Yet the clearance of the kanuka, which can clearly not be justified on soil or nature conservation grounds, is rationalised because of the need to create employment, particularly for the Ngati Porou. For conservationists and Treasury economists this is a distressing return to the worst aspects of the Muldoon-era subsidies. The mixed objectives of the Forest Service, Department of Lands and Survey and many of the subsidised land development programmes resulted in poor economic and environmental outcomes. All this was swept aside by the economic reforms of Rogernomics. However, the lessons haven't been learnt. The East Coast project in its current form represents a nostalgic return to discredited interventionist policies.

Why is the taxpayer investing in forestry on the East Coast: to control erosion, to create employment, to generate economic activity, to increase exports, to ensure the economic and cultural survival of the Ngati Porou? Which of these objectives has primacy? How should decisions be made on specific issues when the project's multi-objectives are in conflict? Why have officials and politicians so quickly forgotten the painful lessons of the 1970s and 1980s on the way subsidies distort human behaviour and economic investment. It is perfectly rational for the Ngati Porou to wish to carry on farming their eroding cleared land and to use the subsidy to bring into production non-eroding land covered in kanuka. However, this has the effect of turning the scheme on its head and is clearly not in the national interest.

If the Government wishes to generate employment on the East Coast, and this is a worthy objective all would support, then it has a wide range of options to choose from. A poorly designed Think Big forestry/conservation scheme that fails to successfully integrate economic and environmental concerns may not be the best solution. If it wishes to tackle the region's massive soil erosion then the erosionplantings must be directed to cleared eroding land. The soil and nature conservation benefits of retaining the kanuka must be recognised, as must the New Zealand Forest Accord, in a revised East Coast Forestry Project that has erosion control as its overriding objective.

Kevin Smith Conservation Director Royal Forest and Bird Protection Society



RECENT EVENTS



Forests Amendment Act passed

The Forests Amendment Act was passed on March 19, 1993 and will come into force on July 1, 1993. It covers all indigenous forests except: West Coast Accord forests, forests on land reserved under the South Island Landless Natives Act 1906, forests administered by the Department of Conservation, and planted indigenous forests. It will introduce indigenous timber sawmilling and export controls, and sustainable forest management plans.

Sawmilling Controls

The Act requires sawmills (fixed and portable) that propose to mill indigenous timber (including salvaged timber) to be registered with the Ministry of Forestry before October 1, 1993. Registered sawmills will only be able to mill indigenous timber if it is harvested under an approved sustainable forest management plan or permit, or is harvested with the written approval of the Secretary of Forestry under one of the exemptions included in the Act.

There will be a transition period before the sawmilling controls take full effect. The transition period started on July 3, 1992 and will run for four years. During this time registered sawmills will be permitted to mill an 'allowable cut' of indigenous logs from forest not covered by an approved sustainable management plan, as well as any logs that are covered by such a plan. The 'allowable cut' will be a volume equivalent to that milled in the period July 3, 1990 to July 3, 1992. A mill that cut 5000 m³ of logs in these two years will be able to cut that volume during the period from July 1992 to July 1996. The Ministry will be allocating an allowable cut to eligible sawmills once they have registered.

CONSULTANT RECOGNITION

The following has applied for recognition as a general forestry consultant in New Zealand and overseas:

Theo Vos - Rotorua

Under the NZIF constitution, any members of the Institute may send objections in writing, within 40 days of journal delivery, to the Registrar, NZIF Consultants Committee, P.O. Box 1340, Rotorua.

Export Controls

The Act prohibits the export of indigenous woodchips and logs. It permits the export of rimu and beech sawn timber, provided it is harvested under a registered sustainable forest management plan, or a sustainable forest management permit. Sawn timber of other indigenous species will not be allowed to be exported; neither will any timber which is harvested from land not covered by a plan or a permit.

Export of timber from planted indigenous forests, West Coast Accord forests and forests on land reserved under the South Island Landless Natives Act will continue to be controlled under the Customs Act.

Manufactured or finished indigenous timber products, such as furniture, can continue to be exported regardless of the source of timber used in the products.

Sustainable Forest Management

The requirements for a sustainable management plan are complex. Schedule 2 of the Forests Amendment Act provides a guide to the information that must be included in a plan. Sustainable forest management permits are available where the harvesting level from a forest is less than 50 m³ per year. The Ministry intends to develop guidelines on preparing plans and permits as soon as practicable.

Indigenous Forestry Unit to be Established

The Ministry of Forestry is currently establishing an Indigenous Forestry Unit. It will be responsible for registering and monitoring sawmilling operations and will monitor the implementation of sustainable forest management. It will also make recommendations to the Secretary of Forestry on approval of sustainable forest management plans and other matters covered by the Act.

Sustainable forest management as outlined in the Act is new to both land owners and the Ministry. A cooperative and steady approach will be required if it is to be successfully implemented.

Chris Baddeley MOF

NZCER survey shows forestry insights well used

A postal survey undertaken by the New Zealand Council for Educational Research shows teachers, and students, are overwhelmingly positive about the Forestry Insights kits.

The survey was undertaken in November, just two terms after "The Forest" kits had been released to schools, yet almost three-quarters of primary school respondents had already used it or intended to use it in 1993.

"When teachers who had used the kit in 1992 were asked how well their students had reacted to the kit the response was very positive: 60% stated that their students had reacted very well to the kit, 33% quite well, and only one (1%) not very well."

Teachers were devoting two weeks to one month of their time to The Forest. "Developers of the kit can be well pleased with these sorts of time slots, since there are many competing demands on the primary school curriculum and The Forest has had relatively little time to make an impact," the survey says.

"In summary, teachers appear to be incorporating all parts of the kit into their lesson plans, though the Teachers' Guide, activity cards, and picture packs are being used most frequently, and are noted as being the most useful components of the kit. When given the opportunity to make general statements about how easy the kit was to use, students' reaction to the kit, and what improvements they would like to make to the kit, the largest response group always gave a general positive statement about the kit as a whole and what a useful resource it was. Teachers apepar to be finding the kit a worthwhile and valuable resource."

The picture of use in secondary schools is less clear. Materials were provided for Science, Geography, Economics and Design but the response rate across



Processes - free to schools in April.



Sandy Bell, writer of the Standards Kit, shows the Processes material to her class at Mt Eden Normal Primary School.

departments did not give an even sample.

What the survey did show, however, was that 70% of respondents had heard of Forestry Insights and 50% of those had either used, or were going to use, the materials.

"Those that had used the resource were positive about it and intended to reuse it. This is encouraging and indicates that the quality and relevance of the kit is not in question and that the current lower level of use in secondary schools may not be predictive of the level of future use," the survey says. "Some comments in a number of questionnaires from the secondary sector indicated that teachers only became aware of the kit quite late in 1992 – indeed, sometimes at the same time as this survey arrived."

In summary, of the teachers who had used the kit, the majority found the resource easy to use, well set out, and well received by their students. Most teachers thought the kit needed little improvement, and that they were likely to use it again. The kit is being used within a wide range of subject areas – perhaps wider than the writers had at first envisaged as new areas such as Horticulture and Forestry become specific areas of the curriculum.

The survey results show that the partnership approach to providing educational resources works and that the forestry story is indeed being told in schools. The second theme in the Forestry Insights series, Processes, was released to schools in April.

Processes picks up where The Forest left off. The theme covers what happens to a plantation tree once it is cut down – harvesting, transport and export, timber, pulp and paper, and panel products.

The Forest has been well received by schools and Processes promises to be even better. If you would like more information about the project, contact Gendie Somerville-Ryan, Project Manager, C.P.O. Box 39, Auckland, phone (09) 358 2993 or fax (09) 303 2558.

Gendie Somerville-Ryan

New element discovered

Scientists have reported the discovery of the heaviest known element, tentatively called Administratium.

Administratium has no protons or electrons, but it has one neutron, 125 assistant neutrons, 75 vice-neutrons and 111 assistant vice-neutrons, giving an atomic mass of 312.

This particular element is held together by sub-atomic particles called morons and can be detected chemically because it always slows down every reaction it is involved with.

The scientists report that Administratium does not decay like other heavy elements such as plutonium or uranium. Instead it undergoes a reorganisation in which assistant neutrons, vice-neutrons and assistant vice-neutrons exchange places.

Some studies show that the atomic weight actually increases after each reorganisation. They also report that Administratium is toxic at any level of concentration.

Closedowns and bankruptcies burgeoning in Japan

More and more Japanese forest products companies are withdrawing from production to concentrate on other business activities, like direct importing or wholesaling. The latest case involves a Tokyo plywood manufacturer, who ceased production at the end of February. At issue was a local ward plan to develop the waterfront area, leading to the need for the timber industry to relocate. Relocation would normally be an obvious move, particularly with a company having almost 40 years of production history, but in view of problems with log supply and the labour force, the decision was made to close down the manufacturing facility completely. The company will focus its energies now on developing a role in timber distribution.

More seriously, lumber industry related bankruptcies are increasing at a significant rate, with actual cases in 1992 up by 28% over 1991. A Tokyo research organisation has released figures which show 87 cases in 1992.

Furniture and woodworking related bankruptcies are the greater number, at 122, but the rate of increase is substantially lower. Building material company collapses were 101 (down by 27.5% on 1991). Bad debt in the lumber sector amounted to 26.9 billion yen (about \$NZ448 million). – Reprinted from Japanlink, Ministry of Forestry, Rotorua.

Japanlink is a publication produced by the Market Development Group, Ministry of Forestry. Subscription enquiries should be directed to MOF, P.O. Box 1340, Rotorua.

Forestry in the Mackenzie Basin

Plantation forestry has been at the centre of more than its fair share of land-use debates over the years and is likely to be in the depths of another major planning controversy within the next few months. The focus will be the South Island high country and the action will commence with the Mackenzie Basin.

Much of the high country is currently facing desperate times with extensive land degradation, the twin scourges of rabbits and Hieracium, and alarmingly low fine wool prices. Sustainable land uses must be promoted and to date few realistic alternatives other than forestry have been identified. Forestry itself seems to have taken 80 years to find some degree of favour. The 1913 Royal Commission on Forestry recommended plantations in carefully selected areas of Central Otago and the Mackenzie Basin to counter the desertlike conditions that prevailed as a result of constant burning of the tussock and overstocking, and the ravages of the rabbit.

The Mackenzie District Council's

mid-February notification of Proposed Change 21 (Mackenzie Basin Forestry) to their Transitional District Plan is one initiative seeking to address these problems. The current 50 hectare limit for plantation forestry as a permitted activity on any one title or lease would be removed under the Change, and forestry would generally be a permitted activity subject to landscape rules. On delineated sites of outstanding landscape value, and on areas of significant conservation value, forestry would be a discretionary activity.

Submissions on the Proposed Change closed on March 19 and the Mackenzie District Council has engaged an independent commissioner for the hearing. The Change is likely to provide a major test of the requirements under the Resource Management Act to promote, on the one hand, sustainable resource management, and on the other hand, to protect outstanding landscape values.

John Novis

Log exports to US given clean bill of health

New Zealand log exports to the United States have received a clean bill of health.

Access approval has just been granted by the United States Animal and Plant Health Inspection Service subject to New Zealand meeting quarantine regulations.

The breakthrough comes after prolonged negotiations with the United States Government by the Ministry of Forestry, the Ministry of External Relations and Trade, and the New Zealand Forest Owners' Association.

Executive Director of the New Zealand Forest Owners' Association, Mr Ken Shirley, said the American initiative was consistent with a shift away from exploitation of natural forests to greater utilisation of wood sourced from fast-growing plantations. In the United States there was also a strong environmental lobby against commercial logging of their natural forests.

"This is of tremendous potential economic benefit to the entire New Zealand forest-growing and wood-processing industry," he said.

Access to the market also follows promotional work over recent years by New Zealand forest owners, sawmillers and solid wood component manufacturers to raise the profile of radiata pine and its end use versatility.

Mr Shirley said that provided the New

Zealand exporters could consistently meet strict American quarantine regulations, the market opportunities were lucrative. "All the indications are that the demand and prices for New Zealand solid wood products will continue to appreciate."

East Asia Pacific Mountain Association

Lincoln University has decided to convene and service an "East Asia Pacific Mountain Association" as part of a World Mountain Network. The designated Convener is Emeritus Professor Kevin O'Connor. The new association aims to link into a network of interchange for scholars, researchers and managers of mountain lands and to assist in education, training and research.

The Association is being formally inaugurated at a symposium at Lincoln University, May 2-7 this year. The symposium focuses on the ecology and sustained development in the East Asia Pacific mountain area.

For further information contact: Prof. Kevin O'Connor, P.O. Box 56, Lincoln University, Canterbury, NZ. Fax (03) 325-3841.

Act strips forest owners' assets

Private forest owners face being stripped of their assets with the Forests Amendment Act being passed through Parliament.

Federated Farmers' Southland President, Alister McDonald, said the Act, which had its third reading in Parliament on March 9, bars private forest owners from Crown compensation for revenue lost through the export ban on native logs and chips. As a consequence, he said, the value of private forests is being reduced to one-tenth of its real value.

"The Forests Amendment Act forces forest owners to bear the full cost of this Government's forest management policies, and amounts to asset stripping and insider trading of their property.

"That is the sort of fraudulent action usually associated with white collar criminals, not with this country's elected representatives," he said.

Mr McDonald said he is disgusted the Government threw out an Opposition amendment calling for forest owners to be allowed to seek compensation through the courts.

"That indicates to me that this National Government has no regard whatsoever for the preservation of private property rights. If the Crown removes property rights for the benefit of the New Zealand public,



NZ Black Beech on pasture, Coopers Creek, Oxford.

they have a moral obligation to ensure compensation.

"The Forests Amendment Act had the potential to make New Zealand a world leader in the sustainable management of indigenous forests, but there is no doubt it is incapable of achieving that in its present state," Mr McDonald said.

Mr McDonald believes that if the Government was truly interested in sustainable

management, it would have implemented policies that increased the value of the forest product. High-value logs can sustain high-cost, and ecologically sensitive, extraction systems. Allowing export logs, and export chipping of the residual material, while maintaining the requirement for certification of sustainable management plans, would have provided the most practical, and sustainable, solution.

Farm Forestry Award – Te Kuiti meeting

Agroforester and forestry consultant Garth Cumberland received the MOF Farm Forestry of the Year Award from the Minister of Forests, Hon. John Falloon, at the annual meeting of the New Zealand Farm Forestry Association in Te Kuiti recently.

In making the presentation, the Minister said the enthusiasm sweeping the forestry sector was well founded for a number of reasons.

"Recent dramatic increases in international log and lumber prices are exciting. There's now plenty of evidence that radiata has been 'repositioned upwards' in all major markets, but especially Japan and the United States.

"It's now acknowledged as a quality timber and not just some cheap source of wood fibre to make pallets out of," said the Minister.

"An increasing number of New Zealand and international companies are investing in further processing in this country. Barely a week goes by without an announcement of a new processing plant or a major addition to an existing plant for sawing, peeling, reconstituting and remanufacturing radiata pine."

The Minister said that the recipient of the award had demonstrated all of the requirements of the award, which are innovation, use of technology and communication.

Garth Cumberland had been advocating the recommendations that had emanated from the NZ Forest Research Institute to the limit and using his own specific skills and training to integrate forest and pasture crops on his own farm and, through his consultancy services, those of

In thanking the Minister and the Ministry, Garth Cumberland said it was an honour to be awarded such a fine prize.

He said he regarded the award as an acknowledgement by the Ministry of Forestry of the opportunity that plantation forestry offers pastoral farmers.

"And I reiterate that sentiment," said Garth Cumberland. "There are far better prospects from tree crops than most animal products and agronomic crops on land presently in pasture. The potential returns are even more attractive from trees on land with a bit of slope or a 'sustainability' problem, like soil conservation.

"The problem is funding the new crop

and providing cashflow to the farmer while the crop matures.

"However, even this problem is less significant because of the new economy of the forest sector that is now emerging in New Zealand," he said.

"The attractiveness of joint ventures has been canvassed by others, but newly evolving markets for the sale of forest rights for immature trees mean that land owners don't have to wait the full 30 years to capitalise on plantations," said Garth Cumberland.

Garth Cumberland explained that to repay the country's debt - currently standing at about \$60 billion - required one crop from about one million hectares. The area required could be greater or smaller depending on the degree of processing, or the FOB value applicable to the wood from the area at the time of harvest.

"So I support the Minister's call for another one million hectares by the turn of the century," he said.

"Not only is it a challenge to farmers, but every indication suggests a highly profitable opportunity for them," said Garth Cumberland.

Undergraduate forestry studies at the universities

Until recently, forestry education at the tertiary level was confined to the Bachelor of Forestry Science and postgraduate studies at the New Zealand School of Forestry at Canterbury University. Today, forestry subjects are also taught as components of degrees at:

The University of Waikato

 A four-year B.Sc. Tech. degree is available in forestry.

Lincoln University

- All 3rd year B.For.Sc. papers are available to Lincoln students.
- An optional forestry paper can be taken by students studying for the B.Agr.Sc., B.Hort.Sc., B.Sc. and B.P & R Mgt degrees.
- An optional forestry paper is available to students studying for the Diplomas in Farm Management, Horticultural Management, and Parks & Garden Technology.

The University of Canterbury

 An introductory forestry paper (Forests & Societies). This is compulsory for B.For.Sc. students, but can also be credited to a B.Sc., B.A., B.E. or B.Comm. degree.

- The same paper is available extramurally to students elsewhere.
- A four-year B.E. (Forestry) degree is now taught. About one-third of the course work is taught by the School of Forestry
- Two B.For.Sc. papers may be taken as options by students studying Civil Engineering and Chemical & Process Engineering.

Numbers Increase

Student numbers have increased dramatically at the School of Forestry this year: for example, in 1992 the 2nd year class numbered 29. Similarly, some forestry classes at Lincoln have increased. The numbers taking Silviculture have doubled, and the Agroforestry class has increased by one-third. Numbers at Waikato are obviously much higher than when the degree was first offered, but they may have stabilised this year.

Main Reason

Growing public interest in forestry as a land use is undoubtedly the main reason behind these increased numbers, not only

BACHELOR OF FORESTRY SCIENCE (Canterbury)	Year 1 Year 2 Year 3 Year 4	Students 76 49 33 17
BACHELOR OF TECHNOLOGY (FORESTRY) (Waikato)	Year 1 Year 2 Year 3 Year 4	16 17 4 5
LINCOLN STUDENTS TAKING:	Silviculture Agroforestry	41 13
A Lincoln forestry paper for a degree A Lincoln forestry paper for a diploma		37 73
BACHELOR OF ENGINEERING (FORESTRY)	Year 1 Year 2 Year 3 Year 4	not known 11 3 5
OTHER ENGINEERING STUDENTS TAKING FORESTRY PAPERS		36
FORESTS & SOCIETIES PAPER at Canterbury Extramurally		231 34

of potential forestry graduates, but of people taking forestry papers as part of other degrees and diplomas.

J.D. Allen and D.J. Mead

NZ National Poplar Commission

On February 24, 1993 the NZ National Poplar Commission held its first public meeting since its inception in 1968. At a meeting in Aokautere (Palmerston North) of 50-60 people, representing a wide range of interests, Allan Wilkinson was elected Acting Chairperson and 12 others were appointed to assist him in further developing the New Zealand role and activities of the Commission. National Poplar Commissions are linked internationally via the FAO International Poplar Commission (IPC). Allan Wilkinson is a scientist in Landcare Research and is an Executive member of IPC.

In a keynote paper Garth Eyles asked if poplars could be the next breakthrough in agricultural development. He noted that only 8.4 million ha of New Zealand was capable of physically sustainable pastoral use without special conservation measures; some 11.2 million ha require trees or other conservation methods if a physically sustainable land-use is to be adopted. Poplars are potentially suitable for about 3.7 million ha of erosion-prone country. In terms of physical climate and soil suitability, poplars could be grown under a range of management systems on 60% of the land area.

The New Zealand Poplar Commission sees its role in fostering interest in the use of poplars for both erosion control and wood production. Key tasks will be to coordinate and foster collaboration in information transfer and research. It may also act as a lobby group to ensure poplars are taken seriously and used wisely. The Commission will establish working groups in breeding, silviculture, utilisation, biomass for energy, marketing, and information transfer. Good market information for poplar wood was seen as critical.

For more information contact: Allan Wilkinson, Acting Chairperson, NZ National Poplar Commission, C/- Manaaki-Whenua – Landcare Research, Private Bag 11052, Palmerston North. Ph 06 356 7154, Fax 06 355 9230.