forests will be the norm and any plantation manager will be expected to achieve the same standards of performance in whatever terms are used to certify sustainability. There is little doubt that the New Zealand community has a keen interest in our native forests, and accordingly the emphasis on different aspects of management practice may be greater than is the case with our plantations. Nevertheless the key principles are likely to be the same.

Apart from the obvious political implications and the pragmatic response to this by the plantation forest owners, it is not clear why New Zealand should need to have two sets of sustainable forest management standards. Council has discussed this matter at some length and continues to oppose the division, however members may have other views and I would welcome wider discussion of these.

There is unlikely to be any disagreement with the sudden heightening of interest in border protection associated with the outbreak of Foot and Mouth disease in the UK. For some time there has been widening concern about our pest interception practice and control, largely based about the failure to contain and eradicate the Painted Apple Moth in the Auckland suburbs (in stark contrast to MoF's treatment of White Spotted Tussock Moth only a couple of years before).

Only a few weeks ago a Government department rejected the opportunity to impose pre-border (offshore) inspection of imported motor vehicles, and is

quite at odds with the Parliamentary Commissioner for the Environment on this matter. The emphasis given to pests of significance to our primary industry is commendable, however there is also little doubt that our indigenous biodiversity is at risk and needs greater emphasis. It is unclear whether these are issues of focus or resourcing, what is clear is that no one agency can be expected to address these issues on its own and NZIF Council will be continuing to put its weight behind further strengthening of the biosecurity system, and supporting MAF or any other agency to further develop their import quarantine capability.

Finally I would like to mention the departure of Michael McLarin from Council and New Zealand. Mike has put a lot of time and energy into coordinating and promoting local section activity and while we are sorry to lose his contribution we wish him well in his new role in Tasmania.

For those of you less-sure or less committed to local section activity, I urge you to consider again the opportunities these meetings provide for interaction with local communities, keeping up with events and changing forestry technology, and networking with your forestry

Having visited several local sections over the last year it is evident to me that the enthusiastic, well-led local sections remain the life-blood of the Institute and I congratulate those local section office bearers and organizers for their continued input in this respect.

## **NZIF Submission to the Primary Production Select Committee** inquiry into sustainable forestry management

In representing the forestry profession in New Zealand, the Institute of Forestry wishes to principally focus on the primary objective of the inquiry, as set out in Mr Damien O'Connor's press release dated 24 August 2000, viz. to examine how confidence in New Zealand's indigenous wood industry can be secured and maintained. Therefore this submission is seeking to address principles rather than details.

#### Summary

The following principles apply to management of the indigenous forests of Aotearoa/New Zealand:

- 1. Forestry is the art and science of managing forests.
- Sustainable forest management has been developed 2. in Europe over the past five hundred years and in Aotearoa/New Zealand over the past century.
- Silviculture can vary widely for particular forest 3. types and species.
- Sound research has been carried out to determine appropriate means of sustainably managing New Zealand's indigenous forests.
- New Zealand indigenous forests can be sustainably managed either as near natural forest or as "plantations".
- Most natural temperate hardwood forests throughout the world have a high percentage of dead, decadent and diseased trees.
- Temperate hardwood forests, such as New 7.

- Zealand beeches, are responsive to management which enhances their health and productivity.
- New Zealand has demonstrated world leadership 8. in sustainable management of indigenous production forests.
- 9. Sustainable production management of indigenous forests is a long term commitment.
- Security of tenure is an essential pre-requisite for 10. indigenous sustainable forest management.
- Community "ownership" of sustainable 11. management of indigenous forests is essential.
- 12. Management of indigenous forests must be economically viable.
- Management of indigenous forests must be 13. environmentally appropriate.
- 14. The above principles can be best understood by visiting sustainably managed indigenous forests.

#### Principles of sustainable forestry

The principles applicable to management of the indigenous forests of Aotearoa/New Zealand, summarised above, are hereunder briefly explained.

- Forestry is the art and science of managing forests. Sustainable forest management is management to perpetuate particular types of forest.
- Sustainable forest management, as we know it today, has been developed in Europe over the past

**500** years and in Aotearoa/New Zealand over the past century. Two distinct types of management have been by way of plantations and near natural forest

Plantations are what most New Zealander's are familiar with: blocks of radiata pine trees planted in seried rows, pruned and thinned to enhance wood quality and harvested in blocks (coupes). Other than for pruning and time span, management of plantations is not too dissimilar from growing a crop of carrots in the garden. These crops are artificially regenerated to improve the genetic quality of successive crops.

Near natural management of forests has involved removal of dead, dying and diseased trees, as well as weeds and over-crowding, to favour growth of the commercially favoured species. Harvesting involves removing single commercially favoured trees when they are of optimal size and age. Management of these forests largely depends on successful natural regeneration.

- 3. Silviculture, management techniques, can vary widely for particular forest types and species. Walker in 1875 and Cockayne in the early 1900s recognised that most of New Zealand's indigenous commercial species vigorously regenerated themselves as natural forests and had the capacity to be managed sustainably for wood and non-wood products.
- Sound research has been carried out to determine appropriate means of sustainably managing New Zealand's indigenous forests. In the 1920s and early 1930s, the original Canterbury Forestry School, led by Charles Foweraker and Frank Hutchinson, pioneered research into sustainable management of terrace rimu forests for production in Westland. Over the past fifty years application of sustainable management techniques was demonstrated by numerous people. For example, people deeply involved in application of sustainable production management in podocarp forest were Chavasse, Griffiths and James, in beech forest Hardcastle, Morris, Ensor, Kirkland, Franklin and Gleason, in kauri forest Morrison and Barton, and in central North Island podocarp/hardwood forest Beveridge and Herbert. Over the past 60 years research into reducing populations of introduced pests in all indigenous forests to ecologically and economically acceptable levels has accelerated.
- 5. New Zealand indigenous forests can be sustainably managed either as near natural forest or as "plantations", depending upon their physiognomic characteristics. For example, rimu management needs to align with the near natural approach. Kahikatea, totara and beeches have the capacity to be productively managed according to either approach. These species can be managed either as near natural forest with single tree or a small group periodic harvesting of trees or by harvesting coupes of various sizes according to topographic and commercial considerations and managing the natural

- regeneration as "plantations". However, current legislation prescribes that private forests may only be managed as near natural forests.
- 6. Most natural temperate hardwood forests throughout the world have a high percentage of dead, decadent and diseased trees. The New Zealand beeches are characteristic of the world's temperate hardwood forests. In their natural state they have a high percentage of dead, decadent and diseased trees.
- 7. Temperate hardwood forests, such as New Zealand beeches, are responsive to management which enhances their health and productivity. For example, whereas natural red/hard beech forest may be growing at a rate of 2.5 m³ per hectare per annum, under sustainable coupe management it can produce 6.5 m³ or even 8m³ or more per hectare. Not only can positive silviculture enhance the productivity, it can also enhance the quality of the harvested timber.
- 8. New Zealand has demonstrated world leadership in sustainable management of indigenous production forests. Evaluators of the effectiveness of sustainable management under Montreal process criteria rated very highly the management of West Coast Crown production forests. Forestry experts from many nations have lauded the management currently being applied by Timberlands West Coast Ltd.
- 9. Sustainable production management of indigenous forests is a long term commitment. Most New Zealanders are familiar with radiata pine forests being clear-felled (and usually replanted) after 28 30 years growth. Douglas fir may take 50 60 years growth. But all New Zealand's indigenous species take longer. Fundamental to management of all forests is the nurture of seedlings, saplings, poles and rickers through to sound mature trees to be harvested. That period for some beeches might be 60 years, other beeches 80 100 years, kauri and kahikatea 120 years, and rimu 300 400 years.
- 10. Security of tenure is an essential pre-requisite for indigenous sustainable forest management. Unless there is absolute guarantee of perpetual use of land for sustainable management of indigenous forests there can be no confidence for investment of time, energy and finance. Nobody can afford to risk investment in indigenous forestry on their land unless the land title guarantees such use of the land for successive owners. Security of tenure is essential for sustainable indigenous forest management on both Crown and private land.
- 11. Community "ownership" of sustainable management of indigenous forests is essential. Local people must have strong incentives to sustain indigenous forests and adhere to long term management plans. Society at large must understand and enjoy the long term benefits of sustainable management of indigenous forests. Fundamental to achieving community "ownership" is public education.
- 12. Management of indigenous forests must be

**economically viable**. Forest operations must be structured and managed so as to be sufficiently profitable, without detriment to the forest resource, ecosystem or affected communities.

- 13. Management of indigenous forests must be environmentally appropriate. Harvest of timber and non-timber products need to maintain the forest biodiversity, productivity and ecological processes.
- 14. The above principles can be best understood by visiting sustainably managed indigenous forests. On 13 January an invitation was sent to the Chairman of the Primary Production Select Committee to choose from a list of suggested forests to have the Select Committee visit and understand the principles of sustainable forest management. The Institute would welcome the opportunity to facilitate visits to various private forests.

#### **INDIGENOUS FORESTRY WORKING GROUP**

# Principles basis of parliamentary submission

#### Peter Allan

The Institute's oral submission to the Primary Production Parliamentary Select Committee was on the basis of principles rather than specific issues. Probably the most fundamental of the principles was that members of the Committee see for themselves the practice of sustainable management of indigenous forests.

As a consequence of negotiations since November last year the Institute has been able to host the Select Committee on visits to the black beech forest of John and Rosily Wardle at Oxford and the silver beech forest of Iain MacDonald at Winton. Still on the agenda is a visit to Russell & Jean Adams' podocarp/hardwood forest at Inchbonnie.

What was most satisfying about the forest visits was a number of members of the Select Committee saying, "previously I thought any human intervention in management of indigenous forests destroyed them; now I know that human intervention can not only protect the forests but also enhance their productivity, biodiversity and usefulness to local communities."

A challenge now is to get our critics into such forests and have them tell us what we are doing that is harmful.

# Nominations called for NZIF Registration Board

Nominations are called for one position on the Registration Board, to take effect from 1 June 2001. The term will be for four years.

Board Members attending meetings of the Board are paid expenses incurred plus an attendance fee. Nominees must be Registered Forestry Consultants.

For more information and to obtain a Nomination Form and return to:

NZIF Secretary PO Box 19-840 Christchurch

### Calendar 2001

The following conferences, expos, courses and other events will be of interest to readers. Details are brief, so please contact the organisers for more information.

#### 5 June-16 July 2001

Agroforestry for Sustainable Development (AGFOR)

Training course, Los Banos, Philippines (6 weeks) Training Center for Tropical Resources and Ecosystems Sustainability (TREES), University of the Philippines Los Banos, College of Forestry and Natural Resources, College, Laguna, Philippines

The State of the second

Contact: trees@laguna.net

#### 9-13 July 2001

International Geoscience and Remote Sensing Symposium (IGARASS). Sydney, Australia

URL: http://www.igarss.org/future.html

#### 25-27 July 2001

World Woodchip Technology Conference 2001 Tasmania, Australia (no details at this stage) URL: www.britesite.com/events

#### 12-16 August 2001

93rd Annual General Meeting and Conference of the Canadian Institute of Forestry Resort Municipality of Whistler, British Columbia, Canada

Contact: Robin Clark, Co-Chair, HAMPCO 2001, 3431 West 21st Avenue, Vancouver BC, V6S 1GB,

URL: http://cif-ifc.org/agm2001/default.htm
Tel: 1-604-737-1112; Fax: 1-604-737-1112
Email: robin@rbc.bc.ca

#### 17-21 September 2001

12th Fundamental Research Symposium Oxford, United Kingdom Contact: frc@butlers-court.co.uk

#### 9 November 2001

Appita NZ Section, one day conference Tel: 09-532 9364; email: appita.nz@xtra.co.nz

#### 12-16 March 2002

New Zealand Forest Expo 2002

Phone/Fax: 07-362 7875; Email: bal@wave.co.nz