A new Curriculum for University of Canterbury School of Forestry

After a short-lived flurry earlier in the century, the School of Forestry next commenced a serious intake of students in 1970. Its curriculum was carefully planned, after substantial sector consultation, and it lasted unchanged until 1982. In 1983 a modified version was introduced, redesigned following the 1981 Forestry Conference to increase the emphasis on forest engineering, processing and marketing. The new degree was barely into its stride however, with the first graduates under it completing their degrees in 1986, when the present restructuring of the forestry sector commenced.

The implications of Government’s changes were quite significant for forestry education. Essentially, there was to be no future role for the ‘generalist’ forester who would work in both indigenous and plantation forestry. He or she was likely to work in one of these areas only. Educationally, that meant the present degree was no longer appropriate. If it could be restructured however, it offered the opportunity for a greater level of specialisation than in the past, something which the forest industry had sought, and which the conservation sector was seen to need.

A revised curriculum has been developed to take heed of the above changes. After circulating proposals widely round the sector toward the end of last year (no comments were received), it has gone through the university formalities and will commence in 1990. There is a core of subjects, some 40% of the degree, which must be taken by all students. Outside of that core, students may put together whatever mix of subjects they wish. It is expected, however, that most will seek a mix aimed either at optimising their career prospects as commercial foresters or as conservation managers. There are implications in this for employers: from 1993 when the first graduates emerge under the new curriculum, it will be necessary to question prospective employees carefully about the content of their degree.

While still substantially teaching a science base, the first year of the new curriculum now contains one forestry subject. This does not necessitate the first year of the degree being taken at Canterbury, however. It can still be taken at any university, with the forestry course being picked up subsequently. Incidentally this course, Forestry and Societies, will be open to students taking other degrees and it is hoped it will increase interest in forestry.

The third year of the degree will be taught on the Lincoln University campus (Lincoln College becomes a university in January 1990). The decision to do this reflected the strength of Lincoln in applied economics, marketing and finance; as well as its strengths in resource management, soil science, soil and water engineering and recreation management. That third year will also allow joint teaching in agroforestry and resource-based recreation. In addition agricultural students will be able to take other courses with a forestry flavour.

The University of Canterbury School of Forestry believes its new Bachelor of Forestry Science degree to be of top quality by any standards. It would be ironic if, shortly after its introduction and with a commercial sector set for major expansion, the School was forced to close through lack of student numbers. On the basis of a very low intake during the last two years, this is possible unless student numbers increase. To facilitate that happening the School has developed new promotional material, developed after a survey of school leavers’ knowledge and views of the forestry sector. That material has been distributed to every high school in the country. School of Forestry is also asking its past graduates to visit schools, display the material and promote forestry and conservation as careers. There are nearly 400 high schools in New Zealand which we would like to have visited. Please contact the School if you would like to offer your services.

G.B. Sweet

RADIATA PINE PROMOTION

New Zealand’s major forestry companies, together with the Trade Development Board and the Ministry of Forestry, have joined forces in mounting a major promotion campaign for radiata pine.

The multi-language campaign is targeted at major markets in China, Japan, Korea and India, and the objective is a larger share of log and processed wood sales currently dominated by other species.

The Minister of External Relations and Trade, Hon. Mike Moore, has applauded the industry’s initiative and endorsed the campaign on behalf of Government. He said the processing of New Zealand radiata pine has been developed into one of the world’s most efficient and productive wood industries.

“The primary objective is to promote awareness of radiata pine’s ability to perform well in a wide range of applications,” said the Minister. “This in turn should lead to increased acceptance of the species as an alternative to the traditional wood supplies.”

“Wood is a diminishing resource in most areas, and therefore New Zealand is one of the countries uniquely placed with its guaranteed availability of lumber and wood fibre.” The campaign, he said, spells out the amazing versatility and the diverse applications of radiata pine, with its growing and processing in New Zealand tailored to meet specific market needs.

“It is now time to tell the world about this resource, its availability and its versatility,” said the Minister.

The international promotion has involved the production of 350,000 individual printed items including an overview brochure, a series of pamphlets about processing radiata pine, video presentations, seminars and technology exchanges in the various target countries.

Late last year a group of the country’s major wood exporters agreed to mount a
combined image-building campaign in various key Pacific basin markets. They were mindful of the fact that, by the year 2000, log production from New Zealand's plantation resource will double, and increase a further 75% by the year 2015. Exportable fibre volumes will increase five-fold in the next 20 years. New Zealand is one of the few countries in the world with a sustainable and increasing supply availability.

**Forestry Corporation Annual Report**

The 1989 annual report released in the middle of July showed that the New Zealand Forestry Corporation had increased their operating surplus by 19% over the previous year to $94.6 million. Sales were up 24% to $293 million. About $17 million was invested in silviculture and planting. However, the area of new forest planted showed a decrease by 66% to only 3500 ha. The areas pruned and thinned to waste dropped by 18 and 47% respectively. The number of salaried employees has dropped from 649 to 519 in the past year, with 105 of these being shed from New Zealand Timberlands.

The Chairman, Mr A.T. Gibbs, noted that their studies indicated that within 20 years new processed products from the Corporation forests could provide exports of $5 billion annually. This is about 40% of the total value of all New Zealand's current exports. However, he argued that an investment of $6-7 billion in new industry requires the sale of the forests with secure property rights, etc. and that there should be no restraints on buyers.

**Tasman Forestry Ltd protects native forests**

In June Tasman Forestry Ltd signed an accord about their native forests with the Department of Conservation, Forest and Bird Protection Society, Maruia Society and the Federated Mountain Clubs.

In signing the agreement for his Department, Conservation Minister Philip Woollaston said the accord was the single most important conservation offer made by a New Zealand company. He commented: “If there ever is... a step-by-step guide to protection of the world’s rainforests, this accord should be included as an example of co-operation in the cause of conservation.”

The accord had its beginnings in a conservation campaign in March 1988 when Tasman Forestry Ltd were clearing a native forest block near Rotorua. It has since then liaised with the conservation groups.

**Main Clauses**

The main clauses in the agreement provide for:
- formal protection of 30,348 ha of freehold native forest;
- an end to all native forest clearance apart from commitments to supply tawa until 1990;
- the sale, for $1.5 million, of 3500 ha in the Mamaku Range to the Department of Conservation;
- a $150,000 grant for a three-year kokako research and management project;
- a commitment to further consultation on resource use and environmental issues.

Tasman will continue to own the 30,348 ha but it will be permanently covenanted under the Reserves Act or Queen Elizabeth II National Trust Act or by addition to adjoining conservation land.

The 3500 ha sold to the Department of Conservation is to be used to protect the biggest surviving population of kokako – about 300 birds. (A photograph of the forest is on the front cover of NZ Forestry, courtesy of Tasman Forestry Ltd.)

Some 52 blocks in both the North and South Island are included in the accord and range from 20 ha to 8820 ha. The largest is the Ngatapa beech forest block north of the Mohaka river and adjoining Whirinaki Conservation Park. It is an important habitat for the blue duck, North Island kaka, robin and falcon. Also included are 1896 ha of heavy bush in the Northern Tararua ranges (Toki-maru block); 100 ha of young kauri forest on Coromandel Peninsula; and the 500 ha Waitahanui reserve near Taupo which was set aside in 1973 for trout spawning.

Tasman’s Managing Director, Bryce Heard, noted that Fletcher Challenge Forestry operations in British Columbia and Tasmania were trying to reach the same sort of arrangements with conservationists.

**SATELLITE CHIPPER AVAILABLE**

A satellite chip mill, previously not available in New Zealand, is now being offered through the Auckland-based IST Engineering Limited. The mill is manufactured by Fulghum Industries Limited who are acknowledged as America’s market leader in the supply of forest products equipment.

The system accepts tree-length logs and has applications as a cost-effective addition beside an existing chipping plant, or as a separate satellite unit erected close to a wood source. The complete system, or components of it, is now available through IST Engineering and according to sales manager Peter Coper interest is extremely high.

The chip mill comprises a log crane, a debarker, a chipper and drum screen. The Fulghum radial log-handling crane, in addition to stacking wood in a circular pattern for efficient storage and processing, loads tree-length logs into the infed chute of the debarker. After about 15 minutes the debarked stems are conveyed to the chipper, and onto the drum screen unit.

From an economic and process design standpoint, the satellite chip mill offers several manufacturing advantages. Operating costs are lower, installation is less capital intensive than traditional woodyards, maintenance is less of a problem, and the system is a highly viable back-up to major plants in the event of a breakdown. Additionally, the mill is operated by only two or three operators and the turnaround time for trucks is substantially reduced.

Mr Cooper said there are five Fulghum log-handling cranes available, ranging in size from 22 metres to 47 metres and with capacities from 9.5 tonnes to 45 tonnes. He said that complete specifications of all units were available for inspection at IST’s Penrose Office.

**New Zealand Forestry a teaching aid**

In a letter to the NZ Institute of Forestry President, Ian Hutchinson from Turrialba in Costa Rica writes: “...you would be surprised at the number of Latin American graduate students who, during my classes, see overhead transparencies of photographs and other information taken from the Journal.”