TREES IN THE LANDSCAPE: THE BOTANIC GARDEN'S ROLE¹

by Allen Paterson

Trees and the Landscape seems to most of us to be the ultimate truism: A landscape without trees, at least in this area is inconceivable. Or is it?

Certainly until recently it was. In the adjoining province from which I come, we are celebrating Ontario's bicentennial. There, Empire Loyalists came to a fully forested land out of which they carved their farms. Trees seemed unlimited. In their lifetime they were — but no longer. As urban sprawl continues apparently unchecked the importance of trees in the landscape becomes evermore important.

Thus our role, as people concerned with trees, if not entirely disinterestedly, is continually to emphasize their importance in the civilized scene. The only living organisms big enough to ameliorate man's buildings. Often it's only when they have gone that people realize what they are lacking. This was very much the case with a small park in the city from which I come: this developed into a celebrated local cause celebre.

I should make it clear that I don't talk to you with the local, that is, Canadian knowledge of some of your other speakers, but I do come with a sort of background that might have relevance, and after all this is an international conference. Thus the British example is valid. In Britain the forest clearance began not 200 but over 2000 years ago and by the 17th Century this clearance was virtually complete. So much so that by the late 1600s people started to look round for someone to put on such an arboricultural conference as this.

John Evelyn's famous Sylva or, a Discourse of Forest Trees and the Propagation of Timbers in his Majesty's Dominions published in 1664 was the first study in English of trees and how and where they might be planted and what sorts of trees were available. It was of course just at this time that Andre LeNotre was laying out great

gardens at Vaux le Vicomte and Versailles and planting trees on a forestry scale.

Also a time in which the range of possible species was increasing. Exotics coming in, especially through the first Botanical Gardens, tulip tree, cedar, horsechestnut, plane, linden, larch. The range of possible species was increasing.

All was greatly encouraged by naval needs as Evelyn's preface makes clear. How convenient that 18th Century landscape gardening, which replaced French formalism of Evelyn's time, should so have combined beauty with economy. So much so, of course, that what is taken to be a typical untouched bit of English landscape is an utterly contrived arrangement in which trees, native and exotic — are the dominant feature. 'Tis use alone that justifies expence' as Pope said in reference to grand landscape designs.

Here in Canada, I suggest, that effect of planned landscape has not yet occurred. We are still dependent upon original or natural secondary forest, but the time must be upon us when, if not as a forest industry, but as the most important contribution to a civilized scene — tree knowledge and tree planting must be seen as vital. As professionals, we need to educate both our masters and our customers, politicians and people, not least about the time-scale within which we must work.

While it is vital to plant for the future it is equally important to preserve for the present. Retaining existing trees during building operations provides new developments with an atmosphere of "belonging." Of course there are the difficult physiological problems of existing trees adapting to inevitable changes in water tables, soil levels and so on. But in general more effort could be made to help — and only the developer can do so. Only the developer will do so if it is made clear that such effort pays off economically. These are com-

plicated issues which I do not wish to try to oversimplify: I merely intend to emphasize the importance of a subject to which both our heads and our hearts need to be committed.

The second part of my title is The Botanic Garden's Role. The 17th Century connection has been mentioned and Botanical Gardens with their extensions, on site or elsewhere, of Arboreta and Pineta (especially from the early 19th Century in Europe) have continued to be resource centers.

Their simplest role — and perhaps still the most important — has always been to demonstrate the potential of a given climate or area by growing what is possible. This offers on-going potential for education at all levels from the amateur to the professional from nature study (trees as organisms or as habitats) to practical arboriculture. It will also have a local or perhaps national aspect. At the Royal Botanical Gardens, Hamilton, we continue

to accumulate Canadian introductions and a recent plant introduction program has been started in association with the nursery trade and landscape architects to encourage use of such trees. Throughout, visual comparisons are more valuable than a library full of books, however elegantly written. Such a living collection provides also a site for research projects of many sorts.

Finally, I return to the time scale of treegrowing. Decades and half centuries are normal units. Botanic gardens, especially if of national stature, are among the few institutions that can work in such terms. They deserve your support to be there for the use of yourselves and generations to come.

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TREE PROBLEMS IN IRELAND¹

by Malcolm B. James

Ireland is situated off the west coast of the United Kingdom, and consists of 32 counties, 26 of which are located in the south of the island, and are referred to as the Republic of Ireland which became independent from the United Kingdom in 1922. The remaining 6 counties in the north of the island remain subject to UK law, as do the rules, regulations and orders relating to trees.

When considering the many differing types of problems which have arisen over the years in

Ireland, I will concentrate on those problems to be found specifically in the 26 counties of Ireland, which can be divided roughly into the following four categories: a) trees in development, b) the danger of roadside trees, c) planning regulations and the 1946 Forestry Act, and d) indiscriminate felling.

Over the last three generations in Ireland there has been a sad lack of replacement planting. This now means that a large percentage of the tree

^{1.} Presented at the annual conference of the International Society of Arboriculture in Quebec City, Canada in August, 1984.