

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 tree-growing. 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.

Royal Botanical Gardens

P.O. Box 399

Hamilton, Ontario, Canada L8N 3H8

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.

population is mature, and some have an extremely limited life. Unfortunately, there is little effort to replace the trees now being removed as a result of general decline, development of land for the use of industrial or housing estates, and, perhaps the largest problem, the removal of trees that have been rendered unsafe by road-widening schemes.

In the last fifteen years, development in the capital city of Dublin and surrounding areas has taken place at an alarming rate. This has had the advantage of enabling the profession of Arboriculture, specifically Tree Surgery, to improve and progress to the point now where high standards both in quality of work and safety are being achieved.

Enormous help has been given in establishing standards by the four major Government departments responsible for Parks and Urban Spaces in Dublin, namely: Dublin County Council, Dublin Corporation, Dun Laoghaire Corporation and lastly the Office of Public Works, which is specifically responsible for the many historical parks throughout Ireland and also the grounds attached to Government offices such as the Irish Parliamentary Building.

Arboriculture in Ireland is a relatively new concept, as the first professional Parks Superintendent was appointed to Dublin Corporation, a local government department, in 1949. However, it was not until the early 1970s (1971-74) that Dublin County Council, Dun Laoghaire Corporation and one other provincial local council, Limerick, in the southwest of the Republic, employed professional Parks Superintendents.

The relevant local authorities mentioned above are still relatively small and still trying to establish themselves within the local government framework so that they can provide the service that is expected of them. Unfortunately, as in many other places, budgets granted to Parks Departments seem inadequately small. There is, nevertheless, hope for the future as new and vigorous County Managers are promoted and are able to fight for larger budgets to carry out the work which is so badly needed throughout the country.

Trees in development. Numerous problems have arisen with trees on development sites, due,

in part, to the lack of awareness of tree care throughout the development period on the part of the developers and builders. Unfortunately because of the shortage of trained personnel and the limited budgets of the local authorities, it is not always possible for all sites to be closely watched so that tree health and care can be monitored to prevent unnecessary damage.

Having been involved with development sites for the past seven years, I am conscious that the age-old problems of soil disturbance, root disturbance and physical damage to trees still remain, and although stringent efforts are made to protect trees by erecting protective fencing and providing stipulations within the overall planning permission regulations, the penalties for failure to comply with these stipulations are lenient, so that in many cases the fines for neglect and damage of healthy specimens are only minimal compared with the gains that can be made through faster development or increasing the amount of building plots within a development site.

The danger of roadside trees. At the present time this problem is topical in Ireland, as in the first three months of 1984, the country suffered some of the worst gale conditions ever experienced. This resulted in the collapse of a huge number of roadside trees and the death of 8 people, six in motoring accidents and two pedestrians.

Many of the trees that collapsed did so due to lack of remedial works, fungal infection, and severe root damage caused by soil disturbance where road widening schemes had taken place in previous years.

These partial and total collapses occurred chiefly in areas governed by provincial councils rather than the city areas where the condition of roadside trees is under the stricter control of the Parks Department.

These provincial areas do not, in the main, have arboricultural officers to carry out tree inspections on highways and for this reason, little notice was taken of the trees until the gale conditions caused so many partial and total collapses, and thereby severe traffic problems.

Planning regulations and the 1946 Forestry Act. Control on felling within the city boundaries is unfortunately restricted to the limited cover afforded by felling licences issued by the Department of

Fisheries and Forestry under the 1946 Forestry Act.

Felling licences are not required by law under the following circumstances: i) *If a tree is standing in a County Borough or a Borough or in an urban district, it is only subject to planning conditions when specifically ordering its retention.* This condition drastically reduces the area covered by the 1946 Forestry Act to the point where felling licences need only be obtained in rural areas not covered by district or county councils.

ii) *When a mature tree is standing within 100 feet of a building other than a wall or a temporary structure.* In a densely populated area it is often hard to find a tree standing in a space greater than 100 feet from a building.

iii) *Felling licences are not required by the semi-state bodies for electricity supply or telephone service.* Neither of these semi-state bodies employ trained staff to deal with these situations, consequently there is no control of felling or harsh pruning carried out to clear wires.

There are only two categories of exempted trees in areas where felling licences are required and the wording of the 1946 Forestry Act here leaves a great deal to be desired: i) *A tree or trees not necessarily for ornament or protection of the holding on which they stand and which their intended use is stated on the felling notice. Their timber can be used to repair buildings, fences or for domestic fuel.* The above statement allows virtually anyone to fell a relatively healthy tree if in need of firewood for the next winter.

ii) *A tree or trees which are dead or badly damaged and are useless for commercial purposes.* This is an extremely ambiguous situation and there have been cases of farmers and country developers damaging trees in their "normal course of work," thereby being allowed to fell these trees legally under an issued felling licence.

With regard to indiscriminate felling taking place within city areas, it is clear from the wording of the 1946 Forestry Act that there are so many contradictions and consequently so many loopholes that widespread indiscriminate felling does take place.

Indiscriminate felling. The problems within this section are closely linked with section b) on dangerous roadside trees, but are nevertheless

well worth discussing separately.

In Ireland, there exist huge insurance and compensation risks relating to tree damage which has led many provincial councils to carry out panic felling. These councils have extremely small budgets for Parks Departments, and in many cases no qualified arboriculturalists to carry out tree inspections on highways. This in turn means that inspections have been carried out by untrained people such as Roads Engineers who have condemned relatively healthy trees because of their size, height and crownspread rather than for safety reasons. Several people, in fact, whom I have dealt with recently, who are in charge of trees on roadsides do not even have a basic knowledge of pests and diseases and were unable to recognize a fungal presence such as *Ganoderma*, *Meripilus* and *Ustulina*. Little has been done to counteract the tremendous damage which was done in the early months of 1984, although provincial councils may now hopefully be in a position to either call in commercial consultants to advise on their trees or to make monies available for the employment of trained staff to carry out these particular tasks.

Fortunately panic felling has abated somewhat due to the public outcry of conservationist bodies.

Conclusion

At present, professional people involved in arboriculture are striving to upgrade the standards which we hope will be enforced by the relevant local authorities. We are also working towards major changes in the 1946 Forestry Act which conflicts so badly with planning regulations. There is an urgent need to update and amend this Act to ensure that stricter control on felling is carried out.

Conservationist groups are now bringing pressure to bear in the right direction for improvement and amendment, although I fear it will be some years before we are able to proclaim professional satisfaction.

References

A Manual on Urban Trees. 1982. An Foras Forbartha (Government Research Centre).

Director of STS (Ireland) Ltd.
Gaywood, Mulhuddart
County Dublin
Ireland