizes the Minister of Natural Resources to appoint provincial officers who may enter any land, public or private, and take whatever measures they consider advisable to control an infestation of forest tree pests in the public interest at the expense of the Crown. The pests they may control include any vertebrate or invertebrate animal or any virus, fungus, or bacterium or other organism that is injurious to trees commonly found growing in a

forest or windbreak or the products from such trees. 55 However, the act applies only to those forest tree pests designated by regulations 56 , and no such regulations have been made since the act was passed in 1968.

The Municipal Act also contains provisions giving municipalities the power to order treatment of diseases or correction of dangerous conditions. These powers are intended primarily to protect the public and other trees, rather than to protect the injured, infested or diseased trees themselves. One section, in apparent duplication of powers under the Plant Diseases Act, enables municipalities to pass bylaws requiring people to destroy tussock moths (whose larvae are serious tree defoliators) and their cocoons on trees and on surrounding premises.⁵⁷ The broad wording of paragraph 120 of section 354(1) of the act, which enables municipalities to pass bylaws for "prohibiting and abating public nuisances", appears to provide a basis for municipalities to treat at their own expense--or order private owners to treat--disease, infestation or injury to trees on private property. However, doubting whether this general provision gave them sufficient power, two municipalities, the City of Toronto 58 and the Borough of York⁵⁹, recently applied for and received from the province special legislation specifically enabling them to pass bylaws to enter private property to inspect trees, and, where an immediate hazard to persons or property is verified, to "eliminate the hazard".

Although little financial assistance has been provided for treatment of trees, some statutes permit municipalities and government ministries to offer such assistance to private owners. The *Plant Diseases Act* permits municipalities to pay any expenses incurred in the treatment or destruction of diseased plants out of the general funds of the municipality⁶⁰, and, as stated above, the *Forest Tree Pest Control Act* permits control of infestations at the expense of the Crown. In addition, a general section of the *Municipal Act* passed in 1974 confers a power on municipal councils to make grants to any person, within or outside the boundaries of the municipality "for any purpose that, in the opinion of the Council, is in the interests of the municipality". ⁶¹

3.2.5 The power to remove or destroy trees: In addition to the right of every owner to remove or destroy his own trees, subject to the limitations described above, many public authorities have the right to do so, usually for purposes of health and safety, e.g., to prevent the spread of disease or to protect users of the highway. Generally, where a public authority has been given the rights described above to treat or trim trees, it has also been given the power to remove them. The decision whether to require treatment

or removal is generally left to the discretion of the person responsible for taking the action. In other words, Ontario statutes seldom encourage or require treatment where less expensive destruction or removal of trees will solve a problem.

In general, Ontario legislators may be said to have been more concerned with the removal of urban shade and ornamental trees than with their preservation. Because the planting and conservation of urban trees may frequently conflict with other public and private goals and purposes, trees are subject to legal destruction by many public authorities at their own initiative or at the request of tree owners. The authority to remove trees is sometimes subject to notice to the owners of the trees, and sometimes not. Generally, there is no provision for notifying neighbors or the general public. Requirements for compensation for removal of trees vary from statute to statute.

In the urban setting, trees must compete with the "needs" of developers, utilities, highway engineers, home improvements, and the installation and maintenance of many public works. According to the Conservation Council of Ontario: 62

"Trees along roads are problems to highway engineers. Those who planted the trees did not have the criteria of traffic flow design in mind. Utilities companies make demands for roadway space, shoulders must be provided and adequate drainage assured. Besides, trees cause accidents. Not surprisingly, the trees come down.

Highway design engineers advance two main arguments in favor of eliminating trees:

- (1) Existing mature trees have invariably developed along roadways too narrow for today's traffic volumes and speeds. Most road widths in the past have been happenstance, arising from the sizes of chain measure. The modern right of way becomes crowded above and below the ground with the roadway itself and the prerequisites associated with it. Old trees cannot be retained, or if left would quickly die due to an altered drainage pattern; and there is no space for new trees.
- (2) Trees along roads cause traffic deaths. For example, in 1965 just under 5% of all fatal highway accidents on the King's Highways in Ontario, involved collisions with trees.

They also point out that many old trees are eyesores, particularly when they have been severely pruned by utility companies; that householders often request removal of trees which are interfering with sewers, utilities and the like; and that trees are vulnerable to ice storms."

However, the Conservation Council also noted that:

"Trees do enhance their surroundings. There are other benefits also. They provide food and cover for wild-life, they temper the heat of summer and the raw winds of winter, and they filter glare through the air. Some writers have gone further and identified important contributions to improving the quality of the air and regulating the water cycle, although the specific role of trees in these matters is not as easy to demonstrate. But their most obvious value is an aesthetic one, and without them, the Ontario towns and countryside would lose much character and interest. In fact, there has been a traditional pattern of tree planting along roadways. The most attractive urban setting, be it country village or city subdivision, is barren and dull without the patina of mature trees."

A number of those who are exempt from bylaws and provincial legislation prohibiting injury to trees have already been mentioned. As stated, Ontario Hydro, municipalities, and agents of the Ontario government are generally exempt from the "tree cutting" bylaws that may be passed pursuant to the *Trees Act*.

Although the *Municipal Act* permits the municipalities to pass bylaws for preserving trees and for prohibiting the injury or destruction of trees, the municipality may restrict the applicability of such bylaws. For example, section 7 of Toronto bylaw 319-69 exempts the city from the application of its own bylaw. It provides that "the Commissioner (of Parks and Recreation) is hereby authorized to trim, transplant, cut down or remove...any trees planted or growing in any city street or square of the corporation, without notice to the owner or occupant of the adjoining property and without payment or compensation therefor."

Under the *Municipal Act*, municipalities have the following powers to remove trees planted on highways:

(1) Councils may pass bylaws permitting them to have any tree planted on the highway removed when this is deemed necessary to the public interest. The owner

of the tree must be given 10 days notice of the intention of the Council to remove the tree and must be recompensed for his trouble in planting and protecting it. In addition, if the owner so desires, he is entitled to remove the tree himself. The owners of trees on highways are not entitled to any other compensation, such as an amount of money to recognize the amenity value to his property or the commercial value of the timber. 64

This provision appears to apply to the case where someone has planted a tree on the highway abutting his land with the consent of the municipality. In addition, subsection 3 of section 457 states that every tree on a highway is "appurtenant" to the abutting land. This section has sometimes been interpreted by the courts as giving the owner of abutting land a property interest in a tree on a highway. In some circumstances, therefore, an abutting landowner may be entitled to at least minimal compensation regardless of whether or not he planted the tree. In any event, the section appears to impose some duty upon the municipality to pass a bylaw before removing any such trees and it is arguable that the removal of such trees without a prior bylaw could act as the foundation of a civil suit by an abutting owner against the municipality for compensation.

- (2) The municipality may pass a bylaw authorizing it to remove any trees growing on a highway or planted on a highway by an abutting owner without the consent of the municipality or without authorization by a municipal bylaw. In such a case, the municipality need not give notice of its intention to remove a tree to abutting owners or occumpants or other members of the public. 65
- (3) The municipality may pass bylaws authorizing its personnel to remove decayed or dangerous trees or trees that the municipality has directed to be removed by a bylaw. Section 487 of the *Municipal Act* gives similar powers to the trustees of police villages.
- (4) The Council may make an agreement with the owner of land adjacent to an intersection of two highways under the jurisdiction of Council or adjacent to the intersection of a highway under the jurisdiction of the Council with a rail-way or rapid transit right-of-way to remove or alter any tree, shrub, bush or hedge that might obstruct the view of drivers of vehicles or pedestrians on the highway when they are approaching the intersection. 67

If the landowner and the Council are unable to reach an agreement, the municipality may apply to a County Court judge for an order compelling the removal or alteration of the tree or shrub. The judge

may order the owner of the land to do the work or may authorize the municipality to do the work. The judge may also make the order subject to the payment of compensation by the municipality or impose other conditions on the order. 68

In addition, municipalities have miscellaneous powers to preserve or sell timber or trees on an original road allowance and to remove timber from land within the municipality, or, with the consent of an adjacent municipality, from land in that municipality, for the purposes of constructing, maintaining and keeping in repair highways and bridges, or "for any other purpose". 69

Other public authorities have powers similar to those of the municipality to compel a landowner to remove trees which may, in their opinion, interfere with the use of highways. The *Public Transportation and Highway Improvement Act* provides that for the purposes of constructing, maintaining, or repairing a highway, or for the construction or maintenance of any other works necessary for the purposes of the Ministry, the Ministry may enter any land, "alter" any natural or artificial feature of the land, remove any substance or structure from the land and construct or use any roads on, to, or from the land without the consent of the owner, provided that the Ministry gives notice of the work to the owner and advises him that he has a claim for compensation within 60 days after exercising these powers. The owner has a right to compensation for any damage "necessarily resulting" from the exercise of any of these powers. If the owner and the Ministry cannot agree upon the amount of the claim, either party can apply to the Ontario Municipal Board to determine the amount.

In addition to these extremely broad powers, pursuant to section 27 (7) the Minister may direct the owner of any tree, shrub, bush or hedge standing on lands adjacent to the King's Highway to remove it, where, in the Ministry's opinion the object might interfere with the safety or convenience of the travelling public, cause the drifting or accumulation of snow, or be injurious to the highway. This power is also subject to the same right of compensation.

The Minister may order anyone who has placed a tree, shrub, or hedge in certain locations within certain distances of a King's Highway or a controlled access highway without a permit to remove it. If the person does not comply with the notice within 30 days of receiving it, Ministry officials may enter his land and remove or alter the tree, shrub or hedge themselves. In addition, the person may be charged with an offence and fined up to \$100.⁷³

Even if the tree was planted in the offending place in compliance with a permit from the Ministry, or prior to its placement becoming an offence under this Act, the Ministry may still require the owner to remove it, provided, however, that in such a case, the owner has a right to compensation. 74

In addition to the potentially wide powers of tree destruction under the *Plant Diseases Act* and the *Forest Trees Pest Control Act*, the *Planning Act* also permits municipal councils to pass bylaws requiring the removal of trees if they are certified by the building inspector to be infested by termites or other wood destroying insects. 75

The Power Corporation Act gives the Ontario Hydro Electric Power Corporation broad powers to enter upon, take and use private and public lands for a variety of purposes without the consent of the owner. The addition, Ontario Hydro is specifically empowered to enter any land on either side of hydro lines or works, or a right-of-way for hydro lines or works, and fell or remove any trees that the Corporation feels is necessary. If the exercise of these powers amounts to an expropriation or injurious affection, the owner is entitled to compensation under the provisions of the Expropriations Act. If the exercise of these powers does not constitute an expropriation or injurious affection, compensation is to be determined according to procedures set out in the Power Corporation Act. Where the Hydro lines or works are on a highway, compensation is payable only to the extent to which it is payable by a municipality for felling or removing trees or branches under 457 of the Municipal Act. 80

In addition to explicit powers given to authorities to remove or destroy trees, many public authorities and private businesses have statutory powers to undertake activities which may result directly or indirectly in injury to trees or in their destruction. For example, pursuant to the *Public Utilities Act*⁸¹, municipalities may enter any land and divert lakes, rivers, ponds or springs for waterworks purposes. ⁸² In addition to its expropriation powers under this act, a municipality has other extensive powers. Section 21 provides that:

"The corporation, for the purpose of any municipal public utility works, has and always has had authority to put down, carry, install, construct, erect and maintain such conduits, pipes, wires, poles...as it considers necessary or desirable, on, over, under or across any highway, lane or other public communication or with the consent of the owner of private property, on, over, under or across such private property, and has and always has had authority to replace any of them."

Section 23 provides that:

"The corporation may also break up and uplift all passages common to neighbouring owners, tenants or occupants, and dig or cut trenches therein, for the purpose of laying down

conduits, pipes, wires, rods, cables and other apparatus, devices, appliances and equipment or taking up, examining or repairing the same..."

These powers to install above-ground and underground facilities and maintain them necessarily include line clearing and trenching, two activities that can seriously affect the aesthetic qualities and overall health of trees within their path.

The actual line-clearing tunnelling is carried out under policy guidelines which may or may not take the trees into consideration. Line clearing by municipal utilities commissions is usually guided by policy directives from Ontario Hydro. Policy guidelines for trenching and tunnelling operations are often set by the local municipal utility itself, which may not have urban forestry expertise available to it.

A number of federally regulated works, enterprises and undertakings, both public and private, either have explicit statutory authority from the federal government to expropriate land or destroy trees, or are able to do so with impunity because they are exempt from provincial legislation preventing tree destruction. Bell Canada, for example, is subject to a section in its Act of Incorporation which prohibits the company from cutting down or mutilating trees.

In view of that provision, the Board of Transport Commissioners has held that if the company finds it necessary to cut or mutilate trees, it must do so only through agreement with the owner of the tree. 83

However, Bell lawyers take the position that because the company is federally regulated it has alternatives to obeying municipal bylaws and provincial laws. If a municipality imposes conditions on work by Bell which it considers unreasonable, the company may apply to the Canadian Transport Commission to resolve the conflict under section 318 of the Railway Act. 84 If Bell considers that the conditions imposed by the municipality are such that they interfere substantially with the Company's operations and thereby render it impossible for the company to complete a necessary project, Bell can also take the position that inasmuch as the project is for the general advantage of Canada it is not subject to provincial or municipal legislative jurisdiction. Municipal officials have complained that Bell refuses to cooperate in measures to protect trees when these become expensive, because it is aware that it is to some extent above the law.*

^{*} For example, officials of the city of Barrie informed the Canadian Environmental Law Association of problems with Bell in the spring of 1977.

Operators of waste disposal sites may install equipment designed to prevent leachate from entering the groundwater from garbage on their site, but such action is subject to approval from the Ministry of the Environment 85 and is possibly subject to a "water taking" permit under the Ontario Water Resources Act. 86 This equipment may cause a lowering of the water table under surrounding lands that could affect the growth of trees on these lands. Adjoining landowners will lack legal protection in such a case, as the common law provides generally that the landowner has no right to prevent his neighbors from lowering the water table under his land or to sue for damages for injuries to his property resulting from this action. 87

Finally, public utilities, municipalities, provincial and federal government departments and Crown corporations, and many other public authorities have rights to expropriate lands for their purposes. Under the *Ministry of Government Services Act*⁸⁸, for example, the Ontario Government may "subject to the *Expropriations Act...*without the consent of the owner thereof, enter upon, take and expropriate any land or interest that [it] considers necessary for the use or purposes of the Government". ⁸⁹ Such expropriations, for the purposes of widening roads, and building highways, airports and other public works, frequently result in the loss of trees.

3.2.6 The power to prohibit the planting of trees: For the same reason that many public authorities are permitted to remove trees—their potential for interference with other urban needs—the province and municipalities have the power to prohibit the planting of trees in certain circumstances. The Public Transportation and Highway Improvement Act empowers counties and townships to pass by—laws determining and fixing the distance from the centre line of any road under their jurisdiction and control, within which the owner of land adjacent to the road may not plant trees, shrubs, bushes or hedges that may cause the drifting or accumulation of snow, obstruct the vision of pedestrians or drivers of vehicles, or injuriously affect the road. 90

The act also contains provisions prohibiting anyone from placing any tree, shrub or hedge within specified distances of a King's highway or a controlled access highway without a permit from the Minister of Transportation and Communications. 91

3.2.7 Liability for damage caused by trees: Although detailed consideration of this subject is unnecessary for the purposes of this study, some mention might be made of the state of the law. Civil liability is governed by the traditional common law, except where the common law has been modified by statute. The general rule in England, as stated by Pollard, is that:

"A landowner with a tree in a state which is dangerous to occupiers of adjoining land or persons lawfully using a highway is liable for any damage which it causes. The owner or occupier of trees on land adjoining a highway may be liable for damage caused by falling trees even if he does not know that the tree is dangerous; he must however be shown to have been negligent.

A highway authority which plants trees along or near a highway owes the same duty of care to users of the highway as owners of land adjoining the highway.

Generally speaking, the owner or occupier of property is under a duty to act as a good estate manager. This means inspecting and pruning the trees from time to time so that they are not likely to cause damage to persons on the highway or to neighbours." 92

To the best of our knowledge the law is basically the same in Ontario,

This general rule is codified, though not modified, by the $Line\ Fences\ Act^{93}$ with respect to damage from trees thrown down, by accident or otherwise, across a property boundary. Section 17 provides that:

"If any tree is thrown down by accident or otherwise across a line fence, or in any way in and upon the land adjoining that upon which the tree stood, causing damage to the crop upon such land or to such fence, the owner or occupant of the land on which the tree stood shall forthwith remove it and also forthwith repair the fence and otherwise make good any damage caused by the falling of the tree."

The section also permits the person on whose land the tree fell to remove the tree himself and to keep the lumber as compensation in addition to any other damages he may recover, if the tree's owner does not remove it within 48 hours. The *Municipal Act* specifically states that the municipality is not liable for maintenance or otherwise in respect of any tree it plants on private land within 8 ft (2.4 m) of the highway. 94 By implication, the traditional civil liability for damage done by the tree rests with the owner of the land.

Traditionally, common law would make the municipality liable for damage to private drains done by trees on municipal property; however, the Ontario High Court ruled in 1943, in the case of Stockinger vs. Coburg, that the owner of property, the drain of which

is connected with a municipal sewer as a matter of permission and not by virtue of any legal obligation, cannot recover damages against the municipality where his basement becomes flooded because the roots of a tree on the highway adjacent to the property blocked the drain. The Court held that since section 511(3) of the *Municipal Act* (now section 457[3]) declares the tree to be appurtenant to adjacent property, this gives the owner of the land a proprietary interest in the tree, and hence he, and not the municipality, would be responsible for damage done by its roots. The decision was appealed to the Ontario Court of Appeal, which upheld the municipality's lack of legal responsibility, but on other grounds.

Two Ontario municipalities have had special legislation passed to cover the question of liability for damage caused by trees on highways blocking private drains. Section 3 of the *City of Toronto Act*, 1974^{95} , which is the same as section 1(d) of the *Borough of York Act*, 1975^{96} , states:

"The Corporation may pay in whole or in part, the cost of clearing any blockage of a private drain, caused by a tree on the highway, subject to such conditions as the council of the Corporation may prescribe from time to time, any liability of the Corporation in respect thereof nothwithstanding."

The apparent purpose of this legislation is to enable the two municipalities to pay the costs of clearing the private drains without having to settle the liability for such blockage.

3.2.8 Trees and the planning process: One approach to the protection of trees focuses on protection of the site itself on which trees are found. In the long run, perhaps the most effective protection for trees is a planning process which formulates and follows environmental protection policies at the local or municipal level. Using such an approach, the municipality would be concerned with identification and protection of ecological communities or systems in ecologically sensitive areas. Trees usually are one component of such an ecosystem that face pressures of urban development.

Some elements of this planning process now exist in Ontario. Despite the general rule that every person has the right to deal with his property as he sees fit, it is clear that with proper procedural safeguards, public authorities do have the power to control, or even to freeze the use of, land in private ownership in the public interest, even without actually acquiring it. Statutory land use planning to promote the orderly development of lands is a well established and accepted procedure. As urban planning and renewal have assumed greater

and greater importance as matters of social policy, legal restraints on the distribution and use of real property have proliferated.

It is, in fact, legal in Ontario under the *Planning Act* for a municipality to restrict severely the uses of private land, and to rezone the land for a less intensive use than its present zoning would permit. Despite a belief that such "down-zoning" is improper, it appears to be legal in Ontario. It does not constitute "expropriation without compensation", which might be considered illegal in some circumstances in the United States. Zoning in theory is not a question of rights to be upheld, but a matter of deciding what use of land represents good community planning in the public interest.

However, in practice, the theoretical power to "down-zone" under the present political order will almost never be used in Ontario. Municipal councils and landowners perceive it as an infringement of private property rights. Moreover, every approval of a rezoning application or official plan amendment by a municipality is subject to review by the Ontario Municipal Board, and ultimately, if the decision of the Ontario Municipal Board is appealed, to a decision by the Ontario Cabinet. The policy of the Ontario Cabinet, as expressed through the Ontario Municipal Board, is to prohibit a freezing of the use of lands or down-zoning except as a temporary measure while the municipality attempts to acquire the land by purchase or expropriation. 97

Planning for protection of trees in Ontario, therefore, is largely a matter of give and take between municipal and provincial officials and landowners who wish to develop. In general, the landowner is free to strip his land of trees prior to beginning his participation in this planning process, although he faces some practical and legal restraints to this course of action once he begins to participate in the process.

- 3.3 Planning and Environmental Legislation with Urban Forestry Implications
- 3.3.1 The Planning Act: Under the Planning Act 98, the rights of individual owners are by implication subjugated to the protection of the "health, safety, convenience and welfare" of the public. The Minister of Housing must consider these goals before approving draft plans of subdivision. 99 Committees of adjustment and land division committees must also do so when determining whether to consent to a minor variance or severance of land without a sub-division plan. 100

Every municipal planning board, when carrying out its duties to investigate and survey the physical, social and economic conditions of the planning area, must also keep these considerations in mind. 101

(i) Official plans: An official plan is a "program or policy...designed to secure health, safety, convenience or welfare of the inhabitants" of the planning area. While zoning bylaws discussed below restrict the use of individual parcels of land in some detail, the official plan is an overall statement of a series of policies for future development of a municipality. It will often express an intention for the optimal use of every parcel of land in the municipality. If an official plan designates land in the municipality to be maintained as open space or green space, so as to protect urban forests, no zoning bylaw or any other kind of municipal bylaw that is not in conformity with the official plan may be passed. Similarly, no public work may be constructed that is not in conformity with the official plan.

Official plans must be drawn up by a Planning Board consisting of both elected officials and members of the public appointed by the municipal council. Out of the planning board deliberations, which must, by statute, include public meetings and review of recommended policies and land designations by the general public 105, comes a draft plan which is forwarded to the council for adoption or amendment. Following adoption by the council, the draft official plan is sent to various provincial authorities for their comments. The Minister of Housing, on the basis of these comments, may suggest modifications to the plan. If there are objections to any of the policies or designations in the plan, these may be referred to the Ontario Municipal Board for a decision by the Minister of Housing at the request of any resident of Ontario. 106 The official plan does not become binding until ratified by the Minister of Housing, or, if there is a reference, by the Ontario Municipal Board.

Nowhere in the *Planning Act* is the purpose of an official plan prescribed, other than by its definition as a program or policy to secure the health, safety, convenience or welfare of the inhabitants of the planning area. The act makes no specific mention of environmental protection or nature conservation. Despite this, several municipalities are at present experimenting with the incorporation of conservation policies and designations of land as "environmental protection areas" or "environmentally sensitive areas" in their draft official plans. The intention is to implement these designations and policies on a site-specific basis through zoning bylaws.

In addition to designation of lands to prevent development for conservation purposes, lands which are geologically unstable or subject to flooding may be designated "hazard lands". Development on such lands is not prohibited primarily for nature conservation purposes, but

the prohibition may have the indirect effect of conserving trees. In some official plans there may be "special policy areas" designated, subject to restrictions beyond the general policies for other land use designations. "Estate lot" areas in the proposed official plan for Mississauga, for example, will be subject to conditions intended to discourage the gradual deterioration of areas of estate residential use through infilling between existing houses.

The designation of land in official plans and zoning bylaws as "parks", "open space", or "greenspace", may provide some protection for trees and other natural features, but often this apparent protection is more illusory than real. Policies for uses of municipal parks usually include placement of public works facilities and active recreational uses. In park planning a conflict between the need to preserve natural features and the demand of municipal officials that the land be easy and inexpensive to maintain and available to residents for intensive recreational uses dictates that much of the parkland be treeless. In a developing community, for example, the demand for tennis courts, swimming pools, skating rinks, and playing fields may receive priority over preservation of parkland with trees or urban wilderness areas to serve the "passive" requirements of the walker or bird watcher. "Greenspace" or "open space" designations or zonings are often looked upon, especially in older official plans, merely as interim designations for land which is not yet served by municipal roads, sewers and other services, and which there is no immediate market pressure to develop. Such designations are seen by purchasers and councils as an open invitation to apply for a more intensive use designation and rezoning, rather than as long-term planning policies. Pressures on municipal councils to change these designations and zonings are often great.

(ii) Zoning 108: Zoning bylaws (or "restricted area" bylaws, as they are called in the Planning Act) restrict the use of land and buildings to particular purposes and subject them to specific controls. Zoning bylaws are intended to regulate rather than prohibit the use of land. Thus, while the zoning bylaw can restrict the use of land, it cannot freeze the land so that the owner is unable to make use of it. The restrictions a zoning bylaw may place on the use of land may not prohibit the owner from cutting down trees, but they may prevent him from building structures that are inconsistent with protection of trees on the site. The zoning will generally recognize the existing uses of the land at the time the zoning bylaw is passed, whether they be for residential development, farmland, industry, commercial enterprises, or parkland, together with uses the planners and municipal officials hope to see in the future. The zoning will restrict the permitted sizes of buildings in relation to lot size, distance between buildings, setbacks from the road and from adjacent lots, and other such features,

Where an official plan or a zoning bylaw permits uses of land that are inconsistent with protection of trees on the land, or otherwise inconsistent with good planning, the municipal council or any resident of the municipality may apply for a rezoning or redesignation of the land to a less intensive use. However, such "down-zoning" applications have little likelihood of success, in many cases, for the reasons stated above.

(iii) The development process--(a) development control or site development bylaws 109: Private developers or public authorities who wish to build new structures, alter old structures, or put their land to new uses, cannot do so unless the zoning permits it. When an owner applies for a rezoning to develop or "redevelop" his land by erecting buildings or structures or by removing buildings or structures and replacing them with others, a municipality with an official plan may impose a number of conditions on the way in which the owner develops the land. It would appear from the wording of the "development control" section of the *Planning Act* that a municipality may impose conditions intended to prevent the destruction of trees or natural areas on the land during the development process or as a result of the development process or of the development itself. The municipality, for example, may regulate the grading or change in elevation or contour of the land, and also may require establishment of "walls, fences, hedges, trees, shrubs, or other suitable ground cover to provide adequate landscaping of the land or protection to adjoining lands". 110

It seems that the main purpose of the Ontario Legislature in passing this provision in 1973¹¹¹ was to ensure that the land and buildings are adequately serviced and that the owner absorbs his fair share of the cost of providing additional services. But it would appear that the municipality might also use it to negotiate with the owner certain conditions on the approval of his redevelopment plans that are designed to ensure protection of trees on the property.

From the wording of the section, it would appear that the municipality may impose such conditions on any development or redevelopment, even where the land has the required zoning. However, some municipal lawyers believe that the intent of the section was to apply only upon rezoning, and some municipalities, on the advice of their lawyers, are reluctant to use these powers other than on a rezoning application.

(b) Minor variances: Where a landowner wishes to make some use of his land that does not quite comply with the zoning bylaw, but that theoretically is not inimical to the general intent of the bylaw, he may apply to a committee of adjustment appointed by the municipal council for a "minor variance". Residents within a specified distance of the property are notified of the application and given an opportunity to voice any objections before a public hearing of the committee. The committee may also consider reports from the municipal planning department,

municipal engineers, district health officers, the local Conservation Authority, and other public authorities. The committee may allow the landowner, for example, to enlarge a building beyond the size permitted by the zoning bylaw, to build closer to neighboring property than otherwise permitted, or to build on a lot which is slightly smaller than permitted by the bylaw.

In theory, the minor variance gives some flexibility to the planning process without infringing on the intent of the zoning bylaw. In practice, however, the cumulative effect of minor variances may cause serious deterioration of the amenities of a neighborhood. For example, a landowner with a lot slightly smaller than twice the size of the minimal lot on which a residence can be built under the zoning bylaw may seek to subdivide his property into two lots and build a house on the second lot even though it will be slightly smaller than permitted by the bylaw. To do so, he will need the consent of the committee of adjustment for a minor variance. His neighbors, however, noting that a second house cannot be placed on the property without destroying a number of trees on the property, may object before the committee. They may argue that these trees, while on private property, are an amenity available to the neighborhood, and the minor variance will tend to change the nature of the neighborhood. But although the gradual loss of trees and open space through in-filling in older established areas is an insidious process accounting for a large proportion of tree losses in rapidly urbanizing communities, the local committee of adjustment, dealing with each application on an individual basis, is unlikely to provide an effective barrier to this cumulative effect, unless given strong directives by the municipal council.

(c) Subdivision control: The *Planning Act* also provides for subdivision control. 114 A private landowner who wishes to divide his lands for development and resale must register a plan of subdivision or obtain a consent from various officials. Before a plan of subdivision can be registered, it must be approved by the Minister of Housing, who will first confer with the officials of municipalities, a number of government ministries, conservation authorities, and other public authorities. Before approving the plan, the Minister must consider the health, safety, convenience and welfare of future inhabitants of the area, the public interest, the conservation of natural resources, flood control and a number of other matters. 115 Subdivision control applies to both zoned and unzoned lands, but it is most important on unzoned lands where it may be the main protection against environmental destruction.

Where there is no registered plan of subdivision, the committee of adjustment or land division committee must consider, in giving consent to a division of land, the same matters to be considered in approving plans of subdivision.

The Minister or other consent-giving body has the power to refuse permission, or to impose conditions, as well as to approve the subdivision. Among the conditions the Minister may impose is that of requiring the developer to enter into agreements with the municipality. Through such agreement, the municipality might require the developer to protect trees on his property and to avoid developing parts of his property containing forests. The Minister might require, for example, that the developer produce a site-grading plan suitable to the municipality and make it part of the subdivision agreement, or that he erect hoardings or fencing suitable to the municipality around trees or treed areas, prior to commencement of any construction, at a spacing satisfactory to the municipality. The agreement might stipulate that such protection barriers be maintained throughout the construction process.

As mentioned above, the *Planning Act* says very little about environmental matters. Section 33(2)(g) requires that a draft plan of subdivision "indicate natural and artificial features such as buildings, railways, highways, water courses, drainage ditches, swamps, and wooded areas within or adjacent to the land proposed to be subdivided, and anything within or adjacent to such land that constitutes a fire hazard to the proposed subdivision".

Although it is not clear that the purpose of requiring that these natural features be indicated is environmental conservation, municipal planning departments sometimes use this provision as the basis for requiring developers to provide details of natural environmental features that may range from a simple tree map showing, for example, all trees over 8 cm in diameter to more detailed environmental assessments.

The act also requires a developer to convey to the municipality an area equivalent to 5% of the total area of the subdivision 118, or alternatively, one acre (0.4 ha) for every 120 dwelling units to be built. The municipality may accept money instead, however, to be paid into a fund to be used for the acquisition of land for park purposes.

As noted, parkland does not necessarily imply trees. A municipality may prefer treeless land because it is easier to maintain and does not need to be cleared for playing fields and other intensive uses.

With the right to approve or disapprove of applications for rezoning and official plan amendments, to impose development control by-laws, to oppose applications for minor variances, and to refuse to enter into subdivision agreements, the municipality is in a position to negotiate with the developer for retention of trees and greenspace. The development takes place through a series of discussions between the developer and his representatives and the municipality's departments of planning, engineering and parks, as well as with the local Conservation Authority and ratepayers' associations in some cases. Planning board

and council members are also involved indirectly in the negotiating process, as the plan must receive their approval or rejection before going to the Minister or Ontario Municipal Board for final approval.

In deciding whether to clear the land of trees prior to submission of his draft plan of subdivision or to place his buildings on the plan in a position which interferes least with the preservation of existing trees, the developer will weigh a number of factors which directly or indirectly amount to economic considerations. If a developer decides, on reviewing the market for houses of a certain type, that the presence of trees and associated greenspace on the lots will help sell the houses, his planners will plan accordingly. Such planning also has indirect advantages in that the developer will acquire a reputation for developing homes within a well planned, aesthetically pleasing setting, and good public relations with the community and its municipal planning, engineering and parks departments. This can result in easier negotiations and fewer delays in obtaining plan approvals. However, in areas of marginal profitability where it is necessary to erect as many housing units as the zoning allows, the developer is unlikely to sacrifice potential building sites to tree preservation. The advantages of additional units to sell may well outweigh any marginal profits to be gained from selling a treed lot or a more aesthetically pleasing subdivision.

It is also much less expensive to provide services such as sewers, water mains, and roads and to build structures on a flat, dry, treeless piece of land than to develop land in a way which leaves trees, ravines, wetlands, and other such natural features undisturbed. The construction process itself is slower when it is necessary to direct bulldozers around sensitive features or plan for sites for dumping earth removed for foundations. The ideal site, from a developer's point of view, is a piece of flat table land without a tree, shrub or ravine, with workable, well drained soil.

Once the developer and the municipality have agreed on the details of the subdivision agreement, they sign it as a formal contract between them. If some of the trees on the property are to be preserved during and after development, the subdivision agreement can contain provisions to ensure their protection during and after the construction process. The provisions of the agreement may bind the developer to take reasonable precautions during construction to avoid damaging the trees that are to be left. He may, for example, agree to wrap and board all trees, to avoid disturbing topsoil within an agreed number of metres from trees. He may also be required to post a bond against non-performance. In the case of destruction of individual trees, the developer may agree to pay compensation at an agreed rate according to size and species.

A further difficulty is that the actual construction may be done by a number of sub-contractors who are unfamiliar with the terms of the agreement. Trees may be damaged as a result of human error, as in a Mississauga subdivision where workers misunderstood instructions that all marked trees were to be preserved, and removed every tree with a mark, leaving the unmarked ones.

Subdivision agreements may not be effective in protecting trees from building contractors and sub-contractors or their workmen who are not a party to the original agreement unless workers on the site itself are supervised closely by the developer or field operations are inspected by municipal officials. However, although all municipalities have field staff to ensure that services and buildings conform to provincial and municipal standards, we are not aware of any municipality with staff whose function is to ensure compliance with environmental protection standards on construction sites.*

Without such policing, provisions in subdivision agreements for protection of trees may be unenforceable despite the deposit of a performance bond. Trees damaged by compaction of soil, tearing of roots, changing soil levels, scarring by bulldozer blades and other construction mishaps may take several years to die and damage may not be visible immediately. By the time injury manifests itself visibly, the performance bond may have been refunded or the problems of proving the cause of the injury may be insurmountable.

Moreover, tree protection provisions in the agreement are unenforceable against subsequent purchasers of the individual lots, unless the deed from the developer or builder to the purchaser and from the purchaser to subsequent purchasers contains a restrictive covenant forbidding tree removal. Without such a covenant, the purchaser of a treed lot may decide with impunity to build a swimming pool or remove trees obscuring the view from his picture window.

(d) The role of a Conservation Authority with respect to subdivision approvals and development: Where there is a local Conservation Authority, it may review draft subdivision plans in areas subject to possible flooding. These Authorities may exercise their powers under the Conservation Authorities Act to prohibit building on flood-prone lands without a permit from them. 119 Ontario Regulation 735/73, for example, requires that all development within a regulated area must have a permit from the Metropolitan Toronto and Region Conservation Authority before any land filling or construction can take place, no matter how small the project. The regulated areas are those adjacent to streams and rivers within the Authority's region. In such areas, a permit from the Authority is required to place fill, to undertake new

^{*} Mississauga was considering hiring field staff at the time of writing.

construction of any sort, to renovate or add to an existing building, to divert, dam, widen, deepen or in any way alter a watercourse. This permit is required in addition to any health unit* and building permits** that may be required.

3.3.2 Environmental Impact Assessment: Reports and studies referred to as "environmental impact assessments" have been prepared with increasing frequency in recent years as a result of public pressure for evaluation of environmental effects of projects before approval. Until recently, however, there was no uniformity in the scope or methodology of such studies, nor was there any general requirement that these studies be done whenever the environment was threatened.

The most recent addition to Ontario's planning legislation is the Environmental Assessment Act120, passed in 1974. The purpose of the act is to establish a mechanism to identify and evaluate potentially significant environmental effects of proposed undertakings at a stage when alternative solutions, including remedial measures and the alternative of not proceeding, are still available to decisionmakers. The act would apply only to major undertakings of the private sector which are designated by regulation, and to undertakings of provincial government and its agencies, municipalities, and other public authorities, unless they are exempt by order of the Minister of the Environment. 121 Where an undertaking is subject to the act, its proponent must prepare an environmental impact assessment and submit it to the Ministry of the Environment for review. 122 The document is available to the public, and any member of the public may request the Minister to order the Environmental Assessment Board to hold public hearings. 123 The Minister may refuse the request if he considers it to be frivolous or vexatious or to cause undue delay. 124

Although the first assessment ordered pursuant to this act is an assessment of the proposal by Reed Paper Limited to harvest timber in an area of 19,000 acres (7600 ha) of northern Ontario 125 , it is unlikely that this act will have very much application to urban forestry. The projects and programs to be assessed will not always include highway trees or urban woodlots.

As examples of environmental assessment review and statements to be undertaken pursuant to the act, we cite procedures of the Ministry of Transportation and Communications (MTC) and Ontario Hydro which have

^{*} Local health units may require permits for certain kinds of construction pursuant to the *Public Health Act*.

^{**} Building permits may be required under the *Planning Act* to ensure that construction complies with zoning and other provisions of the act.

urban forestry implications. The Environmental Office of MTC has developed an Environmental Screening System to identify road projects that would be subject to environmental assessment. The system includes three lettered levels:

- A. Environmental assessment mandatory. Projects include new routes or alignments, and major realignments and bypasses.
- B. Environmental assessment optional. Projects include freeway upgrading, widening of existing highways, adjustments to pavement features and construction of service centres, rest areas and patrol yards.
- C. Environmental assessment not required. Among these projects would be construction of crossroads, lighting system installation, highway landscaping and replacement of a highway facility destroyed by a catastrophe or disaster.

At the time of writing, the MTC is preparing, for test, a first Evaluation Assessment Class Category (EACC) for consideration by the Ministry of the Environment (MOE). These EACCs will, if approved, establish specific, uniform criteria and standards to be utilized as checklists and guides in preparing assessment statements. This conformity is advocated to simplify and assist in the evaluation of statements by reviewing MOE officials.

Category "B.1" (which is a derivative of the foregoing "B") will cover the widening of existing highways by adding through traffic lanes in rural areas. Category "B.3" which will be presented after approval of "B.1" will be concerned with the engineering features and environmental impacts of "B.1" plus adjustments to alignment, grades or cross sections in urban areas. Under both categories, trees, other vegetation and, of course, land features would be affected.

One feature of the MTC approach is that it maximizes both internal and external review of the category descriptions before submission to MOE. In addition to participation of MTC engineering, landscape maintenance and other divisional experts, external, environmental consultation and review incorporates the opinions of the Canadian Environmental Law Association, the Ontario Shade Tree Council, the Federation of Ontario Naturalists, the Conservation Council of Ontario and other action-conservation groups. These external agencies will also monitor the construction projects resulting from statement approvals. The MTC will act as its own enforcing agency with only a modicum of supervision by the MOE.

Attendant to the foregoing and in recognition of a more natural system of roadside vegetation management, MTC Quality Standard M-300-5 Natural Regeneration, which became effective in 1976, advocates the natural seeding of trees and other plants from seed sources in native

woodlots adjacent to roadside vegetation strips plus the protection of existing native and planted vegetation within right-of-way property. The purpose of this standard is to produce a natural form of vegetation to blend the right-of-way into surrounding landscapes.

Ontario Hydro's compliance with the act is manifested in a fourstep procedure which was initiated on 1 October, 1976. When a new power transmission corridor is proposed the following sequence of events is activated.

- 1. Environmental planners of the Ontario Hydro Forestry Section in consultation with Hydro forestry and engineering colleagues propose an environmental assessment statement which provides a series of alternative routes and the anticipated environmental impacts of each.
- 2. The completed document is then submitted to MOE which consults with other provincial ministries that might be affected by the final location of the corridor. If there are substantial objections, Hydro is advised to replan.
- 3. When an application is finally approved by MOE, Ontario Hydro then applies for an order-in-council from the Cabinet to permit land acquisition along the selected right-of-way. Public hearings are also held at this stage.
- 4. After final approval, the originally requested width of the corridor is narrowed to locate towers or conduits so that they minimize disturbance of the land and the vegetation it supports. (Proposed rights-of-way will thread through a number of urban fringe areas that support woodlots).
- The Ontario Heritage Act: The Ontario Heritage Act 126, which was proclaimed in 1975, continued the existence and expanded the powers of the Ontario Heritage Foundation. The act confers upon the Foundation the authority to purchase, lease or otherwise acquire, and to preserve, restore and manage property of historical, architectural, archeological, recreational, aesthetic and scenic interest for the use, enjoyment and benefit of the people of Ontario. The Foundation can enter into agreements and easements with property owners and provide them with financial assistance by way of grants or loans. 127 Under section 22 of the act, the Foundation can register the easement or covenant against the property affected in the Land Registry or Land Titles office, so that it will run with the land and bind future owners. The Foundation's powers appear to be broad enough to include that of purchasing conservation easements or maintaining trails or nature preserves on private land, in addition to its powers to protect historic buildings. These powers could be used to preserve the total aesthetic character of provincially significant historical or scenic areas, of which trees are usually an integral part.

Similar but more restricted powers are available to municipalities. 128 Municipalities may take action to conserve buildings of historic or architectural value by designating them as worthy of preservation and negotiating with their owners to purchase the property or some interest in it. The conservation of trees on the property would be incidental to the acquisition and conservation of the buildings, but municipalities, unlike the Foundation, may not acquire an interest in a site primarily for preservation of trees and natural features.

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1. R.S.O., 1970, c. 284.
 2.
     S. 457(1).
 3.
     S. 45/(2).
     R.S.O., 1970, c. 468.
     Ibid., s. 7(a), s. 10(1), s. 7(b).
 5.
     Ibid., s. 7(c), s. 10(1).
     R.S.O., 1970, c. 78.
 7.
     Ibid., s. 20(b).
 8.
 9.
     R.S.O., 1970, c. 201.
     R.S.O., 1970, c. 181.
10.
     R.S.O., 1970, c. 502.
11.
12.
    R.S.O., 1970, c. 384.
13.
    R.S.O., 1970, c. 255.
14.
     S. 2.
     S.457, (4)(c).
15.
16.
     S. 11.
     S. 2.
17.
18.
     S. 20(p).
     S. 27(4).
19.
20.
    Forestry Act, S. 2; Woodlands Improvement Act, s. 2.
21.
22.
     R.R.O., 1970, O. Reg. 355, as amended.
23.
     R.R.O., 1970, c. 186.
24.
     Ibid., s. 6(3).
25.
    Public Works Act, s. 19(2).
    Municipal Act, s. 466(1).
26.
27.
    Forestry Act, s. 2(3); Woodlands Improvement Act, s. 4.
28.
     S. 457(4)(i).
     S. 457(4)(e).
29.
30.
    S. 457(7).
31.
    S. 3.
32.
    S. 27(3).
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Public Parks Act, s. 19(1)(e).

33.

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S. 4(3).
     S. 2(3).
35.
36.
     S. 3.
37.
     S. 4.
38.
     S. 5.
39.
     S.O., 1971, c. 130.
40.
     Ibid., s. 2.
     The Borough of York Act, 1975, S.O. 1975, c. 120, s. 1(c).
41.
42.
     S.O. 1974, c. 152.
43.
     S. 457(3)(d).
     S. 457(4)(h).
44.
     S. 451(1).
45.
46.
     S. 4.
     S. 31(5) and s. 31(7).
47.
     R.S.O. 1970, c. 354, as amended by S.O. 1973, c. 57, s. 1 - For-
     merly entitled the Power Commission Act.
49.
     S. 33(2).
50.
     R.S.O. 1970, c. 350.
     S. 10(a), s. 5(1).
51.
52.
     S. 7(1).
     R.S.O. 1970, c. 180.
53.
     S. 3 and 4.
54.
55.
     S. 1(b).
56.
     S. 1(b).
57.
     S. 354(1) para. 62.
     The City of Toronto Act, 1976, S.O. 1976, c. 105, s. 3.
58.
     The Borough of York Act, 1976, S.O. 1976, c. 111, s. 1.
59.
60.
     S.5(5).
61.
     S. 248a.
     "Trees and Roads", 1970, Clive E. Goodwin, Conservation Council of
62.
     Ont.
63.
     S. 7.
     S. 457(4)(f).
64.
65.
     S. 457(4)(g).
66.
     S. 457(1)(h).
67.
     S. 451(1).
68.
     S. 451(2).
     S. 453, para. 5, s. 453 para. 8.
69.
     S. 4, s. 11.
70.
     S. 12(1).
71.
72.
     S. 12(2).
73.
     S. 31.
     S. 31(9).
74.
     S. 38(1) para. 22(c).
75.
76.
     S. 24(1).
77.
     S. 33(2).
78.
     S. 34.
     S. 35.
79.
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80.

S. 35.

- 81. R.S.O., 1970, c. 390.
- 82. S. 2(1).
- 83. Correspondence from Mr. O. Pezzack, Solicitor, Bell Canada, to John Swaigen.
- 84. R.S.C., c. 234.
- 85. Environmental Protection Act, S.O. 1971, vol. 2, c. 86, Part V, s. 23 to 48.
- 86. R.S.O. 1970, c. 332, s. 37.
- 87. The Common Law doctrine that the landowner has no right to prevent his neighbors from lowering the water table under his land has recently been successfully challenged. In Pugliese vs. the National Capital Commission, [1977] 17 Ontario Reports [2nd] 129, the Ontario Court of Appeal ruled that lowering of the water table which interferes with a neighbor's use of his land may be illegal in some circumstances. The decision has been appealed to the Supreme Court of Canada.
- 88. S.O. 1973, c. 2.
- 89. S. 8(2).
- 90. S. 99(4).
- 91. S. 35(2) and s. 31(2).
- 92. Pollard, R.S.W., "Trees and the Law", Leaflet No. 6, Arboricultural Association.
- 93. R.S.O. 1970, c. 248.
- 94. S. 457(4)(c).
- 95. City of Toronto Act, 1974 (No. 1), S.O. 1974, c. 161.
- 96. The Borough of York Act, 1975, S.O. 1975, c. 120, s. 1(d).
- 97. Corbett, Marie, "The Ontario Municipal Board: Planning and Zoning Cases", Osgoode Hall Law Journal, June 1976, Vol. 14, No. 1, p. 93.
- 98. R.S.O. 1970, c. 349.
- 99. S. 33(4).
- 100. S. 29(12).
- 101. S. 12(1), s. 1(h). The combined effect of the definition of official plan and the duties of the Planning Board make it clear that the Planning Board is to keep these conditions in mind in drafting the official plan.
- 102. S. 1(h).
- 103. S. 19(1).
- 104. Tbid.
- 105. S. 12(b).
- 106. S. 15(1).
- 107. Prohibition of building on lands with steep slopes, flood plains, or other "hazard lands". It is a policy of the Ministry of Natural Resources, which reviews every draft official plan, to ensure that it complies with this policy.
- 108. S. 35.
- 109. S. 35a.
- 110. S. 35a(2)9.
- 111. "Background", Ministry of Treasury, Economics and Intergovernmental Affairs, January 11, 1974.

- 112. S. 42(1).
- 113. S. 42(5) and s. 42(7).
- 114. Part II of the Act.
- 115. S. 33.
- 116. S. 33(5).
- 117. S. 33(5)(d).
- 118. S. 33(5)(a).
- 119. S. 20(k), s. 27(1).
- 120. S.O. 1975, c. 69.
- 121. S. 3, s. 30.
- 122. S. 5.
- 123. S. 7(2).
- 124. S. 12(2)(b).
- 125. See EA Update, May 1977, Vol. II, No.3, for draft Order-in-Council, appointing Mr. Justice Patrick Hartt to conduct the Inquiry.
- 126. S.O. 1974, c. 122, as amended by S.O. 1975, c. 87.
- 127. S. 10.
- 128. Part IV.
- Brodie, D. A. A Condensation of the Report of the Forestry Study Unit, Ontario Department of Lands and Forests, 1967.
- Corbett, Marie. "The Ontario Municipal Board: Planning and Zoning Cases", Osgoode Hall Law Journal, June 1976, Vol. 14, No. 1, P. 93.
- Goodwin, C. E. "Trees and Roads", Conservation Council of Ontario, 1970.
- Kennedy. See Literature Cited, chapter 2.
- Pollard, R. S. W. "Trees and the Law", leaflet No. 6, Arboricultural Association, undated.

4. BRITISH AND AMERICAN LEGISLATIVE EXAMPLES

4.1 The English Experience

Since we often look to Britain for legal precedents, we offer the following summary of England's tree-related laws and in particular a discussion of Tree Preservation Order legislation.

As reviewed by Pollard (1974), English law, except for the Cromwellian interim of 1649-1660, has evolved since the thirteenth century. Most of the laws affecting property rights and attendant vegetation were formed by decisions of the law courts. Pollard states that:

"Despite the increasing output of Acts of Parliament since the 1830s much of English law still remains embodied in decisions of the courts and new law is constantly being made by them. This non-statutory law, conventionally called Common Law, may be more flexible than Statutory Law since it is amenable to development through change by judges' understanding of, and response to, new social circumstances. It has however the defect that it is often difficult to state with certainty what the law is where no case has been decided on a particular point. 1"

In addition to the legal regulations that apply to Britain's trees, changing economic and land-use patterns also influence arboreal management.

It has been estimated that 60% of England's trees are found along rural and suburban hedgerows. But the trees and shrubs growing along these historical boundary lines are subject to the vagaries of time and space. Biologically, under present management systems and environmental conditions, the woody plants that formerly composed the geometric web of property and field boundary hedges are assuming different life forms. These rows of once well tended and sheared European beech, elm, hawthorn, holly and ironwood have fallen prey to several ailments. First, the labor force that maintained the hedgerows is almost extinct. High labor costs, lack of interest in agricultural endeavors, and shortages of young arboricultural trainees have allowed the hedge trees either to fall into decay or to sprout with rampant growth. Further, changing agricultural practices (encouraged by Parliament), under the guise of more efficient land management to increase productivity, call for the removal of hedgerows to enlarge existing fields.

Dutch elm disease (DED), which in some parts of southern England has killed most of the elms within the past 5 years (England's woodlands and hedgerows are composed of between 20% and 40% elms of several species), has created a dual malaise. Not only have the English treescapes lost their aesthetic integrity but, more to the point of this report, dying and dead elms have created myriads of complicated lawsuits as falling limbs and trunks indiscriminately damage property and injure livestock and people. Who is ultimately responsible for the removal of dead trees under common ownership? An example of a positive approach which is retarding the spread of DED is found in East Sussex where the County Authority pays for dead elm removal from both public and private property. Unfortunately, in most of the United Kingdom (DED is appearing in Scotland, Wales and Ulster as well), because of lack of funds, responsibility goes unanswered while DED continues unabated.

Further to the legal responsibilities attendant to trees on boundaries, Pollard commented that:

"There is no obligation at common law to cut a hedge or to lop or top a tree on the boundary of a property, however much the neighbouring landowner may object to it. An adjoining landowner may in law cut off any branch which overhangs his land without notice to the owner of the tree. But he may not go on to the land of the owner of the tree to do this. Branches which are cut off, and any fruit growing on branches and fallen fruit, still belong to the owner of the tree and, if they are not returned to him, he could sue the neighbour who cut them for their value. It is not permitted to lop branches as a precaution before they overhang neighbouring land. If fruit from a tree falls on neighbouring land the owner of the tree may enter the other land to take his fruit--provided that he does not stay on the land longer than necessary and does not do any damage by doing so. If in the course of pruning the tree branches fall on to neighbouring land this can be justified but the work must be done as carefully as possible. There is no right to enter a neighbour's land in order to prune a tree. There is no legal right to poison the encroaching roots of a tree. If roots are damaged and the neighbour's tree is consequently injured the landowner using the weed killer or other chemical will be liable for damages.2"

The responsibility of the owner for both the protection of his own boundary trees and shrubs and the damage they may create will probably be further confounded as urban encroachment continues on former rural land. Existing property lines delineated by trees will be altered or erased by subdivision development and the variety as well as the number of boundary trees will continue to decline. Judicial prohibition of damage and destruction to privately and publicly owned trees and shrubs is currently incorporated within one comprehensive statute—the *Criminal Damage Act* of 1971. Under the act, it would be a criminal offence, without lawful excuse, to damage or destroy another property owner's trees. Maximum court penalty for wilful tree destruction is imprisonment for 6 months, a 400 pound fine, or both. If personal injury or death results from cutting or weakening another's tree and if the offender is tried and convicted, the individual is liable to a maximum 10—year prison sentence.

One controversial provision within the act is that a person may pick fruit, flowers, or foliage from trees growing "wild", but may not break or remove a branch. The issue of what is "wild" and what

constitutes a "branch" leads to endless debate (neither term is explicitly defined in the act). Is an apple tree growing in an abandoned orchard "wild" even if in view of the owner's residence? Or does a twig bearing this year's increment of blossoms and leaves constitute a "branch"?

Interpretation of ancient English common law governing harvesting privileges of trees and forest products on common land has also become very technical and complicated. Constant litigation ensues betwen those individuals who hold to their ancestral prerogatives and individuals or groups who regard the village or town commons as communal land deserving the status of a botanical or wildlife sanctuary.

The British Forestry Commission, an autonomous federal organization combining features and functions of the Canadian Forestry Service and the Ontario Ministry of Natural Resources, also holds regulatory powers that affect trees of public and private ownership. Under provisions stipulated within the *Plant Health Act* of 1967, the Commission may direct or authorize, under order, the removal or destruction of trees or shrubs that harbor pathogenic diseases or insect vectors that are liable to spread infections or infestations to other woody plants, thereby endangering forest resources. With the current DED epidemic in Great Britain, the magnitude of mandatory removal of millions of large trees growing on private property where owners do not have to pay for that removal has immobilized the meaningful enforcement of most removal orders.

With respect to comprehensive household insurance coverage, it is usually required that the report of a registered (or equivalent) arboriculturist be submitted to an insurance company before a rider is added to the policy that would cover damage done by trees to adjoining property or persons.

4.1.1 Tree preservation orders: Tree preservation orders prohibit anyone, including the tree's owner, from mutilating or destroying a tree which has been designated by the authorities as having high amenity value. Regulations attendant to tree preservation order legislation are probably the most environmentally enlightened and comprehensive of any tree and forest conservation measures in the western world (Hall 1970). In his review of tree preservation orders, Hardy (1972) reminded his readers that the orders had their origin in the Town Planning Act of 1909 and the later model clauses of the 1929–1932 acts. At that time, a municipal council had the jurisdiction to deny destruction of trees by either public bodies or private individuals if the trees were registered as having amenity value to the community at large. Improvements and revisions to tree preservation order legislation were introduced through the Civil Amenities Act of 1967, the Town and County Planning Act of 1968, and the Trees Act of 1970 (Hall 1970).

Further, authority to issue the orders was given to local planning authorities rather than to municipal councils (Wilson 1971).

Specifically, a tree preservation order is issued under the provisions of section 29 of the *Town and County Planning Act* of 1962 as amended by provisions of section 81 of the *Town and County Planning Act* of 1968 and section 16 of the *Civic Amenities Act* of 1967. According to the Arboricultural Association (Hall 1970),

"A Tree Preservation Order, therefore, becomes a registerable charge against a property with penalties for contravention as set out in section 62(1) of the principal Act as amended by section 15 of the Civic Amenities Act, 1967. These sections of the Acts are framed to prevent the needless destruction or maltreatment of trees and are neither intended nor used to interfere with the requirements of good arboriculture or forestry. Properly administered, an Order can strengthen the hand of the discerning owner of trees, but the existence of a T.P.O. does not in any way exonerate the owner of a preserved tree from his responsibilities as established in Common Law."

Issuance and regulation of tree preservation orders falls within specified jurisdiction.

"Only a local planning authority (i.e. a County Council or a County or London Borough Council) or a District or County District Council acting under delegated powers can promote an Order. The Minister confirms Orders on which objections or representations are made but section 81 of the Town and Country Planning Act, 1968 confers powers on the L.P.A. to confirm Orders where no objections or representations to making the Order are received. Section 16 of the Civic Amenities Act enables the L.P.A. to direct that an Order shall take immediate effect pending confirmation by the Minister during a maximum period of six months."

An owner of a tree or trees has the right to object to the assignment of tree preservation orders on his property if he feels the order is unwarranted or interferes with his common or legal rights.

"The owner or his legal representative may lodge an objection to the Minister during the 28 days which are prescribed by the Act. In this case, the Minister will normally ask the L.P.A. officers to meet the objector, explain the reasons for the Order, and seek his agreement. Should the owner maintain his objection, the matter is decided by the Minister, who after a local hearing by one of his inspectors, may decide not to confirm the Order, or to confirm it with or without modification. Powers exist for the revocation or amendment of an Order or part of an Order by the Minister in exceptional cases. If no objections are received the L.P.A. has the power to confirm the T.P.O. itself."

Tree preservation orders prohibit unauthorized pruning and treatment as well as felling. Requests for cultural work by the tree's owner are seldom detailed but must be approved by the local planning authority before any work begins.

"The L.P.A. may if it thinks necessary stipulate the precise extent of any arboricultural work requested. If, however, a tree or limb becomes a hazard to safety, e.g. through storm damage, then remedial work or felling may take place immediately, but the owner must be prepared to justify his action to the L.P.A. A tree which dies from natural causes may be felled without the necessity of obtaining the consent of the L.P.A., but it is now incumbent on the owner to replace any tree which was covered by the Order at the time of its inception although again not necessarily by one of the same species.

The Order allows for the L.P.A. to require at its discretion the replacement of any tree which is felled although not necessarily by one of the same species. In the case of woodlands replanting is obligatory and can only be dispensed with by the Minister and not by the L.P.A. alone. Furthermore, replanting directions specify exact numbers, spacing, sizes, and species of tree to be replanted, together with details of protection and maintenance.

The owner of a tree protected by a T.P.O. may apply for permission to fell the tree, but the L.P.A. will of course consider the application from the public as well as the owner's viewpoint." The Minister (or his representative) in England is the Secretary of State for the Environment; in Scotland and in Wales he is the Secretary of State.

Standards for tree treatment, which unfortunately are poorly defined in Canada, are explicit and of high calibre in the United Kingdom. Since all work to trees covered by tree preservation orders must be approved by the local planning authority the following applies:

"The criteria which the Minister requires the L.P.A.'s to uphold are those contained in British Standard No. 3998 (1966), "Recommendations for Tree Work". (ref. Hansard, 8th February 1967, Col. 105-110.)3"

Further, it is recommended that all tree work should be entrusted only to arboricultural operators or firms that can guarantee results and that are recognized as completely reliable. Inferior work becomes the responsibility of the owner. Under order enforcement, he is subject to prosecution.

Penalties are incumbent upon an individual who inadvertently or with forethought damages or destroys a tree dedicated under a tree preservation order. He is subject to a substantial fine which may be imposed in addition to other property damage penalties described earlier. In particular:

"The maximum fine for each major offence is 250 Pounds or twice the timber value of the tree, whichever is the greater. If in the case of a continuing offence the contravention is continued after conviction, the fine is 2 Pounds per day. It has been established that both the tree feller and the owner can be held liable where a contravention occurs. Major offences are deemed to be (i) unauthorized felling, and (ii) mutilation carried out in such a manner as to be likely to destroy it as an amenity tree. "

To avoid unnecessary punitive action and as a more positive approach, citizen action by concerned individuals can be an adjunct to the protection of trees. A telephone call or visit to a local planning authority reporting an impending violation or a tactful reminder to a possible offender of his responsibilities can avert a contravention of a tree preservation order.

In spite of this relatively sophisticated tree protection legislation and civic vigilance, abuses to trees still occur. Decline and death of trees registered for protection do not usually result from malicious intent but rather from ignorance of biological processes and lack of order enforcement. A number of trees observed by one of the

authors during a 1976 study tour of southern England were legally posted (sign nailed to tree) with numbered tree preservation orders, but in virtually every case the tree's root system had been disturbed. Trenching for utility conduits within 5 ft (1.5 m) of the trunk, lowering or raising soil grade close to the tree, spilling of gas and oil beneath the shade of the crown, and incorporation of detrimental building debris within the root zone were common occurrences. All of these careless practices create conditions that lead to early mortality of trees both young and old.

One of the weaknesses of the scheme is that orders prevent trees from being felled, but they do not place any obligation on owners to maintain their trees and woodlots properly. Owners may allow trees to decay or die and allow woodlots to deteriorate without taking preventive action despite a tree preservation order. The British Arboricultural Association has recommended on a number of occasions that positive provisions regarding maintenance should be incorporated into the scheme, public money should be spent to cover the cost of maintenance borne by the owner, and the local planning authorities should be allowed to maintain trees under orders (Arboricultural Association and Rickards).

As a further complication, and because of increasing budgetary constraints, arboriculture officers who normally would enforce the orders simply cannot keep ahead of the building and constructions crews nor can they monitor the tree sites to determine or prevent damage.

It is to be hoped that we can employ enough municipal forestry personnel to avoid a repetition of the British problem. Reform of our own Canadian tree preservation legislation without enforcement would be a frightful waste.

4.2 American Selections

Protection of trees in and adjacent to the settlements of early British North America was reinforced by legislation within a decade of the Pilgrims' landing. A law enacted in 1628 forbade the sale or transport of wood out of the Plymouth Colony without approval by the governor and council. By 1668, the Massachusetts Bay Colony had passed protective restrictions to reserve ship timbers. These rules were codified in the formal Massachusetts Bay Colony Charter of 1691.

Fuelwood for Atlantic cities such as Providence and Philadelphia was in short supply during colonial times, so numerous restrictive regulations were placed on the cutting of wood from the "commons" and Crown land (Dana 1956). Benjamin Franklin observed in 1774 that:

"Wood our common fuel which within these hundred years might be had at any man's door, must now be fetched near 100 miles to some towns, and makes a considerable article in the expense of families (Chinard 1945)."

Many of the laws, however, were evaded as friction developed between the American colonies and England, and as emerging cities began to compete with one another for forest products. Further, the laws established in both pre- and post-federation years (and until the 1880s) were geared to interim tree protection for ultimate consumption and not for environmental conservation or preservation.

4.2.1 Federal programs: It was not until 1876, when the American Association for the Advancement of Science prompted the American Congress to investigate the conditions of the nation's federal lands, that meaningful public concern was manifested to protect trees and forests for environmental values. From this start grew the structure of the bureaus and services within the Departments of Agriculture and the Interior that were heralded to conserve and monitor renewable natural resources. Attendant legislation also was formulated to preserve natural ecosystems for future generations. About this time, encouraged by the federal example, most of the states east of the Plains also reviewed the status of their resources through a multitude of surveys directed by forestry and related commissions.

As a contemporary framework, and of direct applicability to the urban scene, was the passage of Public Law 92-288 on 5 May, 1972. This urban-oriented act which amended the *Co-operative Forest Management Act* of 25 August, 1950, reads in part:

"Section 1. The Secretary of Agriculture is hereby authorized to co-operate with State foresters or appropriate officials of the several states, territories, and possessions for the purpose of encouraging the states, territories, and possessions to provide technical services to private landowners, forest operators, wood processors, and public agencies, with respect to the multiple-use management and environmental protection and improvement of forest, lands, the harvesting, marketing and processing of forest products, and the protection, improvement, and establishment of trees and shrubs in urban areas, communities, and open spaces."

Thus, for the first time in American history, the federal government gave special cognizance to the technical and fiscal urban forestry needs of the nation's cities. (Urban renewal legislation of the 1960s provided funding only for landscaping around redevelopment sites.) As anticipated (but not yet funded), the United States Department of Agriculture was to provide general planning guidance

to state forestry professionals who, in turn, would counsel representatives of municipal governments on the assembly and feasibility of urban forestry management plans. Within the plans would be provisions to formulate tree protection ordinances (Andresen 1974).

Following the signing of P.L. 92-288, several House bills were introduced by congressmen to authorize the Secretary of Agriculture to provide cities with grants to pay up to 100% of the cost of trees and shrubs planted as part of city forestry programs. Additional grants would have paid 75% of the annual salaries of urban foresters in cities with populations exceeding 10,000.

In particular, representative Wendell Wyatt of Oregon introduced Bill H.R. 11253 in the first session of the ninety-third congress and representative John M. Swach of Minnesota introduced Bill H.R. 12383 in the second session. In both cases, the proposed act was to be cited as the Urban Forestry Act. Neither bill was approved but intent to make grants to cities and park districts to encourage the increased planting and care of trees and shrubs and to encourage other urban forestry programs was carried over into current (1976-1977) legislation. This new joint bill advocated by Senator Jacob Javits and Representatives Fred Richmond and Hamilton Fish, Jr., all of New York, if approved, would lead to an Urban Trees Act which would authorize an annual appropriation of \$10 million to be matched by a similar amount by participating cities. The funds would be used primarily for tree planting and maintenance.

As the legal framework that supports the American environmental decade, the National Environmental Policy Act of 1970, similar state acts, and associated environmental impact assessment legislation play a significant role in the protection of trees and forests near urban centres or on more remote land used by urbanites for recreation. However, depending on whether priority is given to economic or to environmental considerations (Rosenbaum 1973) and depending also on the political climate (President Carter has promised environmental ascendancy), enforcement of regulations waxes and wanes.

Several other federal programs, through legislation and policy, influence the conservation of urban trees. To conclude this section we cite one more. In the late 1960s, the National Park Service of the United States Department of the Interior conceived a plan to develop a complex of 20 major federal urban parks to meet the outdoor recreation needs of the inner city ethnic population, urban and suburban commuters, and the out-of-state visitor. Since each of the proposed parks includes several thousand hectares of urban and near-urban land, the conservation impact upon urban greenspace could be of major significance. Aside from the preservation of native vegetation, better management of existing planted trees and gradual re-establishment of the indigenous flora, the park programs could provide an important stimulus to conservation integrity.

To date, two major urban recreation park systems have been created. Both were authorized by law (Public Laws 92-589 and 592) on 27 October, 1972, and are meeting the objectives of serving disadvantaged people, but are a continent apart in climatic and vegetation associations. The Golden Gate National Recreation Area of 13,600 ha centred near San Francisco contains Coast redwoods 90 m high, while the Gateway National Recreation Area of 8000 ha headquartered in New York City claims the ailanthus or tree-of-heaven as its symbol.

Both urban parks include refugia for native as well as exotic trees. More important, though, they offer a conservation ethic to a public long removed from a verdant environment.

4.2.2 State programs: In general, state statutes enable local municipal governments to compose and enforce their own ordinances (bylaws) but have a wider effect in the enforcement of state-wide tree-related legislation. This is especially true with respect to the use and abuse of pesticides, conservation of natural areas, reclamation of near-urban wasteland through tree planting, and zoning to protect trees. Many states enforce certified tree-expert licencing laws as well as strict work standards for tree work.

State forestry or conservation divisions offer guidance to municipal officials to help them with urban tree management problems. As indicated earlier, a number of model tree or urban forestry ordinances are available from state officials. For example, the Kansas State Forester has prepared a sample tree ordinance for use by city council members, city managers and other officials concerned with street and park trees (Grey 1972). As an added incentive, only those Kansas municipalities that have passed a tree ordinance are eligible for free urban forestry management advice.

One of the more imaginative tree ordinance approaches is found in the Florida Division of Forestry (1973) *Urban Forestry Handbook*. Ten pages are devoted to a careful evaluation of tree protection ordinance principles with advice on preparation and enforcement. Another 12 pages describe and interpret the environmental laws of Florida. State foresters play an important role in Florida's local and regional planning as well as in urban forestry assistance. In this dual operation, they often assume para-legal capacity.

4.2.3 Local tree ordinances: In their legislative study,
Gutman and Landry (1977) reviewed 99 selected tree
planting, preservation and removal ordinances now in force in New Jersey.
Although other authors (Barker 1975, Chadwick 1972, Rogers 1969) have
written commentaries on local tree ordinances, the New Jersey study is
the most objective and analytical. Gutman and Landry concentrated on an
examination of the provisions and characteristics of five types of tree
ordinances, paying special attention to the target population sector

(homeowners, contractors, civic officials, etc.). The types categorized were:

- (1) tree removal ordinances
- (2) site plan reviews
- (3) subdivision ordinances
- (4) open space zoning ordinances
- (5) general zoning ordinances

Their compilation revealed that only 10 of the 99 ordinances reviewed were concerned with the preservation of existing trees: one subdivision, four site plans (reviews), and five open space ordinances. Much of the regulatory language in these ordinances was vague and open to various interpretations. Sixty-four ordinances were concerned with planting and removal regulations. The remainder were concerned with the recommended location of individual trees and woodlands.

One of the more significant conclusions of the Gutman and Landry study, and one that reinforces British and Canadian experience, was that tree ordinances are difficult to enforce because most municipalities do not have the funding to hire competent arborists or urban foresters to oversee planting, preservation and removal directives.

In other cities of the United States, depending upon the size of the city, and more important on the date of initiation, shade tree ordinances vary considerably in composition and length. Where cities rely upon relatively brief (1,000 to 1,500 words) ordinances, attendant regulations, permit enforcement, and programs of innovative city foresters compensate for lack of ordinance detail.

San Francisco, for example, with a tree, shrub and ground cover control ordinance of approximately 1,200 words, manages to encourage a high degree of civic pride in planting and maintaining trees on public property by private citizens.

Under subdivision (c) of section 4, San Francisco Ordinance No. 8993, series 1939, as amended 12 June, 1964 provides that:

"It shall be the duty of the Department to encourage proper planting and maintenance of trees by private persons, and to advise private persons to plant according to the Official Street and Sidewalk Planting Program.

For that purpose, the Department may furnish advice on the desirable kinds and types of trees, methods of planting and maintaining trees and other educational information."

The Ordinance states further, under subdivision (d) of section 5:

"Permission may be granted by the Director to legally constituted Improvement Clubs, Merchants' Associations and Civic Organizations to plant trees or shrubs, provided that the Organization provide a policy of Public Liability Insurance in such amount as may be determined by the Director. The policy shall be approved in writing by the Director and the City Attorney of the City and County of San Francisco, by endorsement thereon before issuance of such permit to such Organization and a Certificate of such insurance shall be filed with the Director. The said Public Liability Insurance shall also directly protect the City and County of San Francisco, its officers, agents, and employees as named insureds."

Programs encouraged by these provisions, the existence of a number of activist tree conservation groups, and a city-wide concern for trees have resulted in a remarkably well treed "xeric" metropolitan plexus where trees are consciously conserved and protected.

In Gainesville, Florida, where extensive subdivisions and city development were destroying the environmental quality of the city environs, a 35-page Landscape Ordinance (No. 1781) was passed on 1 April, 1972. Advanced in all aspects and with special concern for the aesthetic, ecological and economic values of trees, this ordinance features many sections on the proper planting and protection of public and private trees.

At the county level in Florida, Pasco County Ordinance No. 27-08 (passed 10 October, 1972) provides for the protection of publicly and privately owned "beneficial" trees within specified tree preservation areas. The ordinance provides for:

- (1) the protection of specimen and historic trees
- (2) removal and relocation standards
- (3) tree protection during construction of buildings and public utilities

Wooster, Ohio Shade Tree Ordinance No. 2609 (passed 20 April, 1953) created a Shade Tree Commission with broad advisory and planning

powers to assist the mayor, city council and director of public service (in lieu of a city forester). The Commission is directed to preserve, plant, plan, maintain and protect municipal trees or shrubs. General advice is also given to private property owners about tree care.

The foregoing sample of some of the better local tree ordinances provides several models for Canadian consideration. A more comprehensive survey of tree protection and preservation ordinances should be undertaken to delineate better the responsibilities of both municipal officials and private property owners.

4.2.4 International Society of Arboriculture Model Shade Tree Ordinance: In both its first edition entitled "A standard city ordinance, regulating the removal, planting and maintenance of shade trees in public areas, and standard arboricultural specifications and standards of practice", and the current "A standard municipal tree ordinance" (Neeley 1972), the International Society of Arboriculture (ISA) offered general tree ordinance preparation recommendations, a model standard municipal tree ordinance, a list of arboricultural specifications and standards of practice, and a suggested tree work permit form.

ISA strongly recommended that, through a comprehensive shade tree ordinance, a municipality should assume complete control over all public tree planting, maintenance and removal. Further, such functions should be performed with municipal crews and personnel, or by contracts with qualified, licenced, and insured private commercial arboricultural firms. In relation to the maintenance of trees within utility corridors, it recommended that:

"All work on public trees by the utility companies should be under the direction and control of the municipal official in charge of the public trees through written specifications, permit and inspection."

Although the needs of municipally owned trees are served well by the recommendations in the second edition, the protection and preservation of privately owned urban trees and forests is lacking. This omission is reflected, in most instances, within local ordinances as an absence of reference to privately owned trees. Also there is reluctance on the part of most city councils to interfere with private property prerogatives even if the total community suffers through negligence and abasement of tree and forest resources. It is to be hoped that the third edition will incorporate suggestions for the better management of private tree assets through cooperative as well as legislative effort.

The foregoing review of British and American shade tree legislation provides a number of precedents and examples that will serve as an introduction to the following chapters on proposals for Ontario legislative reform and the preparation of model shade tree bylaws. Although the examples from Britain and the United States reflect indigenous needs and are themselves subject to change, we can profit from the trials and successes of legislation applied to trees grown under cultural conditions similar to those of Canada.

- Andresen, J.W. 1974. Community and urban forestry: a selected and annotated bibliography. USDA Southeastern Area State and Private Forestry. 195 p.
- Anon. 1966. Notes from the Secretary, Arboric. Assoc. J. 1(3).
- Barker, P.A. 1975. Ordinance control of street trees. J. Arboric. 1(11): 212-216.
- Chadwick, L.C. 1972. Some important aspects of a municipal street, tree ordinance. Internat. Shade Tree Conf. Proc. 48: 53-58.
- Chinard, G. 1945. The American Philosophical Society and the early history of forestry in America. Proc. Am. Philos. Soc. 89(2): 444-488.
- Dana, S.T. 1956. Forest and range policy: its development in the United States. McGraw-Hill Book Co., N.Y. 455 p.
- Florida Division of Forestry. 1973. Urban forestry Handbook. Florida Dep. Agric. Consumer Serv. 101 p.
- Grey, G.W. 1972. Developing a community forestry program. Kansas State Univ. 6 p.
- Gutman, R. and J. Landry. 1977. An analysis of tree ordinances: the example of New Jersey. Manuscript for publication on file with Pinchot Institute, Northeastern Forest Exp. Stn., Upper Darby, Pa.
- Hall, T.H.R., Ed. 1970. Tree preservation orders. Arboric. Assoc. Advisory Leafl. No.1. 6 p.
- Hardy, M. 1972. A review of tree preservation orders. Arboric. Assoc. J. 2(2): 31-37.

- Neely, D. 1972. A standard municipal tree ordinance. Internat. Shade Tree Conf., Urbana, Ill. 14 p.
- Pollard, R.S.W. 1974. Trees and the law. Arboric. Assoc. Leafl. No. 6. 20 p.
- Rickhards, L.J. 1965. Preserving Britain's trees. Arboric. Assoc. J. 1(1).
- Rogers, J.R. 1969. The street tree ordinance in support of off-street planting. Internat. Shade Tree Conf. Proc. 45: 188-189.
- Rosenbaum, W.A. 1973. The politics of environmental concern. Praeger Pub., New York. 298 p.
- Wilson, P.J.D. 1970. Trees Act. Arboric. Assoc. J. 1(12): 320-321.
- 1. P. 3.
- 2. P. 4.
- 3. The above quotations are all from [Hall] (1970).
- 4. Ibid.

5. LIMITATIONS OF EXISTING ONTARIO LEGISLATION TO PROTECT TREES AND PROPOSALS FOR REFORM

5.1 The Municipal Act

The *Municipal Act* is designed to enable municipalities to carry out most of their functions. The act permits municipalities, among other things, to make such bylaws as are deemed expedient for the health, safety, morality and welfare of the inhabitants of the municipality. This act, together with the *Public Parks Act*, provides the main authority for municipal urban forestry programs, particularly in parks and along roads, streets, and boulevards, collectively referred to as "highways" in the act. The municipality's powers to pass bylaws to protect or preserve trees are discretionary rather than mandatory; that is, municipalities are not required to pass such bylaws. Many have not done so.

The central section of the act for urban forestry purposes is section 457, which makes the following provisions:

"(1) In this section, "tree" includes a growing tree or shrub planted or left growing on either side of a highway for the purpose of shade or ornament.

- (2) Any person may plant trees on a highway with approval of the council of the municipality expressed by resolution.
- (3) Every tree upon a highway shall be appurtenant to the land adjacent to the highway and nearest thereto. R.S.O. 1970, c. 284, s. 457 (1-3).
- (4) The council of every municipality may pass bylaws,
 - (a) authorizing and regulating the planting of shade or ornamental trees upon any highway;
 - (b) repealed 1975; c. 56, s. 12.
 - (c) authorizing and regulating the planting with the consent of the owner, of shade or ornamental trees within eight feet of any highway at the expense of the municipality, provided that any tree planted under the authority of any such by-law is the property of the owner of the land in which it is planted, and the municipality is not liable for maintenance or otherwise in respect of any tree so planted;
 - (d) for preserving trees;
 - (e) for prohibiting the injuring or destroying of trees;
 - (f) for causing any tree planted upon a highway to be removed when considered necessary in the public interest, but the owner of the trees shall be given 10 days' notice of the intention of the council to remove such tree and be recompensed for his trouble in planting and protecting it and, if he so desires, is entitled to remove the tree himself, but is not entitled to any further or other compensation;
 - (g) prohibiting the planting of any species of tree that the council considers unsuited for that purpose and for the removal without notice of such trees growing on a highway or planted thereon contrary to any such by-law;

- (h) authorizing any officer or committee of the council to supervise the planting of trees upon the highways and the trimming of trees planted upon a highway or upon private property where the branches extend over a highway, or to remove decayed or dangerous trees or trees that have by bylaw of the municipality been directed to be removed;
- (i) prohibiting the attaching of any object or thing to a tree located on any highway or public place, except with the consent of an officer of the municipality named in the bylaw, notwithstanding that such attachment would not injure or destroy the tree. R.S.O. 1970, c. 284, 457(4); 1975 c. 56, s. 12.
- (5) Any notice required by subsection 4 may be given by leaving it with a grown-up person residing on the land or, if the land is unoccupied, by posting it in a conspicuous place on the land.
- (6) Except with the authority of the council or a committee or officer thereof appointed as aforesaid, no person shall remove or cut down or injure any tree growing upon a highway.
- (7) Any person who ties or fastens any animal to or injures or destroys a tree growing upon a highway or who suffers or permits any animal in his charge to injure or destroy such tree or who cuts down or removes any such tree contrary to this section is guilty of an offence and on summary conviction is liable to a fine of not more than \$25. R.S.O. 1970, c. 284, s. 457(5-7)."

Additional municipal powers related to trees are scattered through the act. Section 451 authorizes the municipality to make an agreement with the owner of land adjacent to the intersection of two highways under its jurisdiction or of a highway under its jurisdiction and a railway or rapid transit right-of-way, for the removal or alteration of trees, shrubs, bushes or hedges that may obstruct the view of drivers or pedestrians approaching the intersection. Section 453 authorizes councils to pass bylaws to permit the owners of land to put movable receptacles containing plants, shrubs, or trees "over or upon the sidewalks and canopies that project over the sidewalks", and bylaws "for preserving or selling the timber or trees on any original allowance for road", subject to the rights of timber licencees under

the Crown Timber Act, and in the case of an unopened original road allowance, subject to the approval of the Minister of Natural Resources. The same section permits the council to enter upon land within the municipality or within an adjacent municipality with the consent of that municipality's council, and to take any timber necessary for constructing, maintaining and repairing highways and bridges, "or for any other purpose".

Paragraph 62 of section 354(1), which appears between a paragraph providing for municipal land surveyors and engineers and a paragraph regulating or prohibiting bathing, authorizes municipalities to pass bylaws requiring the destruction of tussock moths and their cocoons on trees.

Sections 352 and 485 of the act, together with provisions of the *Public Parks Act*, authorize the councils of municipalities and the trustees of police villages to establish and manage public parks, gardens, squares, avenues, boulevards, and other such places where urban trees are found.

In addition, a general power in paragraph 120 of section 354(1) to pass bylaws for "prohibiting and abating public nuisances" would appear to provide a basis for municipal regulation, including treatment and removal, of trees in a dangerous condition, on public or private land.

The exact scope and application of section 457 is obscure. Parts of the section are ambiguous, outdated, and possibly contradictory of each other. Section 457(f) permits the municipality to pass bylaws "for causing any tree planted upon a highway to be removed when considered necessary in the public interest". But the owner of the tree must be given 10 days' notice and the opportunity to remove the tree himself. He is entitled to recompense for his trouble in planting it and protecting it. The section appears to distinguish between trees planted on a highway by an adjacent owner and trees planted there by the municipality. If the adjacent owner can prove that he planted the tree, he is entitled to compensation, otherwise he is not.

On the other hand, s. 457(3) provides that every tree on a highway (presumably whether planted by the adjacent owner or by someone else) is "appurtenant" to the land adjacent to the highway. This term "appurtenant" implies that the adjacent owner has some property rights with respect to the tree and perhaps some duties as well, with accompanying liabilities. But nowhere does the act state the rights, duties and liabilities attached to this "appurtenance". It is therefore unclear, for example, what liability the municipality has to the owner of the appurtenant land if it unlawfully removes a tree along a highway without first passing the required bylaw or giving the required notice.

Section 457(h), by comparison, permits the municipality to remove "decayed or dangerous" trees or trees "that have by bylaw of the municipality been directed to be removed". It is unclear how this differs from subsection (f). Does this apply only to trees on private property, only to trees planted on a highway by the adjacent owner, only to trees planted on a highway by someone other than the adjacent owner, or to all of these?

Unlike subsection (f), this subsection provides for no notice or compensation to adjacent landowners.

The attempt to define the extent of the rights of owners of lands adjacent to the highway when roadside trees are injured has played an important part in four reported cases³ in Ontario which dealt with earlier counterparts of the present provisions of section 457.

The primogenitor of the current subsection 3, which states that "every tree upon a highway shall be appurtenant to the land adjacent to the highway and nearest thereto" was certainly more clearly worded. It stated that: 4

"For the purpose of this Act, every shade tree, shrub and sapling now growing on either side of any highway in this province shall, upon, from and after the passing of this Act, be deemed to be the property of the owner of the land adjacent to such highway opposite to which such tree, shrub or sapling is."

These subsections should be amended in light of the most recent court decisions dealing with the rights of an adjacent owner to trees growing on a municipal highway to state clearly the respective rights, obligations and liabilities of the owner and the municipality and to make explicit and consistent provisions for notice and compensation where highway trees must be treated or removed or where trees on private property must be treated or removed because of possible danger to or interference with pedestrians, neighbors or other users of the highway.

The interrelationship of subsections (4)(e) and (7) of section 457 is also unclear. Subsection (7) makes it an offence punishable by a fine of up to \$25 to injure or destroy a tree growing on a highway. This appears to create an offence in itself, without the passage of a bylaw under subsection 4(e). Subsection 4(e), however, provides that the councils of municipalities may pass bylaws "for prohibiting the injuring or destroying of trees". While subsection 7 is limited to protection of trees on highways, it is arguable that subsection 4(e) is broader and is intended to be used for prohibiting injury to trees on property other than highways. Otherwise, subsection 4(e) would appear to be redundant, and the powers of municipalities would be limited to protection of trees on highways, but not in parks or on other municipal property, or on private property.

In addition, subsection (7) provides for a maximum fine of only \$25, whereas section 466(1) of the *Municipal Act* provides for a fine of up to \$1,000 to be imposed on anyone who contravenes any bylaw of the council. It would seem, therefore, that an offence against a bylaw passed pursuant to section 457(4)(e) might carry a maximum fine of \$1,000, while a contravention of s. 457(7) would be punishable by only a \$25 fine.

Perhaps the major weakness of the provisions of the *Municipal Act* as it relates to trees is their ambiguity about the powers of municipalities to regulate, protect or destroy trees on municipal property other than highways, and on private land. In particular, there is no explicit provision to enable municipalities to pass bylaws for the preservation of trees on private property, by prohibiting or regulating cutting or other means of destruction, or by providing treatment and management assistance to private owners. This kind of power is needed to recognize and protect the benefits which accrue to the general public from trees on private property. Special legislation to enable the town of Oakville, the borough of York, and the city of Toronto to regulate the cutting of trees on private property points to a need for general legislation applicable to all municipalities.

Trees growing on municipal property other than highways, parks, avenues, boulevards or squares under the control of a council or a municipal board of park management are not clearly protected by any specific provision in this act. The muncipality can bring a civil action to recover damages for injury to or destruction of such trees, but is not specifically empowered to pass bylaws for their protection. A new provision should be added to the act to enable municipalities to pass such bylaws, subject to the maximum penalties available under section 466.

The Select Committee on the Municipal Act recommended in 1965 "that there be a new Part of the Municipal Act under the title "Trees" and that section 473 (now section 457) be transferred to this Part". The Committee also recommended that the Trees Act be repealed and its provisions incorporated into this new part of the Municipal Act, and that the Public Parks Act be integrated with the appropriate provisions of the Municipal Act.

The Committee further recommended:

"That the provisions of the *Highway Improvement Act* (now the *Public Transportation and Highway Improvement Act* pertaining to highways vested in a county or local municipality and under the jurisdiction and control of a municipal corporation be integrated with the appropriate provisions of the *Municipal Act* relating to Highways", and

"That the provisions of the *Highway Improvement Act* vesting powers in a county or local municipality to pass bylaws in regard to various matters as therein set out be transferred to the *Municipal Act*."

Such a reorganization of the *Municipal Act* would help to clarify the powers available to municipalities, and to rationalize the penalties for destruction of trees and the provisions for notice and compensation to private owners for destruction of their trees in the public interest. These provisions vary from statute to statute, and in some cases from section to section within a statute. A new part of the *Municipal Act* dealing with trees on both public and private property should eliminate the existing confusion and should contain expanded powers.

A new part might be subdivided with provisions covering the following areas:

- 1. Trees growing on highways, incorporating sections 451, 457 and 487(1)(1) of the present *Municipal Act*, and sections 98 and 99 of the *Public Transportation and Highway Improvement Act*.
- 2. Trees growing in parks, incorporating subsection 19(1)(e) of the *Public Parks Act*.
- 3. Trees growing on other municipal lands--a new provision.
- 4. Liability for damage done by trees on highways and other public lands by blocking private drains—a new provision.
- 5. Treatment or removal of dangerous trees on private property—a new provision.
- 6. Preservation and protection of trees on private property—a new provision.

The penalties for infractions of bylaws made under this new part should be standardized by application of the range of penalties available under section 466.

5.2 The Public Transportation and Highway Improvement Act

This statute provides generally for the construction, improvement and maintenance of roads and highways by the provincial government and various levels of municipal government, and provides for subsidies from the provincial Ministry of Transportation and Communications to the municipal governments to 'assist them in this.

The Ministry may plant trees along the sides of the king's highways, which are under its jurisdiction. 8 The cost of planting is assumed by the Ministry as part of the cost of highway maintenance. 9 Injuring these trees is an offence. 10 The Ministry may also pay a grant of up to 75¢ per tree to anyone who plants trees on lands adjoining the highway, with the safeguard that this grant is not to be paid until a highway engineer has certified that the trees have remained alive, healthy and in good form for three years and that they were planted in accordance with a permit issued by the Minister of Transportation. 11 The Ministry is also authorized to prohibit planting of trees within specified distances of the highway, except in accordance with a permit, and to remove, or order the planter to remove, any tree planted in a prohibited area without a permit. 12 Where a tree has been planted within a prohibited area prior to the prohibition or in accordance with a valid permit, the Ministry may still remove the tree, provided that it pays compensation to the owner of the land containing the tree. 13 Compensation must also be paid 14 to the landowner for any damage to trees on his land resulting from the exercise by the Ministry of its broad powers under section 4 of the act to:

"Without the consent of the owner,

- (a) enter upon and use any land;
- (b) alter in any manner any natural or artificial feature of any land;
- (c) construct and use roads on, to or from any land; or
- (d) place upon or remove from any land any substance or structure...for the purposes of highway improvement."

The amount of compensation for injury to or destruction of trees is to be determined by the Ontario Municipal Board if the owner and the Ministry cannot reach agreement, with an appeal to the Ontario Court of Appeal, if that Court gives leave to appeal. 15

Municipalities and suburban roads commissions are also authorized to plant trees on their roads as part of the cost of maintaining the road. If a tree, shrub, bush or hedge growing on the road allowance or on the land adjoining the road allowance may cause the drifting or accumulation of snow, injuriously affect the road, or obstruct the vision of pedestrians or drivers, the municipal officials may make an agreement with the owner of the land adjacent to the road to compensate him for damages caused to him by reason of the removal. If the municipal officials and the owner of the adjoining land are unable to agree on the amount of compensation, or if the owner will not agree to removal of the tree, the municipal officials may apply to a county

court judge for an order permitting them to remove the tree and the judge may set the amount of compensation. Either party would have a right of appeal to the Court of Appeal without leave.

Counties and townships are authorized to pass bylaws prohibiting adjoining owners from planting trees within whatever distance of the road they consider necessary to prevent trees from causing the drifting or accumulation of snow, obstructing the vision of pedestrians or drivers, or otherwise injuriously affecting the road.²⁰

This act provides the primary authority for planting and preserving trees on the highways linking Ontario's municipalities. Within municipalities it overlaps with the powers given to municipalities under the *Municipal Act*.

Its provisions for planting and maintenance of trees are generally inadequate to ensure a sound urban forestry program. Although the Ministry of Transportation and Communications is authorized to plant trees along highways as part of the cost of road construction, no statutory provision is made for maintenance of the trees planted. From a series of telephone interviews with MTC officials responsible for planting and maintenance of roadside trees, it appears that the provisions of the act are underutilized and that there is no funding program to implement them. There is no systematic monitoring of the condition of roadside trees by the Ministry. Although implementation of maintenance standards varies by MTC Administrative District and Region, reasonable attempts are made to replace dead or dying trees, to conserve existing vegetation, and to prune sapling trees for several years after planting. District landscape supervisors in southern Ontario have been apprised of new techniques for the better maintenance of their trees and shrubs (Andresen and Lewis-Watts 1977) and are gradually eliminating herbicidal spraying and excessive grass mowing.

Similarly, the provisions for grants of 75¢ a tree are outmoded and have fallen into disuse. The grants are too low to provide any incentive and Ministry of Transportation officials cannot remember anyone having applied for such a grant in many years. If the grant were raised and monies set aside for the purpose, this could be a useful provision, since unlike most statutory provisions, which provide for the planting of trees but provide no financial or other incentives to ensure that planting and maintenance are carried out in such a way as to minimize loss of trees, this provision ties the grant to proper maintenance. If the bonus provision is to be useful, it should be amended to permit the granting of sizeable bonuses for tree planting. The bonuses should be tied to maintenance and survival as they are now, but perhaps they should be payable after one year, provided that the condition of the trees is satisfactory, rather than after three years.

It is unclear to what extent the subsidies given yearly to municipalities for road improvement may be used for planting and

maintaining roadside trees. Section 77 authorizes every city, town and village (with a few exceptions) to apply yearly for a subsidy for its expenditures on road construction and maintenance. Tree planting and maintenance are not specifically included in the list of expenditures that a municipality may properly charge to road improvements under section 79 of the act. However, under section 98, which authorizes municipalities and suburban roads commissions to plant trees along roads as part of their road maintenance programs, the spending of provincial subsidies on tree planting appears to be authorized.

Total provincial subsidies for tree planting and related programs vary annually and geographically. As budgetary allocations shift from year to year and district engineeer program priorities alter, municipalities may receive less than their specified amounts. So far, however, the majority of requests have been honored by those municipalities submitting proper documentation.

In the borough of Etobicoke in 1977, for example, the total tree request for subsidization was reimbursed on a cost sharing basis. The Ministry returned \$12,500 for clearance and removal of trees, and other vegetation control that facilitated traffic flow. For tree planting the borough was granted \$17,500. The borough of North York, under the same program, was subsidized \$30,000 for pruning and removal while an additional \$70,000 was provided by the MTC for tree planting. In each case, the respective Parks Departments advised their own Works Departments of billings and costs which then accompanied other requests for subsidized road projects. Total provincial subsidy costs for urban forestry purposes are yet to be identified and summarized by the Ministry. ²¹

In practice, though, the Ministry of Transportation has no program to encourage the use of its subsidies for tree purposes.

MTC neither encourages municipalities to include an amount for roadside planting and maintenance in the overall budgets they submit for subsidies nor does it discourage them from doing so. However, in the opinion of one MTC official, it is unlikely that municipalities would often apply the subsidy to roadside planting and maintenance for two reasons: first, rights-of-way or road allowances in most municipalities are too narrow for tree planting, unlike the wider road allowance for king's highways and secondary highways; second, the subsidies are usually too small to cover both normal road maintenance, repair and construction and tree planting and preservation. The former is likely to be given priority over the latter.

The sections of this act providing for a mechanism for compensation to adjacent landowners for removal of roadside trees appear incompatible with similar sections of the *Municipal Act*. At worst, they may be in direct conflict on some points, and at best their interrelationship is ambiguous.

Section 99, for example, appears to give the adjacent landowner a right of compensation where trees on the municipal road allowance beside his land are removed, while s. 457(4)(f) of the *Municipal Act* limits compensation to those cases in which the adjacent owner planted the tree. Section 457(c), on the other hand, expressly exempts the municipality from any liability in respect of trees planted on the road allowance. The *Public Transportation Act* provisions place no limit on compensation, which is to be determined by an outside arbiter, while section 457(4)(f) limits compensation to the adjacent owner's actual planting and maintenance costs.

The act has a number of mechanisms for providing compensation. When damage to trees is done by the MTC, compensation is to be determined by the Ontario Municipal Board, with an appeal of the Board's decision to the Court of Appeal with leave. Where the municipality removes a tree in similar circumstances, however, the compensation is set by a county court judge, apparently with an automatic right of appeal to the Court of Appeal. Moreover, the landowner has a right to appeal not only the amount of compensation but also the need to remove a tree where the action is contemplated by municipal road authorities. However, he has the right to dispute only the amount of compensation where the action is taken by the Ministry of Transportation and Communications. 25

Despite the inconsistencies within the *Public Transportation* and *Highway Improvement Act* and between provisions of this act and of the *Municipal Act*, those provisions of the *Public Transportation and Highway Improvement Act* which deal with compensation of an adjacent owner and permit him to challenge the need to remove trees compare favorably with provisions for removal in other statutes, e.g., the *Planning Act*, where there is no provision for notice, challenge of need, or compensation.²⁶

Nevertheless, the Public Transportation and Highway Improvement Act should be amended to provide a single notice, challenge, compensation and appeal procedure that is internally consistent and consistent with other statutes providing public authorities with a right of removal.

Section 98, which permits a municipality or suburban roads commission to plant trees on its roads, appears to duplicate section 457(1)(a) of the *Municipal Act*, which authorizes the councils of muncipalities to pass bylaws authorizing and regulating the planting of shade and ornamental trees on any highway. As suggested above, the two sections should be integrated in a new part of the *Municipal Act* dealing with trees.

5.3 The Trees Act

The current *Trees Act* is a consolidation of provisions from earlier statutes dealing with trees. They include provisions passed in the last century as well as a series of provisions passed in 1946 by the then Ontario Department of Lands and Forests to enable municipalities to control the stripping of farm woodlots by unscrupulous operators.

The provisions of section 2 regarding common ownership of trees planted on boundary lines were first passed in 1883. The section is a statutory enactment of a common law principle. Section 3, which provides for a maximum fine of \$25 for injury to or destruction of a boundary tree, also dates back to 1883, the fine remaining the same for 93 years.

Sections 4 to 6, collectively entitled "Tree Conservation", were first enacted in the *Trees Conservation Act* of 1946 to prevent the cutting of rural forests before they were biologically or economically "mature".

Following the end of World War II, a period of prosperity led to a rapid and uncontrolled expansion of demand for consumer products. A shift in demand for forest products from war use to consumer use created a demand in the logging industry similar to the land speculation and real estate development "boom" in Ontario in the 1960s. Logging companies took advantage of this demand for fibre to purchase farm woodlots, which they clearcut or "high-graded" with no regard for proper forest management. When farmers were unwilling to sell the woodlot alone, these operators purchased the entire farm, stripped it of lumber, and resold it. To prevent this destruction of forest, sections 4 to 6 were passed, giving the councils of rural municipalities the power to pass bylaws restricting and regulating the cutting of trees on woodlots greater than 2 acres (0.8 ha) in area by purchasers who owned the land for less than two years. The councils were also empowered to appoint officers to enforce the provisions of these bylaws.

The right of an owner to cut trees for his own use after two years was retained to avoid hardship to farmers and other rural owners who depended on their woodlot for firewood and for sawlogs for use in building and renovating structures on their own land.

Even after two years, the landowner could cut trees only for his own use. Some speculators attempted to circumvent these bylaws by holding the land for two years, then clearcutting for sale of commercial timber. However, the courts interpreted the phrase "for his own use" as excluding commercial sale.²⁷

Section 7 of the act empowered county councils to acquire land for forestry purposes.

Section 11 empowered councils of townships to enter into agreements with owners of lands in the township to reforest these lands or plant trees on them, provided that the Minister of Lands and Forests (now Natural Resources) gave approval to the bylaw.

The purpose of the Ministry's power to withold approval of such a bylaw is quality control. Before approving a bylaw, the Ministry would want to ensure itself that there were qualified personnel of the Ministry in the area or that the township had available the services of qualified forestry professionals or technicians to ensure that trees of suitable species were planted under conditions conducive to their survival. ²⁸

It is difficult to determine the exact scope of this power, because no township in Ontario has passed such a bylaw. Ministry officials responsible for administration of the *Trees Act* are of the opinion that the bylaw does not give the township the power to manage a private forest, but only to plant trees.²⁹

The failure of townships to utilize their power to reforest private lands is probably due to the restrictions placed on the exercise of this power by the act, as well as to the fact that townships do not consider that they have funds available to subsidize private owners and the act provides for no provincial assistance.

From the owner's point of view, the fact that he must enter into an agreement with the township which restricts his right to cut timber for the duration of the agreement may make such agreements unattractive. From the township's point of view, the fact that the landowner may request tax exemption, as provided for in section 11(4), as one of the terms of agreement, may discourage the municipality from entering into an agreement. The fact that the conditions upon which timber may be cut are also subject to approval by the Ministry of Natural Resources may also serve to discourage both the township and the private owner, as proper forestry practices may be more expensive than unrestricted cutting and may require the advice and services of qualified professionals who may not be readily available to the township or the owner except at a cost they may not be prepared to assume.

The *Trees Act* is concerned essentially with rural councils and their powers of reforestation. Although it has possibilities for application to the urban milieu, this potential remains largely unrealized.

Sections 2 and 3 of the act are not restricted in their application to rural areas or to trees grown for fibre products. There is nothing in their wording restricting enforcement in urbanized areas, and they have been so applied in at least one private prosecution. 30 Apart from sections 2 and 3, however, the *Trees Act* has little application to urban forestry.

The restriction of the municipal right to pass "tree-cutting" bylaws to woodlots 2 acres (0.8 ha) or more in size severely limits the usefulness of the act in urban areas, where the need for controls over developers of remnant woodlots is greatest. At present, Ontario municipalities can exercise some influence over developers to prevent them from cutting down trees through the statutory planning process (see above). Municipalities may require developers to sign agreements as a condition to the approval of a draft plan of subdivision under section 33(5)(d) and 33(6) of the *Planning Act*. However, it is not unknown for developers to strip the land of trees after purchasing it, but before applying for subdivision approval, to avoid being subject to such agreements.

In the interim period, after purchase by the developer, but prior to application for subdivision approval, the municipality may prevent the owner from destroying trees by passing a bylaw pursuant to section 4 of the act, provided that the property is over 2 acres (0.8 ha) in size. Such a bylaw could prevent cutting for two years after purchase, and after two years, cutting would still be prohibited for purposes other than for the use of the owner. As it is not uncommon in Ontario for so-called "development companies" to sell lands to developers who apply for subdivision approval before two years, section 4 may have some limited use in protecting urban forests.

Another limitation on the usefulness of such a "tree-cutting" bylaw is that the intention of the legislature in passing section 4 of the Trees Act, according to Ministry of Natural Resources officials, was not to conserve shade or ornamental trees, but to conserve commercial fibre crops. Although there is nothing in the act to prevent the use of this section for a new purpose, and although the current definition of "forestry purposes" in the act expressly includes "provision of proper environmental conditions for wildlife, protection against floods and erosion, recreation, and protection and production of water supplies", in addition to the production of wood and wood products, it does not expressly include shade, ornament or aesthetics. It is possible that such a bylaw which interfered with developers' profits might be challeneged in the courts by developers on the grounds that protection of trees grown for shade or ornament is not within the powers given the municipality by the act.

The act would be much more effective for urban forestry purposes if municipalities were given the power to apply "tree-cutting" bylaws to areas smaller than 2 acres (0.8 ha) and for periods longer than two years. In addition, the act should be amended to state explicitly that

the purpose of agreements and bylaws made pursuant to this act includes protection of the amenity value of urban shade and ornamental trees.

Without such amendments, municipal attempts to use the "tree conservation" sections of the act to preserve trees growing on private residental urban land are largely ineffective. Recognizing this, the city of Toronto, at the initiative of former Alderman William Kilbourn, applied to the Ministry of Natural Resources in March, 1973 for amendments to the act to enable the municipality to pass bylaws applying to areas smaller than 2 acres (0.8 ha). The Ministry refused the request, advising the city instead that it already had the power to pass the necessary bylaws under section 457(4)(d) which permits municipalities to pass bylaws "for preserving trees". The Ministry later retracted this suggestion on the basis of the city solicitor's opinion that the Municipal Act did not provide the needed power because this section applied only to trees growing on highways.

Currently, amendments to the act which would drop the minimum size of woodlot to which "tree cutting" bylaws could apply from 2 acres (0.8 ha) to 1 acre (0.4 ha) are under consideration by the Ministry.

Bylaws passed pursuant to sections 4 to 6 have not been as effective as they could be. Instead of setting out standards and specifications for cutting which would ensure proper forestry management practices, the bylaws have generally prohibited cutting of trees below a minimum trunk size expressed as a diameter in inches at breast height. But proper forest management requires taking into account individual differences between forests and between trees within a forest, and marking of trees on an individual basis. No single measurement can be appropriately applied to all forests. Municipalities adopted such a rule of thumb because they did not have trained and skilled personnel available to enforce any more stringent standards.

The act provides for fines of up to \$500 or imprisonment up to three months. As imprisonment is unlikely ever to be used in such cases, the only effective penalty is the fine, which, like most other penalties for destruction of trees in other Ontario legislation, is too small to reflect current social and economic values of shade and ornamental trees and attitudes towards such trees. The fine does not provide a sufficient deterrent to tree destruction. Only if the penalty provision were interpreted to mean that cutting of each individual tree is subject to a separate penalty of up to \$500 would this penalty have any deterrent value to developers, to whom a \$500 fine may merely represent the cost of protecting potentially large profits.

The most recent discussion of the need to revise the *Trees Act* took place at the 15 April, 1977 meeting of the Municipal Liaison Committee, a joint committee of representatives of municipalities and

and of Ontario government ministries. As reported in "Background", a periodic publication of the Ministry of Treasury, Economics and Intergovernmental Affairs, the following discussion took place:

"7. THE TREES ACT

The Municipal Position. The MLC tabled the following resolution which had been submitted by ACRO* and ROMA.**

'Whereas there has been widespread municipal concern expressed with regard to the inadequate fines levied on persons found guilty of violating municipal tree cutting by-laws; and

'Whereas such fines have not served as an adequate deterrent to contraventions of the aforementioned bylaws; and

'Whereas the continued disregard to such bylaws will result in the rapid depletion of land currently in forest cover;

'Therefore be it resolved that section 6 of the Trees Act be amended to provide a minimum fine of \$1,000 and a maximum fine of \$5,000.'

'The Provincial Response. W.K. Fullerton, Director, Forest Management Branch, MNR, said the MLC resolution was timely as amendments to the Trees Act are being considered. He pointed out that the Trees Act is enabling legislation only and the municipal bylaw provides the authority. He advised that the ministry had received many letters and delegations concerning various aspects of the legislation.

'W.A. Thurston (MNR) said that the proposed amendments to the Act are being sought in the sections dealing with tree conservation. Many of the changes may be classed as "housekeeping" and include:

- . a definition of the term "woodlot",
- . to provide authority for municipally appointed enforcement officers to enter onto private land,
- to permit a municipality to initiate controls on a part of the municipality only.

^{*} Association of Counties and Regions of Ontario.

^{**} Rural Ontario Municipalities Association.

'Mr. Thurston noted that section 5 of the Act has been used by municipalities when land use conflicts have occurred, contrary to the intent of the legislation. The philosophy of controls under the Act is to protect such forests until maturity. He noted that many municipalities have asked for authority to issue cutting permits and to apply controls in some cases to areas smaller than two acres. To overcome many operational problems amendments are needed to:

- . permit tree cutting for a building construction site,
- . permit cutting of Christmas trees,
- . exclude Ontario Land Surveyors from controls,
- . provide authority to municipalities to create exemption to bylaw controls by application to a 'Board' who may issue a 'permit',
- . to permit the application of the exemption of woodlots smaller than two acres at the discretion of the municipality.

'With regard to penalties, Mr. Thurston said that the current maximum fine of \$500 had been termed 'a licence to cut' by one judge. The proposed amendments re penalties include:

- to provide a minimum penalty of \$500 and a maximum penalty of \$5,000,
- . to authorize the courts to order the replacement, by planting, of forests cut in contravention of a bylaw upon conviction.

'Mr. Thurston pointed out that these are proposed changes to the legislation. Mr. Coolican asked if the proposals were to be looked at or if the decision had been made. Mr. Fullerton said the Ministry had been reviewing the problem for two to three years and any municipal comments should be submitted as soon as possible. Several municipal representatives pointed out that the proposed minimum fine of \$500 was still too low and requested consideration for the \$1,000 as submitted in the resolution."³¹

5.4 The Woodlands Improvement Act and the Forestry Act

The Woodlands Improvement Act and the Forestry Act are similar in the sense that they both provide the Ministry of Natural Resources with the power to enter into agreements with private landowners to improve their lands for "forestry purposes", which include the production of wood and wood products, provision of proper environmental conditions for wildlife, protection against floods and erosion, recreation, and protection and production of water supplies.

The major difference between the agreements contemplated by the two statutes is the degree of involvement by the Ministry. The main purpose of the *Forestry Act* is to enable the landowner to establish an economically viable forest on lands that may have been essentially treeless and barren, such as marginal farmland. This requires long-term management by the Ministry, which in effect administers the land "in trust" for the owner over several decades. The management program includes cutting and marking of these "agreement forests", as they are called, during the period of the agreement.

Under the *Forestry Act*, The Minister agrees to manage the land for forestry purposes for a minimum of 20 years. The Ministry pays for the stock, plants it, and manages it for 20 years or longer. There are forests in Ontario that have been managed by the Ontario government under agreement from 1922 to the present. The Ministry, rather than the owner, is responsible for disease, insect and fire control.

Under such agreements, the Ministry manages land belonging to municipalities, Conservation Authorities, and industrial corporations. Grants are sometimes given by the Ministry to municipalities and Conservation Authorities to help them to purchase lands to establish these "forests".

During the course of the agreement, the Ministry has a right of sale or lease of the timber. It sells the timber and over a period of time recoups some or all of the cost of establishing the forest through revenues from sale or leasing. At the end of the agreement period, the timber rights revert to the landowner, as does the responsibility for forest management.

At the end of the agreement, the Ministry hopes to return a commercially viable forest to the owner for management.

The Woodlands Improvement Act, on the other hand, contemplates management by the owner himself, following an initial planting by the Ministry. This program arose from the need perceived by foresters in the early 1900s to provide incentives and assistance to private landowners to encourage them to manage their own lands for forest preservation rather than to clearcut them. Foresters became aware that the agricultural expansion of the 1800s had resulted in the clearing of land that should have remained forested. To slow down this process of land clearing and promote the establishment of a forest "capital" for landowners, foresters persuaded the government to establish a woodlands improvement program under which the government would plant trees and improve forests as a "gift" to the landowner in return for an agreement by the owner to maintain the trees or forest for the life of the agreement. Like the Forestry Act, the woodlands improvement program

was an attempt to provide for the availability of wood for the industrial market, rather than to promote woodland preservation for shade, ornament, or nature conservation purposes. However, this program took a more laissez-faire approach to management. The government spent less money on each woodlot than under the Forestry Act, and demanded in return no guarantee that the wood products would ever be marketed. Leaving this to natural market demand, it assumed that if owners could be encouraged to maintain their forests in a condition suitable for harvesting, in most cases the fibre would eventually be harvested.

Under the Woodlands Improvement Act, the owner enters into a 15-year agreement with the Ministry. The Ministry provides stock at the owner's expense. The Ministry's staff plant the stock themselves to ensure proper planting conditions and provide advice on the kind of stock to plant. The planting is done at no cost to the landowner.

The owner agrees to cut no wood during the life of the agreement, to keep the forest free of fire, insects and disease, and to refrain from pasturing cattle in the forest. Under these agreements, the Ministry accepts no responsibility for insect or disease control or for fighting fires. These functions are the owner's responsibility. However, if the trees planted fail to thrive, the Ministry will replace them at its own expense, provided that the failure is beyond a predetermined level.

The purpose of maintaining such forests under the Forestry Act and Woodlands Improvement Act may extend beyond fibre production, since the Ministry's management plan must be approved by the landowner. Conceivably, the owner might have the objective of total conservation for part of the forest, but no such agreements providing for outright conservation exist. It is unlikely that the Ministry, whose purposes in providing this assistance are overwhelmingly the promotion of commercial forestry rather than conservation, would provide assistance to a landowner whose purposes did not include eventual commercial harvesting of the forest.

There are about 5,000 agreements in effect under the *Woodlands Improvement Act* covering forests ranging in size from about 5 acres (2 ha) to 1,000 acres (400 ha). There are about 60 agreements under the *Forestry Act* for forests ranging from $12\frac{1}{2}$ acres (5 ha) owned by the Hamilton and Wentworth Conservation Authority to 25,000 acres (10,000 ha) owned by the municipalities of Prescott and Russell. 33

Section 7 of the *Forestry Act* permits the Cabinet to authorize the Ministry of Natural Resources to establish nurseries and furnish nursery stock to any landowner on terms and conditions set out in the regulations 34 , and to any public authority or other organization for educational or scientific purposes on whatever terms and conditions the Minister considers proper. 35

The Ministry has established several nurseries pursuant to this power, which provide stock for provincial government concerns such as highways, the grounds of provincial reform institutions, and provincial parks, as well as for public authorities such as Conservation Authorities. In addition, the regulations provide that nursery stock may be furnished for use on private land with an area of over 2 acres (0.8 ha) exclusive of any part of the land occupied by structures. The furnishing of nursery stock is not limited to commercial forestry purposes, but includes, as stated above, educational or scientific purposes.

Some nursery stock is sold to Conservation Authorities which may not forest their lands primarily for sale of wood products, but for flood control and watershed protection, and for recreational programs such as trails for horseback riding, cross-country skiing, snowmobiling and hiking. The regulations specifically provide that the nursery stock may be used for "enlarging, establishing and replenishing a shelter belt or wood". The regulations also establish the prices and sizes of stock that may be furnished. 38

In addition, *The Forestry Act* permits the Cabinet, with the consent of the owner of any land covered with forest or suitable for reforestation, to declare the land to be a private forest reserve. ³⁹ Once a property is declared a private forest reserve, and the declaration is registered in the land titles or land registry office, neither the present owner nor any future owner may cut any trees without the Minister's consent, and the forest must be preserved in perpetuity. ⁴⁰ This section was passed to enable philanthropically minded landowners to ensure that their natural areas would be preserved. No one has taken advantage of it, however: there is not one private forest reserve in Ontario.

The Woodlands Improvement Act and the Forestry Act and the way they are applied reflect the orientation of the Ministry of Natural Resources toward promotion of production forest rather than conservation of forest for its own sake, prior to 1967, "forestry purposes" were defined as being "primarily the production of wood". Other forest purposes were secondary. This definition was changed to permit Conservation Authorities to utilize the services provided under these statutes for recreational and other non-productive purposes. However, the officials of the Ministry still apply these acts primarily to promote commercial production. For example, there are no agreement forests under the Forestry Act that are devoted primarily to purposes other than commercial production.

Some Ministry of Natural Resources officials criticize the agreements under the *Woodlands Improvement Act*, not because they give too little emphasis to objectives other than commercial production, but because they are not sufficiently stringent to ensure that commercial production results from the government assistance.

These personnel are critical of the fact that the open-ended program does not result in any guarantee that the fibre will ever reach the market.

Some officials of Conservation Authorities, which plant trees on private lands without requiring any agreement from the landowner, feel that the Conservation Authority tree planting programs are more effective. One Conservation Authority official has said that his Conservation Authority plants three times as many trees as the Ministry because landowners are reluctant to bind themselves to a Ministry agreement.

The sections of the act providing for establishment of private forest reserves, though apparently sound in principle, have proved completely ineffective in practice, as no landowners have agreed to participate in this program since the provisions were passed in 1919 as the *Private Forest Reserves Act*.

The provisions for furnishing of nursery stock have proven largely useless for the purposes of urban forestry because of the restrictions imposed by the regulations. The availability of stock only to areas of over 2 acres (0.8 ha) has served to reassure commercial nurseries that the Ministry of Natural Resources will not be able to supply trees to be used as ornamentals and hence will not be in competition with them. However, it has also prevented the act from being useful for urban forestry purposes in the same way that the similar limitation on municipal power to control tree cutting on smaller areas has reduced the usefulness of the *Trees Act*.

The restrictions on the size of tree that the Ministry may provide and on the recipients of such trees have also served to appease the commercial nurseries, but they too have interfered with the usefulness of the act for urban forestry purposes. Under the regulations, for example, a municipality would be unable to acquire large stock from the Ministry's nurseries to replace trees killed by Dutch elm disease or to enhance rural areas or recreational areas. Municipal officials have complained that Ministry nurseries burn healthy stock rather than sell it to municipalities for their recreational land. The municipalities find this government waste difficult to accept when they have difficulty paying for a tree planting program out of revenues available to them. According to a former Minister of Natural Resources, the Honourable Leo Bernier, large trees and shrubs would not be available, for example, for municipal golf course projects "due to present regulations that restrict these materials to rural areas only, such as townships or regional improvement projects".41

To be useful for urban forestry purposes, it would appear that the *Forestry Act* and/or regulations should be amended to permit the

furnishing of nursery stock to private owners on properties smaller than 2 acres (0.8 ha) to permit the Ministry to supply municipalities and other public authorities with larger stock, and to permit the Ministry to provide stock to municipalities and other public authorities for a variety of urban forestry purposes in urban as well as rural areas.

The definition of forestry purposes should also be broadened to include the establishment, maintenance and conservation of urban forests for their amenity value alone.

In his recent report prepared for the Division of Forests of the Ministry of Natural Resources, Andresen⁴² recommended a greater urban forestry involvement by the Ministry. Three alternative courses of action were advocated:

- 1. Initiate a new, specifically identified program designed to service municipal governments. As a primary assignment, new staff would prepare comprehensive municipal forest management plans. Estimated costs to OMNR for this program would be \$336,000 per year.
- 2. Create a new municipal assistance program utilizing forestry-trained professionals transferred from other branches within the OMNR. Costs would be comparable to alternative (1) but would be absorbed within existing OMNR budgets.
- 3. Eliminate or reduce some regional and district programs to place a new priority (with support) on municipal forestry assistance. Costs would be absorbed within current regional and district allocations.

Andresen added that challenges and opportunities associated with sound forest management systems can be relayed and used within urban Ontario to conserve trees and forests under the jurisdiction of municipal governments.

5.5 The Conservation Authorities Act

Under the *Conservation Authorities Act* of 1946, municipalities may group themselves together to undertake schemes for conservation, restoration, and development of natural resources, or for the control of water to prevent floods and pollution, or for similar worthy purposes. One or more watersheds may be covered by such an Authority.

When agreement is reached among the municipalities participating in any such scheme, the Cabinet may establish the Authority, designating the participating municipalities and the area included. 43

The Authority is then administered by a membership consisting of municipal representatives and representatives of the provincial government. The authorities obtain most of their funds from the provincial government and are responsible to the Conservation Authorities Branch of the Ministry of Natural Resources. Exercise of their powers sometimes requires only the approval of the members of the Authority, but sometimes requires the approval of the Minister of Natural Resources or of the Cabinet.

An Authority, properly established, has the power to conduct engineering studies, purchase or erect structures, acquire land through expropriation, purchase, lease or otherwise, plant forests⁴⁴ and assess the cost of its activities to the participating municipalities, which, in turn, may issue debentures or otherwise raise the money.⁴⁵ Grants to authorities may be made by the Ministry of Natural Resources.⁴⁶

The Conservation Authorities play a major role in identifying, inventorying and protecting forests and other natural areas. They are likely to be aware of ecologically sensitive lands within the area of their jurisdiction. They are consulted as a matter of course by ratepayers, municipal politicians, ministries of the provincial government, and other public authorities whenever development threatens woodlands and other natural areas. Applications for subdivision approval are circulated to the Conservation Authority. The decision of a Conservation Authority, whether to comment, publicly or privately, on the ecological importance of lands on which development is proposed, may have a significant influence on the outcome of applications for the many kinds of municipal, provincial or federal licences, permits and other approval needed before lands may be drained, trees cut, or construction Even where the Conservation Authority does not choose to give evidence publicly before such tribunals as the Ontario Municipal Board and the Environmental Assessment Board, studies and reports which it may have prepared pursuant to its objects of "establishing and undertaking a program designed to further the conservation, restoration, development and management of natural resources"47 in the area over which it has jurisdiction may be brought before the tribunals by ratepayers, municipal councils, and others to support their objections to destruction of ecologically sensitive lands.

Conservation Authorities may plant trees on Crown lands with the consent of the Minister of Natural Resources and on other lands, private or public, with the consent of the owner.⁴⁸

Many of the programs of Conservation Authorities with respect to trees and forests are similar to, and intermesh with or overlap, those of the Division of Forests of the Ministry of Natural Resources.

For example, like the Ministry of Natural Resources, the Conservation Authorities will plant trees on private lands. The tree

planting service of the Conservation Authorities dovetails with that of the Ministry, because while OMNR assistance under the WIA program and the Forestry Act program is normally restricted to areas of over 5 acres (2 ha) Conservation Authorities generally plant trees on areas under 5 acres.

Some Conservation Authorities operate their own nurseries, but many operate their tree planting service using stock bought by the private owner from the Ministry of Natural Resources. The usual policy of Conservation Authorities is not to buy stock from the Ministry of Natural Resources for the owner, but to supply the planting service if the owner buys the stock.

Conservation Authorities also purchase and administer their own forests, primarily for recreation and conservation purposes rather than for commercial production. The Ministry of Natural Resources pays grants to the Conservation Authorities to assist them in buying land for reforestation, and the Ministry manages property belonging to Authorities under the management agreement provisions of the Forestry Act.

Because of their mutual interest in reforestation, officials of the Ministry of Natural Resources will sometimes refer landowners requiring trees to the local Conservation Authority and vice versa. However, there is also considerable rivalry or even jealousy between the Division of Forests of the Ministry of Natural Resources and the Conservation Authorities. Conservation Authority officials take pride in their more comprehensive approach to management of private lands they have assisted in reforesting or maintaining, and in what they consider to be their superior training and technical expertise. The Ministry officials express concern that many Conservation Authorities do not employ trained foresters or forest technicians, and that, consequently, in their opinion, trees planted by the Conservation Authorities may have a high failure rate.

Conservation Authority officials, on the other hand, take pride in the fact that some Conservation Authorities plant many more trees on private lands as a result of less stringent requirements on the landowner.

The Metropolitan Toronto and Region Conservation Authority, for example, plants trees at the request of private owners for the purposes of erosion control and flood control, wildlife habitat, and aesthetic considerations. The owner pays for the cost of the nursery stock and the Conservation Authority absorbs the costs of labor. When planting trees, this Conservation Authority usually, unlike the Ministry of Natural Resources, also plants shrubbery to create edge effects and a bush that will adapt more quickly as a wildlife habitat than it would if trees alone were planted.

Unlike the Ministry of Natural Resources, this Conservation Authority does not require the recipient landowner to enter into any agreement that would restrict his right or the right of future owners to remove the trees. The Conservation Authority feels that this requirement would discourage most landowners from utilizing the tree planting service. Authority officials feel that many landowners who might otherwise reforest their lands are not prepared to enter into an agreement that would inhibit their ability to sell the land. Although the lack of control of cutting exercised by Conservation Authorities means that there is no legal protection of the public investment in planting and maintaining trees on private lands, this Conservation Authority feels that the advantages of having the trees planted outweigh the disadvantages. There is some evidence that this approach may be correct, as the effectiveness of agreements restricting cutting of trees on properties subject to agreements under the Woodlands Improvement Act is questionable. Armson 49 found that:

"Although no conclusive data exists, discussions with staff in southern Ontario districts indicate that there is considerable change annually in ownership of property under the Woodlands Improvement Programme (WIA). Owners are supposed to notify district offices of such ownership changes, but it is obvious that many are not doing so. The changes are only brought to light when copies of the magazine 'Your Forests' are returned or when district staff have occasion to visit the property."

On the other hand, the right of the Minister to terminate the agreement and recover from the owner the cost of planting the nursery stock or the improvement of the woodlands could provide some deterrent to unauthorized cutting.

If the powers of Conservation Authorities to conserve lands were clarified and strengthened, these Authorities would be in a better position than they are to preserve wooded lands, as well as marshes, valleylands and other environmentally sensitive areas. Although section 19 of the Conservation Authorities Act provides that the purposes of a Conservation Authority are, among others, the conservation and management of natural resources, and although section 27(1)(f) permits the Authorities to prohibit or regulate dumping of fill anywhere within their jurisdiction where the fill might affect conservation of land, the Authorities are reluctant to use these powers unless the land conservation activities are related to flood control. The Authorities are aware that although they are called "conservation" authorities, they were established primarily for flood control purposes. land conservation powers overlap with the planning and expropriation powers of the individual municipalities which make up the local Authority, and they are reluctant to exercise powers which the individual

municipalities within the watershed might exercise. The Ontario Government, from which the Authorities receive most of their funding, has apparently taken a similar view of Conservation Authority powers, since it has begun to cut back on funds available to the Authorities for the purposes of establishing conservation areas for recreation.

Because the Conservation Authorities regard their land conservation powers as ancillary to their flood control powers, they tend to protect only those lands in river valleys and flood plains where it is necessary to act in opposition to the wishes of landowners. For example, pursuant to section 27(1)(f), the Authority would prohibit dumping of fill on private land in a river valley, but not in other environmentally sensitive areas. A further restriction on their powers, according to Conservation Authority officials, is the complex formula for determining a "regional storm", which they believe makes it almost impossible to establish in court that a storm is "regional". The Authorities have the power to prohibit building of structures on lands which would be flooded during a "regional storm" -- a storm of a certain intensity according to the formula provided in the regulations. But Authorities are reluctant to attempt to establish in court that specific lands would be subject to such a storm, because of the expense of retaining expert witnesses to establish this and the difficulty of proving it.

The Metropolitan Toronto and Region Conservation Authority, which has participated with the city of Toronto, the Municipality of Metropolitan Toronto, and several citizens' groups and provincial ministries, in a study of ways to protect Metropolitan Toronto's ravines, has recommended the following amendments to the *Conservation Authorities Act* to strengthen its land conservation powers:

- "(a) That a "cease and desist" or "stop work" order be included as part of the issuance of a notice of violation for activities undertaken without a permit;
- (b) That a more precise and legally enforceable definition of the term "conservation of land", Section 27(1)(f) and Regulation 2, be provided to enable the use of this control in administration of the regulation;...
- (c) That, in addition to the present requirements, a permit be required for the removal of fill and for any proposed buildings or structures within the regulation line of the Authority, as it may be amended by the recommendations;
- (d) That the regional storm be described in more understandable and legally enforceable terms;

(e) That the requirement for an Authority to sit as a Hearing Board in judgment of its own regulation be deleted from the *Conservation Authorities Act* and that an independent hearing process be established in its stead."

Such amendments to the Conservation Authorities Act could assist Conservation Authorities in exercising their powers to conserve land and the trees on it.

5.6 The Plant Diseases Act

This act enables the provincial Cabinet to make regulations ⁵⁰ and municipal councils to pass bylaws ⁵¹ designating diseases or plant injuries caused by insects, viruses, fungi, bacteria, or other organisms as "plant diseases". ⁵² By virtue of the definition of "plant" that includes trees ⁵³, this act enables municipal inspectors to take measures to control or eradicate tree diseases within the municipality. ⁵⁴ Once a municipality has passed a bylaw, and the bylaw has been approved by the Minister of Natural Resources ⁵⁵, the municipality may appoint inspectors to enter private lands between sunrise and sunset for the purposes of making an inspection for plant diseases. ⁵⁶ An inspector who finds a plant disease may order the owner or the person in charge of the premises to disinfect the trees, to treat them, or to destroy them. ⁵⁷ Provincial inspectors under the supervision of a provincial entomologist appointed by the Cabinet, have similar powers. ⁵⁸ It is an offence under the act to hinder or obstruct an inspector in the course of his duties, to furnish him with false information, or to refuse to furnish him with information. ⁵⁹

When an inspector discovers a plant disease or the causal organisms of a plant disease, and orders the plants to be treated or destroyed, the municipality may order the landowner or property occupant to do this at his own expense, or the municipality may pay for any expenses incurred in the treatment or destruction of the plants out of the general funds of the municipality. ⁶⁰

Where an inspector finds the causal organisms of a plant disease in the soil of any premises, he may also order the owner or occupant of the premises not to grow plants that may become infected, for a period of time specified in the order. 61

Failure to comply with the order of a municipal inspector or of the provincial entomologist is an offence punishable by a fine of not more than \$50 for a first offence, and, for any subsequent offence, a fine of not less than \$25 and not more than \$200 or imprisonment for up to 30 days. 62

Hindering a provincial or municipal inspector or refusing to give him information is punishable by a minimum fine of \$100 for a first offence, and for any subsequent offence, a fine of not less than \$200.63

Although this act is designed primarily to control the spread of diseases and insects which damage root crops and fruit tree crops, it has made a significant contribution to the control of urban shade and ornamental tree pests. The main use of the act by municipalities has been for passing bylaws providing for the treatment of Dutch elm disease.

The main weakness of the act has been that the municipality or the individual landowner is responsible for the total cost of any program of disease and insect control. The act has proven effective only when provincial subsidies are available to municipalities. Most of the Dutch elm disease control bylaws were passed during a period in which the Ministry of Agriculture and Food, then the Department of Agriculture, had a program through which municipalities could recover 50% of the cost of removing dead elms, provided that the municipality did so pursuant to a Dutch elm disease control bylaw passed under the Plant Diseases Act. Such removals were part of a winter works project, designed to provide employment.

Experience has shown that without the availability of provincial funding, most municipalities have considered the high cost of spraying and removal of infested trees during epidemics of tree pests beyond their financial capabilities.

For the *Plant Diseases Act* to be effective, it would appear that amendments to it should be passed to enable the province to provide financial assistance to municipalities and also to provide for provincial assistance to adjoining municipalities to coordinate control measures when a plant disease is in need of control across municipal boundaries.

The powers of inspectors may also need strengthening. Although section 6 enables an inspector, for the purposes of making an inspection, to "enter any farm, garden, orchard or building in or on which he has reason to believe there are plants", the act does not explicitly permit an inspector to enter upon "any land" as does the Forest Tree Pest Control Act. As a result, although section 6 may be broad enough to permit an inspector to enter private residential property without consent of the owner, this is questionable. Municipalities have taken a cautious approach to their power, and in some cases have considered that this section does not permit their inspectors to enter a private residential property without permission of the owner. The implications of this ambiguity in the act and this cautious approach by municipalities to enforcement of the act are obvious. If a landowner is

unwilling to let an inspector enter his property to inspect a tree, or if the owner cannot be contacted, the municipality will be unable to make a comprehensive inventory of trees in an area designated for disease control and subsequent control measures will be incomplete.

It would appear that the act should be amended to empower inspectors to enter any land during the daylight hours, with or without the consent of the owner.

As with most tree protection legislation, the penalties do not reflect the current value of urban trees grown for the purposes of shade or ornament. Such trees in urban areas are usually considered more important, in terms of real estate values, at least on an individual basis, than are fruit trees, although the act is intended primarily to protect the latter. The penalties are designed to cover infractions of a relatively minor kind, such as the sale of diseased nursery stock. Although this kind of infraction may be of major importance, in some cases it may be less serious than the refusal of a property owner to remove a tree that is diseased with a readily transmittable organism, and is growing in an area where there is a good possibility of spread of the disease to other trees.

To render this act more effective for the protection of mature urban trees, the penalties should be raised to reflect the current economic value of these trees, and not only the value of nursery stock and fruit trees.

5.7 The Planning Act - Section 38(1)22

Section 38(1), paragraph 22(c), of the *Planning Act*, provides for bylaws to be passed by the councils of municipalities:

"22. For requiring,

(c) the removal and destruction of all wooden poles, trees, stumps, or other wooden or cellulose material that is not part of a building if they are certified by the building inspector or commissioner to be infested by termites or other wood-destroying insects."

This provision appears as part of a section of the act concerned primarily with building bylaws and construction standards, and its purpose is probably to safeguard wooden structures from attack by termites and other insects in dead trees, stumps, and abandoned wooden structures. However, it may also provide a municipality with the power to remove living trees in some instances. This power is to be exercised by a building inspector or building commissioner who would have no training or experience in the diagnosis or treatment of tree diseases. The act

provides for destruction or removal of trees but not for treatment, and therefore has the potential for misuse. There is no provision for specifying the degree of infestation that must be found before the inspector may order removal of the tree.

Unlike similar provisions in other statutes dealing with the treatment of plant diseases, this one does not allow for appeal of the decision of a building inspector or commissioner.

This section could be abused by well-intentioned personnel of buildings departments who lack the necessary training in the diagnosis of tree diseases. Final approval for removal of trees, especially those which are privately owned, should not rest with one person, especially an officer who may not be experienced in the diagnosis and control of tree insect pests.

Some provision should be made for notice to the owner or occupant of the property in the case of living trees, for a right of appeal of the decision of the building inspector or commissioner, and information should be provided to the owner or occupant on the procedures to be used for appeal. The decision to order removal of trees should be made in consultation with trained personnel responsible for enforcement of similar statutes and bylaws, such as officials of the Ministry of Natural Resources or the municipal parks department or forestry department.

5.8 Discussion of Planning Process Statutes

Limitations to the use of the statutes described under the heading "Trees and the Planning Process" for protecting trees are self-evident from the discussion, and give rise to a number of suggestions for reform. The most obvious limitation is that while the statutes generally prohibit an owner from adding structures to his property without going through the planning process, they do not prevent him from removing natural features. He may not be able to build, but he may strip the land of trees to remove the features which the public would protect by opposing his plans to build. This weakness has led to legislation such as that passed by Oakville, the borough of York, and the city of Toronto as described above to prevent the cutting of trees on private lands and in ravines. However, no such legislation of general application throughout the province has been passed by the provincial government.

The *Planning Act* might be amended to provide specifically for environmental protection measures, including description of natural features in draft plans of subdivisions, environmental protection policies and land use designations in official plans, and local environmental advisory committees, similar, perhaps, to the planning committees now established under that act.

Consideration might be given to the enactment of provincial legislation enabling municipalities to preserve a tree or group of trees that has value because of age, size, scarcity, or historic associations. Such legislation would give municipalities powers similar to those that they have under the Ontario Heritage Act to protect historic and architecturally significant buildings.

Finally, it should be realized that the present planning process is greatly affected by the prevailing political climate. The landowner who wants to retain or acquire approval of a zoning, development, or subdivision plan for intensive use of his land has behind him the force of the tradition that the private owner can do whatever he wishes with his property. Neighbors, environmentalists, and citizen groups wanting to restrict the use of land in the interests of conservation, and zoning bylaws and official plan designations and policies which recognize conservation needs, have behind them only the force of support of a changeable and changing municipal council. For example, in Mississauga, in 1973, a so-called "Reform" Council was elected, which initiated work on a revision of the city's official plan that included comprehensive environmental protection policies. In 1974, the council appointed an Environmental Advisory Board, believed to be the first in the province, consisting of a number of citizens with expertise and interest in environmental planning matters who met once a month with representatives of the city's three major departments: planning, engineering, and recreation and parks. The board discussed such problems as excessive peak run-off in urbanized streams, the choice of tree species in the city's planting program, the location of a major new landfill site, the education of the public about the recycling of organic wastes, and smoking in retail stores. The committee did not generally comment on individual planning matters, but made a major contribution to development of policies for the new official plan.

However, a new council elected in 1976 favored more development in the municipality. One of the earliest actions of this council was to decide that the Environmental Advisory Committee would meet only at the discretion of council. The committee fell into disuse. Coincidentally, other committees with citizen members disappeared, including the Tree Committee established under the city's tree protection bylaw. This committee was abolished by the repeal of the clause in the bylaw establishing the committee.

Provincial policies in favor of the establishment of such citizen participation in the planning process and promoting environmental protection policies in all official plans approved by the Ministry of Housing might assist in removing some of the uncertainty arising from the political nature of the Ontario planning process.

5.9 Penalties for Injuring or Destroying Trees

As stated above, the fines established in Ontario statutes for punishing anyone injuring trees range from a low of the maximum \$20 fine in the Public Parks Act to the maximum \$600 fine for destroying trees contrary to a tree-cutting bylaw made pursuant to the Trees Act.* Such levels of penalty do not reflect current values of shade and ornamental trees, nor do they serve as a deterrent to the destruction of urban trees. Some of these penalties have not been revised for decades. fine of \$25 provided for injuring a boundary tree under the Trees Act, for example, has remained the same since 1883. The \$25 fine provided for in section 457(7) of the Municipal Act has remained at that level since 1870. Most of the statutes do not provide for any form of imprisonment in addition to or as an alternative to a fine, nor do they provide for any duty, other than the normal civil liability which must be established by a separate legal action, to repair or replace injured or damaged trees, or to compensate the owner for injury or loss. exception is section 27(3) of the Public Transportation and Highway Improvement Act, which provides that anyone who injures any tree within the limits of the king's highway, "is also liable for any damage occasioned by the injuring" in addition to the fine.

The penalties also reflect the historic discrepancy between the value placed on trees as a cash crop and trees grown for the purposes of shade or ornament. For example, the maximum fine under the *Trees Act* for damage to a boundary tree is \$25, while the maximum fine under section 4--a section passed to protect commercial forest crops--is \$600 or up to three months in jail.

The offences are usually strict liability offences: there is no need to prove an intent to injure the tree. If the injury itself is proven, this is sufficient to convict. However, the *Public Parks Act* makes it an offence to "wilfully or maliciously injure...any ornamental or shade tree or shrub or plant...in any street, park, avenue, drive or other public place under the control of the board (of park management) or...wilfully, negligently or carelessly suffer or permit any horse or other animal...to break down, destroy or injure any tree, shrub or plant therein".

The necessity to prove wilfulness, maliciousness, negligence, or carelessness makes it difficult to prosecute such charges. Where by-laws have contained such elements, municipal officials have frequently left them to fall into disuse rather than face the difficulty of proving such an intent or negligence.

^{*} Section 466(1) also provides that municipalities may pass bylaws providing for a maximum fine of \$1,000 for contravention of any municipal bylaw.

We would recommend that the penalties in all Ontario statutes related to protection of urban forests be reviewed and revised to take into account modern urban conditions and current thought on the ecomic and social value of mature urban trees.

Penalties should be consistent from statute to statute.

Penalties should reflect the current value of shade and ornamental trees in the urban and near-urban setting and should be sufficiently large to provide a deterrent to injury.

In addition to any other penalty, the statutes should make the convicted person liable for any damage occasioned by the injuring, destroying, cutting or pruning of the tree, and for replacement or repair of the tree at his own expense without the need for civil action by the owner of the tree.

Injury to trees should be a strict liability offence. There should be no need to prove intent to injure or negligence.

5.10 Destruction or Removal of Trees

As stated above, when a public authority intends to order the removal of a tree or to remove the tree itself, because of interference with the highway, communicable disease, structural weakness or other danger to persons or property, the provisions for notice to the tree's owner or the owner of adjacent lands, the right of the owner to appeal the decision to remove, the right to compensation, and the amount of compensation vary from statute to statute, and from provision to provision within states.

We would recommend the standardization of these rights, duties, liabilities and procedures as much as possible.

As a general rule, the following procedures should be adhered to:

- 1. The owner of the tree or the owner of adjacent land should be given notice of intention to remove a tree.
- 2. Except where immediate danger to persons or property makes it impossible or highly inexpedient, the owner should have the right to appeal the decision to destroy the tree.
- 3. There should be some provision in the statutes to ensure that the decision to destroy a tree is made in all cases by personnel with adequate training, experience and skills to make this kind of decision.

- 4. In all cases in which the tree is on the land of the adjoining landowner, that individual should have the right to argue for compensation before an independent tribunal.
- 5. Where adjacent owners have planted or maintained trees on public land, or where they have come to think of these trees as appurtenant to or part of their own property from long association, they should be given notice of intended removal, should be given a right to object to removal, and, in some cases, should be given compensation for loss of amenity value and compensation for direct costs of planting and maintenance.
- 6. Procedures for appeals from such arbiters should be standardized as much as possible.
- 7. Provisions should be made for maintenance of trees on public land and for assistance to private owners, and there should be some statutory recognition of the fact that it is preferable to maintain trees in good condition and to treat problems rather than destroy or remove trees when they cause problems.
- 8. Other neighbors and the general public should also be given notice of intention to remove nearby trees and an opportunity to object. Trees are an important amenity in a neighborhood and residents of the area have a valid interest in protecting this amenity.

5.11 Pruning and Other Maintenance of Trees

As pruning of trees is often done by unqualified labor, in an unskilled fashion, and as proper arboricultural standards and guidelines are often sacrificed to the convenience of municipal departments, utilities, and other public authorities and their contractors, there appears to be a need to give owners and other neighborhood residents some notice of intention to trim and some means of objecting to the need to prune or to the manner of pruning. In some cases, a right to compensation for injury to trees during pruning, spraying, or other maintenance of trees or public works should be provided by statute.

Consideration should be given to providing owners and neighbors with similar rights in respect to pruning, spraying, etc., to those we have recommended they have in respect to removal of trees.

The law should encourage the use of trained and skilled personnel by utilities and public authorities responsible for pruning or maintaining trees, and encourage the adoption of practices consistent with principles of sound urban forestry by:

- 1. providing for the licencing of arboriculturists and others working with trees, and providing for procedures for suspending or revoking licences, in a manner similar, perhaps, to the licencing provisions of the *Pesticides Act* and regulations, and/or
- 2. promulgating a provincial set of arboricultural standards, guidelines, and specifications in a manner similar, for example, to the Ontario Building Code or the Ontario Code of Agriculture Practice, or encouraging utilities, municipalities and other authorities to promulgate such a code themselves.

Provision of provincial grants or subsidies for planting or maintenance of trees could be made subject to compliance with such a code.

- 1. S. 242.
- 2. With respect to parks, see for example, s. 352, para. 68.
- 3. Douglas v. Fox (1881), 31 C.P. 140; Stockinger v. Cobourg, [1943] 4 D.L.R. 357, (H.C.J.) affd. by [1944] 3 D.L.R. 104; Uxbridge Township v. Walker [1955] 3 D.L.R. 261 (Cty. Ct.); Hall v. Township of Etobicoke (1963) 40 D.L.R. (2nd) 286, [1963] 2 D.R. 529 (H.C.J.).
- 4. Tree Planting Act (1871) 34 Vic. c. 31, s. 1.
- 5. Section 457 of the present *Municipal Act* refers primarily to trees on highways. Predecessors of this section also govern trees on highways; however, the term "highway" in previous acts was defined broadly to include public squares and a variety of kinds of public land. The definition of "highway" in section 1, paragraph 10 of the present act, however, is much narrower. Over the years, inadvertently or intentionally, the application of the *Municipal Act* to urban forestry matters on lands other than roadsides appears to have been eroded.
- 6. See footnotes 39, 41, 42 of Part 3 of this study.
- 7. "Fourth and Final Report of the Select Committee on the Municipal Act and Related Acts", March 1965, Queen's Printer, Ontario, pp. 141-148.
- 8. S. 27(1).
- 9. Ibid.
- 10. S. 27(3).
- 11. S. 27(4), (5).
- 12. S. 31.
- 13. S. 31(9).
- 14. S. 12.
- 15. Ss. 12(2) to (5).
- 16. S. 98.

- 17. S. 99(1).
- 18. S. 99(2).
- 19. This would appear to be the effect of s. 33, County Courts Act, R.S.O. 1970, c. 95.
- 20. S. 99(4).
- 21. Discussion based on J.W. Andresen and P. Lewis-Watts, "Roadside Vegetation Management in Ontario", 1977, Research Report for Ontario Ministry of Transportation and Communications.
- 22. Where trees are removed or damaged pursuant to the Minister's powers under s. 4 or s. 31, s. 31(10) and s. 12 provide for compensation to be determined by the Ontario Municipal Board.
- 23. S. 99(2).
- 24. Ibid.
- 25. S. 12, s. 27(7), s. 31(10).
- 26. S. 38, para. 22(c).
- 27. Rex v. Hay and Co., [1948] O.W.N. 313 (H.C.J.), (obiter).
- 28. Interview with Mr. W.A. Thurston, Division of Forests, Ontario Ministry of Natural Resources.
- 29. Ibid.
- 30. R. ex rel. Strathy v. Konvey Construction Company Limited, Provincial Court (Criminal Division), Judicial District of York, Provincial Court Judge A. Newall, February 27, 1975. See Canadian Environmental Law News, vol. 4, no. 2, April-May 1975, p. 36.
- 31. "Background", Ministry of Treasury, Economics and Intergovernmental Affairs, issue 77/17, April 29, 1977, p. 13 and 14.
- 32. Interview with Mr.W.A. Thurston.
- 33. Ibid.
- 34. S. 7(1) and (2).
- 35. S. 7(3).
- 36. O. Reg. 355, s. 4.
- 37. Ibid., s. 5.
- 38. Ibid., s. 6.
- 39. S. 5(1).
- 40. S. 5(2) and (3).
- 41. Letter from the Honourable Leo Bernier, Minister of Natural Resources, to the Honourable Robert Welch, Minister of Culture and Recreation, December 20, 1976.
- 42. Andresen, J.W., "Urban Forestry in Ontario Municipal Challenges and Opportunities", 1976, Report on file with Forest Management Branch, Ontario Ministry of Natural Resources, 144 pages.
- 43. S. 3.
- 44. S. 20.
- 45. S. 24, s. 25, s. 26.
- 46. S. 39.
- 47. S. 19.
- 48. S. 20(p).

- 49. "Forest Management in Ontario", K.A. Armson, 1976, Ontario Ministry of Natural Resources, p. 42.
- 50. S. 10(a).
- 51. S. 5(1).
- 52. S. 1(g).
- 53. S. 1(f).
- 54. S. 5, s. 7.
- 55. S. 5(2).
- 56. S. 6.
- 57. S. 7.
- 58. S. 4.
- 59. S. 6(2).
- 60. S. 5(5).
- 61. S. 7(2).
- 62. S. 9(1).
- 63. S. 9(2).

Andresen, J.W. and Lewis-Watts, P. 1978. Roadside vegetation management in Ontario. Res. Rep. for Ont. Min. Transport. Communic.

Armson, K.A. 1976. Forest management in Ontario. Ont. Min. Nat. Resour., Toronto. 172 pages.

6. GENERAL SUMMARY

Our study of urban tree and forest legislation in Ontario and a review of similar programs in other countries leads us to seven summary conclusions:

- 1. The Ontario Legislature and Ontario municipal councils can profit from numerous examples of existing tree-oriented legislation found in the United Kingdom and the United States, as Ontario recognizes the need for more supportive tree protection legislation.
- 2. Ontario government departments have placed little emphasis on urban forestry. The Ontario government has few programs designed to encourage or assist municipalities to develop systematic tree preservation programs or to hire skilled personnel to implement existing programs. The Ministry primarily responsible for forestry in the province, the Ministry of Natural Resources, is concerned overwhelmingly with trees as a commercial crop, and not with their amenity value. There is no provincial ministry with a mandate or program designed to promote urban forestry.

- 3. At present, Ontario legislative acts and bylaws overemphasize tree removal and underemphasize the preservation of essential amenity or heritage trees and forests.
- 4. Legislative reform is urgently needed not only to enforce better municipal tree planting practices but also to protect trees and wooded areas on public as well as on private land.
- 5. There is a prime need for greater public education and subsequent public involvement in the conservation of tree resources in and near human settlements. Municipal councils and operating departments with tree management responsibilities must be ready to accept and encourage citizen action.
- 6. Municipal governments, especially those of small communities, must be encouraged to formulate and pass tree protection bylaws. Advice should be forthcoming from federal, provincial, professional and educational organizations.
- 7. Although immediate public attention about environmental protection issues may be diverted by other general problems, it is vital to the public welfare that our irreplaceable tree and forest resources, especially in and near urban areas, be conserved and protected through enlightened management practices backed by adequate legislation.

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