

### Canada's forest industry

- Canada's mostly coniferous forests are the second largest in the world, exceeded in size only by those in the USSR.
- The Canadian forest industry accounts for one-quarter of all internationally traded forest products.
- Its annual shipments are now worth more than £20 billion. Most of its exports go to the US, but the UK is also an important market, buying some £700 million of Canadian forest products in 1989.
- The Canadian industry invests more than £2.5 billion each year in new plant and equipment, including some £500 million which is spent on pollution control and environmental protection.
- The industry directly employs about 300 000 people in Canada, but another 500 000 people indirectly rely on it for their jobs.
- About 350 communities in Canada depend on the industry as their prime – or only – source of economic support.

have set up a fund worth £600 million, of which 80 per cent is used for silviculture, planting, thinning or fertilising depending on the needs of a particular area.

The native white spruce and black spruce are the most common species to be planted followed by the Jack pine and the lodgepole pine, the seeds of which are normally sown directly onto the ground. In recent years other species have been introduced, notably the Japanese larch, the European larch and the Norwegian pine.

#### High-tech solutions aid forest conservation

Forestry Canada and its partners have pioneered innovative tissue culture techniques, cold storage gene banks and the use of the bacterium *Bacillus thuringiensis* to replace chemical pesticides. Its

scientists have also made full use of information technology to help forestry managers balance the competing elements that affect their planning decisions.

One such technology is the Forest Fire Management System which integrates real-time forest fire data with information about terrain and vegetation, access routes and equipment availability. Another is the second generation Multispectral Electro-optical Imaging Scanner, an airborne electronic camera that collects data for forest inventories and damage surveys. Digital data can then be transformed into colour-enhanced computer imagery detailed enough to show individual trees.

Forestry Canada scientists are also applying the latest technologies to the Forest Insect and Disease Survey – a complete inventory of pests and diseases present in Canada's forests which was started in 1936. Using computer models they are able to predict insect build-ups and epidemics, along with management alternatives.

'Science has shown that enlightened forest management embodies enormous potential for major contributions to environmental solutions,' says Forestry Minister Frank Oberle. 'Our knowledge of the world's ecosystem suggests that a healthy forest can do much to ameliorate – and even heal – the ravages of such global spectres as the greenhouse effect.'

'As part of our global responsibility, we are examining the role of Canada's forests as a planetary carbon bank.'

At the same time, Canada is ensuring that its expertise is shared with other countries which are in the process of developing their forests. In April of this year, for example, the country signed a Memorandum of Understanding covering a £5-million project to help China better manage its scarce forest resources.

The project, based in the northeast of China, will transfer Canadian technologies and forest management techniques that range from tree planting to proper cutting and processing. Approximately 30 Canadian experts will visit China, and 40 Chinese foresters will be trained in Canada – seeing at first hand how Canada protects and sustains its 'precious green mantle'. ❀

## Premier centre for Canadian studies in the UK

By GED MARTIN –  
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Canadian studies programmes have been operating in Britain for 15 years. This article looks at the work of the oldest Centre, established at the University of Edinburgh.

Edinburgh University's Centre of Canadian Studies – inaugurated in 1975 – is a small unit with just two full-time academic staff members (a

Director and one Lecturer) plus a secretary. However, it also welcomes a stream of distinguished visitors, most recently former Cabinet Minister Flora MacDonald, who was a Visiting Fellow in 1989, and a succession of Alberta Visiting Fellows from that province's universities.