

Planting seven seedlings a second

Forests have been important to Canada at least since the beginning of the 19th century when they provided the British navy with squared timbers and tall masts for its ships. Today, forest products remain the country's biggest export earner benefiting the Canadian trade balance by some £10 billion. And the livelihood of about 800 000 Canadians is in some way dependent on forestry and the forest industry.

Close to 90 per cent of Canadian forests are owned by the provinces, and policies and practices associated with these forests are their responsibility. The forest industry is significant in all ten provinces as well as the Yukon and Northwest Territories. Quebec, Ontario, New Brunswick and Alberta are major producers, but the undisputed leader — with nearly 45 per cent of the industry's output — is British Columbia.

That province exports as much softwood lumber per year as the Soviet Union, United States and Scandinavia combined. Yet visitors to British Columbia will look in vain for signs of irresponsible forest devastation; the provincial government's extensive reforestation programme ensures that the natural environment is well protected.

This is no fresh initiative. It is 65 years since the British Columbian Forestry Service (BCFS) started its planting programme with experimental trials at the Shelbourne Nursery in Victoria. By 1938 one million seedlings had been planted, and by 1954 the cumulative total had reached one hundred million. Forest farming — silviculture — had become well established.

In the early 1980s BCFS was planting one hundred million seedlings a year, and the private sector was adding a similar number. By 1989 two billion seedlings had been planted in the province since the inception of the programme, and the plan now is to increase the cumulative total to three billion in 1992. This year alone the number will top 300 million — more than seven seedlings every second.

Uninhabited wilderness

Of course, there is much more to forest management than planting seedlings. The Government of British Columbia has stewardship responsibilities for all the provincial forests, which make up 85 per cent of the province's total area. About one quarter of this forest land is available and suitable for timber felling. The remainder — unroaded, uninhabited wilderness — is far larger than the area that has ever been harvested.

Every year the government determines the amount of timber to be harvested in the province. The allowable annual cut is constantly being reviewed and can vary considerably from one year to the next. To ensure sustainable development, the amount of productive forest available for felling is limited to around one per cent per

‘Forests are a precious green mantle of vital importance to the entire planetary life support system.’

— Frank Oberle, Forestry Minister

annum — a smaller proportion than in most other timber-producing countries.

The Chief Forester then allocates timber licences to the forestry companies, whose performance is carefully monitored to ensure that they keep within their quotas and carry out the reforesting of the sites they harvest. There are stiff penalties for those that fail to keep within the guidelines.

However, the forest is under threat not only from man but also from natural phenomena. Some 78 000 hectares of British Columbia's forests are destroyed by fire every year — in 1986 it was as high as 235 000 hectares — and so £25 million is spent annually on surveillance, detection, fire fighting and fire prevention. Even more trees are killed off by insects, especially the mountain pine beetle and the spruce budworm. Again, steps are taken to restrict the damage caused.

‘Today we are implementing one of the foremost systems in the world to determine the best way to harvest

and then prepare and reforest the harvested sites,’ says John Cuthbert, Chief Forester of British Columbia.

Other provinces are also making tremendous strides in forestry. In fact, all provinces are committed to the principle of sustained yield forest management which ensures that the annual harvest will not exceed the annual growth of wood fibre. The new Quebec Forest Act, which came into force in 1987, enshrines multiple use along with sustainable yield as its two main elements. Quebec has an intensive planting programme.

Ontario and New Brunswick have also placed considerable emphasis on stand tending — fertilisation, weeding and pruning — with five year averages of 90 000 and 50 000 hectares per year respectively, to accompany very active planting programmes. Additionally Alberta is engaged in comprehensive research programmes in the use of appropriate seed stock and the development of trees with superior genetic characteristics.

Federal initiatives secure forests' future

Although Canada's new ministry of forestry was established only this year, it is, in reality, close to 100 years old. It is an offshoot of the Canadian Forestry Service — set up in 1899 — which has been separated from the Department of Agriculture to become a government department in its own right.

The new ministry — called Forestry Canada — has 1300 employees, six regional forestry centres, two national research institutes and seven regional sub offices at its disposal. It also co-operates extensively with provincial governments, universities and the private sector to develop and protect the forests.

Its Forest Resource Development Agreements with provincial governments represent a major initiative to ensure that sufficient crops of new trees replace those that are cut. These agreements