Public attitudes towards forestry to be tested

The first phase in an international research programme initiated in 1993, which aims to evaluate public attitudes towards visual impacts of forestry practices in New Zealand, will be implemented early in 1995.

Collaborators in the project from the New Zealand Forest Research Institute, a US Forest Service Consortium, and Tasman Forestry Ltd have just finished taking almost one thousand photographs of different plantation forestry scenes in the Nelson area. These will be incorporated into a computer environment before being digitally manipulated to produce images depicting alternative harvesting and replanting scenarios, and depicting how the forests will look in the future as they grow over many years.

“For example, from the original photographs, we can produce very realistic images of the same scene depicting cutover to the highway edge or with a roadside buffer of varying widths,” said Alan Thorn, a scientist with NZFRI’s newly formed Resource Monitoring Unit. “We can show the site replanted with trees aligned vertically up the hillsides, or we can illustrate what the area might look like with trees planted along the contours of the landscape. By predicting the growth of the trees and using mathematics to modify the image, we will be able to show how the scenery will change and how it will look 10, 20, and even 30 years from now. This information will be taken to the public to find out how different practices affect people’s perception of forestry in New Zealand. We will also be taking the results of this study to industry so that they can assess the economic implications of different activities in the forest, and to the policy makers in regional councils who implement the Resource Management Act.”

Images are combined with existing information available in many computer-based forest management packages. Digitised photographs of particular scenes will, for example, be ‘draped’ over accurate terrain models which come from Geographic Information System databases. Forest growth predictions for the demonstration scenarios will be based on extensive forest mensuration information and growth models produced by NZFRI and used by forest owners throughout New Zealand.

“These images will be linked back to ground-based measurements taken from the site,” said Alan Thorn. “What we produce will be very realistic, reliable, and believable.”

NZFRI formalised the collaborative research programme last year, during a visit to the Institute by Bill White (of the USDA Forest Service) and Dr Terry.
Daniel (of the University of Arizona).

One of the reasons that the US Consortium was keen to pursue this project in New Zealand was the opportunity it presented for them to be able to verify and validate the technologies they have produced so far. "The US researchers have a problem in that their trees grow slowly and often they can't cut them as they would wish for this study," said Tim Thorn. "Conservation lobbyists may often bar their progress when the researchers wish to prepare the visualisation data, harvest the trees, and manage the regeneration. But here in New Zealand our radiata pine stands are intensively managed and the trees do grow sufficiently quickly for us to verify predictions within a reasonable time frame."

Scientists in the USDA Forest Service Consortium have been developing expertise in data visualisation technologies and public attitude survey methodology for about ten years now. Dr Brian Orland, from the University of Illinois, was at NZFRI recently to help compile the various forest scenes which will be used in the survey. One of the key players in the research team, Dr Orland has worked with computer programmers, psychologists, statisticians, and marketing professionals over many years to develop and refine the models used in this work.

"To get forest managers to communicate with a broad range of people, we need to put information into a format which is more readily understood, and a vehicle through which we can do that is data visualisation," said Dr Orland. "We can often illustrate concepts through these computer-generated pictures better than through words alone. Say 'clearcut' and many people assume that means horizon-to-horizon devastation which is not necessarily the case at all. A visual image of clearcutting, sensitively carried out, may not always give a negative response."

"The key to this project is that we are being proactive in researching how to construct tools which can be used in developing protocols for future administrators of the Resource Management Act," said Alan Thorn. "One of the primary purposes of the RMA is to ensure the sustainable management of New Zealand's natural resources through avoiding any adverse effects of various activities on the environment. But the Act doesn't explicitly define what these 'adverse effects' might be in terms of public perception of forestry practices.

"We will be taking data visualisation and perceptual assessment technologies already well developed in the United States and adapting them to the New Zealand forestry scene. This programme will provide RMA administrators with better methods for determining public perceptions towards effects of forestry activities on our landscape."

Alan Thorn said this was a three-way-situation. "New Zealand forestry companies will acquire technologies that will assist them in managing their compliance with the Resource Management Act: United States scientists will be able to validate their models to date; and we at NZFRI are able to conduct research into powerful decision-support tools required by all forest management personnel in the future. The US is years ahead of us in terms of data visualisation technology and software development and this project has provided us with the perfect opportunity to facilitate the introduction of these capabilities into the New Zealand forestry industry," he said.

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**NZ imported tropical timber group reaches agreement on charter of understanding**

The New Zealand Imported Tropical Timber Group reached agreement on a Charter of Understanding in August 1994. The Charter formalised the aims of the Group which was first set up in 1991 and comprises representatives of New Zealand's tropical timber importers, tropical timber retailers, and environment and conservation non-government organisations. The Ministry of Forestry is represented as an observer.

The goals of the group under the Charter are:

- to ensure that all tropical timber imported into New Zealand is sourced from certified sustainably managed forests;
- to agree on certification procedures that provide purchasers with a reliable assurance of the sourcing of the product from sustainably managed forests;
- to seek understanding of and common ground between members of the group on the key issues underpinning both the tropical timber trade and management of tropical forests;
- to promote the findings, decisions, and goals of the group and where appropriate contribute to relevant policies of Government and international tropical timber agencies;
- to have the entire tropical timber trade in New Zealand represented on the group.

Certain conditions apply to members of the ITTG. All members of the group have agreed to use the definition of 'sustainable management' of tropical forests as determined by the ITTG. Members have also agreed not to advertise or otherwise promote tropical timber decking that is sourced from unsustainably managed forests.

Importers have further agreed to actively seek sources of timber from sustainably managed forests or tree plantations and, as such sources become available, to phase out the importing and sale of timber from non-sustainable sources. A Task Force of the ITTG has been set up to assist in this process. Timber retailers and importers have also agreed not to source tropical timber from Sabah and Sarawak until timber from these countries can be sourced from sustainably managed forests.

Conservation and environment non-government organisations have agreed in turn not to demonstrate or issue media releases against members of the ITTG on issues relating to the ITTG goals while members are abiding by the conditions of the group and then only after discussion through the ITTG chairperson.

**Solomons Project**

The ITTG is currently in the process of developing a sustainably managed forestry project in the Solomon Islands to be paid for initially out of a levy on timber imports into New Zealand.

**Tim Thorpe**

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1 Current members are PlaceMakers (Chair), Benchmark Building Supplies, Carter Holt Building Supplies, Miter 10, Independent Timber Merchants, NZ Timber Importers Association, Greenpeace, Maruia Society and NZ Rainforest Coalition.
School of Forestry news

New Professor at the School
Dr Roger Sands, a tree physiologist at the University of Melbourne, has been appointed Professor of the School, replacing Geoff Sweet who has retired. Dr Sands has been an Associate Professor and Director of the Creswick School of Forestry for the past 12 years. Dr Sands, whose research interests lie at the interfaces between tree physiology and plantation silviculture, agroforestry, soil science and wood science, has an international reputation in his field, and is one of only four Australians to have received the Scientific Achievement Award from the International Union of Forest Research Organisations. Roger will be taking up his position in early March: in the meantime Ron O'Reilly will be Acting Head of the Department as well as Dean.

University Review of the School
In September, the University of Canterbury carried out a Review of the School of Forestry, as part of its programme of assessment "to provide an opportunity for the activities of departments and programmes to be critically evaluated both internally and externally"; and "to facilitate the setting of goals for the future". The recommendations of the Review Panel are very favourable and supportive (see the accompanying article) and the Report of the Panel has been accepted by the University Council. Staff of the School are very pleased with the outcome, and would like to express their appreciation to those industry representatives who made submissions to the Review Panel.

Overseas Travel
Dr Graham Whyte spent five weeks in September/October on a JSPS Fellowship in Japan, hosted by Professor H. Naguma, Department of Forest Management at the University of Tokyo. Graham attended two IUFRO Conferences, delivering keynote addresses at each ("Modelling Growth and Yield of Tropical Forests", and "Sustainable Forest Management"). The topic of self-sufficiency of forests is a hot topic in Japan, and Graham was able to meet the leading advisers to the Japanese Government and discuss their current perceptions about realistic targets. Graham also toured Honshu, delivering a series of lectures on New Zealand forestry, with the assistance of Warwick Schaffer, a B.For.Sc, graduate, and Nicky Spence, a Cantabrian lecturing in law, and an expert in resource management law, at Osaka University. Graham extends an invitation to industry people to enquire further about his recent experiences in Japan.

Short Course on The Business of Forestry
A month-long course on forestry as a business was held at the School during November, with attendees from Sabah, Chile, Japan and New Zealand. This course was the first at the School covering subjects such as management and business principles, data needs, management information systems, economic decision-making, financial management, forest valuation, yield regulation and harvest scheduling, and will form the basis for similar courses in the future. Dr Whyte, the course organiser, reports that the format of future courses can be altered to meet specific industry needs.

1995 - 25th Anniversary Year for the School
To celebrate the School's first 25 years of quality education and research in forestry, a number of special events will be held in 1995. Open Days, a series of lectures by Distinguished Alumni, and a major conference in December are all being planned. Watch this space!

Other Highlights
Jacqueline Sloggett, one of our final-year students, represented students at an International Forestry Students Conference in Switzerland.

The industry representatives on the Review committee influenced it to support unanimously the need for better communications of the School's research output over and above what is relayed to the industry through SOFAC (the School of Forestry Advisory Committee) members.

To this end, the School is proposing to host, in collaboration with another leading forestry organisation, a three-day conference in Christchurch during December 1995 to mark our 25th Anniversary. We hope that some New Zealand forest industry representatives will be able to take advantage of such an opportunity.

J.D. Allen and A.G.D. Whyte

School of Forestry review

The University of Canterbury has recently carried out a review of the School of Forestry, and the results and recommendations have many implications for the School and the industry.

The Review Committee consisted of three University of Canterbury members (Prof. Bob Park, Deputy Vice-Chancellor, Prof. Bevan Clarke, Dean of Commerce, and Dr Vida Stout, Department of Zoology), one overseas member (Prof. Eric Bachelard, Dept. of Forestry, ANU, Canberra), and two forest industry members (Mr Dennys Guild and Mr Peter Berg). Submissions were received from the staff of the School, Deans and members of other Faculties, the Student Association and Class representatives, members of the School of Forestry Advisory Committee, and a number of outside organisations, including the Forest Research Institute, Lincoln University, FITEC, and private individuals.

The review was very comprehensive, and resulted in 35 specific recommendations to the University and the School. Overall, the tone of the report was very positive and supportive and this was reflected in the first recommendation: "Support of the School of Forestry by the University of Canterbury should be fully maintained and indeed strengthened. The School of Forestry at the University of Canterbury is the primary source of professional forestry graduates in New Zealand for a rapidly expanding forestry industry. The School receives firm backing from a very supportive industry."

Some of the other recommendations include:
- the appointment of at least two further academic staff;
- enlargement of the School to provide increased accommodation;
- stronger on-campus links with NZFRI, other Departments on campus and the
East Coast forestry project meeting goals

The Minister of Forestry, John Falloon, said recently that the Parliamentary Commissioner for the Environment's report on the East Coast Forestry Project was a positive endorsement of the scheme.

"The first and most important conclusion of the report is that the East Coast Forestry Project should continue," he said.

"The Parliamentary Commissioner states that the project is an important means for change to more sustainable land management in the East Coast region. "Some people have criticised the scheme for having a series of objectives. However, the primary objective has always been to plant as much unstable land as possible in areas where it is uneconomic to do so in normal commercial circumstances. "Over 16,370 hectares has been committed for planting, more than the whole amount planted in New Zealand in 1991. It has also been a major catalyst for other new commercial planting in the East Coast region, which last year reached about 8000 hectares. "Mrs Hughes has suggested some constructive changes to the way the scheme is targeted and I will carefully study these. They are very worthwhile. "In many ways, Mrs Hughes' suggested changes highlight the problems caused by opposition to the project. "For example, in the early stages of the project, the Government was criticised for allowing subsidised planting on land that was not eroding at the time. Yet I have become increasingly concerned about the targeting of the proportion of potentially erodible land. "I believe, as the Commissioner obviously does, that there are substantial areas of the East Coast that are certainly prone to erosion, as Cyclone Bola showed. While they are not necessarily eroding now, they should be planted.

"The targeting system does need reviewing, if only to clearly show that erodible land is being planted. In fact the percentage of erodible Class VII land planted or conditionally approved is approximately 68%. "I agree with the Commissioner's view that refining the method of protecting native scrub is desirable. "Significantly, Mrs Hughes did not suggest that the project should be narrowed down to a purely subsidised conservation-based planting scheme, as suggested by some. "This would substantially reduce the commercial viability of the planting and lead to a significant reduction in the benefits to the region, in both sustainable land management and commercial terms. "I am very confident that the scheme will continue to meet its objective of sustainable land management on the East Coast and provide social and economic benefits to the region. I thank the Commissioner and her unit for the quality of their report. "Already the confidence of substantial plantings in the region has led to improved confidence, strong investment and more importantly, more land being sustainably managed."

Forestry School development urged

Canterbury University has been advised to beef up its School of Forestry and seek more links with industry and the multimillion-dollar forest products market. A departmental review of New Zealand's only professional forestry school says the department should put the uncertainties of the past behind it and consolidate its position as New Zealand's primary source of forestry graduates.

The review points to failed attempts by two other universities - Lincoln and Waikato - to acquire the school in recent years. It concludes that Canterbury should not only hold the school but should add staff, relocate the NZ Forest Research Institute onto its campus, increase the crosstown with the school of engineering, and add to its research within the industry. The panel recommended the university move more towards producing graduates skilled in the processing and harvesting of timber rather than growing. The export of forest products already earned New Zealand $2.5 billion a year and was tipped to rise to $6 billion by 2010. It also recommended pulling back year-three teaching from Lincoln University, which has been enrolling Canterbury students in a joint arrangement since 1992. The panel said while it was important to keep some links with Lincoln, third-year training should take place at Canterbury.

The convener of the review panel, the Deputy Vice-Chancellor, Bob Park, said forestry was very important to the region, yet the school had been through a period of considerable uncertainty and many reviews since 1980. Local industry was keen on expanding links with the school and the opportunity was too good to pass up.

The Vice-Chancellor, Professor Albert Brownlie, said the review would require close scrutiny. The university council called for a report on the financial implications of locating the NZFRI on campus.

Forest Owners elect executive

Peter Hill (Woodland Forestry) has been re-elected president of the New Zealand Forest Owners' Association.

Other members of the executive council are: Russell Dale (Forestry Corporation), Mike Hetherington (City Forests), Colin McKenzie (Groome Poynt), Devon McLean (Carter Holt Harvey Forests), Peter Olsen (P.F. Olsen and Company), Nick Roberts (Tasman Forestry), Erle Robinson (Tasman Forestry), Bill Studholme (Selwyn Plantation), and Warren Yardley (Carter Holt Harvey Forests).

Reprinted from The Press (Christchurch)
1994 new planting levels at 100,000 hectares

Investment levels in the forestry industry continue to demonstrate strong growth, said the Minister of Forestry, Hon John Falloon, when he released the results of the 1994 winter planting season.

"The Ministry of Forestry’s winter nursery survey has shown a record new planting rate of 98,200 hectares this year. This represents a significant turnaround from 1991 when just 15,000 hectares was planted in that year," he said.

"Next year’s planting estimates are also on a high roll – the survey shows that the nurseries intend to grow enough seedlings to plant 91,500 hectares of new forest.

"Furthermore, it is the smaller investors who are the main players out there – 85 per cent of the new planting was undertaken by individuals and organisations other than the large forestry companies.”

While 90 per cent of the planting had been in radiata pine, Mr Falloon said there were indications that Douglas fir was gaining more prominence in some areas, particularly in the Central North Island and Southland.

"Douglas fir is expected to increase from around 3 per cent of the total new plantings nationally to about 7 per cent in 1995. The species has gained particular popularity in Southland where it is expected to comprise over 20 per cent of the new crop planted in the coming year," said the Minister.

"Coupled with this surge in new planting are the recent investment announcements of Rayonier NZ in Southland, of Jukken Nissho in Gisborne and of Wenita near Dunedin. These investments alone would be worth over $NZ400 million.

"I think we have seen a turning point – we have moved away from the forest-growing industry being just an investment for the large forestry companies and are moving towards having a far more significant domestic processing sector. This can only mean further positive news in terms of export and employment opportunities in the industry.

"In the year to February 1994, employment in the sector increased by over 14 per cent or just under 3000 full-time positions. These figures clearly demonstrate that we can look forward to continuing strong employment growth.”

Road upgrading causes funding concerns

Funding to upgrade and maintain roads to meet the projected increase in logging traffic is causing concerns.

In a Transit New Zealand survey, local authorities said that funding their share of a projected $5 million a year for increased road maintenance requirements would be difficult. They hoped forest owners would meet some of the road upgrading costs.

Executive Director of the New Zealand Forest Owners’ Association, Ken Shirley says the industry recognises the extra burden logging traffic is going to place on local authorities. However, he says, ‘differential rating’ (different fee structures for different activities) is out of the question.

"In addition to the rates we are charged, the forest industry pays road user charges to the Road Transport Fund for every kilometre travelled. In 1990 those fees exceeded $21 million. And it’s expected to top $30 million by the end of the century," says Ken Shirley.

"In fact, forestry places a minimal call on services compared with other land users. We only make one heavy demand on the roads – and that’s at harvest time.”

He adds that, in many instances, forest operators are prepared to discuss specific road needs with territorial local authorities.

The 18 authorities surveyed by Transit New Zealand estimated that the total additional funding requirements for roads used by logging traffic is around $11m a year. Of that, Transit New Zealand would probably provide $6m a year.

Ongoing dialogue on forestry issues

Close cooperation between the commercial forestry industry and local government is expected to result following a series of seminars.

Organised by the Local Government and Forest Owners’ Associations, the seminars were held to address issues relating to managing the effects of forestry under the Resource Management Act (RMA), and the provision and funding of roads used by the forestry industry.

They were attended by some 400 people such as foresters, consultants, policy advisers and policy makers (especially local body politicians and officers) involved with the issues.

The Executive Director of Forest Owners, Ken Shirley, says that the seminars were highly worthwhile.

"Before the seminars, forestry possibly saw some local government bodies as unnecessarily restrictive and too regulatory. Local Government possibly perceived forestry to be irresponsible and wanting action too quickly," he says.

"The seminars allowed forestry and local government people to raise issues and concerns, and to talk them through.

"There must be a meeting of the minds. Partnership is now the key word and we have to work in association with local government. We all want an ongoing dialogue.”

He says that individual industry companies are already meeting with their local authorities and “that’s what should happen”.

The Executive Officer (Resource Management) for the New Zealand Local Government Association, Jonathan Jull, says that the feedback from the seminars has only been positive.

"Getting together and talking to each other has been excellent, and we want ongoing dialogue about issues,” he says.

As well as the importance of these two organisations confronting, other interest groups will also be getting into consultation. These include government departments/agencies such Transit New Zealand, Department of Conservation, Ministry of Agriculture and Fisheries, Ministry for the Environment and the Ministry of Forestry.

Other needs that arose from the seminars included:

- Convince regional councils and territorial local authorities to upskill in RMA. (NZ Local Government Association/territorial local authorities/
Warning on unlicensed communications equipment

Unlicensed communications equipment used in the log-hauling industry could have potentially disastrous consequences for operators.

Different operators may be using the same frequencies, and it’s only a matter of time before the ‘wrong’ signal is intercepted by an operator, according to the Managing Director of Taupo Rigging Services, Pat O’Sullivan.

The Ministry of Commerce allocates radio frequencies to users, but problems could arise with operators using unlicensed equipment, frequently imported from North America.

The Ministry’s radio communications section manager, Trevor Cudby, says there are two ‘bush winch’ radio bands operating in New Zealand.

“A company wishing to use any of these frequencies must apply for a licence. Unlicensed equipment receives no protection and, if it interferes with a licensed service, it must either change frequency or cease operation,” he says.

He suggests forest owners insist they only sign contracts with operators who can demonstrate a professional approach to licensing and use of communications equipment.

New Zealand Forest Owners’ Association Executive Director Ken Shirley says forest owners have a responsibility to ensure their contractors use frequencies that are correctly registered.

NZ vice-chairperson of International Tropical Timber Organisation

The International Tropical Timber Organisation (ITTO) has elected Don Wijewardana as vice-chairperson.

Mr Wijewardana, International Policy Manager with the Ministry of Forests in Wellington, will spend a year as vice-chairperson before becoming ITTO chairperson for 1996.

NZ Role Recognised

An economist, Mr Wijewardana has represented New Zealand at ITTO meetings since it became a member in 1992. He says the appointment to the Organisation, comprising 52 member countries and several international organisations, recognises New Zealand’s role in the environment and trade issues at the centre of ITTO activities.

Go-ahead for more UK forests

Twelve new forests covering a total area of some 4500 square kilometres are expected to be created in Britain.

Three forests were approved in August 1993 and are already under way, another two were agreed very recently and now plans for a further three have been given the go-ahead by the UK Government to progress to implementation. Another four are in the pipeline.

The 12 forests are part of a long-term plan to improve the environment close to towns and cities, and will provide new opportunities for education, quiet recreation and diversification into forestry-related farming activities.

The three newcomers are Mersey Forest, Red Rose Forest and the South Yorkshire Forest, and are all located in the north of England. Other forests already approved, however, include one in the English Midlands and another east of London in southern England.

Chairman of the UK Countryside Commission, Sir John Johnson, said of the newly announced forests: “We are delighted at this further boost for the community forest programme. It is entirely appropriate that the announcement comes at the start of National Tree Week as community forests, too, will give opportunity for local people to be involved in improving their local environment. The forests will greatly enhance areas that have suffered industrial change, and provide new recreational opportunities for millions of people.”

Director General of the Forestry Commission, Mr Robin Cutler, added: “These plans set out a vision of countryside around towns and cities that will bring tremendous benefits to everyone who lives nearby.”

ITTO vacancies

Don Wijewardana, recently elected vice-chairperson of the International Tropical Timber Organisation, has brought to our attention two vacancies in ITTO.

One is for Assistant Director, Reafforestation and Forest Management, and the other for Information Officer. Deadlines for applications are March 15, 1995.

Brief job descriptions are available from Don Wijewardana, C/- Ministry of Forestry, P.O. Box 1610, Wellington.

Ed.

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